**(Rev.02)** **6S/3.0/600-250**

 **(700x600x250), Internal Pad – 192mm**

 **Applicable for Drg. No. LSD-70 (Rev. 00)**

Program for 6 spindles of M. Jumbo 3.0 mm, 360 holes in a circle, 41 rows in a die

Created on: 10-12-19

**Running RPM –** Refer to chart

**FEED-** Refer to chart

**Coolant Pump:** Refer to chart

**Guide Bushes:**

3.0 mm bush Holder with good condition bushes should be used

**Drill Change: -**

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O0005 (Main Program no.)

#500 = -………. (Z axis total value)

#501 =59.0000 (Even line End value)

#502 =1.0000 (Pitch in Degrees)

#503 = - 4.536 (Z axis pitch Value)

#505 =0.5000 (Odd line start value in degree)

#510 =59.5000 (Odd line End value)

#541 =0.0 (Even line start value in degrees)

#540 = -……….. Z axis start value)

 N5G21G90G94 N5: BLOCK NUMBER, G21: AXIS VALUE INPUT IN MM, G90: ABSOLUTE PROGRAMING, G94: FEED PER MINUTE

M60 M60 CODE FOR MACRO EXECUTION HALT

#506=#540 Variables

G01Z#540.0F1000 G01: AXIS FEED MOVEMENT,Z AXIS GOES ON POSITION OF # 540 VALUE WITH ACTIVE FEED OF 1000 MM/MINUTE

M60 M60 CODE FOR MACRO EXECUTION HALT

#507=#541 Variables

B#507 Variables

G4X2.0 G4: DWELL TIME, X3.0: 3 SEC DELAY

M60 M60 CODE FOR MACRO EXECUTION HALT

N10IF[#506EQ#500]GOTO500 **GOTO500** N10: BLOCK NUMBER, IF [#506EQ#500] GOTO500: CONDITION CHECK WHETHER #506 EQUAL TO #500 IF YES THEN GOTO BLOCK NUMBER 500 OTHERWISE CONTINUE TO NEXT BLOCK

M60 M60 CODE FOR MACRO EXECUTION HALT

N20IF[#504EQ0]GOTO40 N20: BLOCK NUMBER, IF [#504EQ0] GOTO40: CONDITION CHECK WHETHER #504(EVEN ODD LINE IDENTIFICATION REGISTER) EQUAL TO 0 IF YES THEN GOTO BLOCK NUMBER 40 OTHERWISE CONTINUE TO NEXT BLOCK

M60 M60 CODE FOR MACRO EXECUTION HALT

N30IF[#504EQ1]GOTO200 N30: BLOCK NUMBER, IF [#504EQ1] GOTO200: CONDITION CHECK WHETHER #504(EVEN ODD LINE IDENTIFICATION REGISTER) EQUAL TO 1 IF YES THEN GOTO BLOCK NUMBER 200 OTHERWISE CONTINUE TO NEXT BLOCK

M60 M60 CODE FOR MACRO EXECUTION HALT

N40G01G94Z#506F500 N40: BLOCK NUMBER, G01: AXIS FEED MOVEMENT, G94: FEED PER MINUTE,Z MOVES ON VALUE OF # 506 WITH FEED OF 500 MM/MINUTE

M60 M60 CODE FOR MACRO EXECUTION HALT

N50IF[#507GT#501]GOTO130 N50: BLOCK NUMBER, IF [#507EQ#501] GOTO130: CONDITION CHECK WHETHER #507 EQUAL TO #501 IF YES THEN GOTO BLOCK NUMBER 130 OTHERWISE CONTINUE TO NEXT BLOCK

M60 M60 CODE FOR MACRO EXECUTION HALT

N60IF[#508EQ0]GOTO90 N60: BLOCK NUMBER, IF [#508EQ0] GOTO90: CONDITION CHECK WHETHER #508(FIRST DRILL IN LINE IDENTIFICATION REGISTER) EQUAL TO 0 IF YES THEN GOTO BLOCK NUMBER 90 OTHERWISE CONTINUE TO NEXT BLOCK

M60 M60 CODE FOR MACRO EXECUTION HALT

N70#507=#507+#502 N70: BLOCK NUMBER, #507=#507+#502: ADDITION OF #502 VALUE TO #507 VARIABLE.

N80G01G94B#507F1000 N70: BLOCK NUMBER, G01: AXIS FEED MOVEMENT, G94: FEED PER MINUTE,B MOVES ON VALUE OF # 507 WITH FEED OF 1000 MM/MINUTE

N90M45 N70: BLOCK NUMBER,1st BUSH BUTTING FORWARD

M47 2ND Bush Butting Forward

M7 1st coolant pump on

M61 2nd coolant pump on

M64 3rd coolant pump on

M24 2nd Coolant by pass off

M56 1st coolant bye pass off

M58 3rd coolant bye pass off

M35 Spindle of A axis on

M26 Spindle of U axis on

M28 Spindle of U axis on

M33 Spindle of X axis on

M31 Spindle of Y axis on

M37 Spindle of V axis on

N95M98P09 N70: BLOCK NUMBER, M98P09: CALL SUB PROGRAM P09

N100M60 N100: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

N110#508=#580+1 N110: BLOCK NUMBER, #508=#580+1: ADDITION OF 1 TO #508 VARIABLE.

