NC Error Messages

1
Processor check error 0

Cause of error:
The CRC sum for the control's data (datum point etc.) is incorrect.
Corrective action:
Inform your service agency.

2
Processor check error 0

Cause of error:
The CRC sum for the controls data (datum point etc.) is incorrect.
Corrective action:
Inform your service agency.

3
Processor check error 2

Cause of error:
The CRC sum of a file in the block memory is incorrect.
Corrective action:
Inform your service agency.

4
Processor check error 3

Cause of error:
Not all tests were completely run.
Corrective action:
Inform your service agency.

5
Processor check error 4

Cause of error:
There is crosstalk of data in the RAM memory.
Corrective action:
Inform your service agency.

6
Processor check error 5

Cause of error:
There is crosstalk of addresses in RAM memory.
Corrective action:
Inform your service agency.

7
Processor check error 6

Cause of error:
Internal error: stack overflow or stack underflow.
Corrective action:
Inform your service agency.

8
Processor check error 7

Cause of error:
The CRC sum of a PLC file is incorrect.
Corrective action:
Inform your service agency.

9
Processor check error 8

Cause of error:
The CRC sum of the compiled PLC program is incorrect.
Corrective action:
Inform your service agency.

10
Processor check error 9

Cause of error:
The CRC sum for the test program is incorrect.
Corrective action:
Inform your service agency.

11
Processor check error A

Cause of error:
General file management error.
Corrective action:
Inform your service agency.

12
Processor check error A

Cause of error:
General software error in the main processor task.
Corrective action:
Inform your service agency.

13
Processor check error A

Cause of error:
General software error in the Sync-Task.
Corrective action:
Inform your service agency.

14
Processor check error A

Cause of error:
Insufficient memory left free to open a machine parameter file.
Corrective action:
Delete unneeded part programs to increase memory space.

15
Processor check error A

Cause of error:
File management error: In the Program Run or Program Test operating modes an NC program was selected although no status flag M or S is set.
Corrective action:
Inform your service agency.

16
Processor check error B

Cause of error:
Internal error: incorrect interrupt
Corrective action:
Inform your service agency.

17
Processor check error C

Cause of error:
Overrun of the internal time slice:
Control loop, PLC, and interrupts need all the processing time or the timer interrupt interrupts itself.
Corrective action:
Inform your service agency.

18
Processor check error D

Cause of error:
Internal error: More commands were given to the control loop than have space in the transfer buffer.
Corrective action:
Inform your service agency.

19
Processor check error E

Cause of error:
Internal error: A task was given an unknown command or a command with illegal parameters.
Corrective action:
Inform your service agency.

20
Processor check error F

Cause of error:
Internal error: More dynamically managed memory was requested than is available.
Corrective action:
Inform your service agency.

20
Processor check error S

Cause of error:
Internal error: More dynamically managed memory was requested than is available.
Corrective action:
Inform your service agency.

21
Processor check error F

Cause of error:
Internal calculations have led to a non-representable value.
Corrective action:
Inform your service agency.

22
Processor check error G

Cause of error:
Internal error: A CPU was given an unknown command to load the program (boot command).
Corrective action:
Inform your service agency.

23
Processor check error H

Cause of error:
Internal error: The program was incorrectly loaded (booted) by a CPU.
Corrective action:
Switch the control off and on again.

24
Processor check error I

Cause of error:
Internal error: While a program was being loaded (booted) an incorrect auxiliary instruction was given together with the „test" command.
Corrective action:
Inform your service agency.

25
Processor check error J

Cause of error:
Internal error: The memory for transferring commands for loading the program cannot be correctly written or read.
Corrective action:
Inform your service agency.

26
Processor check error K

Cause of error:
Internal error: The program loaded in the RAM memory of a CPU does not match to the code stored in the EPROM.
Corrective action:
Inform your service agency.

27
Processor check error M

Cause of error:
The operating voltage lies outside the permissible tolerance.
Corrective action:
Have the operating voltage at the logic unit tested by trained personnel.

28
Processor check error N

Cause of error:
There are no files stored in the PLC EPROM with PLC dialogs or PLC error messages.
Corrective action:
Have the machine manufacturer exchange the PLC EPROM.

29
Processor check error O

Cause of error:
You have attempted to simultaneously move more axes than is possible with the export version of the control.
Corrective action:
- Reset the basic rotation
- Reset the 3-D rotation.

30
Processor check error P

Cause of error:
You have tried to activate a protected function without activating the appropriate software-enabling module.
Corrective action:
Order the software protection module from HEIDENHAIN.

31
Processor check error Q

Cause of error:
A required CPU (control loop, geometry) is not ready for operation.
Corrective action:
Switch the control off and on again.

32
Processor check error R

Cause of error:
During output of a miscellaneous function M or the spindle speed S the PLC commanded a PLC positioning, a datum shift or a range switch although machine parameter MP7440 or MP3330 have commanded constant speed with M or S output.
Corrective action:
Inform your service agency.

33
Checksum error A

Cause of error:
The CRC sum of the EPROMs IC-P1 and IC-P2 is incorrect.
Corrective action:
Inform your service agency.

34
Checksum error B

Cause of error:
The CRC sums of the EPROMs IC-P3 and IC-P46 is incorrect.
Corrective action:
Inform your service agency.

35
Checksum error C

Cause of error:
The CRC sum of the EPROMs IC-P5 and IC-P6 is incorrect.
Corrective action:
Inform your service agency.

36
Checksum error D

Cause of error:
The CRC sum of the PLC EPROM is incorrect.
Corrective action:
Inform your service agency.

37
Checksum error E

Cause of error:
The CRC sum of the EPROM IC-P7 is incorrect.
Corrective action:
Inform your service agency.

38
Excessive servo lag in %.1s

Cause of error:
The servo lag of a moving axis is greater than the value given in machine parameter MP1720 (in lag mode) or MP1420 (in feedforward mode).
Corrective action:
- Reduce the machining feed rate, increase the speed.
- Eliminate all possible sources of vibration.
- If the error frequently reoccurs, contact your service agency.

39
Nominal speed value too high %.2s

Cause of error:
An excessively high nominal speed value was calculated.
Analog axes: maximum nominal speed value -10 V
Analog spindle: maximum nominal speed value -10 V
Digital axes and spindle: maximum nominal speed value = maximum motor speed
Corrective action:
Inform your service agency.

40
Movement monitoring error in %.1s A

Cause of error:
The axis is moving at least 4 times slower or faster than commanded by the nominal speed command output.
Corrective action:
- Check machine parameter 1140.x.
- Inform your service agency.

41
Standstill monitoring err. in %.2s

Cause of error:
The position deviation at a standstill is greater than the value entered in machine parameter MP1110.x.
Corrective action:
Inform your service agency.

41
CCU standstill monitoring %.2s

Cause of error:
The position deviation at a standstill is greater than the value entered in machine parameter MP1110.x.
Corrective action:
Inform your service agency.

41
MCU standstill monitoring %.2s

Cause of error:
The position deviation at a standstill is greater than the value entered in machine parameter MP1110.x.
Corrective action:
Inform your service agency.

42
Excessive offset in %.1s

Cause of error:
During offset adjustment (with code number or cyclic) an offset voltage of more than 100 mV was determined.
Corrective action:
Inform your service agency.

43
Movement monitoring error in %.1s B

Cause of error:
The motor is moving while the axis slide are stationary, or vice versa.
Corrective action:
- Check MP2800.x.
- Inform your service agency.

44
%.2s encoder: amplitude too small

Cause of error:
The amplitude of the encoder signals is too small, or the signal for contamination is active.
Corrective action:
Test the amplitude of the encoder signal.

44
MCU amplitude too low %.2s

Cause of error:
The amplitude of the encoder signals is too small, or the signal for contamination is active.
Corrective action:
Test the amplitude of the encoder signal.

44
CCU amplitude too low %.2s

Cause of error:
The amplitude of the encoder signals is too small, or the signal for contamination is active.
Corrective action:
Test the amplitude of the encoder signal.

45
%.2s encoder: frequency too high

Cause of error:
The maximum input frequency was exceeded at an encoder input.
Corrective action:
Test the input frequency of the encoder signal.

45
MCU frequency too high %.2s

Cause of error:
The maximum input frequency was exceeded at an encoder input.
Corrective action:
Test the input frequency of the encoder signal.

45
CCU frequency too high %.2s

Cause of error:
The maximum input frequency was exceeded at an encoder input.
Corrective action:
Test the input frequency of the encoder signal.

46
%.2s-measuring system defective

Cause of error:
Contradiction apparent from comparison of the absolute and incremental positions.
Corrective action:
Inform your service agency.

47
%.1s motor encoder: ampl. too small

Cause of error:
During digital speed control the signal amplitude from one motor encoder is too small for the motor speed.
Corrective action:
Test the amplitude of the encoder signal.

48
%.1s motor encoder: freq. too high

Cause of error:
The input frequency of the motor encoder for the displayed axis is incorrect.
Corrective action:
Test the input frequency of the encoder signal.

49
PGM section cannot be shown

Cause of error:
During graphic simulation of a positioning block one of the following errors occurred.
- In the positioning block to be simulated one of the axes A, B, C, U, V, W was moved.
- Starting point or target point of the positioning block lies in at least one axis farther away than approx. 128 times the maximum edge length of the programmed BLK FORM.
-The center of a circle lies in at least one axis farther away than approx. 128 times the maximum edge length of the programmed BLK FORM.
-The circle radius is larger than approx. 128 times the longest side of the programmed BLK FORM.
-The arc length of a circle is greater than approx. 128 times the longest side of the programmed BLK FORM.
Corrective action:
-The TNC cannot graphically simulate traverse in the A, B, C, U, V, and W axes.
- Enlarge the BLK FORM.

50
Touch point inaccessible

Cause of error:
In the TCH PROBE 0 (ISO: G55) cycle or during use of the manual probe cycles no touch point was reached within the traverse defined in machine parameter MP6130.
Corrective action:
- Pre-position the touch probe to the workpiece.
- Increase the value in MP6130.

51
Positioning error

Cause of error:
The servo lag of a moving axis is greater than the value given in machine parameter MP1710 (in lag mode) or MP 1410 (feedforward mode).
Corrective action:
- Decrease the machining feed rate, increase the speed.
- Eliminate possible sources of vibration.
- Inform your service agency.

52
Stylus already in contact

Cause of error:
The stylus is already deflected at the start of a probing movement.
Corrective action:
- Get the touch probe clear and repeat the probe.
- If the error frequently recurs, inspect the probe for damage.
- If necessary, contact your service agency.

53
Exchange touch probe battery

Cause of error:
The battery in the touch probe is dead.
Corrective action:
Use a fresh battery.

54
Probe system not ready

Cause of error:
-Touch probe is not connected.
- Battery in touch probe is dead.
- No connection between infrared probe system and receiver unit.
Corrective action:
- Connect the touch probe.
- Exchange the battery.
- Clean the receiver unit.

55
CCU limit switch %.1s+

Cause of error:
The calculated path of the tool exceeds the traversing
Corrective action:
- Check the programmed coordinates. If necessary, edit the program.
- Inspect the datum and, if necessary, reset it.

55
MCU limit switch %.1s+

Cause of error:
The calculated path of the tool exceeds the traversing
Corrective action:
- Check the programmed coordinates. If necessary, edit the program.
- Inspect the datum and, if necessary, reset it.

55
Limit switch %.1s+

Cause of error:
The calculated path of the tool exceeds the traversing
Corrective action:
- Check the programmed coordinates. If necessary, edit the program.
- Inspect the datum and, if necessary, reset it.

56
Limit switch %.1s+

Cause of error:
The calculated path of the tool exceeds the traversing range (software limit switch) of the machine.
Corrective action:
- Check the programmed coordinates and, if necessary, edit the program.
- Check the datum and reset it if necessary.

57
Limit switch %.1s-

Cause of error:
The calculated path of the tool exceeds the traversing range (software limit switch) of the machine.
Corrective action:
- Check the programmed coordinates and, if necessary, edit the program.
- Check the datum and reset it if necessary.

57
MCU limit switch %.1s-

Cause of error:
The calculated path of the tool exceeds the traversing range (software limit switch) of the machine.
Corrective action:
- Check the programmed coordinates and, if necessary, edit the program.
- Check the datum and reset it if necessary.

57
CCU limit switch %.1s-

Cause of error:
The calculated path of the tool exceeds the traversing range (software limit switch) of the machine.
Corrective action:
- Check the programmed coordinates and, if necessary, edit the program.
- Check the datum and reset it if necessary.

58
Limit switch %.1s-

Cause of error:
The calculated path of the tool exceeds the traversing range (software limit switch) of the machine.
Corrective action:
- Check the programmed coordinates and, if necessary, edit the program.
- Check the datum and reset it if necessary.

59
FN 14: error code %-3u

Cause of error:
Forced error through function FN14 (ISO: D14).
With this function the TNC calls the preprogrammed messages of the machine manufacturer (e.g. from an OEM cycle). If during a program run or test run the TNC comes to a block with FN14 (D14), it stops operation and displays a message. You must then restart the program.
Corrective action:
Refer to the User's Manual for a description of the error. Correct the error and restart the program.

60
Two TOOL DEF %-3u with PGM CALL

Cause of error:
The NC block TOOL DEF (ISO: G99), is used more than once to define a tool using the same tool number in programs that are nested to each other.
Corrective action:
Delete the TOOL DEF block (G99 block) in one of the programs, or use another tool number.

61
Tool table locked

Cause of error:
The tool file (TOOL.T) cannot be edited while the TNC is executing a tool call. Pressing the EDIT ON/OFF soft key provokes this error message.
Corrective action:
Wait until the TOOL CALL has been executed, the press the EDIT ON/OFF soft key again.

62
Ref mark %.1s: incorrect spacing

Cause of error:
During a reference run on an encoder with distance-coded reference marks a distance of more than 1000 grating periodswas covered without passing over a reference mark.

Corrective action:
Correct machine parameter MP1350.

63
Handwheel?

Cause of error:
- Electronic handwheel is not connected.
- Incorrect handwheel selected in machine parameter MP7640.
- Transmission line is defective or incorrect.

Corrective action:
- Connect the handwheel via cable adapter.
- Check the machine parameter MP7640.
- Inspect the data transfer line for damage.

64
PLC: invalid command

Cause of error:
PLC syntax error: The TNC cannot interpret the line it has read as a PLC command.
Corrective action:
Edit the PLC program.

65
PLC: invalid operand type

Cause of error:
PLC syntax error - invalid operand type: An unkown operand type was given, or the command cannot be used for the given operand type.
Corrective action:
Edit the PLC program.

66
PLC: operand not found

Cause of error:
PLC syntax error - operand not found: A type was given for the operand, but no value.
Corrective action:
Edit the PLC program.

67
PLC: operand incorrect

Cause of error:
PLC syntax error: An operand number was given that lies outside of the range available for this operand.
Corrective action:
Edit the PLC program.

68
PLC: error in text after command

Cause of error:
PLC syntax error: Behind the PLC command additional characters were found that could not be interpreted.
Corrective action:
Edit the PLC program.

69
PLC: line too long

Cause of error:
PLC syntax error: the line is longer than 128 characters.
Corrective action:
Edit the PLC program.

70
PLC: label not defined

Cause of error:
PLC syntax error: A reference was made to a label that has nowhere been defined with LBL, KFIELD or EXTERN.
Corrective action:
Edit the PLC program.

71
PLC: end of block not found

Cause of error:
PLC syntax error - no block end found: at the end of the program file are PLC commands that are not concluded with an EM or JP command. The danger therefore exists that at runtime an undefined program range is run through.
Corrective action:
Edit the PLC program.

72
PLC: program too long

Cause of error:
PLC syntax error: The total length of the program code to be generated exceeds the memory available in the control.
Corrective action:
Edit the PLC program.

73
PLC: assignment in 1 parenthesis

Cause of error:
PLC syntax error: An attempt was made to assign the result of a gated operand, although not all opening parentheses had been closed.
Corrective action:
Edit the PLC program.

74
PLC: too many parentheses

Cause of error:
PLC syntax error: An attempt was made to nest more than 16 parenthetical expressions in each other.
Corrective action:
Edit the PLC program.

75
PLC: jump incorrectly programmed

Cause of error:
PLC syntax error: An unconditional jump was programmed although the assignment chain begun beforehand had not yet been assigned.
Corrective action:
Edit the PLC program.

76
PLC: closing parenth w/o opening

Cause of error:
PLC syntax error: There were more closing than opening parentheses.
Corrective action:
Edit the PLC program.

77
PLC: label incorrectly programed

Cause of error:
PLC syntax error: A label was set within a parenthetical calculation. This is illegal because closing-parenthesis commands cannot be executed without the associated opening-parenthesis commands.
Corrective action:
Edit the PLC program.

78
PLC: label incorrectly programed

Cause of error:
PLC syntax error: A label was programmed in a gate that has already been started. This is illegal because the first command behind the label would then have to be interpreted, depending on the course of the program, once as a logical connection and once as a load command.
Corrective action:
Edit the PLC program.

79
PLC: jump incorrectly programmed

Cause of error:
PLC syntax error: A jump command was programmed within parentheses. This is illegal because due to the internal implementation all opening parentheses must be followed by closing parentheses, which would not happen in a jump.
Corrective action:
Edit the PLC program.

80
PLC: parenthesis not closed

Cause of error:
PLC syntax error: You have programmed an EM instruction in a parenthetical expression.
Corrective action:
Edit the PLC program.

81
PLC: label defined twice

Cause of error:
PLC syntax error:
-The same label name was used twice for a LBL or KFIELD instruction.
- A label name that was imported with EXTERN from another module was used again with a LBL or KFIELD instruction.
- A name that is reserved for internal modules (9000 - 9255) was used with a LBL, KFIELD or EXTERN instruction.
Corrective action:
Edit the PLC program.

82
PLC: word assignment missing

Cause of error:
PLC syntax error: A word logic operation was conducted. However, the result was assigned to a new logic operation rather than to an operand.
Corrective action:
Edit the PLC program.

83
PLC: logic assignment missing

Cause of error:
PLC syntax error: A logic operation was performed, but the result was assigned to a new logic operation instead of to an operand.
Corrective action:
Edit the PLC program.

84
PLC: word accumulator not loaded

Cause of error:
PLC syntax error: A command was programmed that logically connects, assigns or manipulates the loaded word accumulator, although the word accumulator was not previously loaded.
Corrective action:
Edit the PLC program.

85
PLC: logic accum. not loaded

Cause of error:
PLC syntax error: A command was programmed that logically connects, assigns, or manipulates the loaded logic accumulator, although the logic accumulator was not loaded beforehand.
Corrective action:
Edit the PLC program.

86
PLC: opening parenth. incorrect

Cause of error:
PLC syntax error: You programmed an opening-parenthesis command without first beginning a logic or a word sequence.
Corrective action:
Edit the PLC program.

87
PLC: incorrect type in parenth.

Cause of error:
PLC syntax error: Depending on the logic operation formed before a parenthesis and the parenthesis command used, it is expected that a sequence in parentheses supplies a result of the same type (word/logic). If the types differ, the logic operation requested in the open-parenthesis command cannot be formed.
Corrective action:
Edit the PLC program.

88
PLC: jump incorrectly programmed

Cause of error:
PLC syntax error: You programmed a conditional jump (CMT/CMF/JPT/JPF/EMT/EMF) without first starting a logic operations sequence in the logic accumulator.
Corrective action:
Edit the PLC program.

89
PLC: ENDC/ENDK without beginning

Cause of error:
PLC syntax error: You programmed an ENDC command without a preceding CASE statement, or an ENDK command without a preceding KFIELD label.
Corrective action:
Edit the PLC program.

90
PLC: error in CASE/KFIELD

Cause of error:
PLC syntax error: You programmed a command other than CM behind a CASE instruction and before the associated ENDC instruction, or you programmed a command other than K behind a KFIELD and before the associated ENDK label.
Corrective action:
Edit the PLC program.

91
PLC: too many entries in CASE

Cause of error:
PLC syntax error: You programmed a CASE branch with more than 128 entries.
Corrective action:
Edit the PLC program.

92
PLC: CASE/KFIELD is empty

Cause of error:
PLC syntax error: You programmed a CASE instruction followed immediately by an ENDC instruction, or you programmed a KFIELD label followed immediately by an ENDK instruction.
Corrective action:
Edit the PLC program.

93
PLC: string accum. not loaded

Cause of error:
PLC syntax error: You programmed a command to logically connect, assign or manipulate an already loaded string accumulator without first loading the string accumulator.
Corrective action:
Edit the PLC program.

94
PLC: string within parentheses

Cause of error:
PLC syntax error: You programmed a string instruction within parentheses. String operations cannot be nested with parentheses.
Corrective action:
Edit the PLC program.

95
PLC: string assignment missing

Cause of error:
PLC syntax error: You started a new logic operations sequence without first assigning the logic operation formed in the string accumulator.
Corrective action:
Edit the PLC program.

96
PLC: global/external incorrect

Cause of error:
PLC syntax error: You wrote the GLOBAL or EXTERN commands behind other program code in the file. These commands must always appear before the program code.
Corrective action:
Edit the PLC program.

97
PLC: too many modules

Cause of error:
PLC syntax error: You attempted to link more than 64 files into one program using the USES instruction.
Corrective action:
Edit the PLC program.

98
PLC: file not found

Cause of error:
PLC syntax error: A file linked with the USES command cannot be found, or you attempted to include a file from the RAM memory in a PLC program from the EPROM (Machine parameter MP4010 = 0).
Corrective action:
Edit the PLC program.

99
PLC: file too long

Cause of error:
PLC syntax error: The compiled program code of a single file would be larger than 64 KB and therefore cannot be compiled. Split the file into several smaller files and link them with the USES command.
Corrective action:
Edit the PLC program.

100
PLC: too many local labels

Cause of error:
PLC syntax error: More than 1000 labels assigned in one file. All LBL, KFIELD and EXTERN commands are added together with those (hidden) labels created through structured commands. Split the file into several smaller files and link them with the USES command.
Corrective action:
Edit PLC program.

101
PLC: too many global labels

Cause of error:
PLC syntax error: A total of more than 1000 global labels have been defined within the associated files.
Corrective action:
Edit PLC program.

102
PLC: external label not defined

Cause of error:
PLC syntax error: A label declared with EXTERN has not been defined with GLOBAL in any of the associated modules.
Corrective action:
Edit PLC program.

103
PLC: external label in CASE

Cause of error:
PLC syntax error: A label declared with EXTERN has been inserted in the CM list of a CASE command. Define a local module, which in the simplest case only calls the global module via CM.
Corrective action:
Edit PLC program.

104
PLC: external label in JP

Cause of error:
PLC syntax error: You attempted to jump to a label defined with EXTERN using a JP/JPF/JPT command.
Corrective action:
Edit PLC program.

105
PLC: global label defined twice

Cause of error:
PLC syntax error: You defined the same label more than once with GLOBAL in the same or in several files.
Corrective action:
Edit PLC program.

106
PLC: incorrect program structure

Cause of error:
PLC syntax error:
- You programmed an ELSE/ENDI/ENDW/UNTIL command without the prior required IF/ELSE/WHILE/REPEAT command.
- Variously structured commands have not been nested within each other, but have been interlinked. The structures must always be closed in the order opposite to that in which they are opened!

Corrective action:
Edit PLC program.

107
PLC: structure open at file end

Cause of error:
PLC syntax error: A structured command has been opened and not closed again prior to the end of the file.
Corrective action:
Edit PLC program.

108
PLC: global in the main file

Cause of error:
PLC syntax error: You defined a module from the main file as GLOBAL. Only modules from files which are linked with the USES command can be made accessible for other files through the GLOBAL command.
Corrective action:
Edit PLC program.

109
PLC: excessive nesting

Cause of error:
PLC runtime error:
- You attempted to nest more than 32 module calls within each other.
- You programmed a recursive module call that exceeds the limit of 32 levels.

Corrective action:
Edit PLC program.

110
PLC: stack underflow

Cause of error:
PLC runtime error: You attempted to retrieve data from the stack, although it had not been written there.
Corrective action:
Edit PLC program.

111
PLC: stack overflow

Cause of error:
PLC runtime error: You attempted to write more than 128 bytes of data to the stack. Word operands (B/W/D/K) each occupy 4 bytes, Logic operands (M/I/O/T/C) occupy 2 bytes.
Corrective action:
Edit PLC program.

112
PLC: timeout

Cause of error:
PLC runtime error:
- The processing of the cyclically executed program section takes too long. Check the subprogram structure for very calculation-intensive sections that you can start as SUBMIT jobs.
- The displayed processing time will be increased during data transfer and in handwheel mode. In case of doubt, select handwheel mode and simultaneously start the data transfer at max. baud rate. At the same time, check „MAXIMUM PROCESSING TIME" in the PLC programming. Values should not exceed 150% (safety reserve in the event of unfavorable operating conditions!).

Corrective action:
Edit the PLC program.

113
PLC: CASE out of range

Cause of error:
PLC runtime error: The operand for the CASE command contains a value that cannot be interpreted as offset in the CM table (smaller than 0, or greater than or equal to the table length).
Corrective action:
Edit the PLC program.

114
PLC: subprogram not defined

Cause of error:
PLC runtime error: Subprogram not defined.
Corrective action:
Edit the PLC program.

115
PLC: index range incorrect

Cause of error:
PLC runtime error:
-The address for a writing access to data types B/W/D/M/I/O/T/C is, through the inclusion of the index register, in an invalid region for these operand types.
-The index register contains a value, due to accessing a constant field, which is not possible for this field (less than 0, or greater than or equal to field length).
-The address of a string leads through the inclusion of the index register to an invalid value.
-The number of a dialog (S#Dn[X]) or an error message (S#En[X]) leads through the inclusion of the index register to an invalid value (less than 0 or greater than 999).
- During the addressing of a component string.
Corrective action:
Edit the PLC program.

