1. EXTERNAL ALARM MESSAGE

1001  SAFETY DOOR NEED CLOSE!

ALARM 1001

Is the safety door closed?

Y

Close the safety door.

N

Is the window closed?

Y

Close the window.

N

The diagnostic X8.1=0

Y

Press the RESET key.

N

Cause:
1. The limit switch (-A217) for the safety door or the window detects incorrectly. Please adjust it.
2. The limit switch (-A217) for the safety door or the window is defective. Please replace it.

END
1003  SPINDLE MOTOR ALARM!

ALARM 1003

Please check the alarm number from NC or the LED alarm number that displayed by spindle AMP.

Please call for service
ALARM 1004

Press the RESET button.

Is the machine with gear box?  
D57=1  
Y  
D57=0  
Consult Chap2  
5.2 set.

During maintenance?  
Y  
K4.7=1

Shift the gear box to HI (or LO)  
by execute Sxxxx.

Shift to HI

Is the gear HI solenoid valve ON?  
(-Y306)  
Y  
N

Is the gear HI limit switch ON?  
DGN X5.6=0, X5.5=1  
(S-302)

Shift to LO

Is the gear LO solenoid valve ON?  
(-Y305)  
Y  
N

Is the gear HI limit switch ON?  
DGN X5.6=1, X5.5=0  
(S-303)

END
In HI output
DGNY3.0=1, Y3.1=0

cause:
1. The wiring of solenoid valve is poor contact. Please check the wiring.
2. The solenoid valve is defective. Please replace it.
3. The relay is defective. Please replace it.

In LO output
DGNY3.1=1, Y3.0=0

cause:
2. The limit switch for gear HI/LO detects incorrectly. Please adjust it.
3. The limit switch is defective. Please replace it.
1005   ATC NOT READY!
   (FOR ATC 24T, 30T, 32T, 40T)

Press the POT vertical button and release it to make the POT to the vertical position.

Is the POT in the vertical position?

DGN X6.2=1, X6.3=0

Is the Z axis at the tool change position?
   The diagnosis 71.0=1(absolute)

Keep to press manual ATC button until cycle START button flashing.

Start ATC change by press the cycle START button.

Refer to ALM1019
Is ATC start to change?

Y

Is the ATC in the position after ATC change finish?

Y

Press the POT vertical button and release it to make the POT to the horizontal position.

Y

Is the POT in the horizontal position?

Y

The diagnosis X6.2=0, X6.3=1

Press the RESET button

N

DGN Y2.4=1

N

Press the EMG button and release it.

6

DGN Y2.6=1

N

Make sure the SPINDLE TOOL (The diagnosis D440) and NEXT TOOL (The diagnosis C2) number are correct.

END
Cause:
1. The solenoid valve is defective. Please replace it.
2. The wiring of the solenoid valve is poor contact. Please check the wiring.
3. MAG locked. Please check it.
4. Parts interference. Please check it.

Cause:
1. The button is defective. Please replace it.
2. The wiring of button is poor contact. Please check the wiring.
3. Condition error. Please reset again.

Cause:
- The limit switch is defective. Please replace it.
- The limit switch detects incorrectly. Please check it.

Cause:
1. The limit switch for ARM detects incorrectly. Please check it.
   (ARM HOME X6.5, ARM BRAKE X6.4, TOOL UN/CL CONFIRM X6.6)
**1007  TF ≤ 0 COMMAND ERROR!**

- **ALARM 1007**
- **Cause**: Wrong T command.
- **Press the RESET key.**
- **Modify the T command 0 < T.**
- **END**

**1008  TF IS NOTHING IN TOOL BOX!**

- **ALARM 1008**
- **Cause**: Wrong T command.
- **Press the RESET key.**
- **Correct the T command.**
- **END**
1009 SERVO MOTOR ALARM!

ALARM 1009

Please close NC power than open.

The ALARM 1009 is still display?

□

Please check PMM / MSG massage and consult Chap5 Appendix F eliminate.

□

1010 SERVO MOTOR BATTERY ALARM!

ALARM 1010

Servo Motor battery unusual.

Please check PMM / MSG massage and consult Chap5 Appendix F eliminate.

END
1011 MAG (C0) SETTING ERROR!

ALARM 1011

Press the RESET key.

