

MACHINE->DATA->GENERAL->PRESS

01 Maximum Beam OPENING	350.00	mm
02 Maximum Beam TRAVEL	340.00	mm
03 Nominal Force	100	t
04 Force OFFSET	5.0	t
06 Minimum Force	0.0	t
07 Minimum Muting	12.00	mm
08 Minimum Opening	2	mm
09 Holding time	0.1	s
10 BITS Configuration 1	0	
11 BITS Configuration 2	10	
12 Default Opening	25.00	mm

MACHINE->DATA->GENERAL->ADVANCED

13 Stations offset	5.0	mm
14 Safety Zone (X value)	70	mm
15 Compensation of Beam Deformations(RB)	+0.0000	mm/t
16 Maximum Beam Deformation	0.000	mm
17 Minimum Bend Edge	0.54	
18 Movements Timeout	90	s
19 BITS Configuration 3	384	
20 BITS Configuration 4	6	
21 User LOGIN enable	0: NO	
22 Y Hold time	0.00	s
23 Max A1-A2 Unbalance	1.00	mm
24 Max Y1-Y2 Unbalance	10.00	Å°

MACHINE->DATA->GENERAL->SPECIAL

25 Hemming Time	1.00	s
26 K% Hemming	70.00	%

MACHINE->DATA->SETTINGS

46 Z Type	1: 1 Axis	52 X2	0
47 X Type	1: DC Servo	54 A1	21
48 A Type	1: DC Servo	55 A2	23
75 Y Type	1: DC Servo	77 Y1	12
89 Crown Type	4: Manual	79 Y2	0
72 Z1	11	91 CROWN	0
73 Z2	0	46 C	1: ON
51 X1	13		

MACHINE->Z->GENERAL->GENERAL

01 Machine Type	1: ELECTRIC	
02 Safety Type	3: COMMON	
03 Linear Scale Resolution	20	
04 BITS Configuration 1	144	
05 BITS Configuration 2	65	
06 Left Preset (Index) value (Z1)	316.50	mm
07 Right Preset (Index) value (Z2)	316.50	mm
08 Rotated C Left Offset	-127.80	mm
09 Rotated C Right Offset	0.00	mm

MACHINE->Z->GENERAL->UNBALANCE

10 Maximum Fast Movements Unbalance	8.00	mm
11 Maximum Slow Movements Unbalance	5.00	mm
12 Maximum Release Movements Unbalance	2.00	mm
13 Alignment DAC	50	bit
14 Alignment Time	0.100	s

MACHINE->Z->GENERAL->VALVES

110 Valves Type	0: OFF
111 BITS Valves	0
112 Closing Loop Prop.Gain (KP)	128
113 Closing Loop Int.Gain (KI)	30
114 Zero for LVDT1	50
115 Zero for LVDT2	50
116 PWM Max	255

MACHINE->Z->PHASES->CLOSING

18 Closing Force	100	t	
19 Maximum Closing Speed	100.0	mm/s	
20 Closing Speed	100.0	mm/s	
21 Closing Acceleration	300.0	mm/s ²	
22 Closing Deceleration	200.0	mm/s ²	
Z1			Z2
23 Closing Feed Forward (KDAC)	400		400
24 Closing Proportional Gain(KP)	20		20
25 Closing Integral Gain(KI)	5		5
27 Closing Movements TOLERANCE	0.10	mm	0.10

MACHINE->Z->PHASES->PRESSING

28 Maximum Pressing Speed	60.0	mm/s	
29 Pressing Speed	60.0	mm/s	
30 Pressing Acceleration	150.0	mm/s ²	
31 Pressing Deceleration	150.0	mm/s ²	
Z1			Z2
32 Pressing Feed Forw.(KDAC) at 10% of Force	150		150
33 Pressing Feed Forw.(KDAC) at 90% of Force	150		150
34 Pressing Prop. Gain(KP) at 10% of Force	60		50
35 Pressing Integr.Gain(KI) at 10% of Force	2		2
37 Pressing Prop. Gain(KP) at 90% of Force	20		20
38 Pressing Integr.Gain(KI) at 90% of Force	10		5
40 Pressing Movements TOLERANCE	0.10	mm	0.10

MACHINE->Z->PHASES->HOLDING

Z1			Z2
41 Position Proportional Gain(KP)	30		30
42 Position Integral Gain(KI)	5		5
44 DAC Offset Opening	0	bit	0
45 DAC Offset Pressing	0	bit	0
46 Bending ACCURACY	0.50	mm	0.50

MACHINE->Z->PHASES->DECOMPR.

