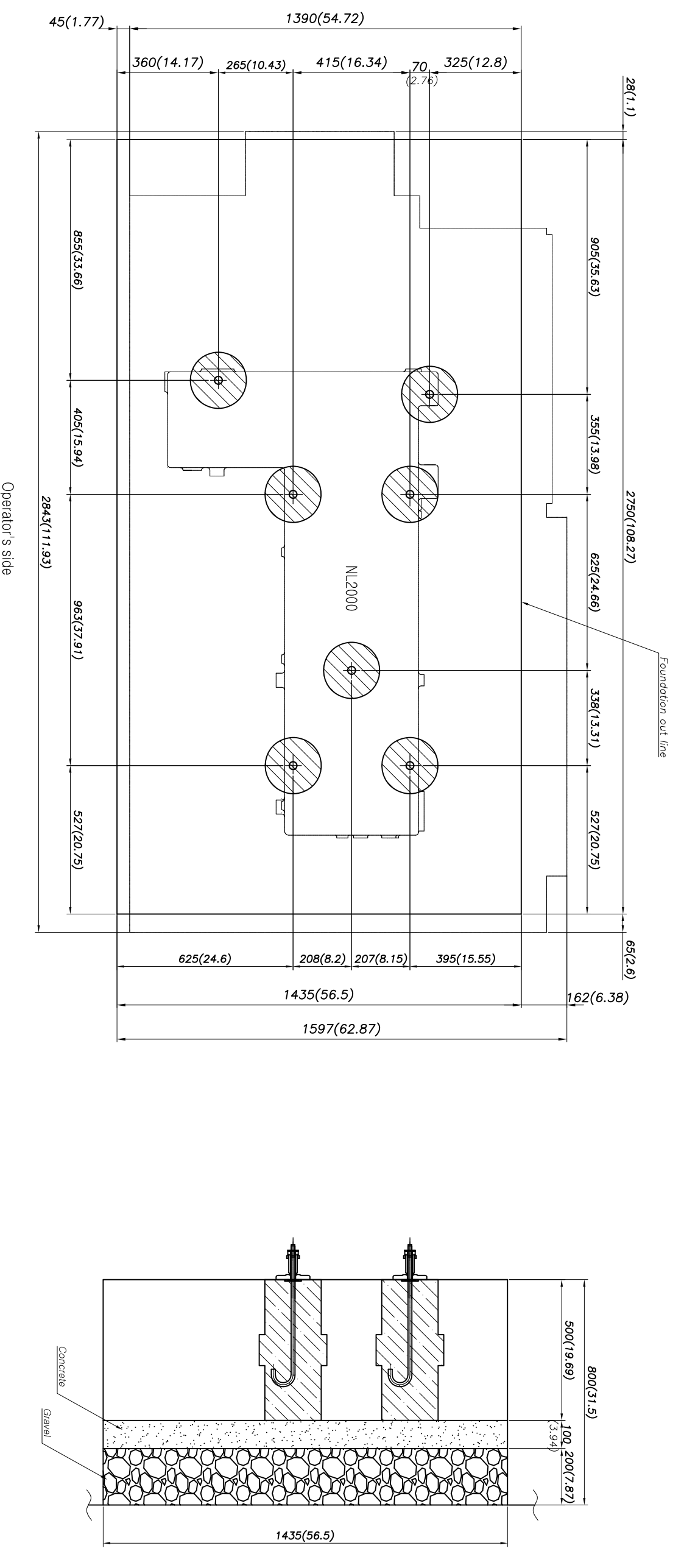


SMART
MACHINE TOOL

NL 2000B(M)

