

NVD 6700

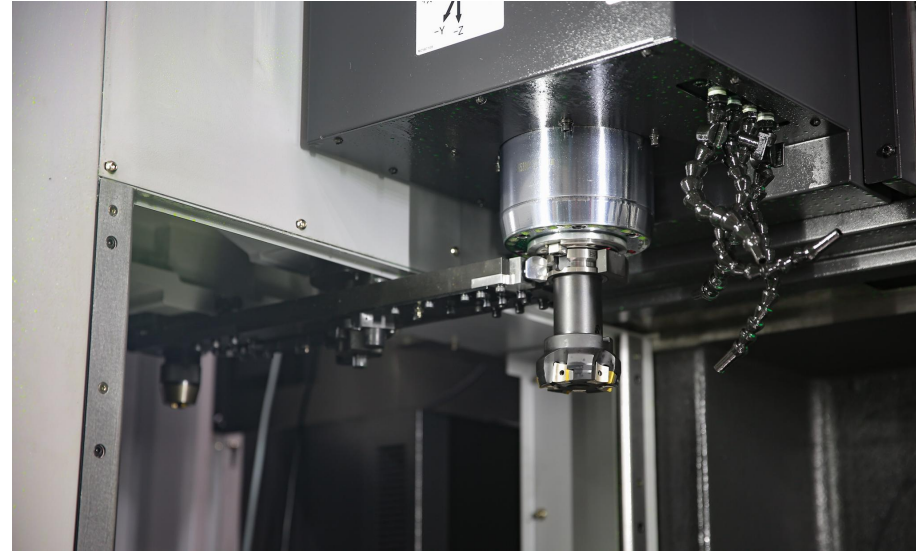
**Ultra-precision
Bridge Type MCT**

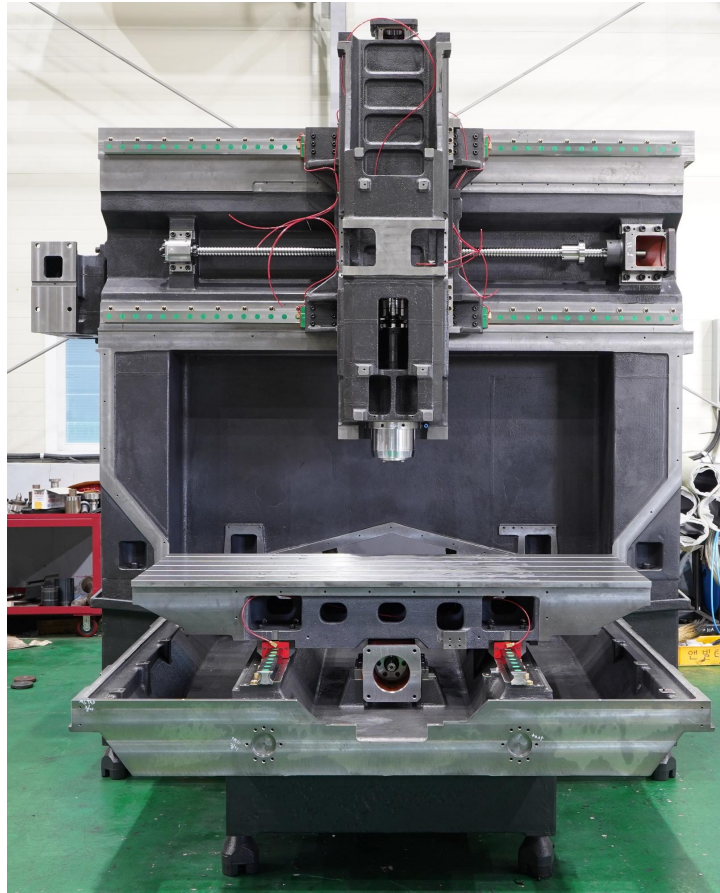