133
PLC: M4005/M4006/M4006 incorrect

Cause of error:
PLC runtime error: More than one of the markers M4005 (M03), M4006, (M04), M4007 (M05) is set.
Corrective action:
Edit the PLC program.

134
PLC: more than one strobe active

Cause of error:
PLC runtime error: More than one of the functions „PLC positioning“, „datum shift, “ or „spindle orientation“ has been activated.
Corrective action:
Edit the PLC program.

151
MP: line w/o number

Cause of error:
Machine parameter input error: A line was found without a machine parameter number (not an empty line or comment).
Corrective action:
Edit the machine parameter list.

152
MP: incorrect number

Cause of error:
Machine parameter input error: The given machine parameter does not exist (incorrect number).
Corrective action:
Edit the machine parameter list.

153
MP: separator missing

Cause of error:
Machine parameter input error: No separator („:“) was found between the number and value of the machine parameter.
Corrective action:
Edit the machine parameter list.

154
MP: input value incorrect

Cause of error:
Machine parameter input error: The input value for the machine parameter is incorrect.
Corrective action:
Edit the machine parameter list.

155
MP: defined twice

Cause of error:
Machine paremeter input error: A machine parameter has been defined twice.
Corrective action:
Edit the machine parameter list.

156
MP: not defined

Cause of error:
Machine parameter input error: A machine parameter is not defined. The line is generated automatically.
Corrective action:
Edit the machine parameter list.

157
MP: saving not possible

Cause of error:
Machine parameter input error: Machine parameter cannot be saved.
Corrective action:
Inform your service agency.

158
MP: contradictory input

Cause of error:
Machine parameter input error: The entered values for the machine parameters are contrdictory, which results in a conversion error.
Corrective action:
Inform your service agency.

159
Pocket 0 undefined

Cause of error:
You attempted to assign a tool to a locked pocket in the tool-pocket table.
Corrective action:
- Check the tool pocket table.
- Inform your service agency.

160
Wrong pocket number

Cause of error:
-The input value of the pocket number in the tool table is greater than machine parameter MP7261.
- MP7261 = 0, pocket output is activated through MP7480 and no pocket has been assigned to the called tool.
Corrective action:
- Check the tool pocket table.
- Inform your service agency.

161
Feed rate is missing

Cause of error:
You did not program a feed rate.
Corrective action:
Edit the part program, FMAX is effective only for the

162
No new axis during rotatn

Cause of error:
In a tool call a programmed rotation is active and at the same time the new tool axis is not the same as or parallel to the previous tool axis.
Corrective action:
Cancel the programmed rotation in the part program before changing the tool axis.

163
Max. tool age expired

Cause of error:
The service life of the called tool has expired and you have not defined a replacement tool.
Corrective action:
Check the tool and, if necessary, exchange it or define a replacement tool.

164
Exchange buffer battery

Cause of error:
The voltage of the buffer battery in the power supply unit is too low.
Corrective action:
Exchange the buffer battery (see User's Manual).

165
Oriented spindle stop inactive

Cause of error:
You attempted to call either the Rigid Tapping cyle or the Tapping cycle, although your machine does not have a controlled analog spindle
Corrective action:
Contact your machine tool manufacturer.

166
Tool file?

Cause of error:
There are several tool tables in the NC memory and no table is activated in the Test Run operating mode.
Corrective action:
Activate the tool table in the Test Run operating mode (status „S").

167
Datum table?

Cause of error:
A datum table is required to machine a part program. Either there is no table in the control's NC memory, or several tables have be saved and none activated.
Corrective action:
Activate the datum table in the Program Run, Full Sequence mode (status M).

168
Error

Cause of error:
This message indicates that there is an error message on the screen now in the background.
Corrective action:
Switch to the background mode and acknowledge the error message.

169
Tool number already assigned

Cause of error:
You attempted to give a tool more than one definition.
Corrective action:
Edit the part program.

170
Jump to label 0 not permitted

Cause of error:
In a LBL CALL (ISO: L 0,0) block of a part program or in a jump instruction (parametric calculation) you attempted to program a jump to the label 0.
Corrective action:
Edit the part program.

171
Entry value incorrect

Cause of error:
In an APPR or DEP block in a part program the use of a Q parameter leads to an illegal intermediate result: The length of the tangential line for approaching or departing the contour becomes negative.
Corrective action:
Edit the part program.

172
Entry value incorrect

Cause of error:
In an APPR or DEP block of a part program the use of a Q parameter leads to an illegal intermediate result: The center angle of the tangential arc for approaching or departing the contour becomes negative.
Corrective action:
Edit the part program.

173
Entry value incorrect

Cause of error:
In a Contour Train cycle the use of a Q parameter leads to an illegal intermediate result: The length of the tangential line segment for approaching or departing the contour becomes negative.
Corrective action:
Edit the part program.

174
Entry value incorrect

Cause of error:
In a Contour Train cycle the use of a Q parameter leads to an illegal intermediate result: The center angle of the tangential arc for approaching and departing the contour becomes negative.
Corrective action:
Edit the part program.

175
Entry value incorrect

Cause of error:
You have entered a negative value as tolerance for the automatic insertion of a rounding arc (M function M112).
Corrective action:
Enter a positive tolerance.

176
Entry value incorrect

Cause of error:
In the programmed positioning of a rotary axis with feed rate in mm/min (M116) an excessively high velocity results for the rotary table.
Corrective action:
Decrease the feed rate.

177
Cycle 27(G127): depth > radius

Cause of error:
- In the execution of a Cylindrical Surface cycle the entered milling depth is greater or equal to the radius of the cylindrical surface.
-The ratio of the unit radius to the machining radius is too large.
Corrective action:
- Enter a smaller milling depth in the Cylinder Surface cycle.
- Enter a smaller cylinder radius in the Cylinder Surface

178
Entry value incorrect

Cause of error:
In the execution of a Cylinder Surface cycle the programmed radius of the cylinder surface is less than or equal to 0.
Corrective action:
Edit the part program.

179
Entry value incorrect

Cause of error:
In the superimposition of a handwheel movement (M function M118) the programmed maximum permissible superimposition is less than 0.
Corrective action:
Enter only positive values after M118.

180
Blank form definition incorrect

Cause of error:
Error in the conversion of the programmed workpiece blank in the graphic:
-The programmed spindle axis was not X, Y or Z.
- An edge length is negative (the minimum and limits were switched).
- One edge length is smaller than 0.1 mm.
-The length of the shortest edge is less than approx. 1% of the longest edge.
Corrective action:
Edit the part program.

181
Blank form definition incorrect

Cause of error:
Error in the conversion of the programmed workpiece blank in the FK graphics: One edge length is negative (min. and max. limits were switched).
Corrective action:
Edit the part program.

182
Emergency stop

Cause of error:
The Control-Is-Ready PLC input is inactive.
Corrective action:
Check the EMERGENCY STOP circuit.

183
Selected block not addressed

Cause of error:
After an interruption of the program run the TNC can no longer resume the program run from the cursor's present location.
Corrective action:
Press GOTO and enter a block number to select the desired location for returning to the program, or select the mid-program startup function.

184
Program not found

Cause of error:
You attempted to call a program that is not stored in TNC memory.
Corrective action:
Edit the part program.

185
Further file entry impossible

Cause of error:
The TNC cannot save any more files.
Corrective action:
Delete any files that you no longer need.

186
Program name already exists

Cause of error:
You attempted to create a file that already exists.
Corrective action:
Use another file name.

187
Label number already assigned

Cause of error:
You attempted to program the same label number in several LBL SET (ISO: G98 Lxx) blocks in a part program.
Corrective action:
Edit the part program.

188
Label number %-3u already assigned

Cause of error:
During a program start or a subprogram call, several LBL SET (ISO: G98 Lxx) blocks in a part program were found
Corrective action:
Edit the part program.

189
Data transfer erroneous

Cause of error:
E During data transfer with BCC the <NAK> signal was received 15 times in succession.
A to H Error code of the receiver module with one
w/o E of the following causes:
-The baud rate settings of the TNC and peripheral device do not match.
-The parity bit is erroneous.
- Erroneous data frame (e.g.: no stop-bit).
-The receiver module of the interface is defective.
K During transmission of an error to the TNC the <1> character was not transmitted after the <ESC> character.
L After the error sequence <ESC><1> an incorrect error number was received (error numbers 0 to 7 are permitted).
M During data transmission with BCC the <NAK> character was transmitted 15 times in succession.
N An expected acknowledgment <ACK> or <NAK> was not transmitted after a certain time.
Corrective action:
Check the data transfer channel.

190
ME: cassette is missing

Cause of error:
No cassette was loaded in the ME magnetic tape unit.
Corrective action:
Insert a cassette into the ME.

191
ME: cassette is write-protected

Cause of error:
The cassette in the ME magnetic tape unit is write-protected.
Corrective action:
Cancel the write protection on the cassette.

192
ME: incorrect operating mode

Cause of error:
The operating mode set at the ME magnetic tape unit (transmit/receive) does not match the transmission direction set at the TNC.
Corrective action:
Correct the transmission direction (transmit/receive) on the ME.

193
ME: cassette is empty

Cause of error:
The cassette loaded in the ME magnetic tape unit is empty.
Corrective action:
Insert the correct cassette.

194
Program incomplete

Cause of error:
Data transmission was interrupted with the <END> key.
Corrective action:
Transfer the program again.

195
ME: tape end

Cause of error:
The cassette in the ME magnetic tape unit has reached the end of the tape.
Corrective action:
Turn the cassette over or insert a new one.

196
Interface already assigned

Cause of error:
You attempted to assign an already occupied data interface.
Corrective action:
End the data transmission and restart it.

197
Baud rate not possible

Cause of error:
The baud rates set at the two data interfaces do not permit simultaneous transmission over both interfaces.
Corrective action:
Select another baud rate.

198
LSV2 transfer defective

Cause of error:
There was an erroneous transmission in LSV2 mode.
Corrective action:
Check the data transfer line.

199
LSV2 transfer not possible

Cause of error:
LSV2 mode in the control is not possible with the present combination of data transfer rates.
Corrective action:
Change the data transfer rates (MOD, RS 232 SETUP)

200
Ext. in-/output not ready

Cause of error:
-The interface is not connected.
-The external device is either switched off or not ready.
-The transmission cable is defective or incorrect.
Corrective action:
Check the data transfer line.

201
NC program memory erased

Cause of error:
After the control was switched on, a file in NC memory was found faulty and deleted.
Corrective action:
Create the file again.

202
The calling program was changed

Cause of error:
- During start-up of a subprogram the control found that the calling program had been changed.
- During a return jump from a subprogram the control found that the calling program had been changed.
Corrective action:
- Select the point of interruption with GOTO + block number, then continue the run.

203
Emergency stop defective

Cause of error:
The internal or external EMERGENCY STOP circuit is found by the system CPU to be defective.
Corrective action:
Check the EMERGENCY STOP circuit.

204
TNC operating temp. exceeded

Cause of error:
The temperature sensor in the LE has detected an excessively high temperature inside the control housing.
Corrective action:
Check for adequate heat transfer in the electrical cabinet.

205
Emergency stop PLC

Cause of error:
Error message from the PLC (see machine documentation).
Corrective action:
Inform your service agency.

206
PGM %.16s not found

Cause of error:
The program that you have selected contains a program call into a program that does not exist in TNC memory.
Corrective action:
- If necessary, modify the program name
- Modify the program name so than the TNC can call an externally stored program.

207
PGM not found

Cause of error:
During execution of a blockwise transferred part program (DNC mode) the control found that a called subprogram does not exist in NC memory.
Corrective action:
Load the part program.

208
Parallel operation not possible

Cause of error:
You attempted to start a program at the same time in the Program Run and Program Test operating modes, or to start a program in the Program Test mode during execution of a PLC positioning command.
Corrective action:
Start the part program only in one of the operating modes.

209
Parallel operation not possible

Cause of error:
You edited the machine or user parameter list and tried to exit the editor with END. This is not permitted if the part program or a PLC positioning operation is running.
Corrective action:
Wait until the part program run is ended, or interrupt it.

210
Parallel operation not possible

Cause of error:
You attempted to compile an FK program or generate an FK graphic simulation during a runnung NC program or PLC positioning operation.
Corrective action:
Stop the part program.

211
PLC program not translated

Cause of error:
-The PLC program was not compiled after switch-on, or it has been edited since it was last compiled.
-You attempted to activate the In Code Tracer, although the PLC program was not compiled after switch-on or was edited since it was last compiled.
Corrective action:
Compile the PLC program.

212
FK reference to current block

Cause of error:
You attempted in an FK program to delete a block to which another part of the program makes a reference.
Corrective action:
Change the FK reference.

213
Arithmetical error

Cause of error:
Internal calculations have resulted in a non-representable numerical value.
Corrective action:
Check the input values.

214
Arithmetical error

Cause of error:
Internal calculations have resulted in a non-representable numerical value.
Corrective action:
Check the input values.

215
Arithmetical error

Cause of error:
Internal calculations have resulted in a non-representable numerical value.
Corrective action:
Check the input values.

216
Calculated Q parameter too large

Cause of error:
The TNC attempted to display a Q parameter whose value lies outside the permissible range of -99 999.9999 to +99 999.9999.

Corrective action:
Edit the part program.

217
Calculated coordinate too large

Cause of error:
Calculation of a coordinate from a Q parameter resulted in a value outside the permissible range of -99 999.9999 to +99 999.9999.
Corrective action:
Edit the part program.

218
Calculated rpm too large

Cause of error:
Calculation of a spindle speed from a Q parameter resulted in a value outside the permissible range of 0 to +99 999.9999.
Corrective action:
Edit the part program.

219
Calculated feed rate too large

Cause of error:
Calculation of a feed rate from a Q parameter resulted in a value outside the permissible range of 0 to 300 000.
Corrective action:
Edit the part program.

220
Calculated tool number too large

Cause of error:
- Calculation of a tool number from a Q parameter resulted in a value outside the permissible range of 0 to 32767.
-You have called a tool number that is greater than the number of tools defined in the tool table.
Corrective action:
Edit the part program.

221
Calculated label no. too large

Cause of error:
Calculation of a label number from a Q parameter resulted in a value outside the permissible range of 1 to 255.
Corrective action:
Edit the part program.

222
Calculated error no. too large

Cause of error:
Calculation of an error number for the FN14 function (ISO: D14) from a Q parameter resulted in a value outside the permissible range of 0 to 499.
Corrective action:
Edit the part program.

223
Calc. scaling factor too large

Cause of error:
Calculation of a scaling factor from a Q parameter resulted in a value outside the permissible range of 0.0001 to +100.007936.
Corrective action:
Edit the part program.

224
Incr. polar angle too large

Cause of error:
In an NC block you have programmed an incremental polar angle (IPA, ISO: G91 H..) greater than or equal to 5760 degrees (16 full circles).
Corrective action:
Edit the part program.

225
0 pitch not permitted

Cause of error:
You have programmed a thread pitch of 0 in the Rigid Tapping cycle or Tapping cycle.
Corrective action:
Edit the part program.

226
Arithmetical error

Cause of error:
Error in internal calculation, e.g. due to:
- Division by 0
- Extracting the root of a negative value.
Corrective action:
Check the input values.

227
Arithmetical error in APPR/DEP

Cause of error:
Calculation of an APPR or DEP block in a part program resulted in an arithmetic error.
Corrective action:
Check the input values. If necessary, change the starting

228
Arithmetical error in APPR/DEP

Cause of error:
Calculation of an APPR or DEP block in a part program resulted in an arithmetical error.
Corrective action:
Check the input values. If necessary, change the starting

229
Arithmetical error in APPR/DEP

Cause of error:
Calculation of an APPR or DEP block in a part program resulted in an arithmetical error.
Corrective action:
Check the input values. If necessary, change the starting

230
Arithmetical error in APPR/DEP

Cause of error:
Calculation of an APPR or DEP block before or after a helix resulted in an arithmetical error.
Corrective action:
Check the input values. If necessary, change the starting

231
Arithmetical error in rough-out

Cause of error:
Calculation of a rounding circle for contour-parallel rough-out resulted in an arithmetical error.
Corrective action:
- Change the starting point.
- Use another tool radius.

232
Arithmetical error in CR

Cause of error:
Calculation of the circle center of a „circle with radius“ block in a contour pocket resulted in an arithmetical error.
Corrective action:
Check the coordinates in the CR block (ISO: G2,G3 with R).

233
Arithmetical error in CT

Cause of error:
Calculation of a „circle with tangent“ block in a contour pocket resulted in an arithmetical error.
Corrective action:
Check the coordinates in the CT block (ISO: G6, G16).

234
Arithmetical error in RND/CHF

Cause of error:
Calculation of a rounding circle or chamfer in a contour pocket resulted in an arithmetical error.
Corrective action:
- Check the input values in the chamfer or rounding block.
- If necessary, use another tool radius.

235
Incorrect arc/arc intersection

Cause of error:
Calculation of the intersection of two arcs in the contour pocket resulted in an arithmetical error.
Corrective action:
- Check the coordinates in the circle blocks.
- If necessary, use another tool radius.

236
Incorrect arc/line intersection

Cause of error:
Calculation of the intersection of an arc with a line in a contour pocket resulted in an arithmetical error.
Corrective action:
- Check the input values.
- If necessary, use another tool radius.

237
Incorrect line/line intersection

Cause of error:
Calculation of the intersection of two lines in the contour pocket resulted in an arithmetical error.
Corrective action:
- Check the input values.
- If necessary, use another tool radius.

238
Arithmetical error in APPR/DEP

Cause of error:
Calculation of the approaching or departing path with APPR LCT or DEP LCT in the Contour Train cycle resulted in an arithmetical error.
Corrective action:
- Check the input values.
- If necessary, use another tool radius.

239
Error in radius compensation

Cause of error:
Calculation of the radius compensation in the Contour Train cycle resulted in an arithmetical error.
Corrective action:
- Check the input values.
- If necessary, use another tool radius.

240
Error in contour pocket

Cause of error:
Calculation of the intersection of the contour with the tool path in the contour pocket resulted in an arithmetical error.
Corrective action:
- Check the input values.
- If necessary, use another tool radius.

241
Error in contour pocket/train

Cause of error:
The length of the path to be traversed in the contour pocket or in the Contour Train cycle is too large to be represented as a number.
Corrective action:
Check the input values.

242
Error in contour pocket

Cause of error:
Calculation of the contour-parallel paths for clearing out a contour pocket resulted in an arithmetic error.
Corrective action:
- Check the input values.
- If necessary, use another tool radius.

243
Error in contour pocket

Cause of error:
Calculation of the contour elements of a contour pocket resulted in an arithmetical error.
Corrective action:
Check the input values.

244
Error in radius compensation

Cause of error:
Calculation of the radius compensation of a contour resulted in a mathematical error.
Corrective action:
- Check the input values.
- If necessary, use another tool radius.

245
Error in radius compensation

Cause of error:
Calculation of the radius compensation of a contour resulted in a mathematical error.
Corrective action:
- Check the input values.
- If necessary, use another tool radius.

246
Error in contour pocket

Cause of error:
Calculation of the normal from a given point on a contour element for contour-parallel rough-out resulted in an arithmetical error.
Corrective action:
Check the input values.

247
Error in contour pocket

Cause of error:
Calculation of the intersections in the contour pocket resulted in an arithmetical error.
Corrective action:
Check the input values.

248
Rotate spindle by 180º!

Cause of error:
During measurement of the stylus center offset the spindle was not rotated by 180 degrees.
Corrective action:
Rotate the spindle by 180 degrees.

249
Error while testing limit switch

Cause of error:
Checking the software limit switch for a circle or a helix in space resulted in an arithmetical error.
Corrective action:
Check the input values.

250
Arithmetical error during M112

Cause of error:
Calculation of automatically inserted rounding arcs (M function M112) resulted in an arithmetical error.
Corrective action:
Check the input values for M112.

251
Parameter calculation error

Cause of error:
Calculation of an arithmetical expression in the Q parameter calculation resulted in an arithmetical error.
Corrective action:
Check the input values.

252
Error while testing limit switch

Cause of error:
Checking the software limit switch resulted in an arithmetical error.
Corrective action:
Check the input values.

253
Path comp wrongly ended

Cause of error:
You attempted (with R0, ISO: G40) to cancel radius compensation in a circle block.
Corrective action:
The tool radius compensation can be canceled only with a line block (L, ISO: G0, G1, G10, G11).

254
Path comp wrongly started

Cause of error:
You attempted to program a chamfer before starting the tool radius compensation.
Corrective action:
A chamfer may be programmed only with active tool radius compensation.

255
Path comp wrongly started

Cause of error:
You attempted to program a corner radius before starting the tool radius compensation.
Corrective action:
A corner radius can be programmed only with active tool radius compensation.

256
Path comp wrongly started

Cause of error:
You attempted (with RL or RR, ISO: G41 or G42) to activate the tool radius compensation in a circle block.
Corrective action:
The tool radius compensation can be activated only with a line block (L, ISO: G0, G1, G10, G11).

257
Path comp wrongly started

Cause of error:
You attempted to program a corner radius between an part program block without radius compensation and a line block with tool radius compensation.
Corrective action:
Program a rounding arc only with active tool radius compensation.

258
Path comp wrongly started

Cause of error:
You attempted to take over a pole (or circle center) after the first block with tool radius compensation (empty CC block, ISO: G29).
Corrective action:
The Pol can be taken over no earlier than in the second block with tool radius compensation.

259
Path comp wrongly started

Cause of error:
You attempted to program an APPR block during an active radius compensation.
Corrective action:
APPR block is permitted only when no tool radius compensation is active.

260
CYCL DEF incomplete

Cause of error:
-You deleted part of a cycle.
-You have inserted other part program blocks within a cycle.
Corrective action:
- Redefine the complete cycle again
- Delete part program blocks programmed within a cycle.

261
CYCL DEF not defined

Cause of error:
-You have programmed a cycle call without first having defined a fixed cycle.
-You attempted to call a cycle that automatically becomes effective upon definition.
Corrective action:
- Define the cycle call after definition of a fixed cycle.
- Delete the cycle call

262
Contour pocket not permitted

Cause of error:
You attempted to run a contour pocket cycle using a program that is run blockwise from an external data medium.
Corrective action:
Delete the contour pocket cycle.

263
0 plunging depth not permitted

Cause of error:
You programmed the plunging depth 0 in the definition of the called fixed cycle.
Corrective action:
Enter a plunging depth other than 0.

264
User cycle does not exist

Cause of error:
You attempted to call a user parameter that is not stored in TNC memory.
Corrective action:
- Delete the cycle definition.
- Read-in the user cycle.

265
Subprogram does not exist

Cause of error:
You defined a subprogram number in Cycle 14 Contour Geometry (ISO: G37) that does not exist in your program.
Corrective action:
- Correct the subprogram number in the cycle.
- Program a subprogram with the correct number.

266
Subprogram does not exist

Cause of error:
You called a user cycle or a subprogram in the definition of a contour, a contour pocket or a cycle contour train. However, the corresponding file could not be opened for reading.
Corrective action:
Load the file again.

267
Radius compensation not defined

Cause of error:
-You programmed four axes and a tool radius compensation in an L block, but the TNC can move no more than three axes with radius compensation.
- M112 not permitted for circular movement.
Corrective action:
- Remove one of the four axes or the radius compensation.
- Deactivate M112 with M113.

268
Illegal NC block

Cause of error:
A program being executed blockwise contains on the the following part program blocks:
- CALL LBL x REP y (ISO: L x,y)
- LBL SET x (ISO: G98 Lx)
- FN15:PRINT (ISO: D15)
Corrective action:
Delete impermissible part program blocks from the externally stored program.

269
LBL CALL not permitted

Cause of error:
A subprogram call (LBL CALL, ISO: Lx,x) has been programmed in a program being run blockwise from an external data medium.
Corrective action:
Delete the subprogram call.

270
PGM CALL not permitted

Cause of error:
A program call (PGM CALL, ISO: %..) has been programmed in a program being run blockwise from an external data medium.
Corrective action:
Delete the program call.

271
User cycle not permitted

Cause of error:
An OEM cycle has been called in a program being run blockwise from an external data medium.
Corrective action:
Delete the user cycle.

272
Incorrect block syntax

Cause of error:
A part program block contains a syntax error.
Corrective action:
Edit the part program.

273
Incorrect NC block in cycle

Cause of error:
A part program stored in an EPROM contains a jump to a label (LBL CALL) indicating a jump counter.
Corrective action:
Edit the user cycle.

274
Tool definition not permitted

Cause of error:
You programmed a tool definition (TOOL DEF, ISO: G99), although the central tool file is active.
Corrective action:
- Delete the TOOL DEF block (G99 block).
- Deactivate the tool table (machine parameter 7260).

275
TOOL DEF w/o length or radius

Cause of error:
The definition of a tool (TOOL DEF, ISO: G99) is missing the value for tool length or tool radius.
Corrective action:
Complete the TOOL DEF block (G99 block).

276
CT after APPR not permitted

Cause of error:
You programmed a tangentially connecting circle (CT) immediately after an APPR block.
Corrective action:
Edit the part program.

277
CHF after APPR not permitted

Cause of error:
You programmed a chamfer (CHF) immediately after an APPR block.
Corrective action:
Edit the part program.