**Installation
Packet**



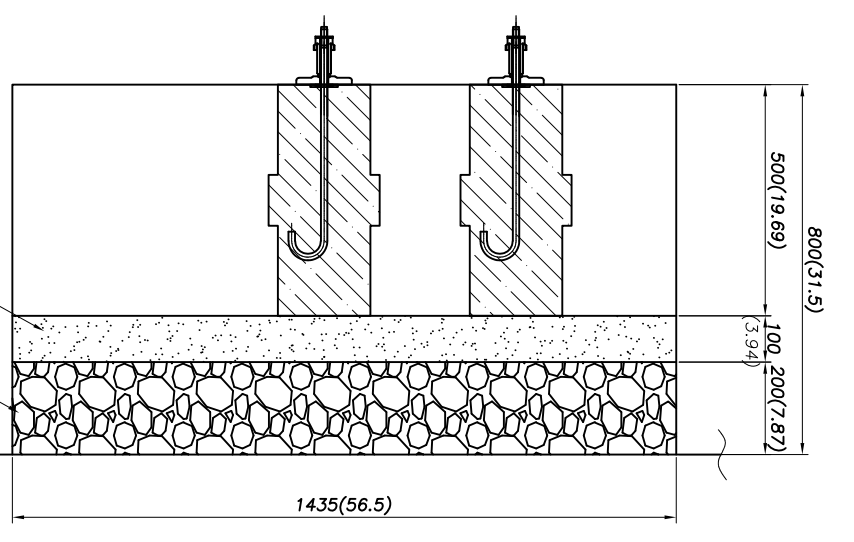
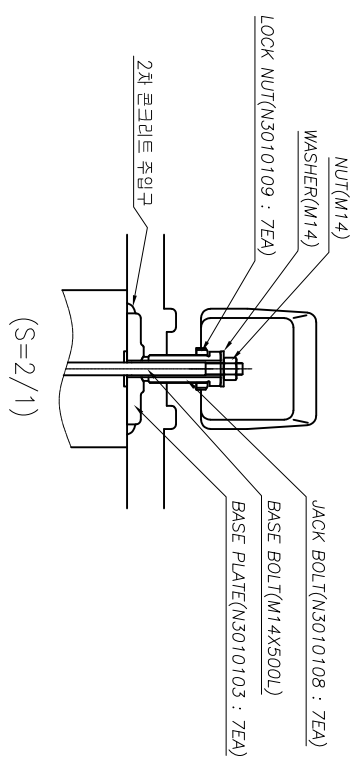
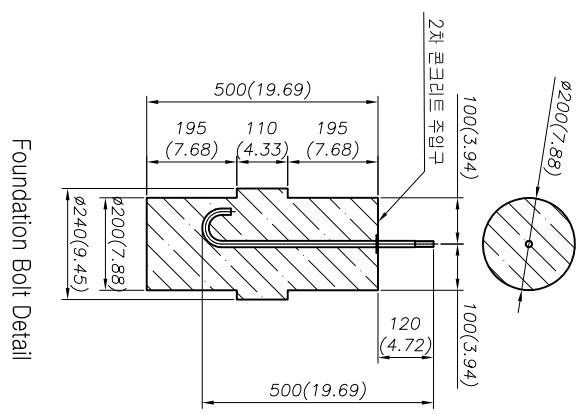
Note1) This drawing shows the standard foundation.
 Modify the concrete thickness according
 ground condition.

Before the first concrete is completely dry,
 chamfer the area facing the outside of the
 machine by approximately 100 mm.

Concrete strength (28 days after placing
 concrete) should be 20.6 Mpa(2986.2 psi)
 or more.

Note2) Because 100 mm(3.94 inch) of styrofoam must
 Adhere to the inside surface of ditch, dig the
 foundation 100 mm(3.94 inch) outside of the
 outline of the foundation.

Note3) Unit : mm(inch)