Set the diagnostic C0 with the total tool amount of the magazine. Consult Chap2 5.2 setting.

End

1012 POT (C2) SETTING ERROR!

ALARM 1012

Press the RESET key.

Set the diagnostic C2 with the tool no. on the standby pot. Consult Chap2 5.2 setting.

End
1013  DOUBLE TOOL DETECTION!

ALARM 1013

Press the RESET key.

Check the standby pot no. equaling to the tool no. on the spindle.

Y

Set the correct pot no. (C2) Consult Chap2 5.2 setting.

N

Remove the tool from the pot

Try tool change M6 Txx again.

N

Is the alarm still there?

Y

End

Cause:
1. The sensor (S404) for tool detection is defective. Please replace it.
2. The sensor for tool detection is poor connected. Please check it.
1014 SP. ORI ALARM!

- ALARM 1014
  - Press refer to the parameter list attached with the machine to correct the NC parameters No.4000~4099.
  - Press the RESET key.
  - Execute the M19 command of spindle orientation.
  - Is the alarm still there?
    - Y
    - N
      - End
1015  MOTOR OVERLOAD!

ALARM 1015

Please check the following motors whether there is overload or fuse blown.
1. Motor of coolant pump (-F213)
2. Motor of chip conveyor (-F217, -F218)
3. Fuse on Lubricating unit (-A204)
4. Fuse on oil-air lubricating unit (-F239)
5. Motor of oil skimmer (-F234)
6. Motor of pump for coolant through spindle (-F200)
7. Motor of hydraulic unit (-F222)
8. Motor of pump for floor flushing (-F232)
9. Motor of spindle cooler (-A207)

Solve the cause of overload.

Press the resetting device on the overload relay

Press the RESET key.

End
1016  SP. TOOL (D440) SETTING ERROR!

ALARM 1016

Set the diagnostic D440 with the tool no. on the spindle. Consult Chap2 5.2 setting.

Press the RESET key.

End

1018  M6 WITHOUT TF ALARM!

ALARM 1018

Modify the format of program as M6 Txx

End
ALARM 1019

Press the RESET key.

Is the function of automatic ATC position return used? (The function for PMC axis)

Y → Set diagnostic K11.0=1

N → Is the spindle at the ATC position?

Y → Is the servo motor incremental or absolute type? K2.2=1 is the incremental type.

Y → Cause:
   1. ATC position detection error, please adjust LS. (-S131)
   2. ATC position LS damage please change the LS. (-S131)

N → Please execute the command of ATC position return before automatic tool change ATC.

N → Cause:
   Wrong setting for the ATC position. Please refer to the following table to modify the parameter setting.

End
<table>
<thead>
<tr>
<th>ATC Type Parameter</th>
<th>Simple disk type (crank driving)</th>
<th>Cam type of single cycle</th>
<th>Roller gear type (Z axis for ATC position)</th>
<th>Roller gear type (3 axes for ATC position)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1241 X Y Z</td>
<td>0 0 0</td>
<td>0 0 0</td>
<td>ATC position. [● ●]</td>
<td>ATC position. [● ●]</td>
</tr>
<tr>
<td>N6916</td>
<td>0 0 0</td>
<td>0 0 0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>N6917</td>
<td>3 0 0</td>
<td>0 0 3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>N6918</td>
<td>3 3 3</td>
<td>3 3 3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>N6936</td>
<td>0 0 0</td>
<td>0 0 0</td>
<td>X coordinate of ATC position +250. [● ●]</td>
<td></td>
</tr>
<tr>
<td>N6937</td>
<td>The 2nd ATC position +250. [● ●]</td>
<td>0 0 0</td>
<td>Y coordinate of ATC position +250. [● ●]</td>
<td></td>
</tr>
<tr>
<td>N3968</td>
<td>The 1st ATC position +250. [● ●]</td>
<td>250 250</td>
<td>Z coordinate of ATC position +250. [● ●]</td>
<td></td>
</tr>
<tr>
<td>N6956</td>
<td>0 0 0</td>
<td>0 0 0</td>
<td>X coordinate of ATC position −250. [● ●]</td>
<td></td>
</tr>
<tr>
<td>N6957</td>
<td>The 2nd ATC position −250. [● ●]</td>
<td>0 0 0</td>
<td>Y coordinate of ATC position −250. [● ●]</td>
<td></td>
</tr>
<tr>
<td>N6958</td>
<td>The 1st ATC position −250. [● ●]</td>
<td>−250 −250</td>
<td>Z coordinate of ATC position −250. [● ●]</td>
<td></td>
</tr>
<tr>
<td>N8010 X Y Z</td>
<td>0 0 0</td>
<td>0 0 0</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

[● ●]: The setting value varies according to the machine model.