N120GOTO50 N120: BLOCK NUMBER, GOTO50: GO TO BLOCK NUBER 50

N130M60 N130: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

#507=#541

N161G01G94B#507F1000 N161: BLOCK NUMBER, G01: AXIS FEED MOVEMENT, G94: FEED PER MINUTE, B#507: BAXIS MOVEMENT AS VALUE IN #507 VARIABLES with Feed of 1000 mm/minute

N162M60 N162: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

N163#506=#506+#503 N163: BLOCK NUMBER, #506=#506+#503: ADDITION OF #503 VALUE TO #506 VARIABLE

#508=0

#504=1

N170GOTO10 N170: BLOCK NUMBER, GOTO10: GO TO BLOCK NUMBER 10

N200G01G94Z#506F500 N200: BLOCK NUMBER, , G01: AXIS FEED MOVEMENT, G94: FEED PER MINUTE,G90 Absolute programming, Z#506: Z AXIS MOVEMENT AS VALUE IN #506 VARIABLES with feed of 500

G4X5.0 G4: DWELL TIME, X5.0: 5 SEC DELAY

M60 M60 CODE FOR MACRO EXECUTION HALT

N210IF[#507GT#510]GOTO380 N210: BLOCK NUMBER, IF [#507EQ#510] GOTO380: CONDITION CHECK WHETHER #507 EQUAL TO #510 IF YES THEN GOTO BLOCK NUMBER 380 OTHERWISE CONTINUE TO NEXT BLOCK

M60 M60 CODE FOR MACRO EXECUTION HALT

N220IF[#508EQ0]GOTO340 N220: BLOCK NUMBER, IF [#508EQ0] GOTO340: CONDITION CHECK WHETHER #508(FIRST DRILL IN LINE IDENTIFICATION REGISTER) EQUAL TO 0 IF YES THEN GOTO BLOCK NUMBER 340 OTHERWISE CONTINUE TO NEXT BLOCK

M60 M60 CODE FOR MACRO EXECUTION HALT

N230IF[#508NE0]GOTO300 N230: BLOCK NUMBER, IF [#508NE0] GOTO300: CONDITION CHECK WHETHER #508(FIRST DRILL IN LINE IDENTIFICATION REGISTER) NOT EQUAL TO 0 IF YES THEN GOTO BLOCK NUMBER 300 OTHERWISE CONTINUE TO NEXT BLOCK

 N300M60 N300: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

N310#507=#507+#502 N310: BLOCK NUMBER, #507=#507+#502: ADDITION OF #502 VALUE TO #507 VARIABLE

N320GOTO350 N320: BLOCK NUMBER, GOTO350: GO TO BLOCK NUMBER 350

N330M60 N330: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

N340#507=#507+#505 N340: BLOCK NUMBER, #507=#507+#505: ADDITION OF #505 VALUE TO #507 VARIABLE

N350G01G94B#507F1000 N350: BLOCK NUMBER, G01: AXIS FEED MOVEMENT, G94: FEED PER MINUTE, B#507: B AXIS MOVEMENT AS VALUE IN #507 VARIABLES with feed of 1000 mm/minute

N360M45 1st Bush Butting Forward

M47 2nd Bush Butting Forward

M7 1st coolant pump on

M61 2nd coolant pump on

M64 3rd coolant pump on

M24 2nd Coolant by pass off

M56 1st coolant bye pass off

M58 3rd coolant bye pass off

M35 Spindle of A axis on

M26 Spindle of U axis on

M28 Spindle of U axis on

M33 Spindle of X axis on

M31 Spindle of Y axis on

M37 Spindle of V axis onN365M98P09 N360: BLOCK NUMBER, M98P06: CALL SUB PROGRAM P009

N362M60 N362: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

N364#508=#508+1 N364: BLOCK NUMBER, #508=#508+1: ADDITION OF 1 TO #508 VARIABLE.

N370GOTO210 N370: BLOCK NUMBER, GOTO210: GO TO BLOCK NUMBER 210

N380M60 N380: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

N390#507=#541 N390: BLOCK NUMBER; PUT #507 VARIABLE VALUES EQUAL TO #541

N400G01G94B#507F1000 N400: BLOCK NUMBER, G01: AXIS FEED MOVEMENT, G94: FEED PER MINUTE, Z#507: Z AXIS MOVEMENT AS VALUE IN #507 VARIABLES with feed of 1000 mm per minute

N410M60 N410: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

N420#506=#506+#503 N420: BLOCK NUMBER, #506=#506+#503: ADDITION OF #503 VALUE TO #506 VARIABLE

#508=0

#504=0

N430GOTO10 N430: BLOCK NUMBER, GOTO10: GO TO BLOCK NUMBER 10

N500M60 N500: BLOCK NUMBER, M60 CODE FOR MACRO EXECUTION HALT

#506=0 PUT #506 VARIABLE VALUES EQUAL TO ZERO

#507=0 PUT #507 VARIABLE VALUES EQUAL TO ZERO

#504=0 PUT #504 VARIABLE VALUES EQUAL TO ZERO

M27 Spindle of C axis off

M29 Spindle of U axis off

M34 Spindle of X axis off

M38 Spindle of V axis off

M32 Spindle of Y axis off

M36 Spindle of A axis off

M9 1st CLT PUMP OFF M CODE

M62 2nd coolant pump off M code

M65 3rd coolant pump off M code

M30 PROGRAM END M CODE

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