278
RND after APPR not permitted

Cause of error:
You programmed a rounding radius (RND) immediately after an APPR block.
Corrective action:
Edit the part program.

279
RND radius = 0 not permitted

Cause of error:
You programmed a rounding arc (RND, ISO: G25) with the radius 0 in the definition of a contour, a contour pocket or a contour train.
Corrective action:
Edit the part program.

280
Chamfer length = 0 not permitted

Cause of error:
You programmed a chamfer (CHF, DIN/ISO: G24) with the length 0 in the definition of a contour, a contour pocket or a contour train.
Corrective action:
Edit the part program.

281
2nd rounding arc not permitted

Cause of error:
You programmed two rounding arcs (RND, ISO: G25) in succession in the definition of a contour, a contour pocket or a contour train.
Corrective action:
Edit the part program.

282
RND after CHF not permitted

Cause of error:
You programmed a rounding arc (RND, ISO: G25) immediately after a chamfer (CHF, ISO: G24) in the definition of a contour, a contour pocket or a contour train.
Corrective action:
Edit the part program.

283
CHF after RND not permitted

Cause of error:
You programmed a chamfer (CHF, ISO: G24) immediately after a rounding arc (RND, ISO: G25) in the definition of a contour, a contour pocket or a contour train.
Corrective action:
Edit the part program.

284
2nd chamfer not permitted

Cause of error:
You programmed two chamfers (CHF, ISO: G24) in immediate succession in the definition of a contour, a contour pocket or a contour train.
Corrective action:
Edit the part program.

285
DEP LCT after HELIX not permittd

Cause of error:
You programmed a DEP LCT block for departing a contour immediately after a helix.
Corrective action:
Edit the part program.

286
APPR LCT before HELIX not permtd

Cause of error:
You programmed the APPR LCT block or APPR PLCT block for approaching a contour immediately before a helix.
Corrective action:
Edit the part program.

287
Illegal NC block

Cause of error:
You programmed one of the following (non-permissible) blocks within the definition of a contour, a contour pocket or a contour train:
-TCH PROBE (ISO: G55)
-TOOL DEF (ISO: G99)
-TOOL CALL (ISO: T..)
- BEGIN PGM (ISO: %..)
Corrective action:
Edit the part program.

288
Rounding arc not permitted

Cause of error:
You programmed a rounding radius immediately before a CT (ISO: G6) or CTP (ISO: G16) block in the definition of a contour, a contour pocket or a contour train.
Corrective action:
Edit the part program.

289
Rounding arc not permitted

Cause of error:
You programmed a rounding arc (RND, ISO: G25) as first block in the definition of a contour, contour pocket or contour train.
Corrective action:
Edit the part program.

290
Chamfer not permitted

Cause of error:
You programmed a chamfer (CHF, ISO: G24) as first block in the definition of a contour, contour pocket or contour train.
Corrective action:
Edit the part program.

291
DEP not last block

Cause of error:
You programmed a DEP block in a position other than last in the definition of a contour or contour train.
Corrective action:
Edit the part program.

292
No rounding arc as last block

Cause of error:
You programmed a rounding arc (RND, ISO: G25) as last block in the definition of a contour, contour pocket or contour train.
Corrective action:
Edit the part program.

293
No chamfer as last block

Cause of error:
You programmed a chamfer (CHF, ISO: G24) as last block in the definition of a contour, contour pocket or contour train.
Corrective action:
Edit the part program.

294
Only one DEP block permitted

Cause of error:
You programmed more than one DEP block in the definition of a contour or a contour train.
Corrective action:
Edit the part program.

295
DEP not permitted

Cause of error:
You programmed a DEP block in the definition of a contour or contour pocket.
Corrective action:
Edit the part program.

296
APPR not permitted

Cause of error:
You programmed an APPR block in the definition of a contour or a contour pocket.
Corrective action:
Edit the part program.

297
APPR not first block

Cause of error:
You programmed an APPR block in a position other than first in the definition of a contour or contour train.
Corrective action:
Edit the part program.

298
Tool call not permitted

Cause of error:
You programmed the M function for automatic tool call in a block with radius compensation.
Corrective action:
Cancel the radius compensation before an automatic tool change.

299
Cycle 14 (G37) not permitted

Cause of error:
- During compilation of an FK program a part program „ERROR" block was read-in.
- You defined a Cycle 14 in a contour subprogram (ISO: G37).
Corrective action:
- Delete the ERROR block.
- Delete Cycle 14 (G37) from the contour subprogram.

300
Tool call not permitted

Cause of error:
You attempted to execute an automatic tool call while a part program block with radius compensation was running.
Corrective action:
Edit the part program.

301
Tilting not possible

Cause of error:
The existing machine geometry does not allow the definition of the angle entered in Cycle 19 for tilting the working plane.
Corrective action:
Check the angle in the Tilted Working Plane cycle.

302
M91/M92 with 3DROT not permitted

Cause of error:
You have programmed a positioning operation with M91 or M92 with a tilted working plane.
Corrective action:
Edit the part program.

303
M114 with 3DROT not permitted

Cause of error:
You attempted to activate the Tilted Working Plane functions and M114 simultaneously.
Corrective action:
Edit the part program.

304
M114 without machine geometry

Cause of error:
You programmed the M function M114 without entering a corresponding description of the machine geometry the machine parameters MP7510 and following.
Corrective action:
Define the machine geometry in machine parameters MP7510 and following.

305
No M114 with radius compensation

Cause of error:
You programmed the M function M114 in a block with tool radius compensation.
Corrective action:
Edit the part program.

306
Cylinder surface not tiltable

Cause of error:
You called the Cylinder Surface cycle while the working plane was tilted.
Corrective action:
Delete the cyclindrical interpolation cycle from the part program.

307
Axis double programmed

Cause of error:
In the Contour Lines cycle (TCH PROBE 7) you programmed the starting position in one axis twice.
Corrective action:
Edit the part program.

308
Axis double programmed

Cause of error:
You programmed an axis twice in a single positioning block.
Corrective action:
Edit the part program.

309
Axis double programmed

Cause of error:
You programmed an axis twice in the Mirror Image cycle.
Corrective action:
Edit the part program.

310
Axis double programmed

Cause of error:
You called a Slot Milling or Rectangular Pocket cycle in which the same axis is programmed for length and width.
Corrective action:
Edit the part program.

311
Axis double programmed

Cause of error:
While defining Cycle 26 (axis-specific scaling factor) you programmed the scaling factor or the scaling datum twice in one axis.
Corrective action:
Edit the part program.

312
Height axis not permitted here

Cause of error:
While defining the Contour Lines cycle (TCH PROBE 7) you programmed a height axis in the starting point.
Corrective action:
Edit the part program.

312
Plane wrongly defined

Cause of error:
While defining the Contour Lines cycle (TCH PROBE 7) you programmed a height axis in the starting point.
Corrective action:
Edit the part program.

313
Plane wrongly defined

Cause of error:
The two axes of the circle end point in a circle block (C, ISO: G2, G3, G12, G13)) differ from the axes in the circle center block (CC, ISO: I,J,K).
Corrective action:
Edit the part program.

314
3-D comp.: plane def incorrect

Cause of error:
LN block: Calculation of the plane direction resulted in an error.
Corrective action:
Have the components NX, NY and NZ of the surface normals checked.

315
Plane wrongly defined

Cause of error:
The tool axis is not perpendicular to the plane in which the basic rotation is active.
Corrective action:
Edit the part program.

316
Plane wrongly defined

Cause of error:
In a probing operation the tool axis active in the NC program is not identical or parallel to the touch probe axis, and the machine parameter 7411 has the value 1 (active tool data remain in the part program block TCH PROBE, ISO: G55).
Corrective action:
Edit the part program.

317
Plane wrongly defined

Cause of error:
In a circular block you programmed the coordinates for the end point in a main axis and its associated parallel axis.
Corrective action:
Edit the part program.

318
Plane wrongly defined

Cause of error:
You programmed only one axis in a „circle with radius“ block (CR, ISO: G2,G3 with R). You also either did not define a tool axis or the programmed axis is the tool axis.
Corrective action:
Edit the part program.

319
Plane wrongly defined

Cause of error:
In a CT block (ISO: G6, G16) you defined an axis that is not included in the working plane.
Corrective action:
Edit the part program.

320
Plane wrongly defined

Cause of error:
Radius compensation in a circle block is not possible if the circle lies in a plane parallel to the tool axis and a basic rotation or a programmed rotation is active.
Corrective action:
Edit the part program.

321
Plane wrongly defined

Cause of error:
Radius compensation is not possible in a circle block (C, ISO: G2, G3) if the starting point and end point do not have the same two axes or those axes are not parallel to the axes of the circle center (CC, ISO: I,J;K).
Corrective action:
Edit the part program.

322
Plane wrongly defined

Cause of error:
Radius compensation is not possible in a rounding block (RND, ISO: G25) if two mutually parallel linear axes are programmed in the preceding positioning block (e.g. X and U).
Corrective action:
Edit the part program.

323
Plane wrongly defined

Cause of error:
Radius compensation is not possible in a chamfer block (CHF, ISO: G24) if two mutually parallel linear axes are programmed in the preceding positioning block (e.g. X und U).
Corrective action:
Edit the part program.

324
Plane wrongly defined

Cause of error:
You programmed a radius-compensated circle block that does not lie in the compensation plane.
Corrective action:
Check the programmed axes in the circle block.

325
Plane wrongly defined

Cause of error:
You programmed only one axis in a circle center or pole block (CC, ISO: I,J,K) and that axis does not lie in the plane that was previously defined in a CC block, or there is no preceding CC block.
Corrective action:
Edit the part program.

326
Plane wrongly defined

Cause of error:
You programmed a circle center block or pole takover block (CC,ISO: I,J,K) without entering coordinates (pole assumption) and without explicitly programming two linear axes in the preceding positioning block.
Corrective action:
In the block before the pole-takeover block, program two linear axes of the working plane.

327
Plane wrongly defined

Cause of error:
The calculated positioning operation requires movement in more than five axes.
Corrective action:
Edit the part program.

328
Plane wrongly defined

Cause of error:
You programmed a helix for which the axis of linear motion is identical or parallel to one of the axes of circular motion.
Corrective action:
Edit the part program.

329
Rotary axis not permitted here

Cause of error:
You programmed a rotary axis as tool axis.
Corrective action:
Program only linear axes in the TOOL CALL block (ISO: T..).

330
Locked axis was programmed

Cause of error:
-You programmed a locked axis in a part program block.
- A traverse was calculated for a locked axis (e.g. due to an active rotation).
- A programmed axis is a freely traversing rotary axis.
Corrective action:
- If necessary, activate the axis.
- Delete the axis from the part program block.

331
Wrong axis programmed

Cause of error:
You called a Slot Milling cycle or Pocket Milling cycle in which the programmed axes for length and width do not lie in the working plane.
Corrective action:
Edit the cycle parameter.

332
Wrong axis programmed

Cause of error:
You called a Slot Milling cycle or Pocket Milling cycle in which one of the programmed axes for length or width is a rotary axis.
Corrective action:
Edit the cycle parameter.

333
Wrong axis programmed

Cause of error:
You called a Slot Milling cycle or Pocket Milling cycle in which one of the programmed axes for length or width is a secondary axis, although a programmed rotation or basic rotation is active.
Corrective action:
- Reset the basic rotation.
- Use a principle axis for the cycle.

334
Wrong axis programmed

Cause of error:
In the Thread Cutting cycle (18, ISO: G86) you programmed as target point a coordinate that does not agree with the current tool axis.
Corrective action:
Edit the part program.

335
Rotary axis not programmed

Cause of error:
In Cycle 27 (Cylinder Surface, ISO: G127) you did not program the rotary axis corresponding to the linear axis in the first block of the description of a contour.
Corrective action:
Edit the contour subprogram.

336
Axis geometry not defined

Cause of error:
You programmed Cycle 27 (Cylinder Surface, ISO: G127) although in machine parameters MP7510 and following no rotary axis, or the programmed rotary axis, is not configured.
Corrective action:
- Define the correct rotary axis in the contour subprogram.
- Have the machine manufacturer check machine parameter 7510 and following.

337
No rotary axis was programmed

Cause of error:
The axis recognized as main axis in Cycle 27 (Cylinder Surface, ISO: G127) is not a rotary axis.
Corrective action:
Edit the contour subprogram.

338
No principal axis was programmed

Cause of error:
The linear axis programmed in Cycle 27 (Cylinder Surface, ISO: G127) or the tool axis selected for machining is none of the axes X, Y or Z.
Corrective action:
Edit the contour subprogram.

339
Slave axis of gantry programmed

Cause of error:
You programmed the slave axis of a gantry axis in a part program block.
Corrective action:
Do not program any slave axes.

340
Wrong rpm

Cause of error:
The spindle speed that you programmed is greater than the maximum spindle speed as defined in machine parameter MP3020.
Corrective action:
Enter a permissible speed. Refer to you machine manual.

341
Wrong rpm

Cause of error:
The spindle speed that you programmed is less than the minimum spindle speed as defined in machine parameter MP3020.
Corrective action:
Enter a permissible speed. Refer to your machine manual.

342
Wrong rpm

Cause of error:
The spindle speed that you programmed is greater than the maximum speed for the analog spindle as defined in machine parameter MP3515.
Corrective action:
Enter a permissible speed. Refer to your machine manual.

343
Wrong rpm

Cause of error:
The spindle speed that you programmed results in an excessively low analog voltage (MP3240.1).
Corrective action:
Enter a permissible speed. Refer to your machine manual.

344
Rpm too high for this cycle

Cause of error:
The programmed spindle speed results in an excessively high feed rate in the tool axis during execution of a Rigid Tapping cycle or Tapping cycle.
Corrective action:
Reduce the spindle speed.

345
0 rpm not permitted

Cause of error:
You called a Rigid Tapping or Tapping cycle with a programmed spindle speed of 0.
Corrective action:
Program a spindle speed greater than 0.

346
Wrong rpm

Cause of error:
The programmed spindle speed does not lie in the pattern of spindle speed ranges defined in machine parameter MP3020.
Corrective action:
Enter the correct spindle speed.

347
Chamfer not permitted

Cause of error:
In the definition of a contour, contour pocket or contour train you programmed a chamfer between two contour elements of which one is an arc.
Corrective action:
Enter a chamfer only between straight lines.

348
Chamfer not permitted

Cause of error:
The positioning block preceding a chamfer block (CHF, ISO: G24) is not a straight line.
Corrective action:
Enter a chamfer only between straight lines.

349
Chamfer not permitted

Cause of error:
The positioning block following a chamfer block (CHF, ISO: G24) is not a straight line.
Corrective action:
Enter a chamfer only between straight lines.

350
Chamfer not permitted

Cause of error:
You programmed in sequence a positioning block without radius compensation, a positioning block with radius compensation, and a chamfer (CHF, ISO: G24).
Corrective action:
Enter a chamfer no earlier than after two compensated part program blocks.

351
Chamfer not permitted

Cause of error:
You programmed in sequence a positioning block without radius compensation, a chamfer (CHF, ISO: G24), and a positioning block with radius compensation.
Corrective action:
Enter a chamfer only between radius-compensated blocks.

352
Chamfer not permitted

Cause of error:
You programmed in sequence a positioning block with radius compensation, a chamfer (CHF, ISO: G24), and a positioning block without radius compensation.
Corrective action:
A chamfer can be inserted only between radius-compensated blocks.

353
Chamfer not permitted

Cause of error:
You programmed a chamfer (CHF, ISO: G24) in a plane perpendicular to the working plane followed by a movement only in the tool axis.
Corrective action:
Execute a chamfer only in the working plane.

354
Chamfer too large

Cause of error:
You programmed a chamfer (CHF, ISO: G24) that cannot be inserted because the preceding line is too short.
Corrective action:
Enter a smaller chamfer length.

355
Chamfer too large

Cause of error:
You programmed a chamfer that (CHF, ISO: G24) cannot be inserted because the subsequent line is too short.
Corrective action:
Enter a smaller chamfer length.

356
Chamfer too large

Cause of error:
While defining a contour, contour pocket or contour train you programmed a chamfer (CHF, ISO: G24) whose starting and end points no longer lie on one of the adjoining contour elements.
Corrective action:
Enter a smaller chamfer length.

357
Circle end pos. incorrect

Cause of error:
The difference between the radius at the end point of a C block (ISO: G2, G3) and the radius at the starting point exceeds the tolerance defined in machine parameter MP7431.
Corrective action:
- Check the circle end-point coordinates.
- If necessary, increase the value in MP 7431.

358
C-block: arc end pos. incorrect

Cause of error:
The difference between the radius at the end point of a C block (ISO: G2, G3) and the radius at the starting point exceeds the tolerance defined in machine parameter MP7431.
Corrective action:
- Check the circle end-point coordinates.
- If necessary, increase the value in MP 7431.

359
Circle end pos. incorrect

Cause of error:
The distance between the circle starting point and the circle end point in the CR block (ISO: G2, G3 mit R) is less than 0.2 µm.
Corrective action:
Check the coordinaten in the CR block.

360
Circle end pos. incorrect

Cause of error:
You programmed a „circle with radius" block (CR, ISO: G2, G3 with R) such that the distance between the starting point and the end point is greater than the diameter.
Corrective action:
Check the coordinates of the arc starting point and the arc end point.

361
Circle end pos. incorrect

Cause of error:
After an interruption in a circle block a program run was restarted although the starting position deviates from the arc by a distance greater than the tolerance defined in machine parameter MP7431. This can happen, for example, after you move an axis in a manual mode.
Corrective action:
Use a mid-program startup to return to the interrupted block.

362
Label number not found

Cause of error:
In Cycle 14 (Contour Geometry, ISO: G37) you defined a subprogram number that does not exixt.
Corrective action:
- Correct the subprogram number in Cycle 14.
- Enter the missing subprogram.

363
Label 0 is missing

Cause of error:
A contour subprogram defined in Cycle 14 (Contour Geometry, ISO: G37) is not concluded with LBL 0 (ISO: G98).
Corrective action:
Conclude the contour subprogram with LBL 0 (ISO: G98).

364
Label number not found

Cause of error:
You attempted to used LBL CALL (ISO: L x,x) to call a subprogram or a program section repeat that does not exist.
Corrective action:
- Change the nubmer in the LBL CALL block.
- Insert a subprogram or program section repetition.

365
Cycle 14: LBL not found

Cause of error:
In the Contour Geometry cycle you have listed a subprogram number that does not exist.
Corrective action:
- Correct the subprogram number in Cycle 14.
- Insert the subprogram that you have defined in Cycle 14.

366
Pole is missing

Cause of error:
You attempted to traverse with polar coordinates (LP/CP/CTP, ISO: G10/G11/G12/G13/G15/G16) without first programming a pole (CC, ISO: I/J/K)..
Corrective action:
Program a pole before the first block with polar coordinates.

367
Circle center missing

Cause of error:
You programmed a circle block (C, ISO: G2/G3) without first defining a circle center (CC, ISO: I/J/K).
Corrective action:
Define a circle center before the circle block.

368
Tool radius too small

Cause of error:
In Cycle 3 (slot milling) you defined a width that is greater than four times the tool radius.
Corrective action:
- Input limits for slot width:
Greater than tool diameter, smaller than four times the tool radius.
- If the slot width is greater than four times the tool radius, use the pocket milling cycle.

369
Tool radius 0 not permitted

Cause of error:
You called the Slot Milling, Pocket Milling, Circular Pocket Milling, or Contour Pocket cycle although the active tool has a radius of 0.
Corrective action:
Edit the part program.

370
Radius comp. undefined

Cause of error:
You programmed a radius-compensated single-axis positioning block which without the radius compensation does not result in tool movement (e.g. IX+0 R+, ISO: G7).
Corrective action:
Edit the part program.

371
Radius comp. undefined

Cause of error:
You programmed a radius-compensated single-axis positioning block whose path would take a direction opposite to that of the non-compensated path.
Corrective action:
Edit the part program.

372
Radius comp. undefined

Cause of error:
You attempted to run a part program block with tool radius compensation after inserting a spherical or toroidal cutter.
Corrective action:
Set R2 to equal 0 in the tool table.

373
Radius comp. undefined

Cause of error:
In the definition of a contour, a contour pocket or a contour train you neglected to program radius compensation.
Corrective action:
Set a tool radius compensation in the contour subprogram to define whether the contour is for a pocket or island.

374
Radius comp. undefined

Cause of error:
You called Cycle 22 (Contour-Parallel Roughing, ISO: G122) or Cycle 21 (Pilot Drilling, ISO: G121) although the product of the tool radius and the overlap factor is 0.
Corrective action:
Edit the part program.

375
Traverse reference points

Cause of error:
In a part program block you attempted to move an axis that has not yet traversed the reference point.
Corrective action:
Move the axis over the reference point.

376
Rounding-off undefined

Cause of error:
You programmed in sequence a positioning block without radius compensation, a rounding arc (RND, ISO: G25), and a circle block with radius compensation.
Corrective action:
Edit the part program.

377
Rounding-off undefined

Cause of error:
You programmed a corner radius perpendicular to the working plane, followed only by a movement in the tool axis.
Corrective action:
Edit the part program.

378
Rounding-off not permitted

Cause of error:
In the positioning block before a rounding arc (RND, ISO: G25) either you programmed a movement only in the tool axis or you used the M function M98 to cancel compensation.
Corrective action:
Edit the part program.

379
Rounding radius too large

Cause of error:
While defining a contour of a contour pocket or of a contour train you programmed a rounding arc (RND, ISO: G25) with so large a radius that it does not fit between the adjoining elements.
Corrective action:
Define a smaller rounding radius in the contour subprogram.

380
Rounding radius too large

Cause of error:
In a rounding block approaching a contour, the starting point of the block lies inside the circle of the arc.
Corrective action:
- Use a smaller rounding radius.
- Program the starting point of the approaching block farther away from the contour.

381
Rounding radius too large

Cause of error:
In a rounding block approaching a contour the starting point of the block lies too close to the center of the rounding circle (less than 1.6 µm).
Corrective action:
- Program the starting point of the approach block farther away from the center of the rounding circle.

382
Rounding radius too large

Cause of error:
In a rounding block departing a contour, the end point of the departing block lies within the rounding circle.
Corrective action:
- Use a smaller rounding radius.
- Program an end point of the departing block farther away from the contour.

383
Rounding radius too large

Cause of error:
In a rounding block departing a contour, the end point of the departing block lies too close to the center of the rounding circle (less than 1.6 µm).
Corrective action:
- Program and end point of the departing block farther away from the center of the rounding circle.

384
Rounding radius too large

Cause of error:
You programmed a rounding arc (RND) whose starting point does not lie on the contour or on the compensated contour.
Corrective action:
Edit the part program.

385
Rounding radius too large

Cause of error:
You programmed a rounding arc (RND), whose end point does not lie on the contour or on the compensated contour.
Corrective action:
Edit the part program.

386
Rounding radius too large

Cause of error:
You defined a pocket (Cycle 4) in which the sum of twice the corner radius plus the stepover factor is greater than the width of the pocket.
Corrective action:
Edit the part program.

387
Rounding radius too large

Cause of error:
In the Contour Train cycle, you programmed the approach to or departure from a contour with a rounding block whose starting position or target position lies within the arc.
Corrective action:
Edit the part program.

388
Spindle must be turning

Cause of error:
You called a fixed cycle without first switching on the spindle.
Corrective action:
Edit the part program.

389
Mirror image on tool axis

Cause of error:
You ran a TOOL CALL block (ISO: T..) in which a mirrored axis is given as tool axis.
Corrective action:
- Cancel the mirror image before a tool change.
- If necessary, change the tool axis in the TOOL CALL block.

390
Mirror image on tool axis

Cause of error:
In Cycle 8 (Mirror Image, ISO: G28) you defined the tool axis as a mirrored axis.
Corrective action:
Edit the part program.

391
Tool axis is missing

Cause of error:
You programmed a positioning block with tool radius compensation without first calling a tool.
Corrective action:
Edit the part program.

392
Tool axis is missing

Cause of error:
You programmed a paraxial positioning block with tool radius compensation without first calling a tool.
Corrective action:
Edit the part program.

393
Tool axis is missing

Cause of error:
You called a fixed cycle without first activating a tool.
Corrective action:
Edit the part program.

394
Tool axis is missing

Cause of error:
You programmed Cycle 10 (Rotation,ISO: G73) without first calling a tool. The tool call defines which working plane the TNC rotates.
Corrective action:
Edit the part program.

395
Tool axis is missing

Cause of error:
You attempted to approach a position using the positioning logic, but did not first define the working plain through a tool call.
Corrective action:
Edit the part program.

396
Tool axis is missing

Cause of error:
You programmed the M function for reducing the feed rate in the tool axis, but did not call a tool first.
Corrective action:
Edit the part program.

397
Tool axis is missing

Cause of error:
You called the TCH PROBE 0 cycle (ISO: G55) without first calling a tool.
Corrective action:
Edit the part program.

398
Tool definition is missing

Cause of error:
In a TOOL CALL (ISO: T..) you entered a tool number for which there is no definition in the program.
Corrective action:
Edit the part program.

399
Tool definition is missing

Cause of error:
In a part program run in blockwise transfer (DNC mode) a TOOL CALL block (ISO: T..) was programmed with a number other than that programmed in the preceding TOOL DEF (ISO: G99) block.
Corrective action:
Edit the part program.

400
Tool definition is missing

Cause of error:
You programmed a TOOL CALL (ISO: T..) with a tool number that does not exist in the central tool file (TOOL.T).
Corrective action:
Edit the part program.

401
Tool number is missing

Cause of error:
You programmed a tool axis in the TOOL CALL block (ISO: T..), but no tool number.
Corrective action:
Edit the part program.