[★ ★]: If the machine is with ISC system, all setting values of the ATC position must be the coordinate value multiplying 10 times.
ALARM 1020

Is the spindle with oil-air lubrication or oil cooler?

Y

Is there oil cooler?

Y

Is the oil cooler with enough oil?

Y

Is there oil-air lubrication?

Y

 Cause:
1. Oil-air is too much. The amount needs to be adjusted
2. Wiring of the temperature switches (-F244, -F245) is poor contact. Please check the wiring.
3. The spindle motor is out of order. Please solve the cause..

N

Set the diagnostic K3.0=1.

N

Is the oil cooler with enough oil?

Y

Cause:
Oil level of the oil cooler is too low. Please fill oil. (-A207)

Diagnostic K8.2=1 ?

N

Cause:
The detector for oil level of the oil cooler (-A207) detects incorrectly. Please check it.

Y

End
1021  TOOL MEASURE ALARM

ALARM 1021

Is it overtravel during tool length measurement?

Y

Under the HANDLE mode, move the spindle apart from the probe.

N

Press lightly the detecting switch of the prober to get the red lamp lighting on.

Diagnostic X7.4=0 ?

Y

Cause:
1. The cable for the element of the probe is poor connection or broken. Please check and replace the cable.
2. Some element of the probe (-A206) is defective, please replace the probe.

N

Press lightly the detecting switch of the probe to check whether the returning signal (X4.7) is actuated.

Y

2

Press the RESET key.

End

2

1
1022 TOOL LIFE EXHAUST

ALARM 1022

Counting of tool used (time or times) has been reached.

Consult Chap 4 5.1 setting.

Press the RESET key.

End
1023  MAG NOT INPOSITION!

1. Is the magazine in the position?
   The diagnosis X6.3=1
   Y  \rightarrow 2
   N  \rightarrow 7

2. Press the RESET key

3. DGN Y2.6=1
   N  \rightarrow 6
   Y  \rightarrow 4

4. Is the POT in the horizontal position?
   Press the POT vertical button and release it to make the POT return to the horizontal position.
   Y  \rightarrow 4
   N  \rightarrow 3

5. Is the MAG motor start?
   N  \rightarrow 1
   Y  \rightarrow 5

6. Is the MAG motor stop?
   N  \rightarrow 1
   Y  \rightarrow 6

7. Change to the JOG mode

Cause:
1. The button of “POT vertical” is defective. Please replace it.
2. The wiring of “POT vertical” button is poor contact. Please check the wiring.
1. The wiring of the solenoid valve for POT H is poor contact. Please check the wiring.
2. The solenoid valve for POT H is defective. Please replace it.
3. The relay (K418, K419) damage. Please check it.

**Cause:**
1. The limit switch for POT H detects incorrectly. Please check it.
2. The limit switch for POT H is defective. Please replace it.

**DGN X6.3=1**

---

**The diagnosis Y4.7=1**

**Cause:**
1. The wiring of MAG CW/CCW button is poor contact. Please check the wiring.
2. The button of MAG CW/CCW is defective. Please replace it.

---

**Press the EMG button**

**Cause:**
1. The limit switch for MAG counter is defective. Please replace it.
2. The limit switch for MAG counter detects incorrectly. Please adjust it.
3. The relay (K404 · K405) of MAG CW/CCW contacts incorrectly or damage. Please check it.

---

**DGN Y4.7=1**

**DGN C2 = at the present tool number**
1024  STC TEMP FAILED!

ALARM 1024

Press the RESET key

Please check the signal of STC temperature card in the electrical cabinet.

Y

Finish

N

Cause :
1. No 24V power input
2. STC temperature card is broken
Please call for service
JIG NEED CLAMP!

ALARM 1026

Is there optional JIG function?

Y

Is there APC function?