2025-04-04

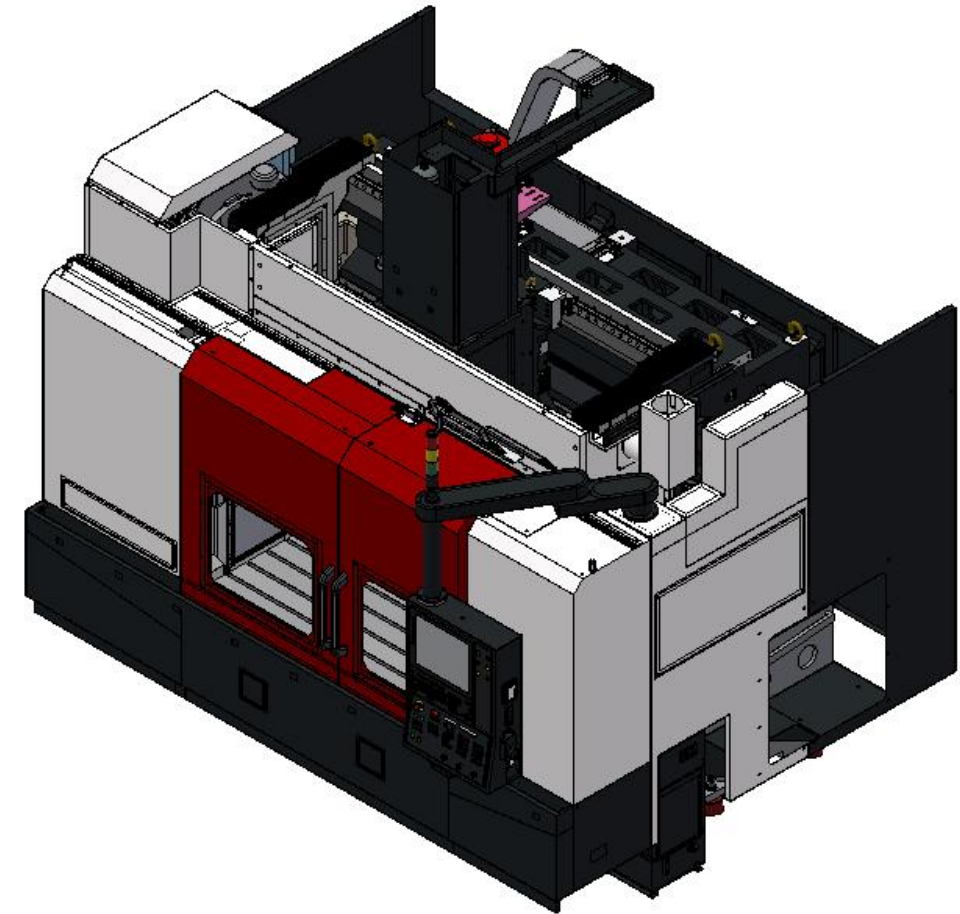
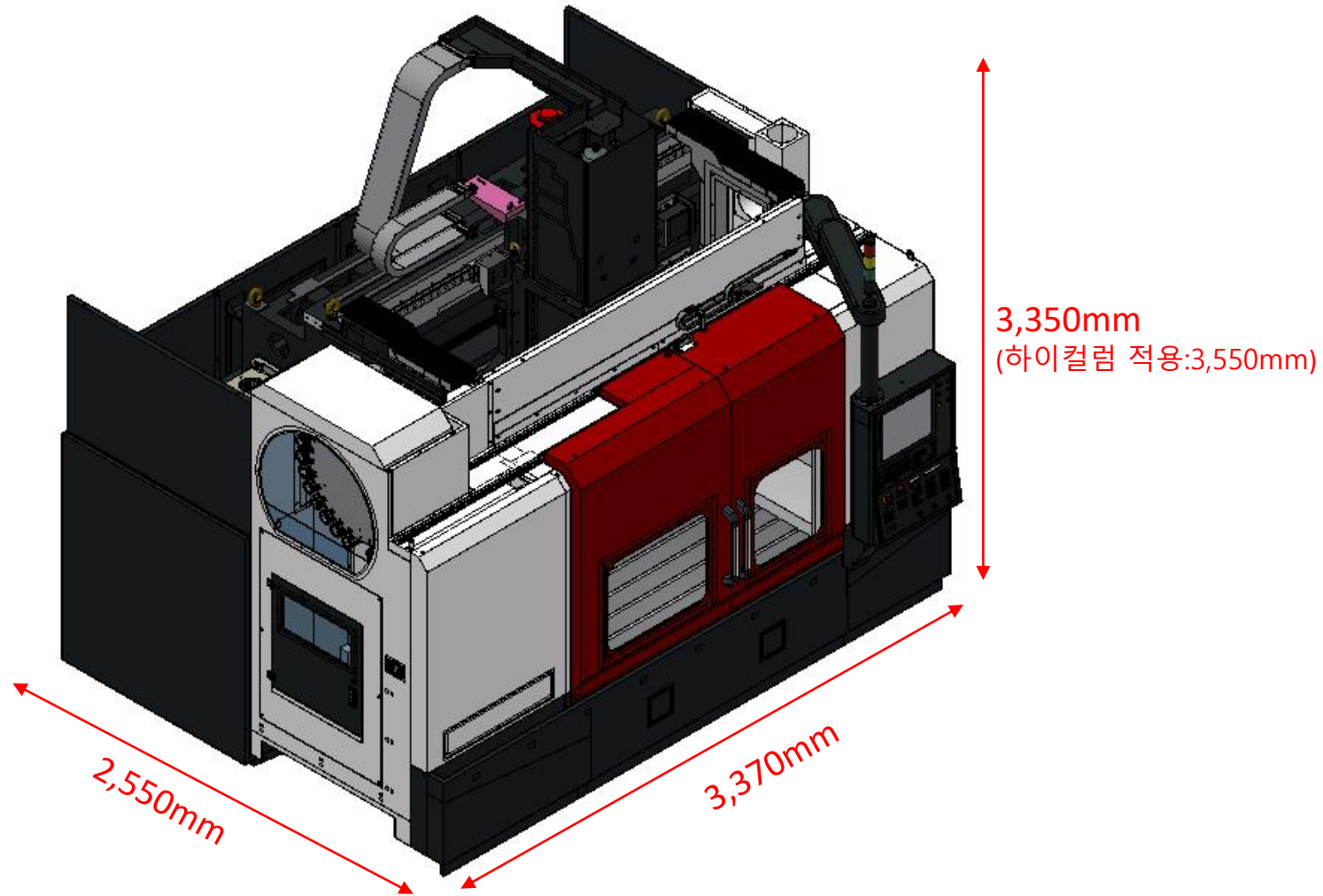
Machine Specifications