402
Tool radius too large

Cause of error:
- Contour milling: During inside compensation, the radius of an arc block is smaller than the cutter radius.
- Thread milling: The core diameter of the thread is smaller than the tool diameter.
Corrective action:
Use a smaller tool.

403
Tool radius too large

Cause of error:
An inside radius compensation is not possible when the radius of the rounding arc is smaller than the cutter radius.
Corrective action:
Edit the part program.

404
Tool radius too large

Cause of error:
The compensated path of the straight line or of the circle would take a direction opposite to that of the non-compensated path.
Corrective action:
Edit the part program.

405
Tool radius too large

Cause of error:
On inside corners the resulting intermediate angle would be smaller than 0.028 degrees.
Corrective action:
Edit the part program.

406
Tool radius too large

Cause of error:
Slot Milling cycle: The slot width is less than the tool diameter.
Corrective action:
Edit the part program.

407
Tool radius too large

Cause of error:
Pocket Milling cycle: The pocket width is less than or equal to the tool diameter.
Corrective action:
Edit the part program.

408
Tool radius too large

Cause of error:
Pocket Milling cycle: The corner rounding radius is smaller than the cutter radius.
Corrective action:
Edit the part program.

409
Tool radius too large

Cause of error:
Circular Pocket Milling cycle: The pocket radius is smaller than the cutter radius.
Corrective action:
Edit the part program.

410
Tool radius too large

Cause of error:
In Cycle 24 (Side Finishing, ISO: G123) the sum of the finishing cutter radius and the finishing allowance is greater than or equal to the sum of the roughing cutter radius and the roughing allowance.
Corrective action:
- Reduce the finishing allowance in Cycle 23.
- Use a smaller finishing tool.

411
Tool radius too large

Cause of error:
During Cycle 21 (Pilot Drilling for Contour-Parallel Rouch-Out, ISO: G121), the drilling tool radius is so large that it would gouge the workpiece.
Corrective action:
Use a smaller drilling tool.

412
Tool radius too large

Cause of error:
The tip edge radius of the toroidal cutter is greater than its shaft radius.
Corrective action:
Enter in the tool table a value for R2 that is less than or equal to R.

413
Program start undefined

Cause of error:
Type of interpolation undefined.
Corrective action:
Restart the part program.

414
Program start undefined

Cause of error:
Type of dimensions undefined.
Corrective action:
Before the first positioning block in the ISO program, use G90 or G91 to define whether you are entering absolute or incremental coordinates.

415
Program start undefined

Cause of error:
A direction of rotation is required to start a circular movement.
Corrective action:
Define the direction of rotation in the first circle block.

416
Program start undefined

Cause of error:
The TNC cannot exactly calculate the geometry from the present position (e.g., the programmed coordinates of the first positioning block are the same as the compensated actual position).
Corrective action:
- Restart the part program.
- Use mid-program startup to return to the point of interruption.

417
Program start undefined

Cause of error:
Error after an interruption in program run (with change of operating mode or PLC positioning): A pole cannot be taken over if a CT block was programmed before the interruption.
Corrective action:
Restart the part program.

418
Program start undefined

Cause of error:
Error after interruption in program run (with change of operating mode or PLC positioning): After an interruption you attempted to start the program with a cycle call or with the TOUCH PROBE measuring cycle.
Corrective action:
Press GOTO, select a cycle definition block.

419
Program start undefined

Cause of error:
-The first block in the part program is a block with automatic pole assumption (CC without coordinates, ISO: G29).
- After a program interruption you pressed GOTO to select a block with automatic pole assumption.
Corrective action:
- Automatic pole assumption must not be the first coordinate block.
-To return to the program, use a positioning block with all coordinates.

420
Program start undefined

Cause of error:
-The first positioning block in the part program is a CT block (ISO: G6, G16).
- After a program interruption you pressed GOTO to select a CT block (ISO: G6, G16).
Corrective action:
- Program at least two positioning blocks before the CT block.
- After a program interruption, restart at least two positioning blocks before the CT block.

421
Program start undefined

Cause of error:
-The first positioning block in the part program is an RND block (ISO: G25).
- After a program interruption with you pressed GOTO to select an RND block (ISO: G25).
Corrective action:
- Program at least two positioning blocks in front of an RND block.
- After a program interruption there must be at least two positioning blocks before the RND blocks.

422
Program start undefined

Cause of error:
-The first positioning block in the part program is a CHF block (ISO: G24).
- After an interruption with GOTO you selected a CHF block (ISO: G24).
Corrective action:
- Program at least two positioning blocks in front of an CHF block.
- After a program interruption there must be at least two positioning blocks before the CHF blocks.

423
Program start undefined

Cause of error:
After a program interruption with GOTO you attempted to select a departing block.
Corrective action:
After a program interruption, do not resume the program at a departing block.

424
Program start undefined

Cause of error:
At the beginning of the program you activated a tilted working plane and M114 at the same time.
Corrective action:
M114 cannot be run while the working plane is tilted.

425
Cancel comp. before PLC positng

Cause of error:
During resumption of a part program a tool radius compensation is active RL/RR (ISO: G41, G42) although a PLC datum shift must be executed.
Corrective action:
Cancel radius compensation before resuming the program.

426
Program start undefined

Cause of error:
When resuming a part program you selected a CT block (ISO: G6, G16) although a PLC positioning or a PLC datum shift must be executed.
Corrective action:
Resume the program several blocks before the CT block.

427
Block format incorrect

Cause of error:
The radius is missing for a Circle with Radius block (CR, ISO: G02, G03).
Corrective action:
Edit the part program.

428
Excessive subprogramming

Cause of error:
In a Contour Pocket cycle or a Contour Train cycle you called more than 3 programs (PGM CALL, ISO: %..).
A program call can also be:
- Cycle 9 (PGM CALL, ISO: G39)
- Calling an OEM cycle
Corrective action:
Edit the part program.

429
Excessive subprogramming

Cause of error:
You nested more than 8 subprogram calls (CALL LBL xx, ISO: Lx,0).
Corrective action:
Check whether all your subprograms are concluded with LBL 0 (ISO:G98 L0).

430
Excessive subprogramming

Cause of error:
You nested more than 10 program section repeats.
Corrective action:
Edit the part program.

431
Excessive subprogramming

Cause of error:
You programmed more than 3 program calls (PGM CALL, ISO: %..). A program call can also be:
- Cycle 9 PGM CALL (ISO: G39)
- Calling an OEM cycle
Corrective action:
Edit the part program.

432
Excessive subprogramming

Cause of error:
Internal stack error in an arithmetical expression (FN20, ISO: D20), e.g. due to excessive nesting.
Corrective action:
Check the condition in the FN20 block.

433
Contradictory signs in cycle

Cause of error:
The algebraic signs of the setup clearance, total hole depth and plunging depth do not match.
Corrective action:
Enter identical signs.

434
Wrong sign programmed

Cause of error:
The programmed dwell time in the DwellTime cycle, Peck Drilling cycle or Tapping cycle is negative (through Q parameter).
Corrective action:
Edit the cycle parameter.

435
Angle reference missing

Cause of error:
In an LP/CP block (ISO: G10, G11, G12, G13) no polar angle or incremental polar angle is defined, i.e.:
-The distance between the last programmed position and the pole is less than or equal to 0.1 µm.
- No rotation is programmed between pole assumption and an LP/CP block.
Corrective action:
- Program the absolute polar angle.
- Check the position of the pole.
- If necessary, reset the rotation.

436
Angle reference missing

Cause of error:
You programmed a CT block (ISO: G6, G16; tool compensation active) that only activates the tool axis.
Corrective action:
In the CT block, program both coordinates of the circle plain.

437
Radius too small

Cause of error:
-You programmed a circular movement in which the radius is less than 1.6 µm.
- In the thread milling cycle 263, 264 or 265 you entered 0 for the countersinking offset at front.
Corrective action:
- Check the circle block.
- For thread milling cycles, program Q359 greater than 0.

438
Angle reference missing

Cause of error:
Contour Pocket or Contour Train cycle: The TNC cannot determine the starting point of the contour.
Corrective action:
Program the starting point in the contour subprogram with absolute coordinates.

439
Angle reference missing

Cause of error:
Contour Pocket or Contour Train cycle: The first or second block in the contour subprogram is a CT block (ISO: G6, G16). The direction of the CT block is therefore undetermined.
Corrective action:
Program at least two positioning blocks before the CT block.

440
DEP interruption not permitted

Cause of error:
You interrupted the part program during a DEP block and then attempted to restart.
Corrective action:
Begin machining before or after the DEP block (if necessary, select with GOTO).

441
DEP interruption not permitted

Cause of error:
You interrupted the part program during a DEP block, then moved the axes, and then attempted to restart.
Corrective action:
Begin machining before or after the DEP block (if necessary,select with GOTO).

442
Coordinates after APPR missing

Cause of error:
You did not give any coordinates in the NC block after APPR.
Corrective action:
Add coordinate data to the part program block after APPR.

443
Range exceeded

Cause of error:
During digitizing the stylus went out of the defined digitizing range.
Corrective action:
Check the data in the Range cycle, especially the entry for the touch probe axis.

444
Faulty range data

Cause of error:
- Range cycle: MAX value is smaller than MIN value
- Range extends past software limit switch
- No Range cycle defined

Corrective action:
Check the data in the Range cycle.

445
Start position incorrect

Cause of error:
Digitizing with contour lines: Incorrect starting position selected.
Corrective action:
Check the axes defined in the Contour Lines cycle.

446
Time limit exceeded

Cause of error:
Digitizing with contour lines: Touch probe does not reach the starting point within the time set in the cycle.
Corrective action:
- It could be that the contour line cannot be closed.
- Increase the time.
- Increase the tolerance for the target window (machine parameter 6390)

447
CYCL parameter incorrect

Cause of error:
For digitizing axes:
- Probe point interval greater than 65 535 (with Q parameter)
- Incorrect line-by-line digitizing axis
Corrective action:
Check the entries in the digitizing cycle.

448
Oversize greater than depth

Cause of error:
SL cycles II: Allowance for floor is greater than milling depth.
Corrective action:
Check Q4 in in Cycle 20 (ISO: G120).

449
Rotation not permitted

Cause of error:
- Rotation not permitted during digitizing.
- Rotation not permitted during automatic measuring (measuring cycles 400 to 418) together with 3-D rotation.
- 3-D rotation not permitted together with Cycle 247.
Corrective action:
- Delete the Rotation cycle.
- Reset the rotation (manual mode).
- Reset 3-D rotation.

450
Scaling factor not permitted

Cause of error:
You programmed a scaling factor before the TCH PROBE 0 cycle (ISO: G55) or before the digitizing cycles.
Corrective action:
Delete the Scaling Factor or the Axis-Specific Scaling

451
Scaling factors not equal

Cause of error:
You attempted to scale a circular contour element with differing axis-specific scaling factors.
Corrective action:
Scale the axes of circular contour elements with the

452
Mirroring not permitted

Cause of error:
You programmed a mirror image before the TCH PROBE 0 cycle (ISO: G55) or before the digitizing cycles.
Corrective action:
Delete the Mirror Image cycle.

453
Datum shift not permitted

Cause of error:
Digitizing with contour lines: Datum shift is active.
Corrective action:
Delete the datum shift.

454
Stylus deflection exceeds max.

Cause of error:
Digitizing with measuring touch probe: Maximum permissible stylus deflection was exceeded.
Corrective action:
- Reduce the digitizing feed rate.
- If necessary, increase the maximum stylus deflection (machine parameter 6330).

455
Too many subcontours

Cause of error:
Contour Pocket cycle: Internal calculations resulted in too many subcontours.
Corrective action:
Use a smaller tool.

456
Too many subcontours

Cause of error:
Contour intersects itself to produce too many subcontours.
Corrective action:
Use a smaller tool.

457
Too many subcontours

Cause of error:
The union of cycles results in to many subcontours.
Corrective action:
Use a smaller tool.

458
Too many subcontours

Cause of error:
Calculation of the tool path results in more than 12 subcontours.
Corrective action:
- Use a smaller tool.
- Decrease the number of programmed subcontours.

459
Too many subcontours

Cause of error:
Calculation of the equidistant results in too many subcontours.
Corrective action:
Use a smaller tool.

460
Too many subcontours

Cause of error:
Calculation of the equidistant results in too many subcontours.
Corrective action:
Use a smaller tool.

461
Too many subcontours

Cause of error:
A contour subprogram contains more than 128 geometrical elements.
Corrective action:
Split the subprogram.

462
Too many subcontours

Cause of error:
A contour subprogram contains more than 128 geometrical elements.
Corrective action:
Split the subprogram.

463
Too many subcontours

Cause of error:
The union of contours results in too many subcontours.
Corrective action:
Use a smaller tool.

464
Too many subcontours

Cause of error:
The union of contours results in too many subcontours.
Corrective action:
Use a smaller tool.

465
Too many subcontours

Cause of error:
Calculation of the equidistant results in too many subcontours.
Corrective action:
Edit the NC program or set Q8 = 0.

466
Too many subcontours

Cause of error:
Calculation of the equidistant results in too many subcontours.
Corrective action:
Edit the NC program or set Q8 = 0.

467
Too many subcontours

Cause of error:
Calculation of the equidistant results in too many subcontours.
Corrective action:
Use a smaller tool.

468
Too many subcontours

Cause of error:
Contour intersects itself to produce too many subcontours.
Corrective action:
Use a smaller tool.

469
Too many subcontours

Cause of error:
The union of contours results in too many subcontours.
Corrective action:
Use a smaller tool.

470
Too many subcontours

Cause of error:
Calculation of the equidistant results in too many subcontours.
Corrective action:
Use a smaller tool.

471
Too many subcontours

Cause of error:
The contour to be machined in contour-parallel roughing has too many subcontours.
Corrective action:
Edit the part program.

472
Too many subcontours

Cause of error:
Calculation of the equidistant results in too many subcontours.
Corrective action:
Use a smaller tool.

473
Too many subcontours

Cause of error:
Calculation of the equidistant results in too many subcontours.
Corrective action:
Use a smaller tool.

474
Too many subcontours

Cause of error:
While defining the range for a measuring touch probe you entered too many subcontours.
Corrective action:
Redefine the range.

475
Contour programming error

Cause of error:
A contour starting point lies on a contour intersection: The TNC cannot recognize how you wish to combine the contours.
Corrective action:
Put the contour starting point in a contour subprogram.

476
Contour programming error

Cause of error:
Two successive contour elements are circles with the same center but different radii.
Corrective action:
Check the arc end-point coordinates.

477
Contour programming error

Cause of error:
A contour subprogram contains only one point.
Corrective action:
Add data to the contour subprogram. At least two points are required.

478
Contour programming error

Cause of error:
The TNC cannot determine the rotational direction of the programmed contour.
Corrective action:
In the contour subprogram, clearly define the rotational

479
Contour programming error

Cause of error:
Programmed contour is not continuous.
Corrective action:
Check the contour subprogram.

480
Contour programming error

Cause of error:
Contour is too complex.
Corrective action:
Try to split the contour subprogram.

481
Contour programming error

Cause of error:
On a self-intersecting contour the starting point lies on an intersection.
Corrective action:
Put the starting point in the contour subprogram.

482
Contour programming error

Cause of error:
At the starting point of the contour is an intersection that cannot be resolved by the TNC.
Corrective action:
Put the starting point in the contour subprogram.

483
Contour programming error

Cause of error:
Incorrect input in MP810.
Corrective action:
Inform your service agency.

484
Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

485
Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

486
Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

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Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

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Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

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Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

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Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

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Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

492
Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

493
Contour too complex

Cause of error:
Contour cannot be resolved.
Corrective action:
Try to split the contour subprogram.

494
Block too long

Cause of error:
Maximum block length exceeded.
Corrective action:
Shorten the highlighted block.

495
Unknown G-code

Cause of error:
You programmed an unknown G function.
Corrective action:
Shorten the highlighted block. Permissible G function:
See the Overview in the User's Manual.

496
N-code missing

Cause of error:
Block number N is missing in the NC block.
Corrective action:
Enter the block number.

497
CMA file: no active line

Cause of error:
Error in compensation value conversion: In the *.CMA file either there is no active line selected or the selected line does not exist.
Corrective action:
Activate the line.

498
File %.16s is missing

Cause of error:
Error in compensation value calculation: The *.COM file selected in the *.CMA file does not exist.
Corrective action:
Load the file.

499
File %.16s is missing

Cause of error:
„PGM not found" error message during Include in an ASCII file.
Corrective action:
Load the file.

500
Too many compensation points

Cause of error:
Error in compensation value conversion: Permissible number of compensation points exceeded.
Corrective action:
Decrease the size of the compensation value table.

501
Too many compensation functions

Cause of error:
Error in compensation value conversion: Permissible number of compensation functions exceeded.
Corrective action:
Decrease the number of compensation value functions.

502
Direction of rotation missing

Cause of error:
You programmed an FK arc without a direction of rotation.
Corrective action:
Always program the direction of rotation (DR).

503
Rounding arc radius too large

Cause of error:
-Tool radius 0 is active.
- A rounding arc does not fit between two contour elements.
Corrective action:
- Program a tool radius other than 0.
- Program a smaller rounding radius.

504
Contradictory entry

Cause of error:
FK programming: You have entered contradictory values.
Corrective action:
Check the input values.

505
Insufficient contour definition

Cause of error:
FK programming: The contour was not resolved by the end of the program.
Corrective action:
Resolve the FK section by entering more information.

506
FPOL missing

Cause of error:
FK programming: You programmed with polar coordinates without first defining an FPOL.
Corrective action:
Program FPOL at some location above the block in which you first use polar coordinates.

507
TNC program block not permitted until contour is resolved

Cause of error:
FK programming: Conventional blocks may follow an FK block only if the FK block led to a complete resolution of the contour.
Exceptions:
- RND block
- CHF block
- L block containing only motion in the tool axis or auxiliary axis.

Corrective action:
Resolve the FK contour completely.

508
The contour is resolved: select block is not permitted

Cause of error:
FK programming:
- FSELECT block follows an already resolved contour.
- FSELECT block follows an as yet unresolvable FK contour (shown in red).

Corrective action:
Delete the FSELECT block.

509
End of closed contour: no incr. coordinates permitted

Cause of error:
FK programming: An FK block in which CLSD (contour end) is programmed contains incremental axis coordinates.
Corrective action:
Use CLSD- only with absolute axis coordintes.

510
Rounding arc or chamfer not permitted at this point

Cause of error:
You programmed a rounding arc or chamfer that does not immediately follow a positioning block.
Corrective action:
Edit the part program.

511
Rounding/chamfer with tangential transition is not permitted

Cause of error:
You programmed a rounding arc or chamfer between tangential contour transitions.
Corrective action:
Edit the part program.

512
Straight line before or after rounding/chamfer has 0 length

Cause of error:
A straight line before or after an RND or CHF block has the length 0.
Corrective action:
Edit the part program.

513
Chamfer is possible only between two straight lines

Cause of error:
The CHF block is not located between two line blocks.
Corrective action:
Edit the part program.

514
Chamfer too large

Cause of error:
The programmed chamfer length is too large.
Corrective action:
Edit the part program.

515
Path comp incorrectly begun: NC block must be a straight line

Cause of error:
You attempted to begin a tool radius compensation on a circular path.
Corrective action:
Activate the tool radius compensation only with a line

516
Path comp incorrectly ended: NC block must be a straight line

Cause of error:
You attempted to end a tool radius compensation on a circular path.
Corrective action:
Cancel the tool radius compensation only with a line block.

517
Contour too complex. More data needed

Cause of error:
FK programming: The information does not suffice for calculation of an FK contour.
Corrective action:
Enter more geometrical information.

518
FK: arithmetical error

Cause of error:
FK programming: Arithmetical error in the calculation of an FK contour (e.g., division by 0, root of a negative number).
Corrective action:
Check the input in the FK section.

519
FK block not permitted at this point

Cause of error:
FK programming: An FK positioning block (FL,FC,FLT,CT) can follow a conventional positioning block only if the end point of the conventional block is unambiguously defined, i.e.:
-The conventional positioning block must not contain any Q parameters.
-The first FK block must not follow a label.
Corrective action:
Edit the part program.

520
FCT or FLT block not permitted at this point

Cause of error:
FK programming: A tangential FK block (FLT,FCT) can follow a conventional positioning block only if the approach direction is unambiguously defined.
Corrective action:
Progarm at least two positioning blocks with the gray path function keys before the tangential FK block.

521
Incremental angle reference not permitted here

Cause of error:
FK programming: You programmed a relative angle reference to a part program block whose slope angle is not constant.
Corrective action:
Change the relative reference.

522
Reference to specified block not permitted

Cause of error:
FK programming: Relative references are possible only to the last 64 positioning blocks:
- A reference was made to a more distant block
- A reference was made to a block that, at that point in the program, would lead to more than one FK solution.

Corrective action:
Change the relative reference.

523
Reference to CC block not permitted

Cause of error:
FK programming: You programmed a relative reference to a CC block.
Corrective action:
Change the relative reference.

524
For FPOL give both coordinates

Cause of error:
FK programming: In FPOL you did not program both coordinates of the working plane.
Corrective action:
Add a coordinate to the FPOL block.

525
Auxiliary point requires both coordinates

Cause of error:
FK programming: You did not program both coordinates in an auxiliary point.
Corrective action:
Add an auxiliary point to the FK block.

526
Parallel operation of FK graphics not possible

Cause of error:
FK programming: You attempted to start an FK graphic while the TNC was already running a part program.
Corrective action:
Start the FK graphic after the part program has been run.

527
Blank form too large

Cause of error:
The blank form is so large that the graphic elements cannot be displayed by the graphics processor.
Corrective action:
Reduce the size of the blank form.

528
Window too large

Cause of error:
Programming graphics: During reduction of a programming graphic simulation the window section exceeds the limits of the graphics processor.
Corrective action:
Enlarge the programming graphic.

529
Window too small

Cause of error:
During enlargement of a programming graphic simulation the window section exceeds the limits of the graphics processor.
Corrective action:
Reduce the programming graphic.

530
Window cannot be shifted farther

Cause of error:
In a programming graphic simulation you moved the selection frame to the edge of the window, which calls for a reduction of scale beyond the capability of the graphics controller.
Corrective action:
Keep the selection frame within the window.

859
ERROR

Cause of error:
General indication of a previous error in the graphic simulation.
Corrective action:
Acknowledge the message with CE.

860
Axis cannot be shown

Cause of error:
Simulation of a movement in the axes A, B, C, U, V, or W is not possible in the graphic.
Corrective action:

861
Further reduction not possible

Cause of error:
The selected section cannot reduced any further.
Corrective action:
Enter the section at its current size.

862
Further enlargement not possible

Cause of error:
The selected section cannot be enlarge any further.
Corrective action:
Enter the section at its current size.

863
BLK FORM cannot be shown

Cause of error:
The workpiece blank cannot be displayed:
-The workpiece blank is not completely defined.
- One edge has a negative length.
-The longest edge is too large or too small.
- Ratio of edge lengths is excessive.
Corrective action:
Edit the part program.

864
Wrong tool axis in BLK FORM

Cause of error:
-The tool axis entered in a tool call does not match the tool axis entered in the BLK FORM block (ISO: G30/G31).
- Programming graphics: In an APPR or DEP block you have programmed coordinates that do not lie in the drawing plane. The drawing plane is perpendicular to the tool axis, which is indicated in the BLK FORM. If no BLK FORM has been programmed, the drawing plane lies in the X/Y.
Corrective action:
- Change the tool axis for tool call, or in the blank form definition.
- Check the APPR or DEP block.

865
Tool radius cannot be shown

Cause of error:
The radius of the active tool cannot be displayed.
Corrective action:
Verify without graphic simulation.

866
Feed rate too fast for graphics

Cause of error:
The feed rate is too high for the program-run graphics to display tool movement.
Corrective action:
Select another screen layout.

869
Memory test

Cause of error:
Memory is tested whenever the control is switched on.
Corrective action:
Wait until the message disappears, or acknowledge the message with CE.

888
Text not found

Cause of error:
The ASCII editor could not find the desired text in a file.
Corrective action:
Search for another text (note upper and lower case letter).

937
Wrong pocket number

Cause of error:
-The input value for the pocket number in the tool table is greater than machine parameter MP7261.
- MP7261 = 0, pocket output is activated through MP7480, and the called tool is not assigned to a pocket.
Corrective action:
- Check the tool pocket table.
- Inform your service agency.

938
Key non-functional

Cause of error:
In this context the key has no function.
Corrective action:

939
Program memory exceeded

Cause of error:
The NC program memory no longer suffices for part programs.
Corrective action:
Delete the programs that you no longer need.

940
Search address missing

Cause of error:
In the NC program the original search address no longer exists.
Corrective action:
Abort search.

941
Tool number 0 not permitted

Cause of error:
A tool definition with the number „0“ is not permitted.
Corrective action:
Edit the part program.

942
Entry value incorrect

Cause of error:
- The value you entered is out-of-range.
- Cycle 209 (ISO: 209): You entered the value 0 as infeed depth for chip breaking (Q257).
Corrective action:
- Enter the correct value.
- Enter a value other than 0 in Q257.

943
Entry value incorrect

Cause of error:
You pressed a sequence of keys so quickly that you filled up the keyboard buffer.
Corrective action:
Repeat your entry.

944
Program name already exists

Cause of error:
This file name already exists.
Corrective action:
Select another file name.

945
Program data erroneous

Cause of error:
This is a general error messsage showing that there is some error in the program data (e.g. an ERROR block).
Corrective action:
Edit the part program.