47 Release Type	0: STEP	
48 Decompression DAC	0	bit
49 Decompression Force	1	t
50 Maximum Release Speed	10.0	mm/s
51 Release Speed	5.0	mm/s
52 Release Acceleration	50.0	mm/s ²
53 Release Deceleration	50.0	mm/s ²
Z1		Z2
54 Release Feed Forward (KDAC)	500	500

MACHINE->Z->PHASES->OPENING

55 Opening Force	100	t
56 Maximum Opening Speed	100.0	mm/s
57 Opening Speed	100.0	mm/s
58 Opening Acceleration	200.0	mm/s ²
59 Opening Deceleration	600.0	mm/s ²
60 Manual Opening/Preset Speed	80.0	mm/s
61 Manual Opening/Preset Acceleration	200.0	mm/s ²
62 Manual Opening/Preset Deceleration	600.0	mm/s ²
Z1		Z2
63 Opening Feed Forward (KDAC)	400	400
117 Opening Proportional Gain(KP)	150	150
118 Opening Integral Gain(KI)	50	50
119 Opening Movements TOLERANCE	0.20	mm

MACHINE->Z->MANUAL

64 Manual Closing Speed	25.0	mm/s
65 Manual Closing Acceleration	200.0	mm/s ²
66 Manual Closing Deceleration	200.0	mm/s ²
67 Manual Speed	25.0	mm/s
68 Manual Acceleration	200.0	mm/s ²
69 Manual Deceleration	200.0	mm/s ²
70 Manual Fast Speed	25.0	mm/s
71 Manual Fast Acceleration	200.0	mm/s ²
72 Manual Fast Deceleration	200.0	mm/s ²
73 Impulsive Speed	25.0	mm/s
74 Impulsive Acceleration	200.0	mm/s ²
75 Impulsive Deceleration	200.0	mm/s ²

MACHINE->Z->TIMES

76 C reverse activation Time	0.200	s
77 Slow valve activation Time	0.000	s
78 Decompression Time	0.000	s
79 Wait in UDP	0.020	s
80 Radius Auto Delay	0.500	s
81 Pressure Time	0.000	s

MACHINE->Z->FORCE-CROWN->FORCE

82 Pressure Position	1	
83 Maximum Current Pressure Valve	0.800	A
84 Current OFFSET Pressure Valve	0.100	A
85 Pressure Proportional Gain(KP)	300	
86 Pressure Integral Gain(KI)	100	

MACHINE->Z->FORCE-CROWN->CROWNING

87 Crowning Type
88 Crowning Position
89 Maximum Current for Crowning Valve
90 Current OFFSET for Crowning Valve
91 Crowning Proportional Gain(KP)
92 Crowning Integral Gain (KI)
93 Crowning Mode
94 Default value for Crowning
95 Crowning Gain

0: OFF	A
2	
1.000	
0.000	
300	
100	A
0: MANUAL	%
20	
1.00	

MACHINE->Z->FORCE-CROWN->FEEDBACK

96 Crowning Feedback Tolerance
97 Crowning Feedback 0%
98 Crowning Feedback 25%
99 Crowning Feedback 50%
100 Crowning Feedback 75%
101 Crowning Feedback 100%
123 Crowning Backlash

0.200	V
1.000	V
3.000	V
5.000	V
7.000	V
9.000	V
0.000	V

MACHINE->I/O NC

[illegible]

MACHINE->MOTION->MOTION 1->RULES->PAGE1

[illegible]

MACHINE->MOTION->MOTION 1->RULES->PAGE2

[illegible]

MACHINE->MOTION->MOTION 1->RULES->PAGE3

[illegible]

MACHINE->MOTION->MOTION 1->RULES->PAGE4

[illegible]

MACHINE->MOTION->MOTION 1->TIMERS

T01	0.800	s	Type 1	0: DELAY
T02	0.000	s	Type 2	0: DELAY
T03	0.000	s	Type 3	0: DELAY
T04	0.000	s	Type 4	0: DELAY
T05	0.000	s	Type 5	0: DELAY
T06	3.000	s	Type 6	0: DELAY
T07	0.050	s	Type 7	0: DELAY
T08	0.050	s	Type 8	0: DELAY
T09	0.000	s	Type 9	0: DELAY
T10	0.000	s	Type 10	0: DELAY
T11	0.000	s	Type 11	0: DELAY
T12	0.000	s	Type 12	0: DELAY
T13	0.000	s	Type 13	0: DELAY
T14	0.010	s	Type 14	0: DELAY
T15(Lubr)	0.000	s	Type 15	0: DELAY
T16(Pump)	0.000	s	Type 16	0: DELAY

MACHINE->MOTION->MOTION 1->ALARMS

01 Alarm 1	0
02 Alarm 2	0
03 Alarm 3	0
04 Alarm 4	0
05 Alarm 5	0
06 Alarm 6	0
07 Alarm 7	0
08 Alarm 8	0
09 Status	0

MACHINE->MOTION->MOTION 2->RULES->PAGE1

[illegible]