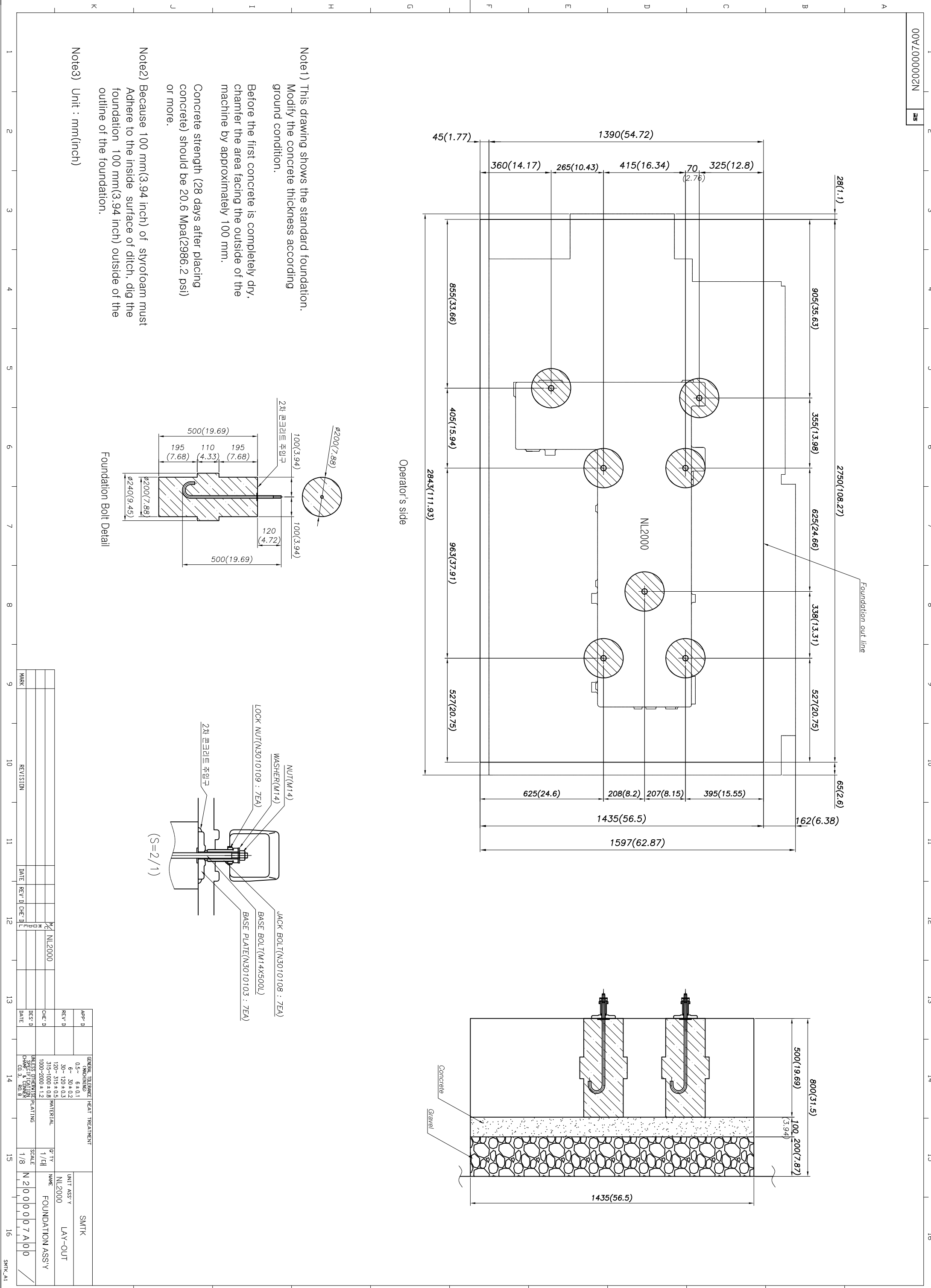
MARK	REVISION	DATE	REV'D	CHE' D	BY	DATE	REV'D	CHE' D	BY	DATE	REV'D	CHE' D	BY

APP'D	GENERAL TOLERANCE	HEAT TREATMENT	SMTK
	0.5 ~ 6 ± 0.1		
	6 ~ 30 ± 0.2		
	30 ~ 120 ± 0.3		
	120 ~ 315 ± 0.5		
	315 ~ 1000 ± 0.9		
	1000 ~ 2000 ± 1.2		
	2000 ~ 5000 ± 2.0		

DES' D	DATE	DES' D	DATE	DES' D	DATE	DES' D	DATE	DES' D	DATE

UNIT ASS'Y	LAY-OUT	NAME
NL2000	FOUNDATION ASS'Y	N 2 0 0 0 0 7 A 0 0

SCALE	SCALE
1/8	1/8



Packing Information (Update date: 2024-02-23)

