

MORI SEIKI Technical Center regarding req.

n 24 hours, 365 days)

TRY], [PLACE NAME])

5. MACHINE AND NUMERICAL CONTROL UNIT SPECIFICATIONS

5.1 Machine Specifications

Item		NTX2000	
Capacity	Max. swing of workpiece	mm (in.)	φ 660 (φ 25.9)
	Swing over cross slide	mm (in.)	φ 660 (φ 25.9) <Turret 2: φ 300 (φ 11.7)>
	Max. turning diameter	mm (in.)	φ 610 (φ 24.0) <φ 660 (φ 25.9)>*1 <Turret 2: φ 274 (φ 10.7)>
	Max. turning length	mm (in.)	1,540 (60.6)
	Bar work capacity	mm (in.)	φ 65 (φ 2.5) [φ 80 (φ 3.1)] *2
Travel	X-axis (Tool spindle)	mm (in.)	495 (19.5) <470 (18.5)+25 (1.0)>
	Y-axis (Tool spindle)	mm (in.)	±125 (±4.9)
	Z-axis (Tool spindle)	mm (in.)	1,560 (61.4) + 215 (8.5) <for ATC>
	B-axis (Tool spindle)		±120°
	X2-axis (Turret 2)	mm (in.)	160 (6.3)
	Z2-axis (Turret 2)	mm (in.)	1,302 (51.3) <Tapee> 1,402 (55.2) <Sapee>
Spindle 1	Max. spindle speed	min ⁻¹	5,000 (4,000) *2
	Number of spindle speed range		4 2(Winding change-over)*2*4
	Spindle nose		JIS A ₂ -6 (JIS A ₂ -8) *2
	Through-spindle hole diameter	mm (in.)	φ 73 (φ 2.9) <φ 91 (φ 3.6)> *2
	Min. spindle indexing increment		0.0001°
	Spindle bearing inner diameter	mm (in.)	φ 120 (φ 4.7) <φ 140 (φ 5.5)>*2
	Spindle torque (25%ED/30min/cont)	N·m (ft·lbf)	621/502/410 (458.0/370.2/302.4) <358/231/214 (264.0/170.4/157.8)>*4
Spindle 2	Max. spindle speed	min ⁻¹	5,000
	Number of spindle speed range		1 2(Winding change-over) *4
	Spindle nose		JIS A ₂ -6
	Through-spindle hole diameter	mm (in.)	φ 73 (φ 2.9)
	Min. spindle indexing increment		0.0001°
	Spindle bearing inner diameter	mm (in.)	φ 120 (φ 4.7)
	Spindle torque (15%ED/30min/cont)	N·m (ft·lbf)	230/178/159 (169.6/131.3/117.3)
Tool spindle (Turret 1)	Number of tool stations		1
	Min. B-axis indexing increment		0.0001° (Full indexing specifications) 1° (1° indexing specifications)
	Max. tool spindle speed	min ⁻¹	12,000
	Taper hole of rotary Tool spindle		Capto C6 HSK-A63 KM-63 BT40 CAT40
	Type of retention knob (BT40, CAT40)		MORI SEIKI 90° (Center through)
	Inner diameter of rotary Tool spindle bearing	mm (in.)	φ 70 (φ 2.7)
	Tool storage capacity		38 76
	Max. tool diameter (With adjacent tools)	mm (in.)	φ 70 (φ 2.7)
	Max. tool diameter	mm (in.)	φ 125 (φ 4.9)