946
Program data erroneous

Cause of error:
An error occurred during downloading through the data interface. The TNC marks the erroneous block with ERROR.
Corrective action:
Edit the part program.

947
Operating parameters erased

Cause of error:
The machine parameters have been erased and the PLC program is missing.
Corrective action:
Enter new operating parameters.

948
Protected File!

Cause of error:
You cannot edit or erase this program until the protection has been removed.
Corrective action:
Cancel the program protection.

949
No editing of running program

Cause of error:
You cannot edit the program while it is being transferred or executed.
Corrective action:
Stop the program or edit it after it is finished.

950
Wrong axis programmed

Cause of error:
An incorrect axis is programmed in the highlighted block.
Corrective action:
Check whether you have programmed an axis twice.

951
Wrong axis programmed

Cause of error:
An incorrect axis is programmed in the highlighted block.
Corrective action:
Check whether you have programmed an axis twice.

952
Wrong rpm

Cause of error:
You entered an invalid spindle speed.
Corrective action:
Enter the correct speed, refer to the machine manual.

953
Block format incorrect

Cause of error:
Incorrect block format in the highlighted block.
Corrective action:
Edit the part program.

953
Block format incorrect

Cause of error:
Incorrect block format in the highlighted block.
Corrective action:
Edit the part program.

954
Address letter already assigned

Cause of error:
You used an address letter incorrectly in an ISO block.
Corrective action:
Edit the highlighted block.

955
G-code group already assigned

Cause of error:
In a part program block you use G codes from the same group (e.g. G01 and G02).
Corrective action:
Check the highlighted block for G codes that influence each other.

956
Block number already assigned

Cause of error:
You attempted to save a block number that already exists.
Corrective action:
Use a block number that is not already being used.

958
Relay ext. dc voltage missing
Relay ext. dc
Cause of error:
Error message after power interruption.
Corrective action:
Switch on the control voltage separately.

958
Relay ext. dc voltage missing

Cause of error:
Error message after power interruption.
Corrective action:
Switch on the control voltage separately.

958
Relay ext. dc voltage missing

Cause of error:
Error message after power interruption.
Corrective action:
Switch on the control voltage separately.

977
Processor check error

Cause of error:
Collective error message for all software errors. Here the explanatory texts are not yet shown individually, but are inserted where the error occurs in the programs.
Corrective action:
Refer to the Technical Manual for the respective control.

978
Checksum error

Cause of error:
Collective error message for all checksum errors. The explanatory texts are inserted in the context of the programs.
Corrective action:
Refer to the Technical Manual for the respective control.

979
Error in PLC program

Cause of error:
Collective error message for all errors in the compilation or execution of the PLC program. The explanatory text is inserted in the context of the program.
Corrective action:
Refer to the Technical Manual for the respective control.

1035
Filename on data medium assigned

Cause of error:
The file name already exists on the external data medium.
Corrective action:
Select with the YES/NO soft key whether to overwrite the file.

1073
Input error

Cause of error:
You enter a value that exceeds the permissible input range.
Corrective action:
Check input value.

1075
TOOL.T: too many tools

Cause of error:
More than 99 tools are defined in the tool table.
Corrective action:
Delete some lines out of the tool table so that no more than 99 tools are stored.

1076
Contour programming error

Cause of error:
Error in the contour subprogram during contour cycle run.
Corrective action:

1077
Processor check error 1

Cause of error:
The CRC sum for the machine parameters is incorrect.
Corrective action:
Inform your service agency.

1078
Processor check error F

Cause of error:
Wrong display mode in the main processor.
Corrective action:
Inform your service agency.

1079
Processor check error L

Cause of error:
Wrong command in the control loop.
Corrective action:
Inform your service agency.

1080
Gross positioning error %.1s F

Cause of error:
Central drive configuration
Corrective action:
Inform your service agency.

1086
Too many points

Cause of error:
Automatic establishment of points for the digitizing range in the Positioning with Manual Data Input operating mode: Number of stored points (max. 893) exceeded.
Corrective action:
Re-record digitizing range after increasing the point spacing.

1096
Handwheel not ready

Cause of error:
Handwheel not ready.
Corrective action:
Check handwheel connections.

1097
Tolerance value too great

Cause of error:
Geometry error message: The tolerance value entered with M124 is greater than half the tolerance value in M112.
Corrective action:
Reduce tolerance value in M124.

1099
Tool number defined twice

Cause of error:
The number used in the tool definition in the program is already defined in the tool file.
Corrective action:
Use numbers greater than 99 for the tool definition in the program.

1106
Delete entire cycle: DEL!

Cause of error:
Warning before deleting an entire HEIDENHAIN cycle.
Corrective action:
For complete deletion of the cycle, press DEL.
To interrupt the delete sequence, press END.

1107
Block in cycle not allowed !

Cause of error:
HEIDENHAIN cycles usually consist of several component blocks. You have attempted to write another part program block in between these component blocks.
Corrective action:
Insert the new part program block before or after the cycle.

1121
Rotary-table coordinates missing

Cause of error:
Coordinates for rotary-table center are missing in the machine parameter 75xx.
Corrective action:

1122
FF01 DSP error %04X %d

Cause of error:
Error in the power stage of the displayed axis.
FF01 ..
F240 ..
Corrective action:
Inform your service agency.

1122
FF01 DSP error %04X %c

Cause of error:
Error in the power stage of the displayed axis.
FF01 ..
F240 ..
Corrective action:
Inform your service agency.

1122
FF01 DSP error %c

Cause of error:
Error in the power stage of the displayed axis.
FF01 ..
F240 ..
Corrective action:
Inform your service agency.

1123
Analog output already assigned %.1s

Cause of error:
An analog output has been used by several axes.
Corrective action:
Inform your service agency.

1124
PLC: module 9008 not called

Cause of error:
Compatibility module 9008 has not been called at the start of the PLC program. The module is required by the TNC 426 in order to be able to process the interface markers of the TNC 425/407.
Corrective action:
Edit the PLC program.

1125
Reference to block %.6s:no DEL

Cause of error:
FK programming: You have attempted to delete a part program block to which another block refers.
Corrective action:
First edit the referring block, then delete the reference

1126
Deactivate M112

Cause of error:
M112 is active during a cycle call.
Corrective action:
Deactivate M112 with M113 prior to the cycle call.

1141
RL/RR not permitted if M120 = 0

Cause of error:
M120 with LA = 0 during active tool radius compensation not permitted.
Corrective action:
- Increase tool radius compensation.
- Enter a value other than zero for LA.

1142
Radius comp. entry is missing

Cause of error:
M120 with LA greater than 0 permitted only during active tool radius compensation.
Corrective action:
Edit the part

1143
Impermissible radius comp.

Cause of error:
-You cannot change the tool radius compensation while M120 is active.
-You programmed a tool radius compensation RR/RL in an LN block, but the TNC will calculate the compensation from the normal vector NX, NY, NZ.
Corrective action:
- Edit the NC program.
- Delete RR/RL from the LN block.

1144
R+/R- not permitted with M120

Cause of error:
Paraxial radius compensation (R+/R-, ISO: G43/G44) is not permitted when M120 is active.
Corrective action:
Edit the part program.

1145
RND not permitted with M120

Cause of error:
When M120 is active, rounding radius is permitted only in the compensation plane.
Corrective action:
Edit the part program.

1146
Chamfer not permitted with M120

Cause of error:
When M120 is active, chamfer is permitted only in the compensation plane.
Corrective action:
Edit the part program.

1147
Analog voltage not defined

Cause of error:
Function definition for laser power control missing in machine parameter 3013/3014.
Corrective action:
Edit the machine parameter list.

1148
Analog voltage ambiguous

Cause of error:
Ambiguous function definition for laser power control in machine parameter 3013/3014.
Corrective action:
Edit the machine parameter list.

1149
Incorrect entry in MP%.4u

Cause of error:
The permissible input range of a machine parameter was exceeded.
Corrective action:
Check the input value of the marked machine parameter.

1149
Incorrect entry in MP%.4u

Cause of error:
The permissible input range of a machine parameter was exceeded.
Corrective action:
Check the input value of the marked machine parameter.

1150
Touch probe not ready %.3s

Cause of error:
The probe system is not ready.
Corrective action:
Check the connection cable.

1151
Resumption with M120 not allowed

Cause of error:
Re-entry with GOTO during active M120 not permitted.
Corrective action:
Re-entry possible only via mid-program startup.

1154
Illegal name for file or path

Cause of error:
File name/path is not allowed.
Corrective action:
Select another file name/path.

1155
File system error A

Cause of error:
Semaphore or queue could not be created.
Corrective action:
Contact your service agency.

1156
File system error B

Cause of error:
Partition faulty or cannot be read.
Corrective action:
Contact your service agency.

1157
File system error C

Cause of error:
Disk has been incorrectly partitioned.
Corrective action:
Contact your service agency.

1158
File system error D

Cause of error:
Sector number is incorrect in the hard disk server task.
Corrective action:
Contact your service agency.

1159
File system error E

Cause of error:
Timeout while waiting for the interrupt from the hard disk.
Corrective action:
Contact your service agency.

1160
File system error 1

Cause of error:
Incorrect cluster number in the „get_cluster“ routine caused by a software error.
Corrective action:
Contact your service agency.

1161
File system error 2

Cause of error:
Incorrect cluster number in the „put_cluster“ routine caused by software error.
Corrective action:
Contact your service agency.

1162
File system error 3

Cause of error:
Incorrect cluster number in the „next_cluster“ routine caused by software error.
Corrective action:
Contact your service agency.

1163
File system error 4

Cause of error:
Incorrect cluster number in the „update_cluster“ routine caused by software error.
Corrective action:
Contact your service agency.

1164
File system error 5

Cause of error:
Incorrect cluster number in the „get_free_cluster“ routine caused by software error.
Corrective action:
Contact your service agency.

1165
File system error 6

Cause of error:
Incorrect cluster number in the „get_last_cluster“ routine caused by software error.
Corrective action:
Contact your service agency.

1166
File system error 7

Cause of error:
Incorrect cluster number in the „get_cluster_befor“ routine caused by software error.
Corrective action:
Contact your service agency.

1167
File system error 8

Cause of error:
Incorrect cluster number in the „read_dos_data“ routine caused by software error.
Corrective action:
Contact your service agency.

1168
File system error 9

Cause of error:
Incorrect cluster number in the „write_dos_data“ routine caused by software error.
Corrective action:
Contact your service agency.

1169
File system error10

Cause of error:
Undefined software error in the „test_file“ routine.
Corrective action:
Contact your service agency.

1170
Measuring touch probe selected

Cause of error:
You have attempted to start a digitizing cycle for a triggering probe, although a measuring probe is defined in machine parameter 6200.
Corrective action:
Edit machine parameter 6200.

1171
Triggering touch probe selected

Cause of error:
You have attempted to start a digitizing cycle for a measuring probe, although a triggering probe is defined in machine parameter 6200.
Corrective action:
Edit machine parameter 6200.

1172
Calibrate touch probe

Cause of error:
You have attempted to automatically measure a tool, although the table probe is not yet calibrated.
Corrective action:
Calibrate table probe with Cycle 30 (TCH PROBE).

1178
3DROT active: use axis buttons

Cause of error:
You have attempted to traverse the reference marks with NC start, although the „rotate working plane“function is active.
Corrective action:
Traverse reference marks using the axis direction keys.

1182
Incorrect entry in MP%u.%u

Cause of error:
An incorrect value exists in a machine parameter.
Corrective action:
Edit your entry.

1182
Incorrect entry in MP%u

Cause of error:
An incorrect value exists in a machine parameter.
Corrective action:
Edit your entry.

1182
Incorrect entry in MP%.4u.%u

Cause of error:
An incorrect value exists in a machine parameter.
Corrective action:
Edit your entry.

1182
Incorrect entry in MP%.4u.%u

Cause of error:
An incorrect value exists in a machine parameter.
Corrective action:
Edit your entry.

1185
File system error F

Cause of error:
Write or read error on the hard disk.
Corrective action:
Contact your service agency.

1186
File format has changed

Cause of error:
This error message will be displayed upon opening a binary file (*.H,*.T...) if the binary format has changed since the previous output version.
Corrective action:
Delete the file.

1187
M89 not permitted

Cause of error:
M89 is not allowed during Cycle 9 PGM CALL.
Corrective action:
Edit the part program.

1192
Entered angle not permitted

Cause of error:
-The solid angle programmed in Cycle 19 Working Plane (DIN/ISO: G80) cannot be realized with the current attachment (e.g. universal head where only one hemisphere is accessible).
- Run probing cycle only with paraxial angular position.
Corrective action:
- Edit the solid angle entered.
- Run probing cyle only with paraxial angular position.

1193
TOOL.T: enter number of teeth

Cause of error:
Automatic tool measurement: Number of teeth not transferred into the tool table.
Corrective action:
Transfer number of teeth (CUT.) into TOOL.T.

1217
Motor temperature too high %.1s

Cause of error:
Temperature of the motor is too high.
Corrective action:
Switch off machine. Allow motor to cool.

1266
Block format incorrect

Cause of error:
Binary format of a plain language block is incorrect.
Corrective action:
Delete block and re-enter.

1521
PLC: error table not yet compiled

Cause of error:
A PLC error table selected in the OEM.SYS file has been recompiled after a change.
Corrective action:
Compile the PLC error table.

1523
PLC: no error table selected

Cause of error:
After an interruption in power, the PLC error table cannot be automatically compiled because there is no table selected in OEM.SYS.
Corrective action:
Register the PLC error table in OEM.SYS.

1524
PLC: error table missing

Cause of error:
There is no PLC error table.
- A PLC error module 9085/9086 was called although no error table was compiled, or there were no entries in the table.
- A PLC error module 9085/9086 was called or an error marker was set, although the error table was edited or erased after compilation.
Corrective action:
- Compile the PLC error table.
- Check the entries in the PLC error table.

1525
PLC: error table not .PET

Cause of error:
The PLC error table selected in OEM.SYS is not a PET file.
Corrective action:
Check the format of the PLC error table.

1527
PLC: error table not found

Cause of error:
The PLC error table in the OEM.SYS file was not found.
Corrective action:
Check the file name or the path name.

1528
PLC: err. table format incorrect

Cause of error:
PLC error table: The error table selected in the OEM.SYS file does not have an up-to-date binary format (e.g. after a software exchange).
Corrective action:
Delete the PLC error table and download a new PLC error table through the data interface.

1568
Wrong axes in .PNT file

Cause of error:
In the selected point file, which limits the digitizing range, no coordinates of the working plane have been saved.
Corrective action:
In the point file, use only coordinates of the working plane as limits.

1590
Dist value too small

Cause of error:
The value entered for 'DIST' in the digitizing cycle 16.0 MEANDER or 18.0 LINE is smaller than the minimum permissible distance that the TNC calculates from the machine data.
Corrective action:
Press <NO ENT> to delete the value for 'DIST'. The TNC enters a value automatically.

1682
TOOL.T: LCUTS or ANGLE missing!

Cause of error:
Cycle 22 needs informaion on the tooth length and the plunge angle of the active tool.
-The data for LCUTS and ANGLE are missing in the tool table
-The tool table is not active
Corrective action:
- In the tool table, enter LCUTS and ANGLE for the current tool.
- Activate the tool table via machine parameter 7260 or

1702
File system error L

Cause of error:
No data request from the hard disk, although expected.
Corrective action:
Contact your service agency.

1745
Access denied

Cause of error:
- You attempted to open a file during a write access - e.g. through the data interface - or vice versa.
- You attempted to open a locked file.
- You attempted to erase or rename a protected file.
- You attempted to erase the main directory (TNC:\)
Corrective action:
- Select the file again at a later time.
- Cancel the file protection.

1748
MP locked by PLC

Cause of error:
The machine parameter is disabled. It is occupied by the PLC.
Corrective action:
Edit the PLC program.

1749
Incorrect number for FN17/FN18

Cause of error:
The number combination of the system datum (FN17/FN18, ISO: D17/D18) is not permitted.
Corrective action:
Check the number and the index of the system datum.

1750
PLC: error in module call

Cause of error:
Fatal error during PLC module call (e.g. Module 9031: error converting MP).
Corrective action:
Edit the PLC program.

1789
Tool locked

Cause of error:
The tool was locked (e.g. after breakage).
Corrective action:
Check the tool and, if necessary, change it or unlock it in the tool table.

1790
Wrong range cycle

Cause of error:
Cycle 15 (RANGE) is active during the start of a contour line cycle.
Corrective action:
Use the Contour Lines cycle only in combination with Cycle 5 (RANGE).

1791
Point spacing too large

Cause of error:
The probe point interval in a digitizing cyle was programmed by Q parameter as a value greater than 6,5535 mm.
Corrective action:
Check the data for the probe point interval in the digitizing cycle.

1792
Wrong axis for line

Cause of error:
- During a meander or contour line cycle the line axis is the same as the probe axis.
-There is no line axis in the range definition (RANGE cycle).
Corrective action:
Check the axis defined in the RANGE cycle.

1793
Wrong axis for column

Cause of error:
Digitizing with measuring touch probe: In the meander or contour line cycle you defined a rotary axis as column axis.
Corrective action:
In the Meander cycle or Contour Lines cycle define a linear axis as column axis.

1794
Wrong angular axis

Cause of error:
During digitizing with rotary axes the rotary axis is not parallel to the line axis or column axis.
Corrective action:
Check the axis definitions in the Range, Meander, Contour Lines and Line cycles.

1795
Incorrect axis in range cycle

Cause of error:
- A rotary axis is active in the range during the start of a contour line cycle.
- Digitizing with measuring touch probe: A rotary axis is defined in the range during the start of a meander cycle.
-Touch probe axis in the range cycle is not the same as the calibrated touch probe axis in the manual mode.
Corrective action:
- Check the axis definitions in the Range cycle.
- Check the calibrated touch probe axis (manual operating

1796
Incorrect line spacing

Cause of error:
-The point spacing in a digitizing cycle was programmed by Q parameter at a value greater than 6.5535 mm.
-The line spacing in a digitizing cycle was programmed by Q parameter as a negative value.
- Digitizing with measuring touch probe: The minimum line spacing is greater than the line spacing, or it was entered as zero.
Corrective action:
- Enter a probe point interval that is positive and no larger than 6.5535 mm.
- Enter a minimum line spacing greater than 0 and less than the line spacing.

1797
Range cycle not yet defined

Cause of error:
There was no range cycle defined before the start of a digitizing cycle.
Corrective action:
Program the Range cycle before the Digitizing cycle.

1798
Range beyond limit switch

Cause of error:
The digitizing range exceeds the traversing range (limit switch).
Corrective action:
- Check the values in the Range cycle.
- If necessary, reset the datum.

1799
Clearance height too small

Cause of error:
The clearance height entered in Cycle 8 or Cycle 18 was less than the MIN point of the touch probe axis in the Range cycle.
Corrective action:
Enter a larger value for the clearance height in Cycle 8 or Cycle 18.

1807
Illegal file name

Cause of error:
Syntax error during file-name input.
Corrective action:
Use no more than 16 characters for file names.

1809
M114 not permitted with M116

Cause of error:
The M functions M114 and M116 cannot be used together.
Corrective action:
Correct the part program.

1810
System memory overflow

Cause of error:
This error occurs when the TNC does not have enough buffer memory for calculations, e.g. for generating complex FK graphics while machining a complex part.
Corrective action:
Acknowledge the error message by pressing CE and repeat the function.

1812
No sign permitted

Cause of error:
You attempted to enter an algebraic sign in a cycle parameter for which a sign is not permitted.
Corrective action:
Acknowledge the error message by pressing CE.

1845
Update the system data!

Cause of error:
The system files on your hard disk are no longer up-to-date.
Corrective action:
Ask your machine tool builder or HEIDENHAIN for a SETUP disk for your present software.

1848
Directory not empty

Cause of error:
You attempted to erase a directory that still contains files.
Corrective action:
- First delete all files and subdirectories stored in the directory that you wish to delete.
- Use the DELETE ALL function to delete directories at once together with their contents.

1850
Cycle 4(G75/G76): incorrect axis

Cause of error:
The main axis and its associated parallel axis is not permitted in the rectangular pocket cycle.
Corrective action:
Correct the axes in the Pocket Milling cycle.
Some possible combinations are:
X/Y, X/V, U/Y, U/V .....

1851
M130 not permitted

Cause of error:
The function M130 is permitted only for a tilted working plane.
Corrective action:
Correct the part program.

1852
M130 not permitted with M114

Cause of error:
The function M130 is not permitted together with M114.
Corrective action:
Correct the part program.

1853
M130 not permitted

Cause of error:
The function M130 is permitted only for line interpolation.
Corrective action:
Correct the part program.

1854
M130 not permitted with comp.

Cause of error:
The function M130 is not permitted at together with radius compensation.
Corrective action:
Correct the part program.

1855
No fixed cycle defined

Cause of error:
There is no fixed cycle defined before Cycle 220/221 (circular/linear point pattern).
Corrective action:
Define a fixed cycle before Cycle 220/221.

1856
Reciprocation feed rate missing

Cause of error:
In the Rough-Out cycle, the reciprocation feed rate has not yet been defined.
Corrective action:
Define the feed rate.

1857
Tool radius too large

Cause of error:
Rough-Out Cycle: The radius of the fine-roughing tool is too large.
Corrective action:
Use a smaller tool.

1867
Illegal file type

Cause of error:
The function cannot be used for this type of file.
Corrective action:
Select another file type.

1870
FK translation is erroneous

Cause of error:
The FK translation is erroneous.
Corrective action:
Convert from FK to H again.

1892
FN20/D20: incorrect condition

Cause of error:
Condition in FN20 (ISO: D20): Wait is not permitted.
Corrective action:
Correct the FN20/D20 block. Permissible comparisons are:
=, <, >, <=, >=

1900
Device busy

Cause of error:
You attempted to interrupt the connection to a device (e.g. network), although the TNC is still accessing the device.
Corrective action:
Wait to end the connection until the TNC is no longer accessing the device.

1901
Drive not found

Cause of error:
The NFS server cannot find the drive that you selected.
Corrective action:
Check whether your network is active.

1914
Tool broken

Cause of error:
Automatic tool measurement: The breakage tolerance (LBREAK or RBREAK) from the tool table was exceeded.
Corrective action:
Check the tool and, if necessary, replace it.

2039
Incorrect datum number

Cause of error:
You have called a datum number that does not exist in the active datum table.
Corrective action:
Call another tool number or activate another datum table.

2040
Insufficient slot width

Cause of error:
The width defined in the slot cycle cannot be machined with the active tool.

Corrective action:
Use a smaller tool.

2041
Pocket too small

Cause of error:
The side lengths defined in the Pocket Milling cycle are too small.
Corrective action:
Use a smaller tool.

2042
Q202 not defined

Cause of error:
There is no plunging depth (Q202) defined in the fixed cycles 200 to 215.
Corrective action:
Enter a plunging depth in the fixed cycle.

2043
Q205 not defined

Cause of error:
In the Universal Drilling cycle, you have not defined the minimum plunging depth.
Corrective action:
Enter a minimum plunging depth in the fixed cycle.

2044
Q218 must be greater than Q219

Cause of error:
Pocket milling cycle: Q218 must be greater than Q219.
Corrective action:
Correct the values in the fixed cycle.

2045
CYCL 210 not permitted

Cause of error:
Cycle 210 cannot be run in the CIRCULAR PATTERN or LINEAR PATTERN cycle.
Corrective action:
Use another fixed cycle.

2046
CYCL 211 not permitted

Cause of error:
Cycle 211 cannot be run in the CIRCULAR PATTERN or LINEAR PATTERN cycle.
Corrective action:
Use another fixed cycle.

2047
Q220 too large

Cause of error:
Pocket finishing or stud finishing cycle: Rounding radius Q220 is too large.
Corrective action:
Correct the rounding radius in the fixed cycle.

2048
Q222 must be greater than Q223

Cause of error:
Stud finishing cycle: Workpiece blank diameter Q222 must be greater than the finished part diameter Q223.
Corrective action:
Correct the workpiece blank diameter in the fixed cycle.

2049
Q244 must be greater than 0

Cause of error:
Circular Pattern cycle: You entered a pitch circle diameter of zero.
Corrective action:
Correct the pitch circle diameter in the cycle.

2050
Q245 must not equal Q246

Cause of error:
Circular Pattern cycle: Enter a stopping angle equal to the starting angle.
Corrective action:
Correct the starting or stopping angle in the cycle.

2051
Angle range must be under 360°

Cause of error:
Circular Pattern cycle: You entered an angle range greater than 360°.
Corrective action:
Correct the starting or stopping angle in the cycle.

2100
Wrong pallet

Cause of error:
Pallet changer: The part program that was started belongs to another pallet.
Corrective action:
Change to the proper pallet.

2101
PLC:\NCMACRO.SYS missing!

Cause of error:
Pallet changer: A pallet change was started although there is no NCMACRO.SYS file.
Corrective action:
Contact your service agency.

2102
'PALETT' in NCMACRO.SYS missing

Cause of error:
Pallet changer: A pallet change was started although the PALLET entry is missing in the NCMACRO.SYS file.
Corrective action:
Contact your service agency.

2103
Pallet data missing

Cause of error:
Pallet changer: You started a part program that does not belong to any pallet.
Corrective action:
Add the PELLET entry to the pallet file. The PALLET entry assigns a pallet to the part program.

2186
Tilt plane: tool axis missing

Cause of error:
Tilting the working plane: Tool axis for the setup clearance in Cycle 19 is missing.
Corrective action:
Before the cycle definition, define a tool call with the tool axis.