NO.	Model	Model (Short)	Description	PART NAME	CBM	NET WEIGHT (KGS)	PACKIN G WEIGHT (KGS)	GROSS WEIGHT (KGS)
1	NL1500/2000/2000B (USA only)	NL1500/2000/2000B	Machine	3,600(L) X 2,300(W) X 2,250(H)	18.63	3,900	530	4,430
2	NL1500M/2000M/2000BM (USA only)	NL1500M/2000M/2000BM	Machine	6,000(L) X 2,300(W) X 2,250(H)	18.63	4,200	530	4,730
3	NL2000ASY	NL2000ASY	Machine + Chip conveyor	5,300(L) X 2,300(W) X 2,475(H)	30.17	5,700	700	6,400
4	NL2000BSY	NL2000BSY	Machine + Chip conveyor	5,300(L) X 2,300(W) X 2,475(H)	30.17	5,800	700	6,500
5	NL2500SY	NL2500SY	Machine + Chip conveyor	5,300(L) X 2,300(W) X 2,475(H)	30.17	6,100	700	6,800
6	NL2500/750	NL2500	Machine + Chip conveyor	5,100(L) X 2,300(W) X 2,250(H)	26.39	5,700	660	6,360
7	NL2500M/750	NL2500M	Machine + Chip conveyor	5,100(L) X 2,300(W) X 2,250(H)	26.39	5,900	660	6,560
8	NL2500/1100	NL2500L	Machine + Chip conveyor	5,550(L) X 2,300(W) X 2,250(H)	28.72	6,900	720	7,620
9	NL2500M/1100	NL2500L M	Machine + Chip conveyor	5,550(L) X 2,300(W) X 2,250(H)	28.72	7,100	720	7,820
10	NL3000B/750	NL3000B	Machine + Chip conveyor	5,100(L) X 2,300(W) X 2,250(H)	26.39	5,700	660	6,360
11	NL3000BM/750	NL3000BM	Machine + Chip conveyor	5,100(L) X 2,300(W) X 2,250(H)	26.39	5,900	660	6,560
12	NL3000B/1100	NL3000BL	Machine + Chip conveyor	5,550(L) X 2,300(W) X 2,250(H)	28.72	6,900	720	7,620
13	NL3000BM/1100	NL3000BLM	Machine + Chip conveyor	5,550(L) X 2,300(W) X 2,250(H)	28.72	7,100	720	7,820
14	NL4000M/1200	NL4000M	Machine	4,800(L) X 2,300(W) X 2,450(H)	27.05	10,800	650	11,450
15	NL4000/1200 C/C	NL4000 C/C	Chip conveyor	4,250(L) X 950(W) X 1,500(H)	6.06	800	70	870
16	NL4000M/2200	NL4000L M	Machine	6,000(L) X 2,300(W) X 2,450(H)	33.81	13,700	750	14,450
17	NL4000(M)/2200 C/C	NL4000L /M C/C	Chip conveyor	5,450(L) X 950(W) X 1,600(H)	8.21	1,000	100	1,100
18	NL4000Y/2200	NL4000L Y	Machine	6,000(L) X 2,300(W) X 2,950(H)	40.71	15,000	650	15,650
19	NL4000Y/2200 C/C	NL4000L Y C/C	Chip conveyor	5,450(L) X 950(W) X 1,800(H)	9.73	1,000	100	1,100
20	NL4000(M)/3200 C/C	NL4000X/LX/LM	Machine	7,000(L) X 2,300(W) X 2,550(H)	41.06	16,800	1,500	18,300
21	NL4000(M)/3200 C/C	NL4000X/LX/LM C/C	Chip conveyor	6,450(L) X 1,150(W) X 1,600(H)	11.87	1,200	100	1,300
22	NL5000/1200	NL5000	Machine	4,800(L) X 2,300(W) X 2,450(H)	27.05	10,800	650	11,450
23	NL5000M/1200	NL5000M	Machine	4,800(L) X 2,300(W) X 2,450(H)	27.05	10,900	650	11,550
24	NL5000(M)/1200 C/C	NL5000M C/C	Chip conveyor	4,250(L) X 950(W) X 1,500(H)	6.06	800	70	870
25	NL5000/2200	NL5000L	Machine	6,000(L) X 2,300(W) X 2,450(H)	33.81	13,700	750	14,450
26	NL5000M/2200	NL5000L M	Machine	6,000(L) X 2,300(W) X 2,450(H)	33.81	13,800	750	14,550
27	NL5000(M)/2200 C/C	NL5000L /M C/C	Chip conveyor	5,450(L) X 950(W) X 1,600(H)	8.21	1,000	100	1,100
28	NL5000(M)/3200	NL5000X/LX/LM	Machine	7,000(L) X 2,300(W) X 2,550(H)	41.06	16,900	1,500	18,400
29	NL5000(M)/3200 C/C	NL5000X/LX/LM C/C	Chip conveyor	6,450(L) X 1,150(W) X 1,600(H)	11.87	1,200	100	1,300
30	NL6000/750(M) C/C	NL6000S/SM C/C	Chip conveyor + Rear cover	3,950(L) X 2,300(W) X 1,750(H)	15.90	1,800	130	1,930
31	NL6000(M)/1500 C/C	NL6000/ M C/C	Chip conveyor + Rear cover	4,850(L) X 2,300(W) X 1,600(H)	17.85	2,150	150	2,300
32	NL6000(M)/2200 C/C	NL6000/ L/M C/C	Chip conveyor + Rear cover	5,550(L) X 2,300(W) X 1,750(H)	22.34	2,250	250	2,500
33	NL6000(M)/3200 C/T	NL6000X/LX/LM C/T	Coolant tank + Rear cover	5,600(L) X 2,300(W) X 950(H)	12.24	2,650	350	3,000
34	NV5500L C/C	NV5500L C/C	Chip conveyor	4,880(L) X 1,150(W) X 750(H)	4.21	900	100	1,000