N

Jig must be clamping during spindle rotation.

Press the RESET key.

Do jig clamping by pressing the JIG CLAMP/UNCLAMP button or execute the command of jig clamping under the AUTO mode.

Execute the command of spindle rotation.

Is the alarm still there?

Y

N

End

N

Set keeprelays:

K4.4=0  (M54/M55)
K4.1=0  (M56/M57)
Set timers:
T18=500  (M54 FINISH TIME)
T20=500  (M55 FINISH TIME)
T22=500  (M56 FINISH TIME)
T24=500  (M57 FINISH TIME)

Are limit switches used for detecting jig clamping/unclamping?

Y

Causes:
1. Some limit switch on the jig is defective. Please replace it.  
(-S215, -S216, -S217, -S218)
2. Some limit switch on the jig detects incorrectly. Please adjust it.  
(-S215, -S216, -S217, -S218)

N

Is the jig clamped?

Y

Cause:
1. The relay for jig is defective. Please replace it.  
(-K233, -K234, -K238, -K239)
2. The solenoid valve for jig clamping is defective. Please replace it.  
(-Y212, -Y213, -Y214, -Y215)
3. The wiring for the solenoid valve is poor contact. Please check the wiring.  
(-Y212, -Y213, -Y214, -Y215)
4. Some hydraulic pipe for jig clamping is clogged. Please clean the pipe or replace it.
Set keep relays:
K4.4=0 (M54/M55)
K4.1=0 (M56/M57)

Is there optional JIG function on the pallet A?

Y

Is there optional JIG function on the pallet B?

N

Is the pallet A in the machining area?

Y

Press the RESET key.

Under the MDI or AUTO mode, execute the command for jig clamping (M54/M56) to do jig clamping.

Execute the command of spindle rotation.

Is the alarm still there?

Y

End

N
Set timers:
- T18=500 (M54 FINISH TIME)
- T20=500 (M55 FINISH TIME)
- T22=500 (M56 FINISH TIME)
- T24=500 (M57 FINISH TIME)

Cause:
1. Some limit switch on the jig is defective. Please replace it. (-S215, -S216, -S217, -S218)
2. Some limit switch on the jig detects incorrectly. Please adjust it. (-S215, -S216, -S217, -S218)
3. The relay for jig is defective. Please replace it. (-K233, -K234, -K238, -K239)
4. The solenoid valve for jig clamping is defective. Please replace it. (-Y212, -Y213, -Y214, -Y215)
5. The wiring for the solenoid valve is poor contact. Please check the wiring. (-Y212, -Y213, -Y214, -Y215)
6. Some hydraulic pipe for jig clamping is clogged. Please clean the pipe or replace it.
Execute the command of spindle rotation.

Is the alarm still there?

- **Y**
  - Under the MDI or AUTO mode, execute the command for jig clamping (M58/M60) to do jig clamping.

- **N**
  - Press the RESET key.
  - End

2
1027  AIR PRESSURE FAILED

ALARM 1027

Is the pressure of air source enough ?

Y  Press the RESET key.

N  Regulate the pressure of air source.

Is the alarm still there ?

Y  

N  End

Cause :
1. Wiring for air pressure detector (-A203) is incorrect. Please check the wiring.
2. Air pressure detector (-A203) is defective. Please replace it.
1028  ATC (D52) SETTING ERROR

ALARM 1028

Is there magazine unit?

Y

Consult Chap2 5.2 setting. (D52)

N

Make sure D52=99.

Re-start the machine.

End
1029 SP TOOL CLAMPING FAILED!

ALARM 1029

Press limit switches (S304, S305) for tool clamping and check whether the diagnostic X5.1=1.

N

Y

Cause:
1. The limit switch for tool clamping is defective. Please replace it.
2. The limit switch detects incorrectly. Please adjust it.
3. The wiring for limit switch is poor contact. Please check the wiring.
4. The wiring of rowed cable for CNC is poor contact. Please check the rowed cable.

End
1030 MAG (D51) SETTING ERROR!

ALARM 1030

Is there magazine unit?

Y

Consult Chap2 5.1 setting. (D51)

Y

Make sure D52=99.

N

Re-start the machine.

End
1031 TOOL SEARCHING FAILED

ALARM 1031

Cause:
Tool searching cannot be finished in the defined time limit.