2187
F010 DSP error in axis %.1s %03X

Cause of error:
Error in the power stage of the displayed axis.
Corrective action:
Contact your service agency.

2187
F010 DSP error in axis %.2s

Cause of error:
Error in the power stage of the displayed axis.
Corrective action:
Contact your service agency.

2188
F050 Power stage in axis %.1s too weak

Cause of error:
Power stage for displayed axis too weak.
Corrective action:
Contact your service agency.

2189
F060 %.1s motor enc. line count too high

Cause of error:
Motor encoder line count too large for the displayed axis.
Corrective action:
Contact your service agency.

2190
F070 Motor %.1s: Xh;X2;f-n;R2 incorrect

Cause of error:
One of the following motor data for the displayed axis is incorrect:
XH = magnetizing reactance
X2 = rotor leakage reactance
F-N = rated frequency
R2 = rotor resistance cold
Corrective action:
Contact your service agency.

2191
F080 Motor %.1s: n-n; f-n incorrect

Cause of error:
One of the following motor data for the displayed axis is incorrect:
N-N = rated rotational speed
F-N = rated frequency
Corrective action:
Contact your service agency.

2192
F0D0 Power stage %.1s: U-Imax incorrect

Cause of error:
U-IMAX of the power stage for the displayed axis is incorrect
U-IMAX = voltage of the current sensor
Corrective action:
Contact your service agency.

2193
F0E0 Power stage %.1s: I-max incorrect

Cause of error:
IMAX of the power stage for the displayed axis is incorrect
IMAX = peak current
Corrective action:
Contact your service agency.

2194
F110 Motor %.1s: t-max incorrect

Cause of error:
T-MAX of the motor for the displayed axis is incorrect
T-MAX = maximum temperature
Corrective action:
Contact your service agency.

2195
F150 Motor %.1s: I-n incorrect

Cause of error:
I-N of the motor for the displayed axis incorrect
I-N = rated current
Corrective action:
Contact your service agency.

2196
F160 Motor %.1s: I-max incorrect

Cause of error:
I-MAX of the motor for the displayed axis is incorrect
I-MAX = peak current
Corrective action:
Contact your service agency.

2197
F170 Motor %.1s: n-max incorrect

Cause of error:
N-MAX of the motor for the displayed axis is incorrect
N-MAX = maximum rotational speed
Corrective action:
Contact your service agency.

2198
F180 Axis %.1s: MP2340/MP2350 incorrect

Cause of error:
MP2340 / MP2350 for the displayed axis is incorrect.
Corrective action:
Contact your service agency.

2199
F190 Axis %.1s: MP2190 incorrect

Cause of error:
MP2190 for the displayed axis is incorrect.
Corrective action:
Contact your service agency.

2200
F1A0 Axis %.1s: MP112 / MP113 incorrect

Cause of error:
MP112 / MP113 for the displayed axis is incorrect.
Corrective action:
Contact your service agency.

2201
F1B0 Axis %.1s: MP120 / MP121 incorrect

Cause of error:
MP120 / MP121 for the displayed axis is incorrect.
Corrective action:
Contact your service agency.

2202
F1C0 Axis %.1s: MP2540/MP2550 incorrect

Cause of error:
MP2540 / MP2550 for the displayed axis is incorrect.
Corrective action:
Contact your service agency.

2203
F200 %.1s motor enc. zn ampl. too small

Cause of error:
ZN amplitude of the motor encoder (ERN 1381) for the displayed axis is too small.
Corrective action:
Contact your service agency.

2204
F210 %.1s z1 motor enc. ampl. too small

Cause of error:
Z1 amplitude of the motor encoder (ERN 1381) for the displayed axis is too small.
Corrective action:
Contact your service agency.

2205
F230 Motor %.1s: temperature too high

Cause of error:
The temperature of the motor for the displayed axis is too high.
Corrective action:
If the error recurs, contact your service agency.

2206
F270 %.1s motor encoder defective

Cause of error:
The motor encoder for the displayed axis is defective.
Corrective action:
Contact your service agency.

2207
F280 Motor %.1s: speed not equal to Imax

Cause of error:
The current motor speed does not equal the expected at Imax. Perhaps the direction of rotation is wrong.
Corrective action:
Contact your service agency.

2208
F2A0 %.1s motor encoder freq. too high

Cause of error:
The input frequency of the motor encoder for the displayed axis is incorrect.
Corrective action:
Test the input frequency of the encoder signal.

2209
F2B0 Motor %.1s: is not turning

Cause of error:
The motor for the displayed axis is not turning.
Corrective action:
Contact your service agency.

2210
Interrupt running transmission?

Cause of error:
You attempted to start a data transfer, although the interface is already occupied.
Corrective action:
Reply with YES to interrupt the transmission now running.
Reply with NO to allow it to continue.

2211
No TOOL CALL permitted with M128

Cause of error:
A TOOL CALL is not permitted with M128 active.
Corrective action:
Enter M129 to cancel M128, then run the tool call.

2212
M91/M92 not permitted with M128

Cause of error:
M91 or M92 were programmed with M128 active.
Corrective action:
Do not program any machine-referenced coordinates while M128 is active.

2213
MP75XX not defined

Cause of error:
M128 without machine geometry description MP 7500 and following.
Corrective action:
Contact your service agency.

2213
MP75XX not defined

Cause of error:
M128 without machine geometry description MP 7500 and following.
Corrective action:
Contact your service agency.

2222
File not found in OEM.SYS

Cause of error:
You attempted to use a workpiece-material table or a tool-material table, although your machine manufacturer has not made the required entries in OEM.SYS.
Corrective action:
The OEM.SYS file must be edited. Contact your machine tool manufacturer.

2223
Incorrect file type

Cause of error:
You searched for a table that does not have the file extension .TAB.
Corrective action:
Search only for tables with the extension .TAB.

2224
Field name not found

Cause of error:
In the definition of a freely definable table you used a field name that is not an element of the table.
Corrective action:
The table definition must be changed. Contact your machine tool manufacturer.

2225
File empty

Cause of error:
You attempted to select a tool material or a cutting material, although the corresponding table has no entries.
Corrective action:
Entering the missing workpiece material in the MAT.TAB file,or the missing cutting material in the CUT.TAB.

2226
Material table not found

Cause of error:
The workpiece material entered in OEM.SYS was not found.

Corrective action:
Check your entry in the OEM.SYS file and, if necessary, regenerate the MAT.TAB file.

2227
Cutting-material table not found

Cause of error:
The cutting material table integrated in OEM.SYS was not found.
Corrective action:
Check the entry in the OEM.SYS file and, if necessary, regenerate the CUT.TAB file.

2228
No material selected

Cause of error:
You attempted to have the TNC automatically calculate the feed rate without first selecting a workpiece material in the workpiece blank definition.
Corrective action:
Enter the workpiece material in the workpiece blank definition.

2229
WMAT-TMAT combination missing

Cause of error:
In the tool table you refer to a cutting-data table in which the workpiece-material/tool-material combination that you selected does not exist.
Corrective action:
- Select another cutting data table in the tool table.
- Add the current workpiece/cutting material combination to the cutting data table that you selected.

2230
No cutting data table selected

Cause of error:
You attempted to call a tool without first assigning it a cutting data table.
Corrective action:
Edit the tool table.

2231
Block not permitted with M112

Cause of error:
The highlighted block is not permitted with M112 active.
Corrective action:
Edit the part program.

2232
Correct the error block

Cause of error:
In the active part program there are ERROR blocks that cannot be run by the TNC (e.g. TOOL DEF block - ISO: G99 block - with active tool file).
Corrective action:
- If necessary, delete the entire ERROR block.
- In the Programming and Editing mode, select the ERROR block and, with the rightward arrow key, go into the block. Edit the block and exit it with END. When the error is eliminated, the TNC automatically erases the word ERROR.

2233
FK blk not selectable with GOTO

Cause of error:
You attempted to resume the program at an FK block that contains Q parameters.
Corrective action:
Use the mid-program startup function to resume the program.

2238
Q223 must be greater than Q222

Cause of error:
In the Circular Pocket Finishing cycle (Cycle 212, ISO: G212), you entered a finished-part diameter (Q223) smaller than the workpiece-blank diameter (Q222).
Corrective action:
Edit Q222 in the cycle definition.

2239
Checksum error R

Cause of error:
EPROMS defective
Corrective action:
Contact your service agency.

2243
ANGLE in TOOL.T too small

Cause of error:
Cycle 22 (ISO:G122) ROUGH-OUT: The plunge angle of the active tool is too small.
Corrective action:
- Change the plunge angle in the tool table TOOL.T (column ANGLE).
- Enter a smaller plunging depth in the rough-out cycle.
- Use a tool that permits a greater plunging angle.

2253
Switch off external dc voltage

Cause of error:
The machine control voltage is still switched on.
Corrective action:
Switch off the machine control voltage.

2254
Normally closed relay open?

Cause of error:
In the relay chain the normally closed contact of one or more relays is open.
Corrective action:
Check the relay for proper function. If necessary, contact your service agency.

2255
Switch on external dc voltage

Cause of error:
The machine control voltage is switched off.
Corrective action:
Switch off the machine control voltage.

2273
TS: inadequate consistency

Cause of error:
During multiple measurement with the automatic probe cycle the variance of the individual measured values is greater than the value defined in machine parameter MP6171.
Corrective action:
- Check whether the probe point and the stylus are clean.
- Expand the tolerance in machine parameter 6171.

2284
Parallel operation not possible

Cause of error:
The window for the help text could not be displayed. It could be that a help window is already open in another operating mode.
Corrective action:
Close the window that is open in parallel.

2285
Axis locked

Cause of error:
The datum point for this axis is disabled in machine parameter MP7295.
Corrective action:
Edit machine parameter 7295: Input value 0 allows datum setting in all axes.

2288
Tool holder defective!

Cause of error:
The tool holder does not open or close.
Corrective action:
Check the tool holder. If necessary, contact your service agency.

2289
Inverter still in operation

Cause of error:
The inverter is still ready for operation, although it is supposed to be switched off.
Corrective action:
Contact your service agency.

2300
Check the cutting data !

Cause of error:
You have altered the entries for automatic cutting data calculation in the part program block WMAT or in the TOOL CALL block (ISO: G99 block).
Corrective action:
Check whether the changed entries have any effects on the spindle speed automatically calculated by the TNC or on the automatically calculated feed rate.

2315
Q214: 0 not permitted

Cause of error:
In the definition of Cycle 204 you have entered the disengaging direction 0.
Corrective action:
In Q214, enter a value from 1 to 4.

2316
PLC: Event file not found

Cause of error:
In the system file OEM.SYS the file defined with PLCEVENTS= was not found.
Corrective action:
Contact your service agency.

2317
PLC: Too many events

Cause of error:
More than 15 events were defined for the current SPAWN process (cooperative multitasking).
Corrective action:
Contact your service agency.

2318
F250 Power supply unit %.1s not ready

Cause of error:
The ready signal for the power stage was switched off during operation.
Corrective action:
Contact your service agency.

2319
TOOL TYPE table not found

Cause of error:
The tool type table entered in OEM.SYS was not found.
Corrective action:
Check the entry in OEM.SYS.

2320
CDT path not found

Cause of error:
The path entered in OEM.SYS for the display of cutting data (CDT files) was not found.
Corrective action:
Check the entry in OEM.SYS, if necessary, change the path.

2321
Too many *.CDT files

Cause of error:
There are more than 128 cutting data tables (*.CDT) in the specified directory.
Corrective action:
Delete unnecessary cutting data tables.

2336
Safe input %d contradictory

Cause of error:
In a safe circuit, each machine operating keystroke sends a signal through separate inputs to two microprocessors. In this case, one of the inputs was not set. The machine function cannot be executed.
Corrective action:
Inform your customer service agency.

2336
CCU S input signals %d not equal

Cause of error:
In a safe circuit, each machine operating keystroke sends a signal through separate inputs to two microprocessors. In this case, one of the inputs was not set. The machine function cannot be executed.
Corrective action:
Inform your customer service agency.

2336
MCU S input signals %d not equal

Cause of error:
In a safe circuit, each machine operating keystroke sends a signal through separate inputs to two microprocessors. In this case, one of the inputs was not set. The machine function cannot be executed.
Corrective action:
Inform your customer service agency.

2339
No connection to network

Cause of error:
The connection to the NFS server was interrupted.
Corrective action:
- Check whether the NFS server is available
- If necessary, inspect the connections, the cables and the Ethernet card

2342
FN17: Assignment value illegal

Cause of error:
In the function „Write System Data“ you entered an assignment value that lies outside of the permitted input range.
Corrective action:
Check the assignment value.

2344
Enter the element.

Cause of error:
You forgot to enter an element required to complete the block or cycle.
Corrective action:
Enter the missing element.

2345
Tool not defined

Cause of error:
You have called a tool that is not defined in the tool table.
Corrective action:
- Add the missing tool to the tool table.
- Use another tool.

2373
Incorrect compensation values

Cause of error:
Erroneous data in the compensation table
Corrective action:
Inform your service agency.

2374
Incorrect tool data

Cause of error:
Erroneous data in the tool table
Corrective action:
Inform your service agency.

2375
M112 not permitted with M128

Cause of error:
You must not program M112 together with M128.
Corrective action:
Delete M112 in the NC program.

2376
Feed rate greater than SRG %.1s

Cause of error:
Feed rate too high for safe operation.
Corrective action:
Inform your service agency.

2376
MCU feed rate greater SRG %.2s

Cause of error:
Feed rate too high for safe operation.
Corrective action:
Inform your service agency.

2376
CCU feed rate greater SRG %.2s

Cause of error:
Feed rate too high for safe operation.
Corrective action:
Inform your service agency.

2377
S: Limit switch %.1s- traversed

Cause of error:
You have traversed the hardware limit switch.
Corrective action:
Inform your service agency.

2377
S: Limit switch %.1s+ traversed

Cause of error:
You have traversed the hardware limit switch.
Corrective action:
Inform your service agency.

2378
S: Gross positioning error L %.1s

Cause of error:
During acceleration or deceleration the machine did not behave as instructed by the software.
Corrective action:
Inform your service agency.

2382
File not found

Cause of error:
In your program you call a file or table that does not exist in the TNC.
Corrective action:
Enter the name of an existing table.

2384
All elements deleted!

Cause of error:
While editing the structure of a freely definable table you erased all the elements.
Corrective action:
Insert at least one element.

2385
Mandatory field deleted!

Cause of error:
While editing the structure of a freely definable table you deleted an element that is always required by the TNC (mandatory element).
Corrective action:
Reinsert the mandatory element.

2386
Max. line length exceeded!

Cause of error:
In a freely definable table, the sum of the column widths of all elements exceeds the maximum permissible line length of 200 characters.
Corrective action:
Decrease the column width of the individual elements.

2387
Error during conversion!

Cause of error:
You changed the structure of a freely definable element. During conversion of an element one of the following errors occurred:
- Incorrect number range defined
- Permissible column width was exceeded
- An element contains impermissible characters

Corrective action:
In your table, examine all the elements marked with a # for the described errors.

2498
File %s%s already exists

Cause of error:
You have already used the entered file name for another file type.
Corrective action:
Select another file name or erase the existing file.

2500
Use RESTORE POS. AT N

Cause of error:
You attempted a mid-program startup by pressing GOTO block number, although it is defined in machine parameter 7680 that a spline be inserted as connecting element at radius-compensated outside corners.
Corrective action:
Use the RESTORE POS. AT N function to resume the program.

2504
Traverse direction not defined

Cause of error:
In a probing cycle you entered 0 for the traverse direction Q267.
Corrective action:
For Q267, enter either +1 (for positive traverse direction) or -1 (for negative traverse direction).

2505
No datum table active

Cause of error:
Probing cycle for datum setting: You want the TNC to write the measured point into a datum table, but you have not activated a datum table in a program run mode (status M).
Corrective action:
In the single block or full sequence program run mode, activate the datum table into which you want the measured point to be entered.

2506
Position error: center in axis 1

Cause of error:
Probing cycle for workpiece measurement: Center of 1st axis outside of position tolerance.
Corrective action:
Check the workpiece and the measuring log.

2507
Position error: center in axis 2

Cause of error:
Probing cycle for workpiece measurement: Center of 2st axis outside of position tolerance.
Corrective action:
Check the workpiece and the measuring log.

2508
Hole diameter too small

Cause of error:
Probing cycle for workpiece measurement: Hole diameter too small for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2509
Hole diameter too large

Cause of error:
- Probing cycle for workpiece measurement: Hole diameter tolerance exceeded.
- Cycle 208: The programmed hole diameter (Q335) cannot be machined with the active tool.
Corrective action:
- Check the workpiece and, if necessary, the measuring log.
- Cycle 208: Use a larger tool. Hole diameter must not be larger than twice the tool diameter.

2510
Stud diameter too small

Cause of error:
Probing cycle for workpiece measurement: Stud diameter too small for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2511
Stud diameter too large

Cause of error:
Probing cycle for workpiece measurement: Stud diameter too large for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2512
Pocket too small: rework axis 1

Cause of error:
Probing cycle for workpiece measurement: Pocket length in 1st axis too small for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2513
Pocket too small: rework axis 2

Cause of error:
Probing cycle for workpiece measurement: Pocket width in 2nd axis too small for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2514
Pocket too large: scrap axis 1

Cause of error:
Probing cycle for workpiece measurement: Pocket length in 1st axis too large for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2515
Pocket too large: scrap axis 2

Cause of error:
Probing cycle for workpiece measurement: Pocket width in 2nd axis too large for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2516
Stud too small: scrap axis 1

Cause of error:
Probing cycle for workpiece measurement: Stud length in 1st axis too small for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2517
Stud too small: scrap axis 2

Cause of error:
Probing cycle for workpiece measurement: Stud width in 2nd too small for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2518
Stud too large: rework axis 1

Cause of error:
Probing cycle for workpiece measurement: Stud length in 1st axis too large for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2519
Stud too large: rework axis 2

Cause of error:
Probing cycle for workpiece measurement: Stud width in 2nd axis too large for tolerance.
Corrective action:
Check the workpiece and the measuring log.

2520
Meas. cycle: length exceeds max

Cause of error:
Probing cycle 425 or 427: The measured length exceeds the maximum permissible value.
Corrective action:
Check the workpiece and the measuring log.

2521
Meas. cycle: length below min

Cause of error:
Probing cycle 425 or 427: The measured length is below the minimum permissible value.
Corrective action:
Check the workpiece and the measuring log.

2522
TCHPROBE 426: length exceeds max

Cause of error:
Probing cycle 426: The measured length exceeds the maximum permissible value.
Corrective action:
Check the workpiece and the measuring log.

2523
TCHPROBE 426: length below min

Cause of error:
Probing cycle 426: The measured length is below the minimum permissible value.
Corrective action:
Check the workpiece and the measuring log.

2524
TCHPROBE 430: diameter too large

Cause of error:
Probing cycle 430: The measured bolt-hole-circle diameter exceeds the maximum permissible value.
Corrective action:
Check the workpiece and the measuring log.

2525
TCHPROBE 430: diameter too small

Cause of error:
Probing cycle 430: The measured bolt-hole-circle diameter is below the minimum permissible value.
Corrective action:
Check the workpiece and the measuring log.

2526
3DROT not permitted

Cause of error:
The tilted working plane function is active during execution of a digitizing cycle or definition of a PRESET.
Corrective action:
Deactivate the tilted working plane function and restart the program.

2609
M128 not permitted with 3DROT

Cause of error:
You attempted to activate the Tilted Working Plane functions and M128 simultaneously.
Corrective action:
Edit the part program.

2610
M114 not permitted with M128

Cause of error:
You attempted to activate M114 and M128 simultaneously.
Corrective action:
Edit the part program.

2611
M128 not permitted with RR/RL

Cause of error:
You attempted to activate M128 while radius compensation was active (PL/RR/RL/ISO: G41/G42).
Corrective action:
Edit the part program.

2612
Safety-oriented input %d not = 0

Cause of error:
The safety-oriented inputs for key switch, door contact and axis configuration were not correctly set during the cyclical test.
Corrective action:
Inform your service agency!

2612
CCU S input %d not equal 0

Cause of error:
The safety-oriented inputs for key switch, door contact and axis configuration were not correctly set during the cyclical test.
Corrective action:
Inform your service agency!

2612
MCU S input %d not equal 0

Cause of error:
The safety-oriented inputs for key switch, door contact and axis configuration were not correctly set during the cyclical test.
Corrective action:
Inform your service agency!

2617
No measuring axis defined

Cause of error:
You failed to define the measuring axis in one of the measuring cycles 400, 402, 420, 425, 426 or 427.
Corrective action:
Check Q272 in the corresponding cycle. Permissible input values: 1 or 2; for Cycle 427: 1, 2 or 3.

2618
Format error in date or time

Cause of error:
While creating a log you entered an illegal format for the date or time.
Corrective action:
Enter the permissible format:
Format for date: 25.10.97 (day.month.year)
Format for time: 10:25:00 (hours:minutes:seconds)

2621
M128: DATUM setting not allowed

Cause of error:
You attempted to set a new datum while M128 was active.
Corrective action:
Deactivate M128 with M129 before setting the datum.

2635
Tool breakage tolerance exceeded

Cause of error:
During workpiece inspection using a measuring cycle, the tool breakage tolerance RBREAK given in the tool table was exceeded.
Corrective action:
Check whether the tool is damaged.

2636
Cancel radius comp. before M128

Cause of error:
You activated M128 while a tool radius compensation RL/RR (DIN/ISO: G41/G42) was still active. The TNC cannot switch from 2-D to 3-D radius compensation.
Corrective action:
If you wish to run a 3-D radius compensation, you must first program M128 and then the tool radius compensation with RL/RR (ISO:G41/G42).

2637
MP file from EPROM defective

Cause of error:
A machine parameter file that was to be copied from the EPROM to the TNC main memory is defective.
Corrective action:
Inform your service agency.

2642
Inverter not ready

Cause of error:
After a „safe stop" the inverter did not return to the ready state.
Corrective action:
Inform your service agency.

2644
M120: LOOK AHEAD not possible

Cause of error:
You attempted to cancel radius compensation immediately behind a positioning block with M120. In order to be able to check for potential collisions, however, the TNC requires several radius-compensated positions.
Corrective action:
- Delete M120 in the part program
- Activate M120 earlier

2645
Clear.hgt. Q260 < Meas.hgt. Q261

Cause of error:
In a touch probe cycle you defined a clearance height (Q260)below the measuring height (Q261). Collision risk!

Corrective action:
Check the entry in the touch probe cycle last defined, and enter a value for Q260 that is greater than Q261.

2646
Machine key depressed

Cause of error:
Contact of a machine key does not open.
Corrective action:
Release the key if pressed, otherwise inform your service agency.

2647
Relay: n.c. contact closed?

Cause of error:
In the relay chain, the normally closed contact of one or more relays is closed.
Corrective action:
Check the relay for proper function. If necessary, inform your service agency.

2649
Tool change is in process

Cause of error:
You attempted to save changes in the pocket table while a tool was being exchanged.
Corrective action:
Wait until the tool change is completed, then try again.

2652
Inverter for spindle RDY=0

Cause of error:
The power supply of the spindle could not be switched to ready condition.
Corrective action:
Check the wiring and inform your service agency.

2653
Inverter for axis RDY=0 %.1s

Cause of error:
The power supply of an axis could not be switched to ready condition.
Corrective action:
Check the wiring and inform your service agency.

2653
Inverter for axis RDY=0

Cause of error:
The power supply of an axis could not be switched to ready condition.
Corrective action:
Check the wiring and inform your service agency.

2654
Inverter for spindle RDY=1

Cause of error:
The spindle power supply is ready for operation although it ought to be switched off.
Corrective action:
Inform your service agency.

2655
Current to spindle not equal 0

Cause of error:
The spindle motor is receiving current although its inverterwas switched off!

Corrective action:
Inform your service agency.

2656
Inverter for axis RDY=1 %.1s

Cause of error:
The power supply for a spindle or for an axis is ready for operation although it ought to be switched off.
Corrective action:
Inform your service agency.

2656
Inverter for axis RDY=1

Cause of error:
The power supply for a spindle or for an axis is ready for operation although it ought to be switched off.
Corrective action:
Inform your service agency.

2657
Current to axis %.1s not equal 0

Cause of error:
The axis motor is receiving current although its inverter was switched off!
Corrective action:
Inform your service agency.

2662
Begin/end block not markable

Cause of error:
You attempted to mark the BEGIN block (ISO: first block with %) or the END block (ISO: block N 999999).
Corrective action:
The marked block must not include the first or last block of a program.

2663
Insertion not possible here

Cause of error:
You attempted to insert a copied block behind the END block (ISO: block N 999999).
Corrective action:
Select another block before inserting.

2664
Intermediate memory empty

Cause of error:
You attempted to insert blocks from intermediate memory, although you haven't copied anything since power has been on.
Corrective action:
Before you can insert anything from intermediate memory you must first fill it using the copy function.

2665
Nothing is marked

Cause of error:
You attempted to fill the intermediate memory using the DELETE BLOCK, COPY BLOCK soft keys, although you have not yet marked a block.
Corrective action:
Mark the block that you wish to delete/copy.

2666
Move to target before starting

Cause of error:
You pressed the NC start button before positioning manually (in distance-to-go) to the target.
Corrective action:
Position to the zero display position, then press the NC start key again.

2668
Correct the block format

Cause of error:
The program contains blocks (indicated with ERROR) with incorrect block format.
Corrective action:
- Correct the blocks
- Delete the blocks and enter them again

2687
MCU NC temperature out of tol.

Cause of error:
The temperature inside the LE is outside the tolerance range.
Corrective action:
Ensure adequate ventilation in the electrical cabinet.