Tool spindle (Turret 1)	(Without adjacent tools)		
	Max. tool length	mm(in.)	300(11.8)
	Max. tool mass	kg(lb)	8(17.6) 10(22)
	Max. tool mass moment (from spindle gauge line)	N·m(ft·lbf)	7.84 (5.8)*3
	Tool changing time (Tool-to-tool)	sec	1.25
Turret 2	Spindle torque (10%ED/cont)	N·m(ft·lbf)	120/44 (88.5/32.5)
	Number of tool stations		10
	Turret indexing time(1-station)	sec	0.19
	Shank height for square tools	mm(in.)	20 (0.8)
	Shank diameter for boring bar	mm(in.)	φ32 (φ1.2)
	Max. rotary tool spindle speed	min ⁻¹	6,000
Tailstock	Spindle torque (15%ED/cont)	N·m(ft·lbf)	4.8/2.3 (3.5/1.7)
	Tailstock spindle diameter	mm(in.)	110 (4.3)
	Taper hole of tailstock spindle		Live center (MT5) Built-in center (MT4)
Feedrate	Tailstock travel	mm(in.)	1500(59.1) <T spec> 1400(55.1) <TZ spec>
	Rapid traverse rate	mm/min (ipm)	X, Y, Z: 40,000 (1574.8) A: 30,000 (1181.1) X2: 30,000 (1181.1) Z2: 38,000 (1496.1)
Motors	Motor for Spindle 1 (30min/cont)	kW(HP)	22/18.5 (30/24.7)