DESCRIPTION			UNIT	NVD 6700
FEED	Travel distance	X axis	mm	1,450
		Y axis	mm	670
		Z axis	mm	650
	Rapid traverse rate	X axis	m/min	36
		Y axis	m/min	36
		Z axis	m/min	24
	Feed motor output	X/Y/Z	KW	7/7/7
	Distance from spindle nose to table top		mm	100 ~ 750 [High column: 300~950]
Slide type		-	LM Roller Guide	
TABLE	Table size		mm	1,600 x 670
	Table loading capacity		kg	1,500
	Height from floor to table		mm	930
	Distance to table		mm	175
SPINDLE	Taper		-	ISO #40
	Max. spindle speed		rpm	12,000
	Spindle output		kW	15/18.5/25/30
	Max. spindle torque		N.m	191
ATC	Type of tool shank		-	BBT 40 [CAT Big plus 40]
	Tool storage capacity		Ea	30
	Max. tool diameter	Continuous	mm	Ø80
		Without adjacent tools	mm	Ø125
	Max. tool length		mm	250
	Max. tool weight		kg	8
	Tool changing time	Tool-to-Tool	Sec	2.5
		Chip-to-Chip	Sec	4.3
CONTROLLER			-	Fanuc 0i-MF Plus (15" touch panel)





Machine LAY OUT



Machine Components

Grinding Spindle

- Direct spindle
- 12,000 rpm
- 15/18.5/25/30

Slide COVER(X-AXIS)

- BELLOWS COVER

ATC MAGAZINE

- 30 TOOL
- CAM TYPE
- MAX.Ø125-250L

Slide COVER(Y-AXIS)

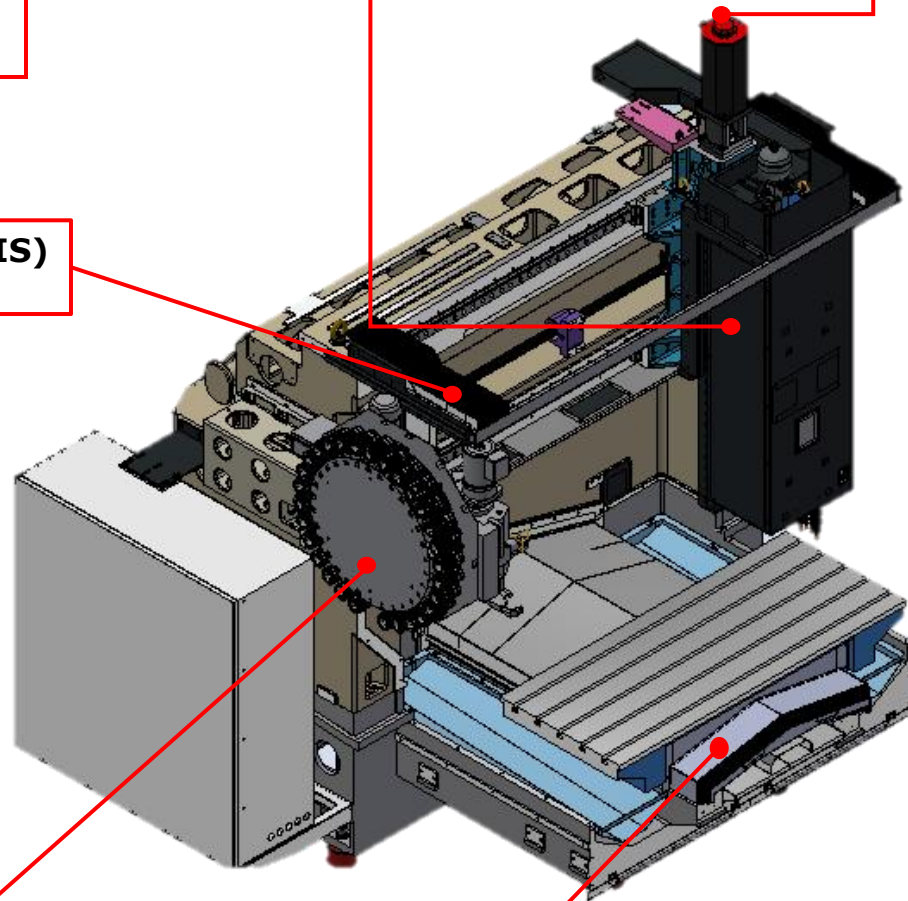
- STEEL COVER

AXIS MOTOR(X/Y/Z)