2687
CCU NC temperature out of tol.

Cause of error:
The temperature inside the LE is outside the tolerance range.
Corrective action:
Ensure adequate ventilation in the electrical cabinet.

2687
NC temperature out of range

Cause of error:
The temperature inside the LE is outside the tolerance range.
Corrective action:
Ensure adequate ventilation in the electrical cabinet.

2688
+5V power out of range

Cause of error:
The 5V power supply of the LE is outside the tolerance range.
Corrective action:
Inform your service agency.

2688
MCU +5V LE out of tolerance

Cause of error:
The 5V power supply of the LE is outside the tolerance range.
Corrective action:
Inform your service agency.

2688
CCU +5V LE out of tolerance

Cause of error:
The 5V power supply of the LE is outside the tolerance range.
Corrective action:
Inform your service agency.

2691
LN: Oriented stop not possible

Cause of error:
The tool direction given in the LN block (TX, TY, TZ) cannot be realized with the active swivel head configuration.
Corrective action:
Have the CAD system recalculate the tool direction.

2692
M128 with LN block not possible

Cause of error:
The rotary-axis coordinate resulting from M128 and from the tool direction given in the LN block (TX, TY, TZ) cannot be realized with this swivel head configuration.
Corrective action:
There is no solution with your swivel head configuration.

2695
Safe stop (SH2) is active

Cause of error:
Error in program run
Corrective action:
Inform your service agency.

2697
Input (NE2) not equal to 0

Cause of error:
During the dynamic test, the voltage at input NE2 is expected to be 0 V. If the input has 24 V, an error message appears.
Corrective action:
Inform your service agency.

2700
Test of cutout channels inactive

Cause of error:
The MCU (Main Computer Unit) failed to test the cutoff channels.
Corrective action:
Inform your service agency.

2704
Safe machine parameter erroneous

Cause of error:
The input value for the safety-oriented machine parameter is not permitted!
Corrective action:
- Enter the proper input value.
- Inform your service agency.

2708
Angle cannot be calculated

Cause of error:
In the tilted working plane function you have spatial-angle input mode active, although the TNC does not support this mode for your machine configuration.
Corrective action:
Set bit 1 in machine parameter 7500 = 0.

2710
Op. state of CCU not equal MCU

Cause of error:
The automatic, SRG, SBH, and SH operating states of the MCU and CCU are compared cyclically. If the states are unalike for over 200 ms, a stop 1 is output.
Corrective action:
Switch on the machine and press CE to acknowledge the error message.

2710
Op. state of MCU not equal CCU

Cause of error:
The automatic, SRG, SBH, and SH operating states of the MCU and CCU are compared cyclically. If the states are unalike for over 200 ms, a stop 1 is output.
Corrective action:
Switch on the machine and press CE to acknowledge the error message.

2710
Op. state of MCU not equal CCU

Cause of error:
The automatic, SRG, SBH, and SH operating states of the MCU and CCU are compared cyclically. If the states are unalike for over 200 ms, a stop 1 is output.
Corrective action:
Switch on the machine and press CE to acknowledge the error message.

2711
Safe checksum erroneous

Cause of error:
Checksum was not yet entered, or it is incorrect.
Corrective action:
Inform your service agency.

2720
%.2s encoder: amplitude too large

Cause of error:
The amplitude of the encoder signals is too large, or the signal for contamination is active.
Corrective action:
Test the amplitude of the encoder signal.

2720
CCU amplitude too high %.2s

Cause of error:
The amplitude of the encoder signals is too large, or the signal for contamination is active.
Corrective action:
Test the amplitude of the encoder signal.

2720
MCU amplitude too high %.2s

Cause of error:
The amplitude of the encoder signals is too large, or the signal for contamination is active.
Corrective action:
Test the amplitude of the encoder signal.

2733
To many columns

Cause of error:
While editing the structure of a configurable table, you attempted to enter more than the permissible 30 columns.
Corrective action:
Erase the superfluous columns.

2734
No axis column selected

Cause of error:
While editing a pallet table, you pressed the actual-position-capture key and the PRESENT VALUE soft key, although the highlight was not on an axis column.
Corrective action:
Use the rightward/leftward cursor keys to select the desired axis column.

2735
M128 not permitted

Cause of error:
You attempted a mid-program startup in a program that contains the miscellaneous function M128.
Corrective action:
Delete M128 from the program.

2736
No .TAB file open?

Cause of error:
You attempted to use FN27 to write to a table, or FN28 to read from a table, although no table was open.
Corrective action:
Use FN26 to open the desired table.

2737
TAB: Field name too long

Cause of error:
You entered an excessively long field name in an FN27 or FN28 function.
Corrective action:
Enter field names with no more than 8 characters.

2738
TAB: Field not numerical

Cause of error:
You attempted to use an FN27 or FN28 function to write to or read from a non-numerical field.
Corrective action:
Writing and reading operations are possible only with numerical fields.

2739
TAB: Too many field names

Cause of error:
You entered more than 8 field names in an FN27 or FN28 function. 07976562067
Corrective action:
Use no more than 8 field names.

2743
S checksum error

Cause of error:
Checksum error due to faulty data.
Corrective action:
Inform your service agency.

2745
Incorrect reference position %.1s

Cause of error:
1) Signal of the reference pulse is disturbed (ground shield).
2) Position ascertainment via Z1 track is faulty.
3) Incorrect encoder line count.
Corrective action:
1) Take noise-suppression measures.
2) Inform your service agency.
3) Inform your service agency; take noise-suppression measures; check the motor table.

2746
Incorrect entry in MP%u

Cause of error:
Input value of the machine parameter MP2180 (PWM frequency) in incorrect.
Corrective action:
Edit MP2180 (PWM frequency).

2747
Line is write-protected

Cause of error:
You attempted to edit or erase a write-protected line.
Corrective action:
Write protection can be canceled only with a certain code number. If you wish to cancel write protection, contact your machine tool builder.

2748
Meas. cycle: M114 not permitted

Cause of error:
You attempted to run a measuring cycle while M114 was active.
Corrective action:
Use M115 to cancel M114 before running the measuring cycle.

2749
Meas. cycle: M128 not permitted

Cause of error:
You attempted to run a measuring cycle while M128 was active.
Corrective action:
Use M129 to cancel M128 before running the measuring cycle.

2750
M114, M128, 3DROT not permitted

Cause of error:
You attempted to run the funtion M138, although one of the functions M114, M128, or tilted working plane was active.
Corrective action:
Before running M138, either:
- deactivate M114 with M115,
- deactivate M128 with M129, or
- reset Cycle 19.

2752
MP: contradictory input

Cause of error:
You entered a machine parameter that does not match the default value set by your machine tool builder.
Corrective action:
To accept the default setting, press ENT.
To confirm the value you entered, press NO ENT.

2757
Command buffer overflow

Cause of error:
Too many commands were not returned by the Control Computer Unit (CCU) to the Main Computer Unit (MCU) as an echo.
Corrective action:
Inform your service agency.

2758
Commands do not agree

Cause of error:
The command returned by the CCU as echo is not the command it received.
Corrective action:
Contact your service agency.

2759
Command not acknowledged

Cause of error:
Command was not acknowledged by the Computer Control Unit (CCU) within 200 ms.
Corrective action:
Inform your service agency.

2760
S function not performed

Cause of error:
One or more S functions within a cycle were not performed.
Corrective action:
Inform your service agency.

2764
MP not yet confirmed with ENT

Cause of error:
The value of a new MP was not yet confirmed by pressing the ENT key.
Corrective action:
Reenter the MP value and confirm it by pressing ENT, or simply press ENT to confirm the default value.

2768
Permissive button was pressed

Cause of error:
The permissive button of the handwheel was pressed.
An incorrect handwheel was selected by MP7640.
Corrective action:
- Check the permissive buttons;
- Correct the machine parameters;
- Inform your service agency.

2769
Incomplete cycle was deleted

Cause of error:
Informational message that the TNC has erased an incomplete cycle.
Corrective action:

2770
Intermediate memory empty

Cause of error:
You attempted to insert a block from an empty intermediate memory.
Corrective action:
before trying to insert a block from intermediate memory, put the block into memory by:
- using the DEL key to delete the block to be copied, or
- placing the editing cursor into the block to be copied

2771
No permission to write

Cause of error:
You have selected a write-protected file for editing.
Corrective action:
Before editing, enter the code number 86357 to cancel the write protection.

2772
To delete entire context: NO ENT

Cause of error:
During editing you attempted to delete a word that is a required element of a function.
Corrective action:
Press NO ENT to delete the entire function, or press END to cancel.

2773
Impermissible change of context

Cause of error:
You attempted to open another context within a context dialog sequence.
Corrective action:
Continue the dialog, or completely erase the block and enter a new context.

2774
No polar coordinates possible

Cause of error:
You pressed the P key to enter polar coordinates. Polar coordinates are not programmable for the active function.
Corrective action:
Enter Cartesian coordinates to program the active function, or use a function that permits polar coordinate input.

2775
To change context: press ENT

Cause of error:
You attempted to change a context initiator to which other elements in the current block belong.
Corrective action:
First delete the elements, then change the context initiator.

2776
Input as context not permitted

Cause of error:
You entered a function that cannot initiate a context.
Corrective action:
Enter only permissible functions.

2777
Check parentheses for pairs

Cause of error:
You attempted to end a Q-parameter block containing an odd number of parentheses. Parentheses can be programmed only in pairs.
Corrective action:
Enter the missing parentheses.

2818
MCU/CCU system clock mismatch

Cause of error:
Hardware error
Corrective action:
Inform your service agency.

2819
Faulty data from CCU

Cause of error:
Faulty software
Corrective action:
Inform your service agency.

2820
MCU pos. deviation too large %.1s

Cause of error:
The calculated position deviation between speed encoder and position encoder is greater than the value from MP640.x.
Corrective action:
- Switch the control off and back on again
- Inform your service agency

2821
No position values from the CCU

Cause of error:
For a certain time the CCU has not sent any position values to the MCU.
Corrective action:
- Switch the control off and back on again
- Inform your service agency

2822
No position values from the MCU

Cause of error:
The MCU must not send any position values to the CCU.
Corrective action:
- Switch the control off and back on again
- Inform your service agency

2823
MCU/CCU checked axes unequal

Cause of error:
Contradictory status of checked position values in the MCU and CCU.
Corrective action:
- Switch the control off and back on again
- Inform your service agency

2824
CalibrateTT in tilted plane

Cause of error:
You attempted to run a cycle for tool measurement while the tilted-plane function was active, although the touch probe was not calibrated in the tilted working plane.
Corrective action:
Run the calibration cycle 30 while the working plane in tilted.

2825
Calibrate TT in non-tilted plane

Cause of error:
You attempted to run a cycle for tool measurement, although the touch probe was last calibrated in a tilted working plane.
Corrective action:
Run the calibration cycle 30 while the working plane is not tilted.

2826
TT not parallel to tool axis

Cause of error:
You attempted to run a cycle for tool measurement although the touch probe is not parallel to the tool axis.
Corrective action:
Position the axes so that the touch probe axis and tool axis are parallel.

2827
Faulty braking process %.2s

Cause of error:
The braking process was not started, or it was started after a delay.
Corrective action:
Switch the control voltage off and back on again, or inform your service agency.

2828
Position control time too short

Cause of error:
The time frame for the position controller is too small.
It can be increased in MP7600.0.
Corrective action:
- Increase the input value for MP7600.0 by 1.
- Inform your service agency.

2829
Enter Q247 unequal 0

Cause of error:
In a measuring cycle you entered in parameter Q247 an angular step of 0.
Corrective action:
Enter an angular step (Q247) other than 0.

2830
Enter Q247 greater than 5

Cause of error:
In a measuring cycle, you entered in parameter Q247 an angular step smaller than 5 degrees.
Corrective action:
To ensure sufficient measuring accuracy, enter an angular step (Q247) greater than 5 degrees.

2831
Incorrect include-file version

Cause of error:
- An include file was called that has differing version numbers in the MCU and CCU.
- Software error
Corrective action:
- Check for the correct software version
- Inform your service agency

2834
EnDat defective 0x%X %.1s

Cause of error:
The encoder with EnDat interface is defective.
The error codes have the following meanings:
001 Light source defective
010 Signal amplitude too low
100 Positions value incorrect
Corrective action:
Inform your service agency.

2837
FK block was not converted

Cause of error:
Automatic FK conversion at NC start not possible.
FK section may be located at the end of the program.
Corrective action:
- First run the program in the Programming and Editing mode.
- Increase the input value in MP 7229.1 (maximum value: 9999).

2853
Synchronization monitoring %.1s

Cause of error:
The positions of two synchronized axes differ by a value greater than that defined in machine parameter MP855.
Corrective action:
- Reduce the feed rate and increase the spindle speed.
- Remove potential sources of vibration.
- If the problem occurs frequently, inform your service agency.

2854
8092 Pos. contr. cyc. time error

Cause of error:
- MCU is outputting erroneous cycle time for CCU position controller. -
A hardware error has occurred.
Corrective action:
- Inform your service agency
- Check machine parameter 7600.x
- Exchange drive control board

2858
No testing rights

Cause of error:
The detachable-key switch does not permit axis testing.
The „untested" status remains in effect.
Corrective action:
Turn the key switch to the proper position and restart the testing procedure.

2868
TT: Pre-position the axes

Cause of error:
You tried to start tool measurement although the REF coordinates of one or more rotary axes (or parallel axes) do not agree with the coordinates defined in machine parameters MP6586.x.
Corrective action:
In the Manual operating mode, position the rotary or parallel axes so that the REF coordinates of the axes agree with the machine parameter values. Then restart the measuring program.

2869
8082 MCU command unknown

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2869
9800 MCU command unknown

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2870
8086 Probing already active

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2871
8010 LSV2 transmission error

Cause of error:
- Interrupted LSV2 connection
- Internal software error

Corrective action:
- Check the LSV2 connection
- Inform your service agency
- Check the software version

2872
8B00 Zn track %.2s error

Cause of error:
- Contamination of motor encoder (Zn track)
- Motor encoder cable defective
- Drive control board defective

Corrective action:
- Inform your service agency
- Exchange the motor
- Check the motor encoder cable
- Exchange the drive control board

2873
8B30 Motor temp. %.2s too high

Cause of error:
- Measured motor temperature is too high
- No temperature sensor
- Motor encoder cable is defective
- Entry in motor table is incorrect
- Incorrect or defective temperature sensor was installed

Corrective action:
- Let the motor cool down
- Inform your service agency
- Check the motor encoder cable
- Check the entry in the motor table
- Measure the temperature sensor (2000 [Ohm] at 25 [°C])

2874
8B50 Axis module %.2s not ready

Cause of error:
- No pulse release for the power supply unit
- Uz too high
- 5-V power supply too weak
- Inverter is not ready for operation
- Drive control board is defective
- PWM cable is defective
- Noise signals

Corrective action:
- Inform your service agency
- Check the control and cabling of the pulse release
- Check Uz
- For non-energy-recovery power module: Is the braking resistor connected?
- For energy-recovery power module: Is the energy recovery activated?
- Check the grounding and shielding of the cable
- Exchange the power module
- For P controls: Exchange the interface card
- Exchange the drive control board

2875
8BA0 Incorrect line count %.2s

Cause of error:
- Incorrect entry in motor table
- Faulty reference signal
- Noise signals
- Encoder cable is defective

Corrective action:
- Inform your service agency
- Check the entry in the motor table
- Check the motor encoder cable
- Exchange the motor encoder cable
- Exchange the motor

2876
8BC0 Motor current %.2s too high

Cause of error:
- Incorrect current controller parameters
- Incorrect parameters in the motor table
- Power supply unit defective
- Motor cable defective
- Motor defective
- Drive control board defective

Corrective action:
- Inform your service agency
- Is the correct motor and power module selected?
- Check the current control adjustment
- Check the motor and motor cable for a short circuit
- Exchange the power module or drive control board

2877
A001 Op. state MCU not equal CCU

Cause of error:
-The automatic, SRG, SBH, and SH operating conditions are compared cyclically between the MCU and CCU. If the values remain unequal for longer than 200 ms, a Stop 1 is released.

Corrective action:
- Acknowledge the error message with CE
- Switch on the machine
- Inform your service agency
- Check the software version

2877
A080 Op. state MCU not equal CCU

Cause of error:
-The automatic, SRG, SBH, and SH operating conditions are compared cyclically between the MCU and CCU. If the values remain unequal for longer than 200 ms, a Stop 1 is released.
Corrective action:
- Acknowledge the error message with CE
- Switch on the machine
- Inform your service agency
- Check the software version

2878
A100 Standstill monitoring %.2s

Cause of error:
-The rotational speed limit SBH was exceeded while the protective door was open and the key switch was turned to „automatic."
Corrective action:
- Inform your service agency

2879
A110 Safe speed SRG exceeded %.2s

Cause of error:
-The safe reduced speed SRG was exceeded while the protective door was open.
Corrective action:
- Inform your service agency

2880
C002 MCU command invalid

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software verion

2881
C003 System clock MCU not = CCU

Cause of error:
- Hardware error (quartz generator)
- Software error
Corrective action:
- Inform your service agency
- Exchange the drive control board or processor board
- Check the software version

2882
C004 Undefined interrupt

Cause of error:
- Software error
- Hardware error: disturbance results in internal interrupt
Corrective action:
- Switch off the machine
- Switch on the machine
- Inform your service agency
- Check the software version
- Check the grounding

2883
C001 Undefined error

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2884
C005 Unknown hardware identifier

Cause of error:
- Software does not fit the hardware
- Hardware defective
Corrective action:
- Inform your service agency
- Check the software version
- Exchange the drive control board

2885
C007 DC-link voltage too low

Cause of error:
- Line power interrupted
- Inverter defective
Corrective action:
- Check the line power supply
- Inform your service agency
- Check the inverter

2886
C009 Stack overflow

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2887
C00A PWM triangular signal error

Cause of error:
- Hardware error: Triangular signal does not oscillate, or it oscillates with incorrect frequency
Corrective action:
- Inform your service agency
- Exchange the drive control board

2888
C00B Too little main memory

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2889
C00D Program checksum error

Cause of error:
- Internal software or hardware error
Corrective action:
- Inform your service agency
- Check the software version
- Exchange the drive control board

2890
C00E Controller software timeout

Cause of error:
- Internal software or hardware error
Corrective action:
- Inform your service agency
- Check the software version
- Exchange the drive control board

2891
C00F Error in software timer

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2892
C011 Softw. synchronization err.

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2893
C012 Pos. control cyc. time err.

Cause of error:
- MCU outputs erroneous cycle time for CCU position controller -
Hardware error
Corrective action:
- Inform your service agency
- Check machine parameter 7600.0
- Exchange the drive control board

2894
C013 PWM frequency error

Cause of error:
- Entered PWM frequency in MP2180 lies outside the permissible input range
Corrective action:
- Inform your service agency
- Check MP2180

2895
C110 Unknown motor type %.2s

Cause of error:
- Error in MP file or in motor table
- Internal software error
Corrective action:
- Inform your service agency
- Check the MP file and motor table
- Check the software version

2896
C140 Pole pair no. too large %.2s

Cause of error:
- Incorrect entry in motor table
Corrective action:
- Inform your service agency
- Check the motor table

2897
C150 Field current error %.2s

Cause of error:
- Incorrect entry in motor table
Corrective action:
- Inform your service agency
- Check the motor table

2898
C160 Grating per. motor enc. %.2s

Cause of error:
- Measured grating period does not agree with the entry in the motor table
Corrective action:
- Inform your service agency
- Check the motor table (line count)
- Check the motor

2899
C170 Rotor time constant err. %.2s

Cause of error:
-The rotor time constant calculated from the rotor table is invalid
Corrective action:
- Inform your service agency
- Check the motor table

2900
C180 Rated speed error %.2s

Cause of error:
- Incorrect entry in motor table
Corrective action:
- Inform your service agency
- Check the motor table

2901
C1D0 Current sensor voltage %.2s

Cause of error:
- Incorrect entry in power module
Corrective action:
- Inform your service agency
- Check the power module table

2902
C1E0 Imax of power module %.2s

Cause of error:
- Incorrect entry in power module table
Corrective action:
- Inform your service agency
- Check the power module table

2903
C210 Tmax of motor table %.2s

Cause of error:
- Incorrect temperature entry in motor table
Corrective action:
- Inform your service agency
- Check the motor table

2904
C230 Oscilloscope error %1s

Cause of error:
- Internal software error
Corrective action:
- Inform your service agency
- Check the software version

2905
C240 Rated I of power module %.2s

Cause of error:
- Incorrect entry in power module table
Corrective action:
- Inform your service agency
- Check the power module table

2906
C250 Rated I of motor %.2s

Cause of error:
- Incorrect entry in motor table
Corrective action:
- Inform your service agency
- Check the motor table

2907
C260 Imax of motor %.2s error

Cause of error:
- Incorrect entry in motor table
Corrective action:
- Inform your service agency
- Check the motor table

2908
C270 Nmax of motor %.2s error

Cause of error:
- Incorrect entry in motor table
Corrective action:
- Inform your service agency
- Check the motor table

2909
C280 Field angle %.2s error

Cause of error:
- Incorrect entry in MP2340 or MP2350
Corrective action:
- Inform your service agency
- Check entry MP2340 / MP2350

2910
C290 Uz %.2s error

Cause of error:
- Incorrect entry in MP2190 (dc-link voltage Uz)
Corrective action:
- Inform your service agency
- Check entry in MP2190

2911
C2A0 Encoder input %.2s

Cause of error:
- Incorrect entry in MP112 or MP113 (speed encoder)
- Internal software error
Corrective action:
- Inform your service agency
- Check entry in MP112 / MP113
- Check the software version

2912
C2B0 PWM output %.2s

Cause of error:
- Incorrect entry in MP120 or MP121 (nominal speed command signal output) -
Internal software error
Corrective action:
- Inform your service agency
- Check entry in MP120 / MP121
- Check the software version

2913
C2C0 Band-pass parameter %.2s

Cause of error:
- Incorrect entry in MP2540, MP2541, MP2550 or MP2551
- Internal software error
Corrective action:
- Inform your service agency
- Check entry in MP2540, MP2541, MP2550 and MP2551
- Check the software version

2914
C300 Zn track %.2s error

Cause of error:
- Contamination in the motor encoder (Zn-Spur)
- Motor encoder cable defective
- Drive control board defective

Corrective action:
- Inform your service agency
- Exchange the motor
- Check the motor encoder cable
- Exchange the drive control board

2915
C310 Z1 track %.2s error

Cause of error:
- Contamination in the motor encoder (Z1-Spur)
- Motor encoder cable defective
- Drive control board defective

Corrective action:
- Inform your service agency
- Exchange the motor
- Check the motor encoder cable
- Exchange the drive control board

2916
C330 Motor temp. too high %.2s

Cause of error:
- Measured motor temperature is too high
-There is no temperature sensor
- Motor encoder cable defective
- Entry in motor table incorrect
- Incorrect or defective temperature sensor

Corrective action:
- Let the motor cool down
- Inform your service agency
- Check the motor encoder cable
- Check the entry in the motor table
- Measure the temperatur sensor (2000 [Ohms] at 25 [°C])

2917
C340 Unknown counter compnt. %.2s

Cause of error:
- Hardware defective
- Incorrect software version
Corrective action:
- Inform your service agency
- Check the software version
- Exchange the drive control board

2918
C350 Axis module %.2s not ready

Cause of error:
- No pulse release for the axis module
- Uz too large
- 5V power supply too small
- Inverter is not ready for operation
- Drive control board is defective
- PWM cable is defective
- Noise signals
Corrective action:
- Inform your service agency
- Check the control signals and cabling of the pulse release
- Check Uz
- For non energy-recovery power supply unit: Is the braking resistor connected?
- For energy-recovery power supply unit: Is energy-recovery activated?
- Check the grounding and shielding of the cable
- Exchange the power supply unit
- For P controls: Exchange the interface card
- Exchange the drive control board

2919
C370 Angle error motor encdr. %.2s

Cause of error:
- Motor encoder defective
- Motor cable defective
- Drive control board defective

Corrective action:
- Inform your service agency
- Check the motor encoder and leads
- Exchange the drive control board

2920
C380 Motor %.2s not controllable

Cause of error:
- Motor cables were crossed (e.g. X with Y)
- Motor encoder cables were crossed
- Phases incorrectly connected to motor
- Motor encoder cable defective
- Incorrect motor table entry (direction of rotation)
- Motor defective

Corrective action:
- Check the motor cabling
- Inform your service agency
- Check the motor and motor encoder cable
- Check the motor table entry

2921
C390 Error in 3-D touch probe %.2s

Cause of error:
- Software error
- Hardware error in drive control board

Corrective action:
- Inform your service agency
- Exchange the drive control board
- Check the software version

2922
C3A0 Incorrect ref. position %.2s

Cause of error:
- Incorrect motor selected (MP2200)
- Grounding error on motor encoder cable (disturbance on reference signal line) -
Motor encoder defective
Corrective action:
- Inform your service agency
- Check the motor selection (MP2200)
- Check the cabling of the motor encoder (grounding)
- Exchange the motor

2923
C3B0 Motor %.2s does not rotate

Cause of error:
- Inverter not ready
- Disturbance on RDY input of the PWM output connector
- Motor jammed
- Inverter defective
- Motor defective
- Incorrect motor selected (MP2200)
- Assignnent of PWM outputs entered incorrectly in MP120
- Assignment of encoder inputs entered incorrectly in MP112
- Motor power cables crossed
- Motor encoder cables crossed
- Incorrect motor connection
Corrective action:
- Inform your service agency
- Check the inverter
- Check the motor and cabling
- Check the machine parameters