Does the magazine rotate?

Y

Y

Execute the T command.

Cause:
1. The limit switch for pot horizontal (S410) is defective. Please replace it.
2. The limit switch for pot horizontal detects incorrectly (X6.3). Please adjust it.
3. The wiring for pot horizontal is poor contact. Please check the wiring.
4. The contact of relay (K404,Y2.2)

N

N

Is the alarm still there?

End

Cause:
1. The limit switch (S401) for pot counter is defective. Please replace it.
2. The limit switch for pot counter detects incorrectly (X7.0). Please adjust it.
3. The wiring of limit switch for pot counter is poor contact. Please check the wiring.
1032  AUTO DOOR FAILED

ALARM 1032

The automatic door open / close works over the set time limit.

Timer T12=xxxx
Refer to the article regarding setting

N

Re-set the timer T12.

Y

Is the automatic door closed?
Diagnostic Y1.6=1

Y

Press the RESET key.

Diagnoses
X8.1=1 · X8.0=0

Y

Execute the command of automatic door open / close (M10 / M11).

N

Is the alarm still there?

2

2

2

2

1

End

Cause:
1. The limit switch (-S201, -S202) for automatic door is defective. Please replace it.
2. The limit switch (-S201, -S202) for automatic door detects incorrectly. Please adjust them.
3. The automatic door gets interference. Please remove the obstacle.
4. The air pressure for the automatic door is too low. Please enlarge the pressure of the air source.
5. The solenoid valve (-Y207, -Y211) for automatic door is defective. Please replace it.
6. The wiring of the solenoid valve (-Y207, -Y211) for automatic door is poor contact. Please check the wiring.
7. The relay (-K268, -K269) for automatic door is defective. Please replace it.
ALARM 1033

Consult Chap2 5.2 setting. (D50).

Re-start the machine.

End
1034 SPINDLE TOOLS OVERLOAD!

ALARM 1034

Press the RESET key

Is the spindle tool broke or damaged

Y

Change tool

N

The settings in spindle overload delay time (T48) is tool short, please refer to the timer setting of Chap2 5.1.

END
1035 WORKPIECE PROBER ERROR!

ALARM 1035

Press the RESET key

Is the signal of prober and receiver are out of measure range? The diagnosis X7.7=1

Y

N

Cause:
1. Is the prober or receiver broken? (-A206)
2. The wiring of prober and receiver is poor contact. Please check the wiring.

Adjust the position of receiver. Setting the prober on spindle then move the z axis, make sure the signal can receive in full travel.

END
ALARM 1036

Is the oil level of the oil-air lubricating system too low?

- Y: Is the air pressure for the oil-air lubricating system not enough?
  - Y: Regulate the air pressure (referring to the mechanical/maintenance manual).
  - N: Cause:
    The pressure switch (-A203) is defective or poor contact.
    Please replace or check the wiring.

- N: DGN X5.7=1 ?
  - Y: End
  - N: Is the oil level of the oil-air lubricating system too low?
1037  DC24V POWER SUPPLY ERROR!

ALARM 1037

Cause:
DC24V Power supply damage or wrong error, please change or check wiring.

Press the RESET key.

End

1046  WORKPIECE PROBE LOW BATTERY!

ALARM 1046

Cause:
Workpiece probe battery life is too low or defective. Please change it.

Press the RESET key

END
1049 APC Door Op/CL APC

ARM Type (Type 3) (K4.6=1, APC Without Door)

Diagnostics
X13.1=1 Close
X13.0=1 Open

Cause:
The APC door close is not finished in the defined time limit.

Is the APC door opened?

Y

Is the APC door closed?

Y

N

Y

2

1

3

2

N

3

2

4

5

Is the APC door opened?
Cause:
1. The limit switch (S536) for APC door open is defective. Please replace it.
2. The wiring of the limit switch for APC door open is connected incorrectly or circuit broken. Please check it and replace the broken one.

Cause:
1. The limit switch (S537) for APC door close is defective. Please replace it.
2. The wiring of the limit switch for APC door close is connected incorrectly or circuit broken. Please check it and replace the broken one.

Cause:
1. The solenoid valve (K501, K502) for APC door is defective. Please replace it.
2. The wiring of the solenoid valve for APC door is connected incorrectly or circuit broken. Please check it and replace the broken one.