	Spindle 2 drive motor (30min/cont)	kW(HP)	22/18.5 (30/24.7)
	Tool spindle drive motor (10min/cont)	kW(HP)	18.5/11 (24.7/15)
	Turret 2 rotary tool spindle drive motor (15%ED/cont)	kW(HP)	1.5/1.2 (2/1.6)
	Feed motor	kW(HP)	X, Z: 5.5 (7.5) Y: 2.7 (3.7) B: 2.5 (3.4) A: 3 (4.1) X2: 2.7 (3.7) Z2: 4.5 (6.1)
	Coolant pump motor (50/60Hz)	kW(HP)	0.635/1.040 (0.866/1.418)
Power sources	Electrical power supply	kVA	78.4
	Compressed air supply	MPa (psi), L/min(gpm)	0.5 (72.5), 650 (171.6)
Tank capacity	Coolant tank capacity	L(gal)	675 (178.2)
Mass of machine		kg	14,110(T spec) 14,520(S spec) 14,860(TZ spec) 15,270(SZ spec) 14,910(TZM spec) 15,320(SZM spec)

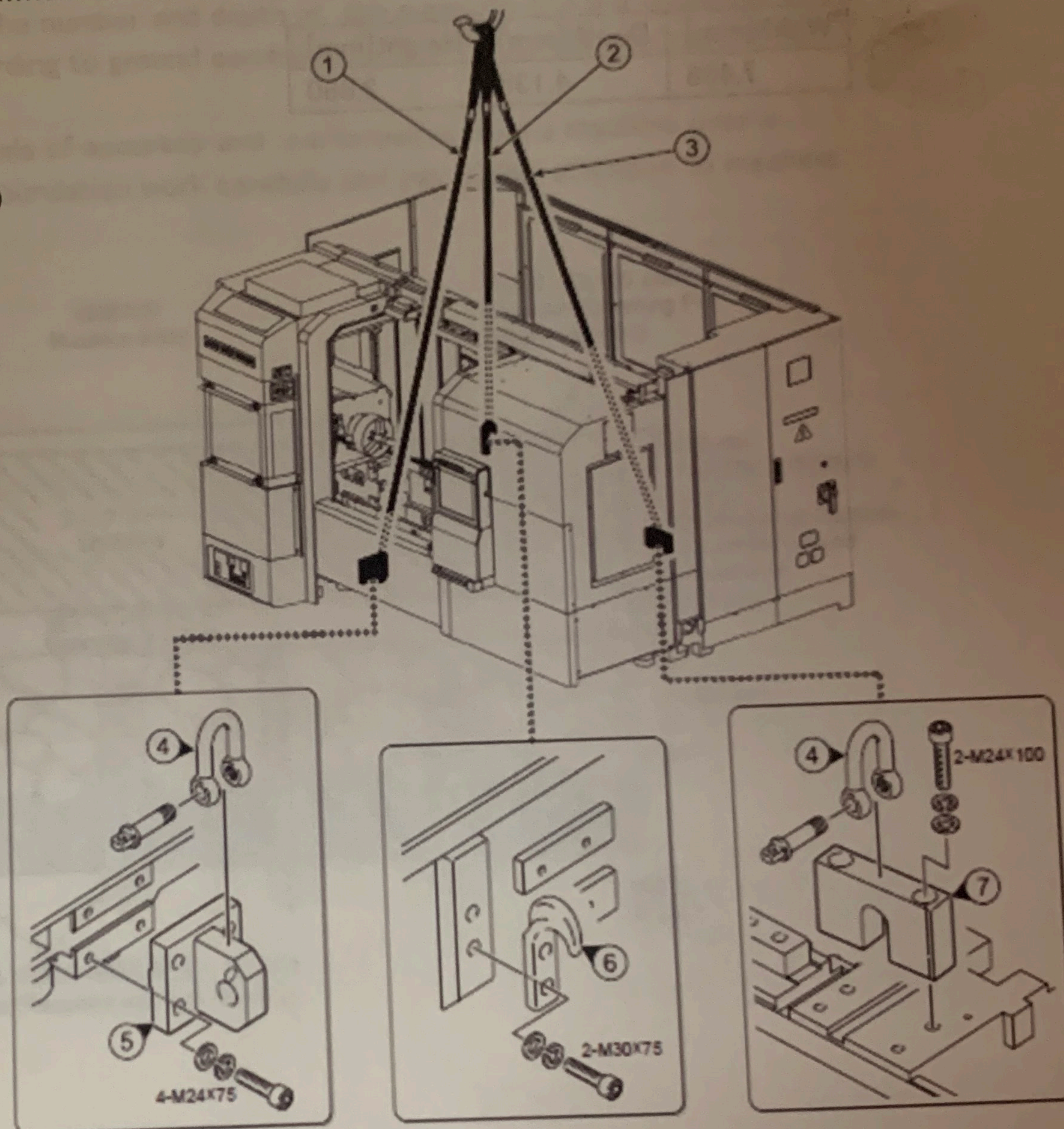
- Bar work capacity reach full bar work
- Max. spindle used, it may not
- ANR: ANR re at 101.3 kPa
- Power sources on the optional
- Compressed air pressure dew p
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- When the tool required.
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11. SHIPPING INSTALLATION