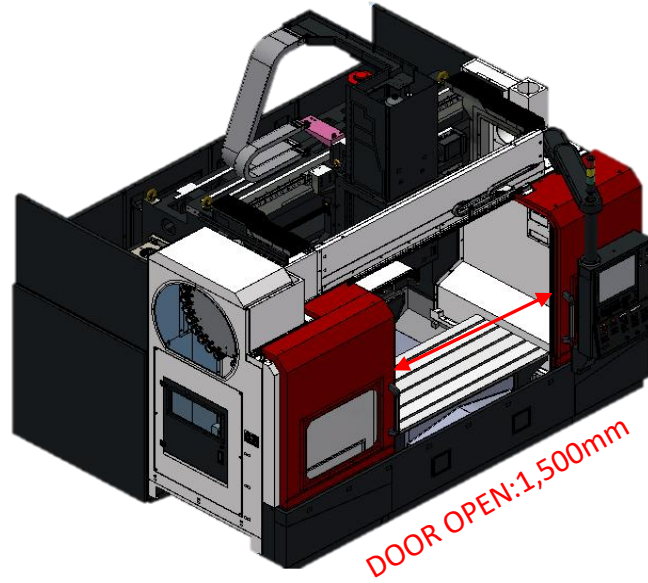
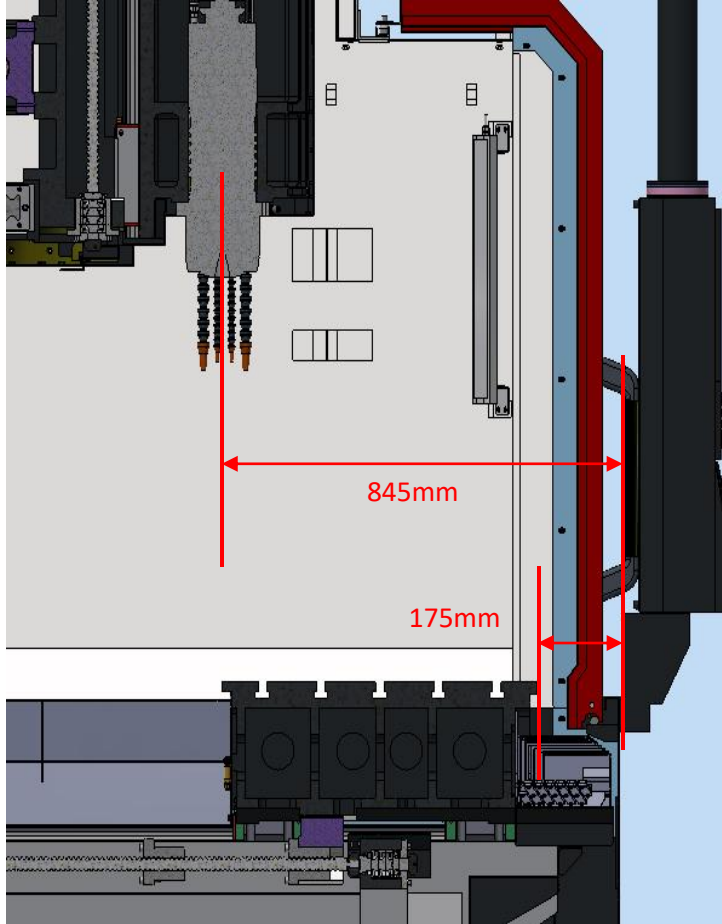
- 7/7/7 Kw