Diagnostic X13.1=1 Close

Y

Press the RESET key.

Execute the command M91/M92 again.

Is the alarm still there?

Y

N

End

3

5
1049  APC DOOR OPEN / CLOSE FAIL  

β6 TYPE(TYPE 4) (K4.6=1, APC WITHOUT DOOR)

ALARM 1049

Diagnostics
X13.1=1 Close
X13.0=1 Open

Is the APC door opened ?

Y

Is the APC door closed ?

N

Select the JOG mode and press the APC DOOR OPEN button.

Y

Cause :
APC door close is not finished in the defined time limit.

N

Diagnose Y6.1=1

N

Y

1

2

3

4

5

6
1. The solenoid valve (K501, K502) for APC door is defective. Please replace it.

2. The wiring of the solenoid valve for APC door is connected incorrectly or circuit broken. Please check it and replace the broken one.

Cause:

1. The limit switch (S536) for APC door open is defective. Please replace it.
2. The wiring of the limit switch for APC door open is connected incorrectly or circuit broken. Please check it and replace the broken one.

Cause:

1. The limit switch (S537) for APC door close is defective. Please replace it.
2. The wiring of the limit switch for APC door close is connected incorrectly or circuit broken. Please check it and replace the broken one.

Cause:

1. The solenoid valve (K501, K502) for APC door is defective. Please replace it.
2. The wiring of the solenoid valve for APC door is connected incorrectly or circuit broken. Please check it and replace the broken one.

Press the RESET key.

End

Diagnostic X13.1=1 Close

N

Y

4

5

6

2

3

8-43
1050  TABLE CLAMP / UNCLAMP FAIL!

ALARM 1050

Is the EMERGENCY STOP button released?

Y

Cause:
Table clamping / unclamping is not finished in the defined time limit.

Diagnostic Y6.6=1

Is the table is clamped?

Y

Diagnostic Y6.7=1

Is the table is unclamped?

Y

N

N

3

4

5
Is the table unclamped?  

Y: Please execute the command M85 to do table clamping.

N: Press the RESET key.

Diagnostics:  
X13.3 = 1  
X13.4 = 0

Y: Please release the EMERGENCY STOP button.

Cause:
1. The limit switch (S538) for table clamping is defective. Please replace it.
2. The wiring of the limit switch for table clamping is connected incorrectly or circuit broken. Please check it and replace the broken one.
3. The limit switch for table clamping detects incorrectly. Please adjust it.

Cause:
1. The limit switch (S539) for table unclamping is defective. Please replace it.
2. The wiring of the limit switch for table unclamping is connected incorrectly or circuit broken. Please check it and replace the broken one.
3. The limit switch for table unclamping detects incorrectly. Please adjust it.

Cause:
1. The solenoid valve (K504, K505) for table clamping/unclamping is defective. Please replace it.
2. The wiring of the solenoid valve for table clamping/unclamping is connected incorrectly or circuit broken. Please check it and replace the broken one.
1051   APC Z AXIS NEED RETEN!

ALARM 1051

Execute zero return of the Z axis.

Press the RESET key.

End
ALARM 1054

Cause:
The APC pallet change is not finished in the defined time limit.

Check limit switches:
1. Pallet A - Locating pin locked (X13.7)
2. Pallet A - Locating pin unlocked (X14.0)
3. Pallet B - Locating pin locked (X14.1)
4. Pallet B - Locating pin unlocked (X14.2)
5. Table clamping (X13.3)
If anyone is defective, please replace it.

Check solenoid valves:
1. Table clamping (Y6.6), unclamping (Y6.7)
2. APC door open (Y6.0), close (Y6.1)
3. Pallet A - Locating pin locked (Y7.1)
4. Pallet A - Locating pin unlocked (Y7.0)
5. Pallet B - Locating pin locked (Y7.2)
6. Pallet B - Locating pin unlocked (Y7.3)

Execute the command of pallet change.

Is the alarm still there?
Y

N
End
1057  ATC NOT READY
(FOR SIMPLE DISK TYPE 20T)

ALARM 1057

Is the Z axis at the ATC position?
Diagnostic F71.0=1
(Absolute type of servo motor)

Y

Is the magazine close to the spindle?
Diagnostics
X6.2=1, X6.3=0

N

Please refer to the ALM1019 to solve the problem.