11.1 Style of Packing

The table below shows the machine (with 38 tools magazine) dimensions at shipment.
For details of shipping dimensions, refer to additional data 3 (shipping diagram).

Machine width : 4,080mm (4,491mm<when 76tools magazine specification>)
Depth : 2,980mm
Machine height : 2,621mm
Machine weight : 14,110kg (T spec)
: 14,860kg (TZ spec)
: 14,910kg (TZM spec)
: 14,520 (S spec)
: 15,270 (SZ spec)
: 15,320 (SZM spec)



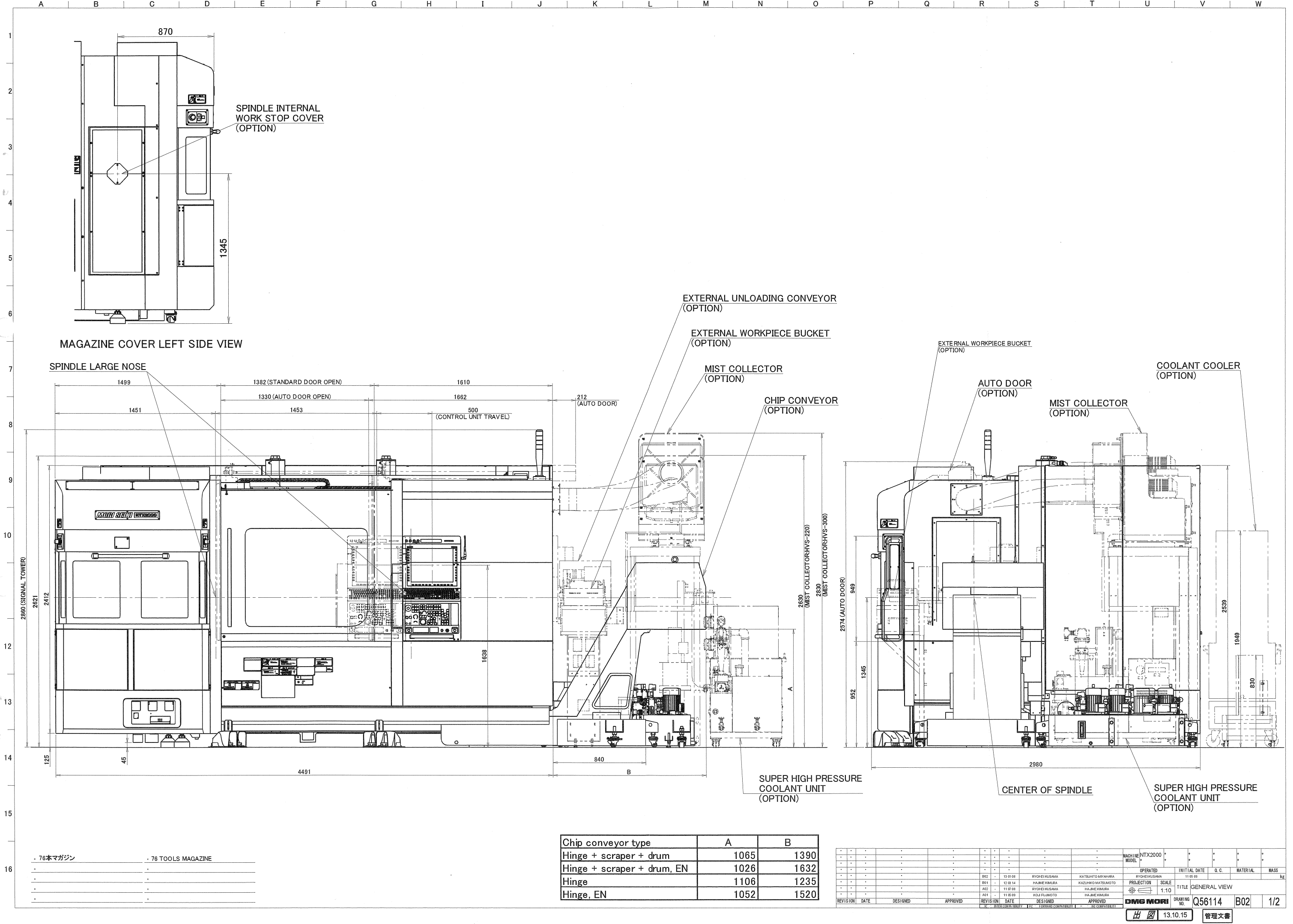
• Length of hoisting ropes

Number	Length (mm)	Diameter (mm)
①	4,460	φ 20
②	4,160	
③	3,870	

• Shackle specification

Number	Withstand load (t)	Size (mm)
④	10	100

※⑤, ⑥, ⑦ are accessories with the machine.



MAGAZINE COVER LEFT SIDE VIEW

EXTERNAL UNLOADING CONVEYOR
(OPTION)

EXTERNAL WORKPIECE BUCKET
(OPTION)

MIST COLLECTOR
(OPTION)

CHIP CONVEYOR
(OPTION)

EXTERNAL WORKPIECE BUCKET
(OPTION)

AUTO DOOR
(OPTION)

MIST COLLECTOR
(OPTION)

COOLANT COOLER
(OPTION)

SUPER HIGH PRESSURE
COOLANT UNIT
(OPTION)

CENTER OF SPINDLE

SUPER HIGH PRESSURE
COOLANT UNIT
(OPTION)

Chip conveyor type	A	B
Hinge + scraper + drum	1065	1390
Hinge + scraper + drum, EN	1026	1632
Hinge	1106	1235
Hinge, EN	1052	1520

								MACHINE MODEL				NTX2000																			
												OPERATED				INITIAL DATE				Q. C.				MATERIAL				MASS			
												RYOHEI KUSAMA				11 05 09												kg			
								B02				13 01 08				RYOHEI KUSAMA				KATSUHIKO MIYAHARA											
								B01				12 03 14				HAJIME KIMURA				KAZUHIKO MATSUMOTO											
								A02				11 07 08				RYOHEI KUSAMA				HAJIME KIMURA											
								A01				11 05 09				KOJI FUJINO				HAJIME KIMURA											
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