2924
C3C0 Motor current %.2s too high

Cause of error:
- Incorrect current control parameters
- Incorrect parameters in the motor table
- Power module defective
- Motor cable defective
- Motor defective
- Drive control board defective

Corrective action:
- Inform your service agency
- Is the correct motor and power module selected?
- Check the current control adjustment
- Check the motor and motor cable for short circuits
- Exchange the power module or drive control board

2925
C3D0 PWM component defective %.2s

Cause of error:
- Internal hardware error

Corrective action:
- Inform your service agency
- Exchange the drive control board

2926
C3E0 Err. in rated U of motor %.2s

Cause of error:
- Motor rated voltage outside of permitted input range

Corrective action:
- Inform your service agency
- Check the entry in the motor table

2927
D000 DP RAM area overlap

Cause of error:
- Internal software error

Corrective action:
- Inform your service agency
- Check the software version

2928
E001 Status NR1/NR2 not equal

Cause of error:
- NR2 input incorrectly connected
- Software error

Corrective action:
- Inform your service agency
- Check the wiring
- Check the software version

2929
E002 Status NE1/NE2 not equal

Cause of error:
- NE2 input incorrectly connected
- Software error

Corrective action:
- Inform your service agency
- Check the wiring
- Check the software version

2930
E003 PLC module 9169 illegal

Cause of error:
- PLC module 9169 in safety-oriented software (illegal)
- Software error

Corrective action:
- Inform your service agency
- Check the PLC program
- Check the software version

2931
E006 Wrong RDY status of spindle

Cause of error:
- Cabling to inverter defective
- Spindle not connected (spindle release relay)
- Inverter defective

Corrective action:
- Inform your service agency
- Check the inverter and cabling

2932
E007 Wrong RDY status of axes

Cause of error:
- Cabling to inverter defective
- No axis connected (axis release relay)
- Inverter defective

Corrective action:
- Inform your service agency
- Check inverter and cabling

2933
E008 SRG speed too high

Cause of error:
- Safe reduced rotational velocity (SRG) was exceeded
- No standstill in safe controlled stop (SBH) operating mode

Corrective action:
Inform your service agency

2934
E009 Incorrect gear range

Cause of error:
- Software error

Corrective action:
- Inform your service agency
- Check the software version

2935
E00A Safe machine param. error

Cause of error:
- CRC checksum does not fit the entered safe MPs

Corrective action:
- Inform your service agency
- Check the safe machine parameters

2936
E00B Cutout channels test error

Cause of error:
- Machine key depressed (ZT.HR, ZT.MB, MT signal)
Corrective action:
- Inform your service agency
- Check the wiring X65, X66 (,X67)
- Check the machine keys

2937
E00C Error in MP transfer

Cause of error:
- MP3210 or MP3510 incorrect
- Software error MCU
Corrective action:
- Inform your service agency
- Check MP3210 and MP3510
- Check the software version

2938
E110 Safe inputs %.2s not equal

Cause of error:
- Wiring error X65, X66 (,X67)
- Safety module defective
Corrective action:
- Inform your service agency
- Check wiring X65, X66 (,X67)
- Exchange the safety module

2938
A800 Safe inputs %.2s not equal

Cause of error:
- Wiring error X65, X66 (,X67)
- Safety module defective
Corrective action:
- Inform your service agency
- Check wiring X65, X66 (,X67)
- Exchange the safety module

2938
B800 Safe inputs %.2s not equal

Cause of error:
-Wiring error X65, X66 (,X67)
- Safety module defective
Corrective action:
- Inform your service agency
- Check wiring X65, X66 (,X67)
- Exchange the safety module

2939
E120 Safe function call error

Cause of error:
- Software error
Corrective action:
- Inform your service agency
- Check the software version

2940
AC00 Mot. enc. ampl. too high %.2s

Cause of error:
- Noise on motor encoder signal
- Short circuit in motor encoder cable
- Signal amplitude of motor encoder is too high
Corrective action:
- Inform your service agency
- Check connection of motor encoder (ground connection)
- Check the motor encoder

2940
E130 Mot. enc. ampl. too high %.2s

Cause of error:
- Noise on motor encoder signal
- Short circuit in motor encoder cable
- Signal amplitude of motor encoder is too high
Corrective action:
- Inform your service agency
- Check connection of motor encoder (ground connection)
- Check the motor encoder

2941
E140 Mot. current %.2s not equal 0

Cause of error:
- Motor current was determined during cutout channel test (24-h test)

Corrective action:
- Inform your service agency
- Check the inverter

2942
E150 Inverter %.2s ready

Cause of error:
- RDY status of the inverter is HIGH instead of LOW

Corrective action:
- Inform your service agency
- Check the inverter
- Check the cabling of the cutout channels

2943
E160 Inverter %.2s not ready

Cause of error:
- RDY status of the inverter is LOW instead of HIGH

Corrective action:
- Inform your service agency
- Check the inverter
- Check the cabling of the cutout channels

2944
E170 Pos. deviation too large %.1s

Cause of error:
- MP640 too small
- Incorrect mounting of position encoder
- Incorrect linear, nonlinear, or temperature compensation, reversal error

Corrective action:
- Inform your service agency
- Correct MP640
- Check the encoder mounting
- Check the compensation

2945
M91/M92 not permitted

Cause of error:
In an active tilted working plane and during an active radius compensation you attempted to use M91 or M92 to move to a machine-based position.
Corrective action:
Use only linear interpolation and inactive radius compensation to move to a machine-based position in an active working plane.

2993
Internet address error

Cause of error:
When the service support ON/OFF soft key was pressed there was no valid Internet address entered under the code word SERVICE.REQUEST.HOST or SUPPORT.REQUEST.HOST in the OEM.SYS file.
Corrective action:
Check with the machine manufacturer about the Internet address.

2994
8B40 No drive release %.2s

Cause of error:
- Inverter not ready for operation
- No pulse release for the power supply unit
- Uz too large
- Power-fail signal is active
- If M control: NE2 input is active
- If P control: drive release at X50 is inactive
- Motor control board defective
- PWM cable defective
- Noise pulses

Corrective action:
- Inform your service agency.
- Check the signal and cabling for the pulse release
- Check Uz
- Check the emergency stop circuit
- If the power supply is not regenerative: Is the braking resistor connected?
- If the power supply is regenerative: is the energy recover activated?
- Exchange the power supply unit
- If P control: Exchange the interface card
- Exchange the motor control board

2995
Illegal PLC datum shift

Cause of error:
During a return to the contour, the PLC commanded an illegal PLC datum shift.
Corrective action:
If the error recurs: Have the machine manufacturer change the PLC program.

2996
Trav. range shift not permitted

Cause of error:
During a return to the contour, the PLC commanded an illegal traverse range shift.
Corrective action:
If the error recurs: Have the machine manufacturer change the PLC program.

3002
Special spindle mode not allowed

Cause of error:
The code number 561320 is nonfunctional because the servicing mode for the spindle was not enabled by the machine tool manufacturer.
Corrective action:
- Check MP560
- Inform your service agency

3006
Perform a tool change!

Cause of error:
You have tried to perform a probing function without an active touch probe. Machine parameter 7411, bit 2 is set so that the calibration data is always taken from the tool table TOOL.T.
Corrective action:
Call the touch probe with TOOL CALL (ISO: T) and the touch probe axis. Then try the touch probe function again.

3011
8B60 Error in axis module %.2s

Cause of error:
- Undervoltage, temperature, or short-circuit monitor of an IGBT in the inverter has responded.
Corrective action:
- Let the inverter cool down.
- Inform your service agency.
- Examine the motor for short ciruit in the windings.
- Replace the power supply unit.

3012
M120 LA not permitted

Cause of error:
You used the M120 function during peripheral milling with active radius compensation.
Corrective action:
M120 is not permitted with this function. Delete M120 from the program.

3013
Circular interpolation illegal

Cause of error:
Peripheral milling is permitted only for straight line blocks L (ISO: G00, G01) or LP (SO: G10, G11).
Corrective action:
Edit the NC program.

3025
Pallet line locked!

Cause of error:
You attempted to run a locked pallet line.
Corrective action:
To resume program run, unlock the line or continue with the next line. If necessary, refer to your machine manual.

3026
Radius compensation not possible

Cause of error:
The TNC cannot execute radius compensation on the programmed contour. Possible cause: You programmed two tangentially connecting straight lines in sequence.
Corrective action:
Kontur korrigieren.

3055
Enter direction Q351 unequal 0

Cause of error:
In a fixed cycle you did not define the cutting direction (climb or up-cut).
Corrective action:
Define the cutting direction as climb milling (= 1) or up-cut milling (= -1).

3056
Contouring disabled by PLC

Cause of error:
In your NC program you have programmed a movement to be executed in more than one axis. However, contouring operation has been disabled by the PLC.
Corrective action:
Edit the NC program so that it contains only paraxial line blocks.

3061
Error in MP transfer

Cause of error:
While copying a machine parameter file into the working memory, the TNC determined that the file to be copied is defective.
Corrective action:
Inform your service agency.

3063
3DROT: No description found

Cause of error:
An incorrect path or file name of a kinematic description is saved in the assignment table for kinematic descriptions.
Corrective action:
- Correct the path or file name in the assignment table.
- Copy the kinematic description to the correct directory.

3065
Reset M114, M128 or CYCL 19

Cause of error:
You attempted to activate a kinematic description, although one of the functions M114, M128 or the tilted-working-plane cycle is active.
Corrective action:
Before selecting a new kinematic description, reset all active 3DROT functions.

3081
Thread depth too large

Cause of error:
The programmed thread depth plus 1/3 of the pitch is greater than the drilling or sinking depth.
Corrective action:
Program the total hole depth to be at least 1/3 of a thread pitch smaller that the total hole depth.

3181
No appropriate tool found

Cause of error:
Automatic tool search: The TNC could not find an appropriate tool in the tool table.
Corrective action:
Check the tool table.

3182
Tool type not found

Cause of error:
Automatic tool search: The TNC could not find an appropriate tool type in the tool table.
Corrective action:
Check the tool table.

3183
Thread diameter not found

Cause of error:
In the technology table for threads, the TNC could not find the thread diameter defined in the cycle.
Corrective action:
Check the thread diameter and, if required, add it to the corresponding technology table.

3184
Reaming diameter not found

Cause of error:
In the technology table for reaming, the TNC could not find the reaming diameter defined in the cycle.
Corrective action:
Check the reaming diameter and, if required, add it to the corresponding technology table.

3185
Countersinking dia. not found

Cause of error:
In the technology table for countersinking, the TNC could not find the countersinking diameter defined in the cycle.
Corrective action:
Check the countersinking diameter and, if required, add it to the corresponding technology table.

3186
Pitch not found

Cause of error:
In the technology table for threads, the TNC could not find the pitch defined in the cycle.
Corrective action:
Check the pitch and, if required, add it to the corresponding technology table.

3187
No PNT file selected

Cause of error:
You have called a fixed cycle with CYCL CALL PAT without having activated a point table.
Corrective action:
Use SEL PATTERN to select a point table before CYCL CALL PAT.

3188
PNT: Clearance height too low

Cause of error:
You have called a fixed cycle with CYCL CALL PAT, and the coordinate you have entered in the tool axis (clearance height) is too small.
Corrective action:
The clearance height entered in the point table is greater than the clearance height in a cycle.

3189
CYCL CALL PAT not permitted

Cause of error:
You have used Cycle 12 (ISO: G39) to declare a program containing CLCL CALL PAT to be a cycle.
Corrective action:
CYCL CALL PAT is not permitted together with Cycle 12 (ISO: G39).

3192
Missing calibration data

Cause of error:
You have attempted to perform a measurement with Cycle 440 without first performing a calibration.
Corrective action:
Repeat Cycle 440, but with Q363 = 0 (calibrate).

3193
Tolerance exceeded

Cause of error:
The limits entered in the tool table TOOL.T in the LTOL or RTOL column were exceeded.
Corrective action:
Check the limit values for the active calibration tool.

3199
Spindle switching not permitted

Cause of error:
- During a mid-program startup, the active gear range did not match the gear range at the restore position.
- During a mid-program startup, the active spindle did not match the spindle required at the restore position.
Corrective action:
- Restart the mid-program startup.
- Before the mid-program startup, activate the gear range and/or the spindle that is needed at the restore position.
- If the problem recurs: Inform your service agency.

3205
Autostart not enabled

Cause of error:
You have attempted to activate the autostart function although it was not enabled by the machine tool builder.
Corrective action:
Contact your machine tool builder.

3206
No macro %.20s

Cause of error:
During a program abort the TNC was not able to run a macro defined by your machine tool builder.
Corrective action:
Contact your machine tool builder

3213
MCU speed greater than SRG %.2s

Cause of error:
Rotational speed for safety-oriented operation too high.
Corrective action:
Kundendienst benachrichtigen.

3213
CCU speed greater than SRG %.2s

Cause of error:
Rotational speed for safety-oriented operation too high.
Corrective action:
Kundendienst benachrichtigen.

3214
Table values were changed

Cause of error:
During a program run, you changed a value in a datum table or point table while in the Programming and Editing operating mode. The TNC was no longer able to include the new value in its geometry look-ahead calculation.
Corrective action:
Restart the program.

3215
AC10 Amplitude too low %.2s

Cause of error:
- Break in the motor encoder cable
- Signal amplitude of motor encoder missing
Corrective action:
- Inform your service agency.
- Check the connection of the motor encoder.
- Inspect the motor encoder.

3216
AC20 Frequency too high %.2s

Cause of error:
- Fault in motor encoder signal
Corrective action:
- Inform your service agency.
- Check the connection of the motor encoder (ground).
- Check the motor encoder.

3217
Contradictory block scan %s

Cause of error:
At the end of a block scan for a mid-program startup, the control detected a disagreement between the geometry and the machine in the data of the active spindle (S), the traverse range (R), or the PLC datum shift (P).
Corrective action:
Acknowledge the error message by pressing the END key. The TNC will then restart.

3218
PLC function not permitted

Cause of error:
During mid-program startup, the PLC function programmed in the displayed block cannot be properly executed.
Corrective action:
Inform your service agency.

3219
Axis not at test position

Cause of error:
Safety-oriented function:
The axis moved from the test position before you pressed the permissive button.
Corrective action:
Reapproach the test position.

3220
Tolerance in MP6510 too small

Cause of error:
The tolerance value entered in MP6510.0 cannot be attained during radius measurement with the TT.
Corrective action:
- Increase the tolerance value for tooth finding with spindle orientation in MP6510.1.
- Reduce the spindle positioning window in MP3420.
- Check for burrs on the contact plate and remove them.
- If required, exchange the tool touch probe.

3221
Calibration radius too large

Cause of error:
The tool radius that you entered for the calibration tool is too large.
Corrective action:
Correct the radius for the calibration tool in the tool table.

3231
PAL/PGM field is missing

Cause of error:
The mandatory PAL/PGM column is missing in a pallet table.
Corrective action:
Add the PAL/PGM column to the pallet table (with the EDIT FORMAT soft key).

3232
Language load error %d

Cause of error:
Setup version does not match the NC software.
Corrective action:
Use the proper setup version for your NC software. Contact your service agency if required.

3234
Tool preselection is running

Cause of error:
The pocket change for tool preselection is still in progress. The programmed tool change is not yet possible.
Corrective action:
Wait until the tool change is completed.
The error message is automatically acknowledged by the TNC.
If the error message remains after the pocket change, contact your service agency.

3235
Negative feed rate

Cause of error:
You have defined for the feed rate a negative value or negative Q parameter.
A negative value resulted from the feed rate calculation by Q parameter.
Corrective action:
Enter only positive values or positive Q parameters for the feed rate.

3236
Switch-off pos. %.2s unequal ENDAT

Cause of error:
The axis position last saved does not match the present position of the rotary encoder with EnDat interface.
Corrective action:
- Inform your service agency
- Check MP960

3238
Tool data not permitted for T0.

Cause of error:
You attempted to enter data for the tool T0.
Corrective action:
Delete the entered values in the tool table or in the TOOL DEF block (ISO: G99 block).

3239
Selected software not loaded

Cause of error:
The selected software could not be loaded into the flash ROMs. The previous software will be used.
Corrective action:
- Transfer the desired software to the TNC again.
- If the error recurs, the binary files will have to be checked. In this case, inform your service agency.

3240
E00C Error in transfer of MP3210

Cause of error:
- MP3210 incorrect
- Check the software version.
Corrective action:
- Inform your service agency.
- Check MP3210.
- Check the software version.

3241
E00D Error in transfer of MP3510

Cause of error:
- MP3510 incorrect
- Check the software version.
Corrective action:
- Inform your service agency.
- Check MP3510.
- Check the software version.

3242
E00E Error in transfer of MP2020

Cause of error:
- MP2020 incorrect
- Check the software version.
Corrective action:
- Inform your service agency
- Check MP2020.
- Check the software version.

3243
No tool axis programmed

Cause of error:
- At his point in the program you have not yet defined a tool axis.
- M140 requires a tool axis for retraction.

Corrective action:
Program a TOOL CALL block and specify the tool axis (ISO: plane selection G17 - G20).

3245
M function not permitted

Cause of error:
The M functions M99 ... M299 cannot be run in the MANUAL OPERATION or ELECTRONIC HANDWHEEL modes. Only M functions that are output to the PLC can be run.

Corrective action:
Enter the desired M function in the POSITIONING THE MDI mode and press the NC start key.

3257
D100 Software error

Cause of error:
- Internal software error

Corrective action:
- Inform your service agency
- Check the software version

3354
Function not permitted

Cause of error:
You attempted to program one of the functions M114, M116, M128, M144 or Cycle 19, although you have already activated one of them. These functions are mutually exclusive.
Corrective action:
Always program only one of the above listed function for the coordinate transformation.
Deaktivate the respective function:
- M114 with M115
- M116 with M117
- M128 with M129
- M144 with M145
- Reset Cycle 19

3355
Kinematic table missing

Cause of error:
- In the OEM.SYS file, under the code word KINEMATIC=, an incorrect path or file name ofthe assignment table for kinematic descriptions was entered.
-There is no assignment table for kinematic descriptions.
Corrective action:
- Create an assignment table.
- Correct the path or file name in the OEM.SYS file.
- Remove the code word KINEMATIC= from the OEM.SYS file, then MP7500 and following from the active machine parameter list will become effective.

3356
Kinematic table defective

Cause of error:
- Selected line in the assignment table not found.
-The table for kinematic description is empty or missing.
- A column in the assignment table is missing or has an incorrect entry.
Corrective action:
- Select the correct line.
- Create the table for kinematic description or add the missing entries.
- Insert the missing column or correct the incorrect entry.

3357
MP subfile incorrect

Cause of error:
The machine parameter subfile entered in the assignment table for kinematic description contains incorrect entries.
Corrective action:
Correct the machine parameter subfile.

3441
M144 not permitted

Cause of error:
You attempted to execute the function M138, although the function M144 was active.
Corrective action:
Use M145 to deactivate M144 before using M138.

3532
Incorrect entry in MFUNCT.TAB

Cause of error:
You have entered an illegal value or number in FUNCT.TAB.

Corrective action:
Enter only Y, N, 0 or 1 in MFUNCT.TAB.

3927
Probing not permitted

Cause of error:
The active probe axis was not positioned with M114 parallel to a machine axis before probing.
Corrective action:
Position the touch probe parallel to an axis in the machine-based coordinate system.

3928
M112 not permitted with M144

Cause of error:
You attempted to activate M112 and M144 at the same time, although tilting axes are in motion.
Corrective action:
M112 is not permitted with this function.
Delete M112 from the NC program.

4175
Pallet line with completed part

Cause of error:
The pallet line under the cursor is marked as a completed part and can therefore no longer be executed.
Corrective action:
Select a pallet line in which a workpiece blank or an incomplete part is entered.

4176
Fixture change macro missing

Cause of error:
Fixture changer: A fixture change was started, although no NC program is indicated for changing the fixture.
Corrective action:
The „Name" field of the fixture line must indicate a separate NC program for changing the fixture.

4177
Invalid geometry context

Cause of error:
During tool-oriented machining, you attempted to resume machining of a damaged or missing part with a saved context.
Corrective action:
The part must be completely remachined (set the W-STATE in the pallet table to BLANK) or excluded from machining (set W STATE to ENDED).

4181
8010 Error in LSV2 transfer

Cause of error:
- Error in data transfer by LSV2 protocol
Corrective action:
- Press the CE key to acknowledge the error.
- Error does not impair the control functions.
- Inform your service agency.

4182
8040 Heat sink temp. in UV 1xx

Cause of error:
- Excessive temperature of heat sink in the UV 1xx
- Further increase of heat sink temperature will result in switch-off.
Corrective action:
- Stop the machine and let it cool.
- Continue working while using less power (i.e., reduce the feed rate).

4183
8041 Excessive Iz in UV 1xx

Cause of error:
- Excessive current of DC link in the UV 1xx power supply unit.
Corrective action:
- Continue working while using less power (i.e., reduce the feed rate).

4184
8042 Leakage current in UV 1xx

Cause of error:
- Insulation problem (e.g. defective motor)
Corrective action:
- Inform your service agency.
- Check the motor.
- Check the wiring.

4185
8080 Uz UV 1xx exceeds max.

Cause of error:
- Excessive DC-link voltage of the power supply unit
Corrective action:
- Inform your service agency.
- Check the machine parameters (braking the spindle).
- If required, check the braking resistor.
- Exchange the power supply unit.

4186
8100 Warning from motor temp. %.1s

Cause of error:
- Further increase of motor temperature will result in switch-off.
- Motor overload
- Machine parameters incorrect
Corrective action:
- Reduce the load on the motor.
- Contact your service agency.
- Check the machine parameters.

4187
8110 Warning from I2t monitor %.1s

Cause of error:
- Further increase of motor current will result in switch-off.
- Overload of the motor or the power supply unit
- Machine parameter MP230x.x incorrect
Corrective action:
- Reduce the load on the motor or on the power supply unit.
- Inform your service agency.
- Check machine parameter MP230x.x.

4188
8120 Heat sink temp. UV 1xx %.1s

Cause of error:
- Excessive heat sink temperature in the UM 1xx power modules. -
Further increase of inverter temperature will result in switch-off.
Corrective action:
- Stop the machine and let it cool.
- Continue working while using less power (i.e., reduce the feed rate).

4189
8130 Is DIR %.1s in motor table OK?

Cause of error:
- DIR in motor table might be incorrect.
Corrective action:
- Change DIR in motor table

4190
8140 Error %.1s field orientation

Cause of error:
- No field orientation possible
Corrective action:
- Inform your service agency

4190
8B20 Error %.1s field orientation

Cause of error:
- No field orientation possible
Corrective action:
- Inform your service agency

4191
8B10 Wrong traverse direction %.1s

Cause of error:
- DIR entry in motor table is incorrect.
- MP1040 is incorrect.
- Check the power connection of the motor.

Corrective action:
- Inform your service agency.
- Check the DIR entry in the motor table.
- Check MP1040.
- Check the power connection of the motor.

4193
A000 Error in T2 test

Cause of error:
- Error during test of the 2nd emergency-off loop.

Corrective action:
- Inform your service agency.
- Check the wiring.
- Check the emergency stop button.
- Exchange the hardware.

4194
C2D0 Encoder line count %.1s

Cause of error:
- Encoder line count was changed

Corrective action:
- Restart the control

4195
C2E0 Motor pole pair number %.1s

Cause of error:
- Motor pole pair number was changed

Corrective action:
- Restart the control

4196
C2F0 DIR in motor table %.1s

Cause of error:
- DIR in the motor table was changed
Corrective action:
- Restart the control

4197
Mid-program startup active

Cause of error:
Mid-program startup is not permitted with the programmed function.
Corrective action:
Mark the programmed function with „skip blocks“ and activate this setting. Then run the mid-program startup again.

4212
8700 No drive-on command for %.1s

Cause of error:
- Speed controller is waiting for the „drive on“ command; the PLC program has sent no „drive on“ command.
Corrective action:
- Check the PLC program.
- Inform your service agency.
- Check the software version.

4226
8BD0 Excessive servo lag in %.1s

Cause of error:
-The following error of a moving axis is greater than the value given in machine parameter MP1720 (in lag mode) or MP 1420 (in feedforward mode).
-The adjusted acceleration is too high.
- In spite of „drive on,“ the motor is not moving.
Corrective action:
- Reduce the machining feed rate, increase the speed.
- Eliminate all possible sources of vibration.
- If the error frequently recurs: contact your service agency.
- Contact your service agency.
- Check MP1060.x.
-The motor current must not be in limitation during acceleration.

4276
ORIENTATION not permitted

Cause of error:
Spindle cannot be oriented.
Corrective action:
Check machine parameter 7442 and enter the value for an M function or enter -1 for spindle orientation via NC. Refer to your machine manual.

4490
Activate 3DROT

Cause of error:
- In the Manual operating mode, the Tilt Working Plane function is inactive.
- Bit 8 in machine parameter 7500 is set to 0.
Corrective action:
- Activate 3DROT in Manual mode.
- In machine parameter 7500, set bit 8 to 1.

4491
Mid-program startup not possible

Cause of error:
The file MGROUPS.SYS is faulty or missing.
Corrective action:
Contact your service agency.

4492
Tool-changer perm. button active

Cause of error:
The permissive button of the tool changer was pressed.
Corrective action:
- Check the permissive buttons.
- Contact your service agency.