Y

Select the JOG mode and press the TOOL UNCLAMP button to do spindle tool unclamping.

N

Before the magazine returns the standby position, make sure no tool will drop down. Or, remove tools on spindle or magazine.

Is the spindle tool unclamped?

Y

Diagnostics
X5.2=1, X5.1=0

N

Select a manual mode to move the Z axis toward the positive direction until the Z axis getting the signal of interlock.F70.7=1 (Absolute type of servo motor)

N

Cause:
1. The limit switch (S305, S307) for spindle tool clamping/unclamping is defective. Please replace it.
2. The limit switch for spindle tool clamping/unclamping detects incorrectly. Please adjust it.
Press the EMERGENCY STOP button and release it.

Is the spindle tool clamped? Diagnostic Y2.7 = 0

Y

Select the JOG mode and press the MAG BACKWARD button to retract the magazine to the standy position.

N

Does the magazine go backward?

Y

Diagnostic Y2.3 = 1

N

N

Set the spindle tool no. at the adress D440.

Try commands M6 Txx again.
1. The limit switch (S404) for magazine backward is defective. Please replace it.
2. The limit switch for magazine backward detects incorrectly. Please adjust it.

1. The MAGAZINE BACKWARD button (S615) is defective. Please replace it.
2. The wiring of the MAGAZINE BACKWARD button is poor contact. Please check the wiring.
3. Conditions are not satisfied. Please check the setting.

1. The magnetic switch (K291) for magazine backward is defective. Please replace it.
2. The wiring of the magnetic switch for magazine backward is poor contact. Please check the wiring.
3. The magazine is jammed. Please repair it.

1. The solenoid valve (Y312) for tool clamping/unclamping is defective. Please replace it.
2. The wiring for tool clamping/unclamping is poor contact. Please check the wiring.

1. The TOOL UNCLAMP button (S638) is defective. Please replace it.
2. The wiring of the TOOL UNCLAMP button is poor contact. Please check the wiring.
3. Conditions are not satisfied. Please check the setting.

Is the alarm still there?

Y

Diagnostic Y2.7=1

Y

Cause:
1. The solenoid valve (Y312) for tool clamping/unclamping is defective. Please replace it.
2. The wiring for tool clamping/unclamping is poor contact. Please check the wiring.

N

End
1058  ATC DOOR NOT CLOSES! (FOR DC 7e"

ALARM 1058

Press the RESET key

Execute the M78 command for close the ATC door

Is ATC door close? The diagnostic Y5.1=1

Y

DGN X10.1=1

Y

Is the alarm still there?

N

END

N

Cause:
1. The ATC door gets interference. Please remove the obstacle.
2. The air pressure for ATC door is too low. Please enlarge the pressure of the air source (-A203).
3. The solenoid valve is defective. Please replace it. (-Y410)
4. The wiring of the solenoid valve is poor contact. Please check the wiring. (-Y410)
5. The relay for POT is defective. Please replace it. (-K255)

Cause:
1. The limit switch for ATC door is defective. Please replace it. (-S233)
2. The limit switch for ATC door detects incorrectly. Please adjust it. (-S233)
1059  TOOL MEASURE COVERS NOT OPEN!

ALARM 1059

Press the RESET key

Execute the M20 command for open the tool measure cover

Is the cover open?
DGN Y4.5=1
(-Y201)

Y

Cause:
1. The limit switch for tool measure cover is defective. Please replace it.
2. Tool measurement is defective

N

DGN X11.2=1
(A202)

Y

Causes:
1. The solenoid valve for tool measure cover is defective. Please replace it. (-Y201)
2. The wiring of the solenoid valve for tool measure cover is poor contact. Please check the wiring. (-Y201)
3. The relay for POT is defective. Please replace it. (-K228)

N

Cause:
1. The limit switch for tool measure cover is defective. Please replace it.
2. Tool measurement is defective

END
ALARM 1060

Modify the setting of JIG CW/CCW timer · consult Chap2 5.1 setting (T66)

Is the alarm still there?

Y

Cause:
1. The limit switch for JIG CW/CCW is defective. Please replace it.
2. The limit switch for JIG CW/CCW detects incorrectly. Please adjust it.