MACHINE MODEL	KVA	AMPS @ 220V	Coolant	Slideways	Hyd. Unit	Transmission	Chuck	Oil for Air
NL150/200/250	31	82	48	.79 gal	5.3 gal	n/a	.2 oz daily	N/A
NL1500(M)	31	82	48	.79 gal	5.3 gal	n/a	.2 oz daily	.6 oz
NL2000B(M)	31	82	48	.79 gal	5.3 gal	n/a	.2 oz daily	.6 oz
NL2000ASY/BSY	40	105	60	.79 gal	5.3 gal	n/a	.2 oz daily	.6 oz
NL2500SY	50	131	60	.79 gal	5.3 gal	n/a	.2 oz daily	.6 oz
NL2500S	40	105	48	.79 gal	5.3 gal	0.75	.2 oz daily	.6 oz
NL2500(M)	40	105	53	.79 gal	5.3 gal	0.75	.2 oz daily	.6 oz
NL3000(M)	40	105	63	.79 gal	5.3 gal	0.75	.2 oz daily	N/A
NL4000(M)	55	144	63	.79 gal	6.4 gal	0.75	.2 oz daily	N/A
NL5000(M)	55	144	63	.79 gal	6.4 gal	0.75	.2 oz daily	N/A
NL5000L(M)	65	170	130	.79 gal	6.4 gal	0.75	.2 oz daily	N/A
NL6000(M)	65	170	105	.79 gal	15 gal	0.75	.2 oz daily	N/A
NL6000L(M)	65	170	150	.79 gal	15 gal	0.75	.2 oz daily	N/A
NL6000XL(M)	65	170	180	.79 gal	15 gal	0.75	.2 oz daily	N/A
NL7000L(M)	65	170	150	.79 gal	15 gal	2 gal	.2 oz daily	N/A
NL7000XL(M)	65	170	180	.79 gal	15 gal	2 gal	.2 oz daily	N/A
				Shell Oil T68	Mobil DTE 24	Mobil Oil Light	SW10	DTE Light
				Mobil Vactra#2		ISO VG 32		
				check daily	check daily	check daily	grease daily	check daily