HYD UNIT

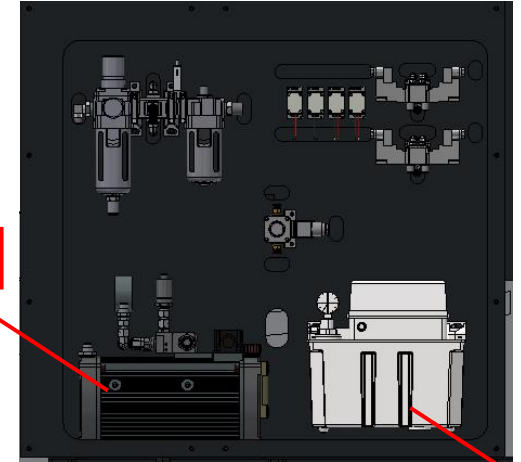
HIGH COLUMN OPTION 200mm COLUMN BASE



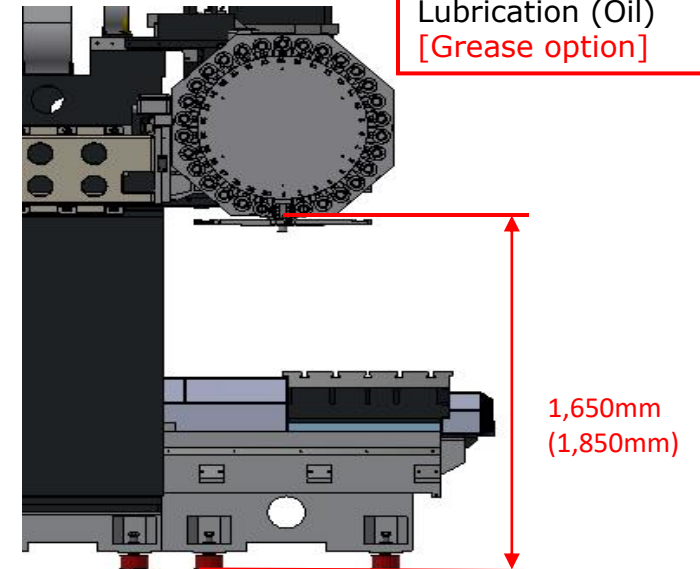
Machine LAY OUT



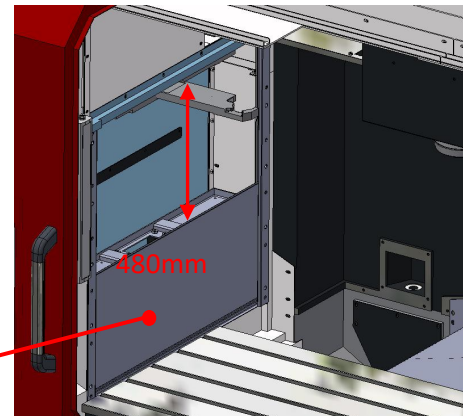
HYD UNIT



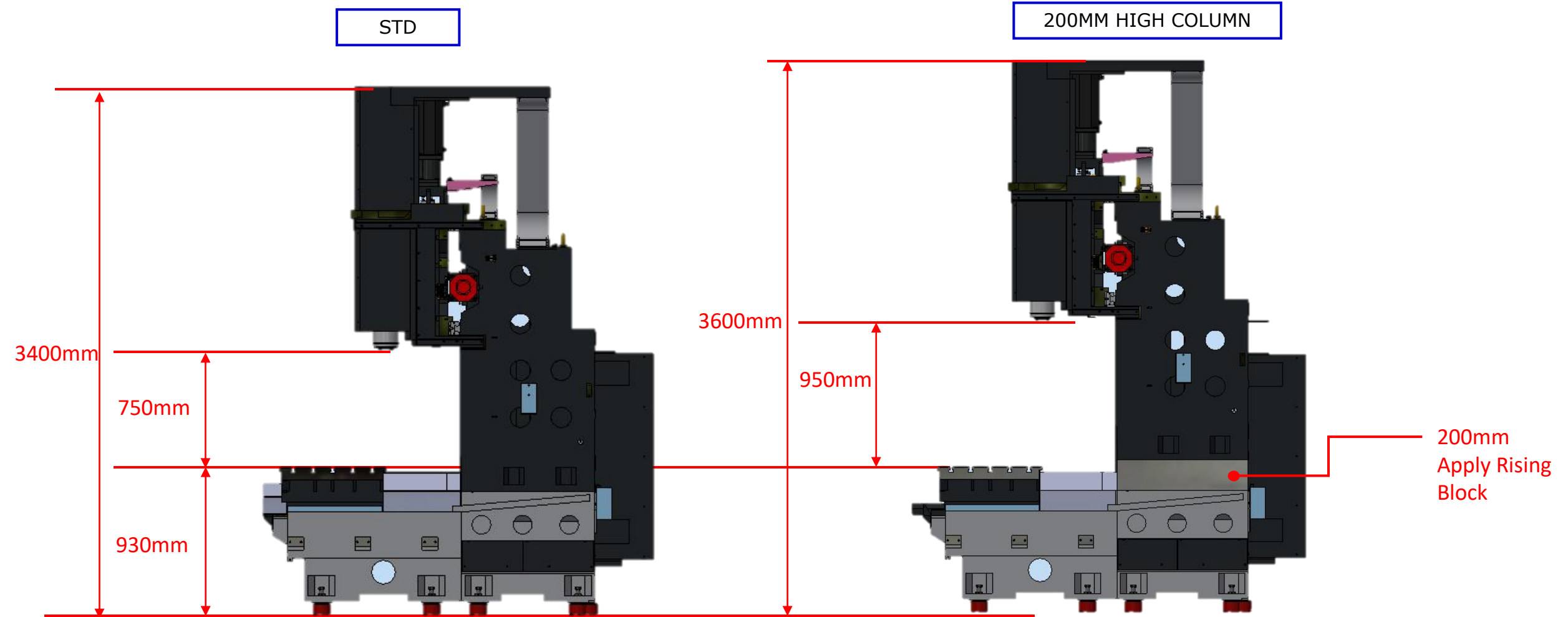
Lubrication (Oil)
[Grease option]