N

END
1061 M6 POT V ERROR!

ALARM 1061

Confirm the ATC type.
Consult Chap2

During maintenance?

Y

K4.7=1

N

Re-command M6

Is POT vertical?

Y

END

N

4

1
Cause:
1. The POT gets interference. Please remove the obstacle.
2. The air pressure for POT is too low. Please enlarge the pressure of the air source (-A203).
3. The limit switch (-S411) for POT vertical is defective. Please replace it.
4. The limit switch for POT vertical detects incorrectly. Please adjust it.
5. Please check the wiring and signal.

Cause:
1. The solenoid valve (-Y411) for POT is defective. Please replace it.
2. The wiring of the solenoid valve (-Y411) for POT is poor contact. Please check the wiring.
3. The relay (-K419) for POT is defective. Please replace it.
1062 M6 ARM L.S ERROR!

ALARM 1062

Confirm the ATC type.
Consult Chap2

During maintenance?

Y
K4.7=1

N

Re-command M6

Check the limit switch for
ATC reference point, brake and spindle tool clamping/unclamping are correct.

Y

Cause:
1. The limit switch (-S416, S412, S415) is defective. Please replace it.
2. The limit switch detects incorrectly. Please adjust it.
3. Please check the wiring and signal.

N

1

END
1063  M6 SPINDLE UNCLAMP ERROR!

ALARM 1063

During maintenance?

Y

N

K4.7=1

Re-command M6

DGN

Y2.7=1

N

Y

N

Is the spindle tool unclamped?

DGN X5.1=1
(-S306)

Y

N

Cause:
1. The air pressure for spindle tool clamping/ unclamping is too low. Please enlarge the pressure of the air source (-A203).
2. The limit switch (-S306) for spindle tool clamping/ unclamping is defective. Please replace it.
3. The limit switch for spindle tool clamping/ unclamping detects incorrectly. Please adjust it.
4. Please check the wiring and signal.

Y

END

N

1

Cause:
1. The solenoid valve (-Y302) for spindle tool clamping/ unclamping is defective. Please replace it.
2. The wiring of the solenoid valve (-Y302) for spindle tool clamping/ unclamping is poor contact. Please check the wiring.
3. The relay (-K312) for spindle tool clamping/ unclamping is defective. Please replace it.
1064 M6 SPINDLE CLAMP ERROR!

ALARM 1064

During maintenance?

Y

K4.7=1

N

Re-command M6

DGN Y2.7=0

Y

Is the spindle tool clamped?

N

DGN X5.1=1 (-S304)

Y

END

N

Cause:
1. The solenoid valve (-Y302) for spindle tool clamping/ unclamping is defective. Please replace it.
2. The wiring of the solenoid valve (-Y302) for spindle tool clamping/ unclamping is poor contact. Please check the wiring.
3. The limit switch for spindle tool clamping/ unclamping detects incorrectly. Please adjust it.
4. Please check the wiring and signal.

Y

Cause:
1. The air pressure for spindle tool clamping/ unclamping is too low. Please enlarge the pressure of the air source (-A203).
2. The limit switch (-S306) for spindle tool clamping/ unclamping is defective. Please replace it.
3. The relay (-K312) for spindle tool clamping/ unclamping is defective. Please replace it.
1065  NONE TF COMMAND!

Enter T code instruct again.

1068 INVERTER BREAKDOWN ALARM

Cause:
Inverter breakdown alarm (check the LED displayed code of inverter)

Please refer to the inverter operation manual (maintain-error-reason-solution) for trouble shooting.

END
1071  STC TEMP ERROR!

ALARM 1071

Press the RESET key

Please check the signal is correct or not of STC temperature card in electrical cabinet.

N

STC temperature sensor has been broken. Please call for service.

Y

Is the ALARM 1071 still displaying?

N

Finish

Y

Please call for service
1072  SP. TEMP ERROR!

ALARM 1072

Press the RESET key. Is the ALARM 1072 still displaying?

N

Y

Press the RESET key after 10 minutes.

Finish

Finish
1073  SP. NEED WARM UP!

ALARM 1073

Press the RESET key.

Following the NC process to run the warming up program.

Continue working process after the warming up program completed.
1900   PLEASE TURN OFF POWER!

Please turn off the power

END