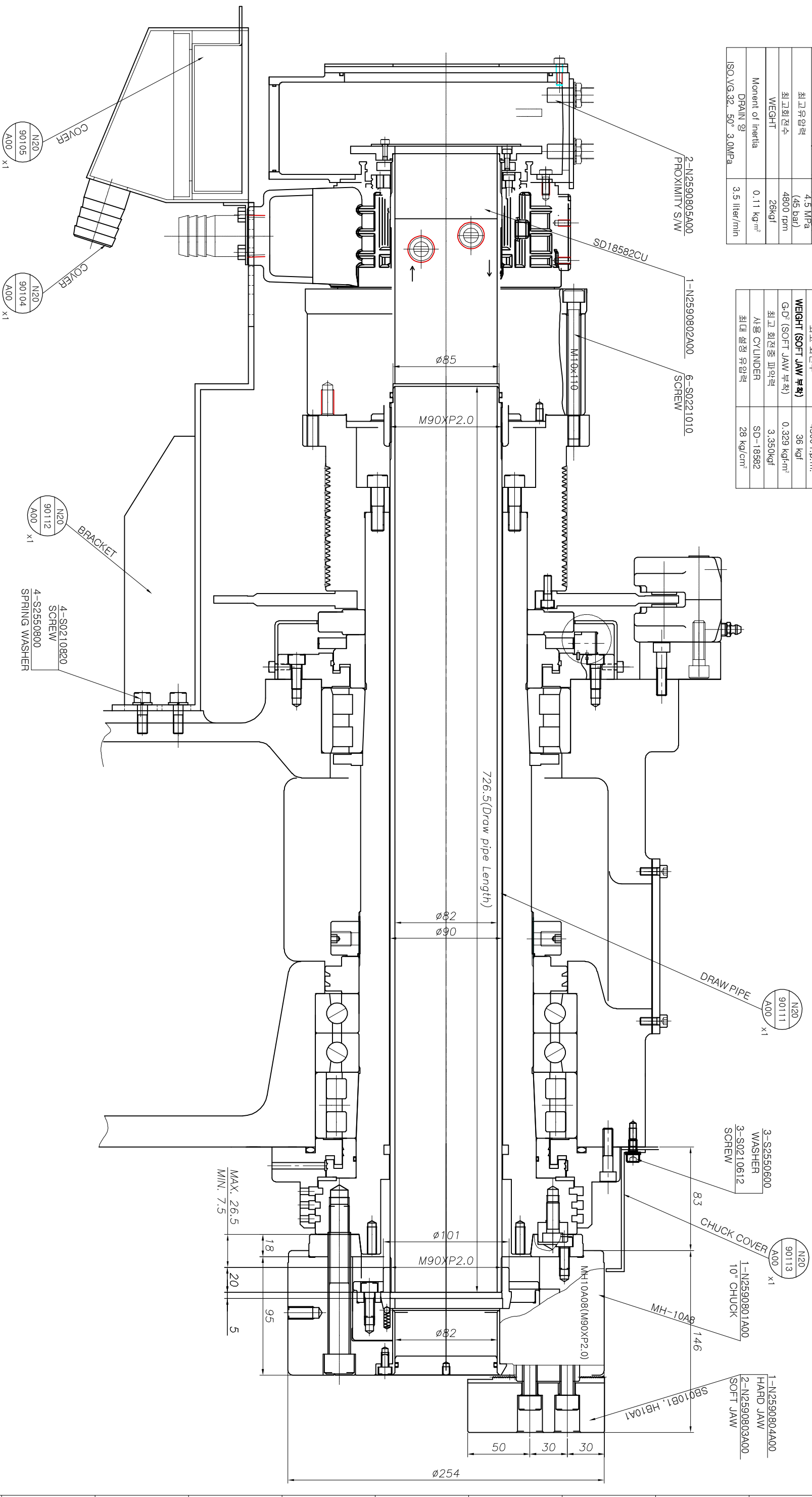
Air requirements: 80-100 psi, 5-10 CFM

Coolant only fluid required at install

Voltage : 220V +/- 10%

CYLINDER SPECIFICATION	
CYLINDER INSIDE DIAMETER	185 mm
PISTON STROKE	30 mm
PISTON THRUST	PUSH (8700 kgf) PULL (8100 kgf) (233cm ²)
최고유압력	4.5 MPa (45 bar)
최고회전수	4800 rpm
WEIGHT	26kgf
Moment of Inertia	0.11 kg·m ²
ISO VG.32, 50° 3.0MPa	3.5 liter/min

CHUCK SPECIFICATION	
PLUNGER STROKE	19 mm
JAW STROKE (직경)	8.8 mm
PLUNGER 허용축력	4676kgf (46kN)
최대 피압력	12848kgf (126.6kN)
최고 회전수	4500 r.p.m.
WEIGHT (SOFT JAW 부착)	36 kgf
G·D° (SOFT JAW 부착)	0.329 kgf·m ²
최고 회전중 피압력	3.350kgf
사용 CYLINDER	SD-18582
최대 설정 유압력	28 kgf/cm ²



추가)
1. NL20000BM 10° 대관용 Chuck & CYLINDER 사양임.

MARK	REVISION	DATE	REV'D	CHE'D	DATE	DES'D	DATE	APP'D	DATE	GENERAL TOLERANCE	HEAT TREATMENT	UNIT ASS'Y	CHUCKING
										0.3 - 6 ± 0.1 6 - 30 ± 0.2 30 - 120 ± 0.2 120 - 315 ± 0.3 315 - 1000 ± 0.5 1000 - 2000 ± 1.2		NL20000BM	HOLLOW CHUCK ASS'Y