ATC AUTO
DOOR

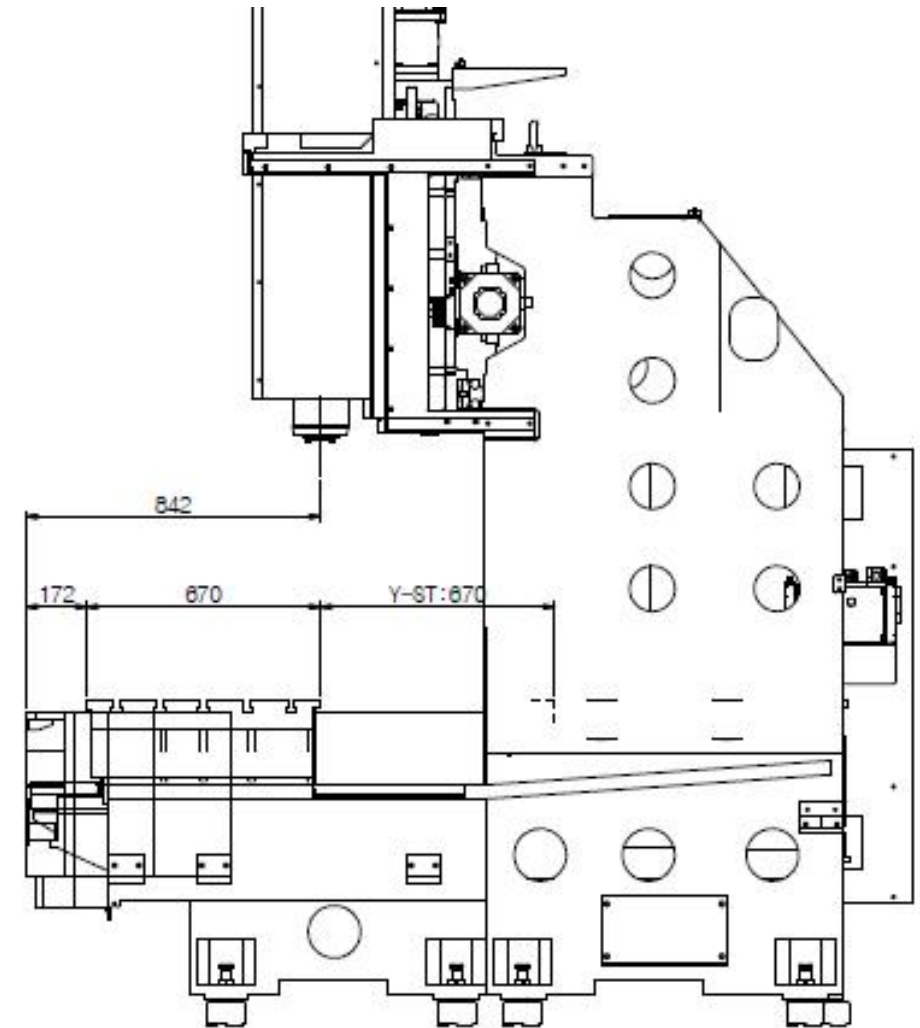
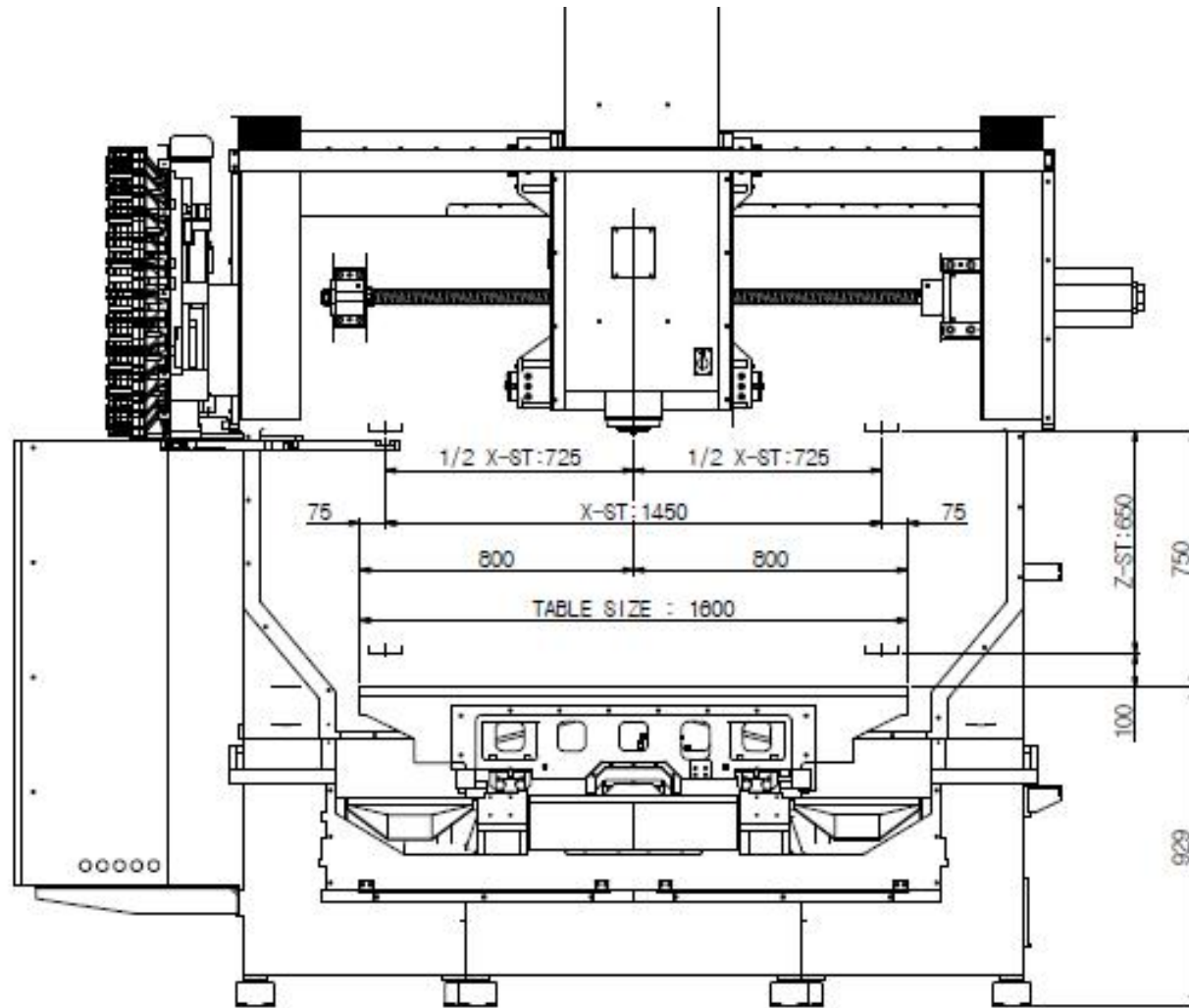