MACHINE->MOTION->MOTION 2->RULES->PAGE2

[illegible]

MACHINE->MOTION->MOTION 2->RULES->PAGE3

[illegible]

MACHINE->MOTION->MOTION 2->RULES->PAGE4

[illegible]

MACHINE->MOTION->MOTION 2->TIMERS

T01	0.000	s	Type 1	0: DELAY
T02	0.000	s	Type 2	0: DELAY
T03	0.000	s	Type 3	0: DELAY
T04	0.000	s	Type 4	0: DELAY
T05	0.000	s	Type 5	0: DELAY
T06	0.000	s	Type 6	0: DELAY
T07	0.000	s	Type 7	0: DELAY
T08	0.000	s	Type 8	0: DELAY
T09	0.000	s	Type 9	0: DELAY
T10	0.000	s	Type 10	0: DELAY
T11	0.000	s	Type 11	0: DELAY
T12	0.000	s	Type 12	0: DELAY
T13	0.000	s	Type 13	0: DELAY
T14	0.000	s	Type 14	0: DELAY
T15(Lubr)	0.000	s	Type 15	0: DELAY
T16(Pump)	0.000	s	Type 16	0: DELAY

MACHINE->MOTION->MOTION 2->ALARMS

01 Alarm 1	0
02 Alarm 2	0
03 Alarm 3	0
04 Alarm 4	0
05 Alarm 5	0
06 Alarm 6	0
07 Alarm 7	0
08 Alarm 8	0
09 Status	0

MACHINE->MOTION->X->X1->GENERAL

01 BITS Configuration 1	427	
02 BITS Configuration 2	33	
03 Encoder Resolution	1024	pulse/rev.
04 Transmission Ratio NUMERATOR	32	mm
05 Transmission Ratio DENOMINATOR	1	
06 Preset(Index) position	795.90	mm
07 Software Limit position	4.00	mm
35 Software Limit position 2	845.00	mm

MACHINE->MOTION->X->X1->GAINS

08 Proportional Gain(KP) POSITION regulation	5	
09 Integral Gain(KI) POSITION regulation	5	
10 Proportional Gain(KP) SPEED regulation	5	
11 Integral Gain(KI) SPEED regulation	5	
12 Maximum Analog Output	10.000	V
13 DAC Offset+	0	bit
14 DAC Offset-	0	bit
15 Feed Forward (KDAC)	20	
16 SPEED to POSITION regulation exchange	0.20	mm
17 Times	10	
18 Position ACCURACY	0.20	mm

MACHINE->MOTION->X->X1->SPEEDS

19 Preset Speed	160.0	mm/s
20 Index Speed	30.0	mm/s
21 Manual Fast Speed	100.0	mm/s
22 Manual Speed	100.0	mm/s
23 Automatic Speed	350.0	mm/s
24 Safety Speed	50.0	mm/s
25 Acceleration	600.0	mm/s ^Å 2
26 Deceleration	600.0	mm/s ^Å 2

MACHINE->MOTION->X->X1->ADVANCED

27 Axis Type	1: FAST	
28 Error Scale	0	
29 Safety Travel	60.00	mm
30 Dead Zone for Integral (KI) component	0.00	mm
31 Maximum Overrun	5.00	mm
32 Backlash	0.00	mm
33 Inertia +	0.00	mm
34 Inertia -	0.00	mm

MACHINE->MOTION->TO->A1->GENERAL

01 BITS Configuration 1	312	
02 BITS Configuration 2	33	
03 Encoder Resolution	1024	pulse/rev.
04 Transmission Ratio NUMERATOR	4	mm
05 Transmission Ratio DENOMINATOR	1	
06 Preset(Index) position	-65.00	mm
07 Software Limit position	-70.00	mm
35 Software Limit position 2	-10.00	mm

MACHINE->MOTION->TO->A1->GAINS

08 Proportional Gain(KP) POSITION regulation	10	
09 Integral Gain(KI) POSITION regulation	10	
10 Proportional Gain(KP) SPEED regulation	10	
11 Integral Gain(KI) SPEED regulation	10	
12 Maximum Analog Output	10.000	V
13 DAC Offset+	0	bit
14 DAC Offset-	0	bit
15 Feed Forward (KDAC)	6700	
16 SPEED to POSITION regulation exchange	0.20	mm
17 Times	0	
18 Position ACCURACY	0.20	mm

MACHINE->MOTION->TO->A1->SPEEDS

19 Preset Speed	30.0	mm/s
20 Index Speed	20.0	mm/s
21 Manual Fast Speed	8.0	mm/s
22 Manual Speed	8.0	mm/s
23 Automatic Speed	5.0	mm/s
24 Safety Speed	10.0	mm/s
25 Acceleration	100.0	mm/s ^Å 2
26 Deceleration	100.0	mm/s ^Å 2