Machine LAY OUT

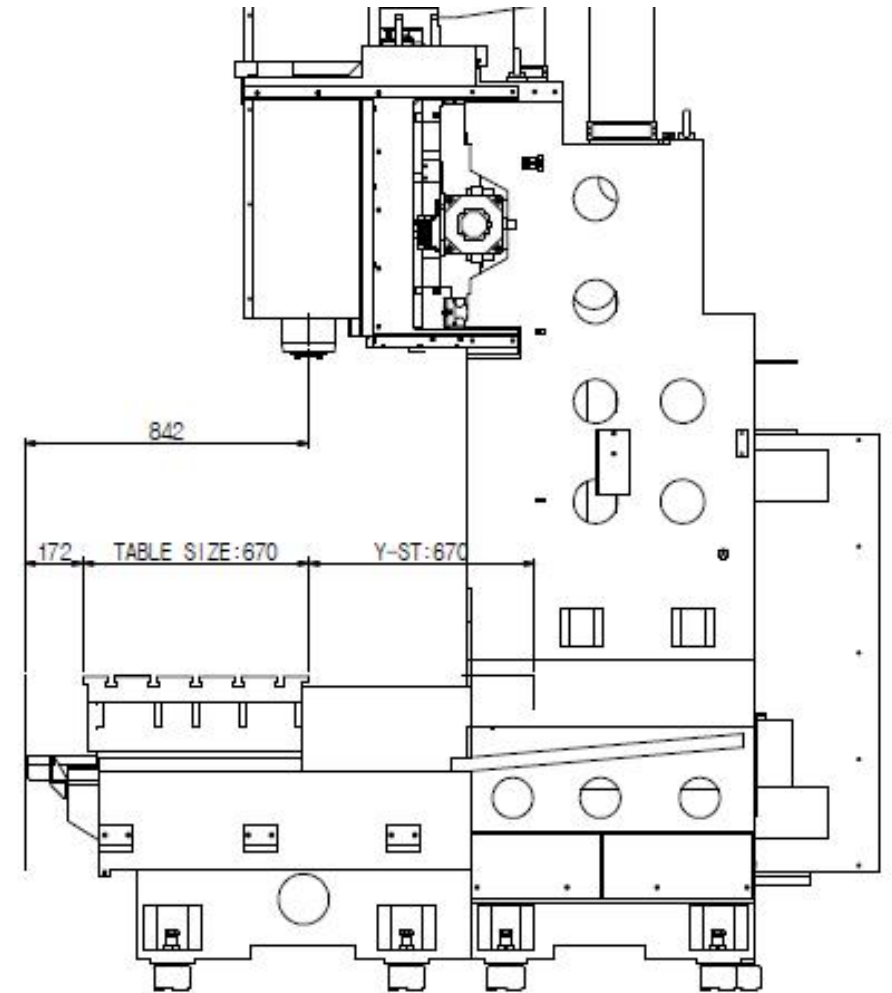
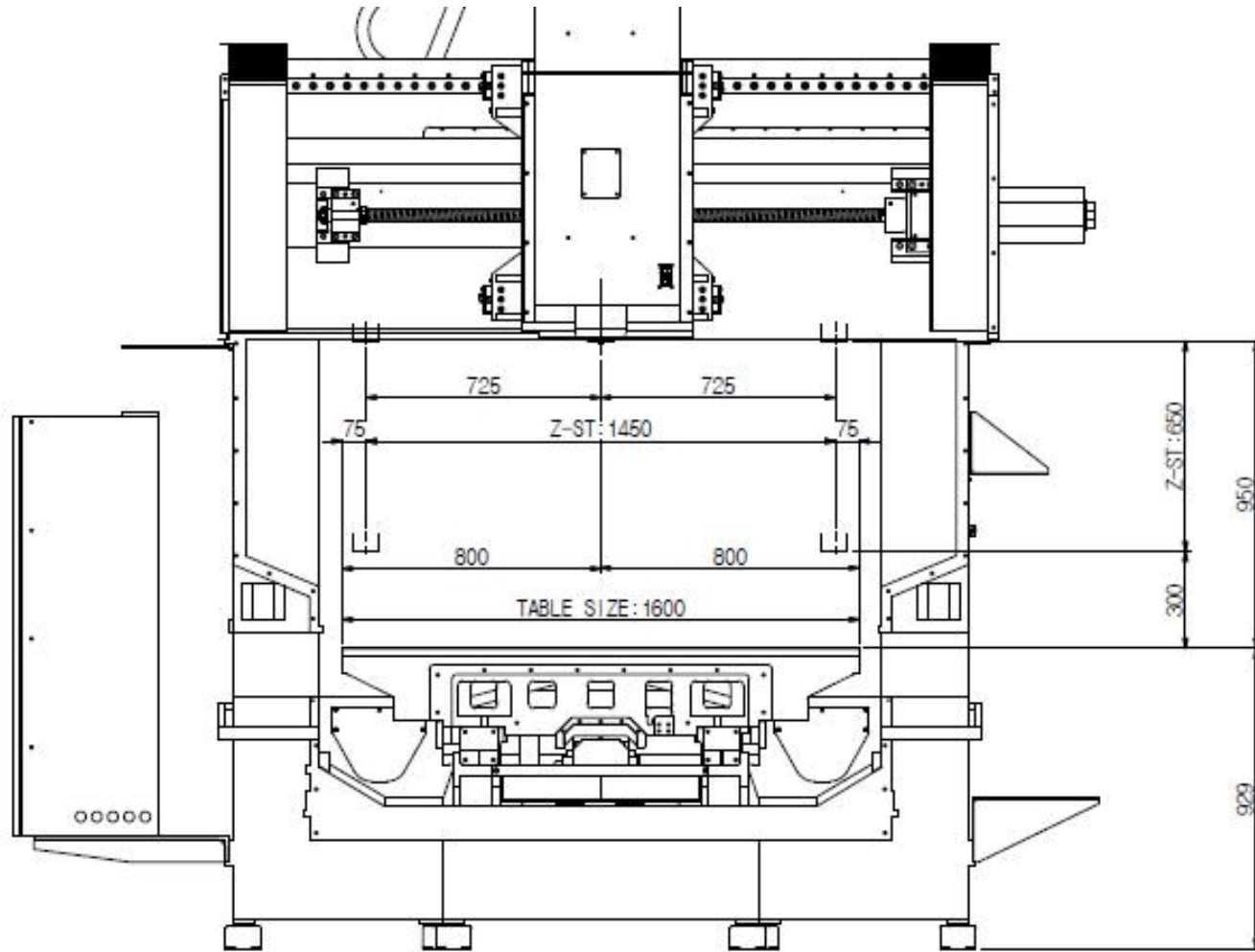