MACHINE->MOTION->TO->A1->ADVANCED

27 Axis Type	1: FAST	
28 Error Scale	0	
29 Safety Travel	50.00	mm
30 Dead Zone for Integral (KI) component	0.00	mm
31 Maximum Overrun	10.00	mm
32 Backlash	0.00	mm
33 Inertia +	0.00	mm
34 Inertia -	0.00	mm

MACHINE->MOTION->TO->A2->GENERAL

01 BITS Configuration 1	312	
02 BITS Configuration 2	33	
03 Encoder Resolution	1024	pulse/rev.
04 Transmission Ratio NUMERATOR	4	mm
05 Transmission Ratio DENOMINATOR	1	
06 Preset(Index) position	-67.30	mm
07 Software Limit position	-70.00	mm
35 Software Limit position 2	-10.00	mm

MACHINE->MOTION->TO->A2->GAINS

08 Proportional Gain(KP) POSITION regulation	10	
09 Integral Gain(KI) POSITION regulation	10	
10 Proportional Gain(KP) SPEED regulation	10	
11 Integral Gain(KI) SPEED regulation	10	
12 Maximum Analog Output	10.000	V
13 DAC Offset+	0	bit
14 DAC Offset-	0	bit
15 Feed Forward (KDAC)	6700	
16 SPEED to POSITION regulation exchange	0.20	mm
17 Times	0	
18 Position ACCURACY	0.20	mm

MACHINE->MOTION->TO->A2->SPEEDS

19 Preset Speed	30.0	mm/s
20 Index Speed	20.0	mm/s
21 Manual Fast Speed	8.0	mm/s
22 Manual Speed	8.0	mm/s
23 Automatic Speed	5.0	mm/s
24 Safety Speed	10.0	mm/s
25 Acceleration	100.0	mm/s ²
26 Deceleration	100.0	mm/s ²

MACHINE->MOTION->TO->A2->ADVANCED

27 Axis Type	0: SLOW	
28 Error Scale	0	
29 Safety Travel	50.00	mm
30 Dead Zone for Integral (KI) component	0.00	mm
31 Maximum Overrun	10.00	mm
32 Backlash	0.00	mm
33 Inertia +	0.00	mm
34 Inertia -	0.00	mm

MACHINE->MOTION->AUX->Y1->GENERAL

01 BITS Configuration 1	312	
02 BITS Configuration 2	32	
03 Encoder Resolution	1024	pulse/rev.
04 Transmission Ratio NUMERATOR	281	$\hat{A}^{\circ}$
05 Transmission Ratio DENOMINATOR	100	
06 Preset(Index) position	5.00	$\hat{A}^{\circ}$
07 Software Limit position	145.00	$\hat{A}^{\circ}$
35 Software Limit position 2	-3.00	$\hat{A}^{\circ}$

MACHINE->MOTION->AUX->Y1->GAINS

08 Proportional Gain(KP) POSITION regulation	2	
09 Integral Gain(KI) POSITION regulation	1	
10 Proportional Gain(KP) SPEED regulation	2	
11 Integral Gain(KI) SPEED regulation	1	
12 Maximum Analog Output	10.000	V
13 DAC Offset+	0	bit
14 DAC Offset-	0	bit
15 Feed Forward (KDAC)	410	
16 SPEED to POSITION regulation exchange	0.20	$\hat{A}^{\circ}$
17 Times	0	
18 Position ACCURACY	0.20	$\hat{A}^{\circ}$

MACHINE->MOTION->AUX->Y1->SPEEDS

19 Preset Speed	15.0	$\hat{A}^{\circ}/s$
20 Index Speed	10.0	$\hat{A}^{\circ}/s$
21 Manual Fast Speed	20.0	$\hat{A}^{\circ}/s$
22 Manual Speed	15.0	$\hat{A}^{\circ}/s$
23 Automatic Speed	80.0	$\hat{A}^{\circ}/s$
24 Safety Speed	20.0	$\hat{A}^{\circ}/s$
25 Acceleration	250.0	$\hat{A}^{\circ}/s\hat{A}^2$
26 Deceleration	150.0	$\hat{A}^{\circ}/s\hat{A}^2$

MACHINE->MOTION->AUX->Y1->ADVANCED

27 Axis Type	1: FAST	
28 Error Scale	0	
29 Safety Travel	50.00	$\hat{A}^{\circ}$
30 Dead Zone for Integral (KI) component	0.00	$\hat{A}^{\circ}$
31 Maximum Overrun	1.00	$\hat{A}^{\circ}$
32 Y Limit GoatFoot	140.00	$\hat{A}^{\circ}$
33 Inertia +	0.00	$\hat{A}^{\circ}$
34 Inertia -	0.00	$\hat{A}^{\circ}$