200mm
Apply Rising
Block

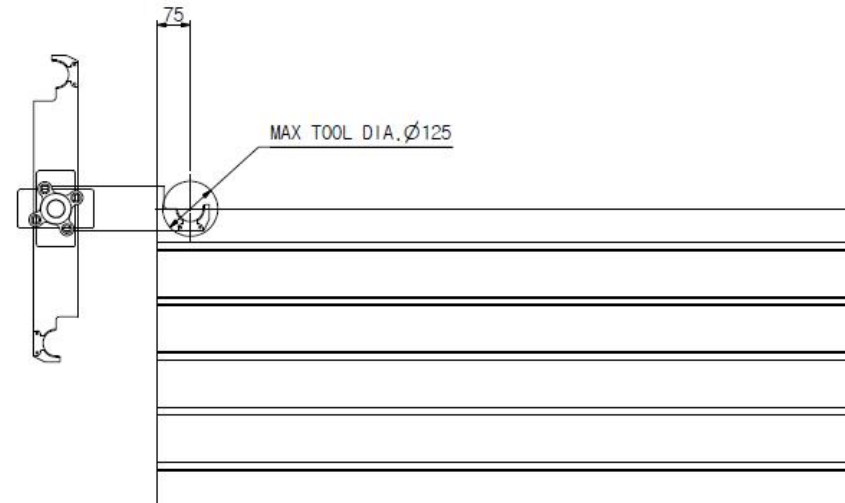
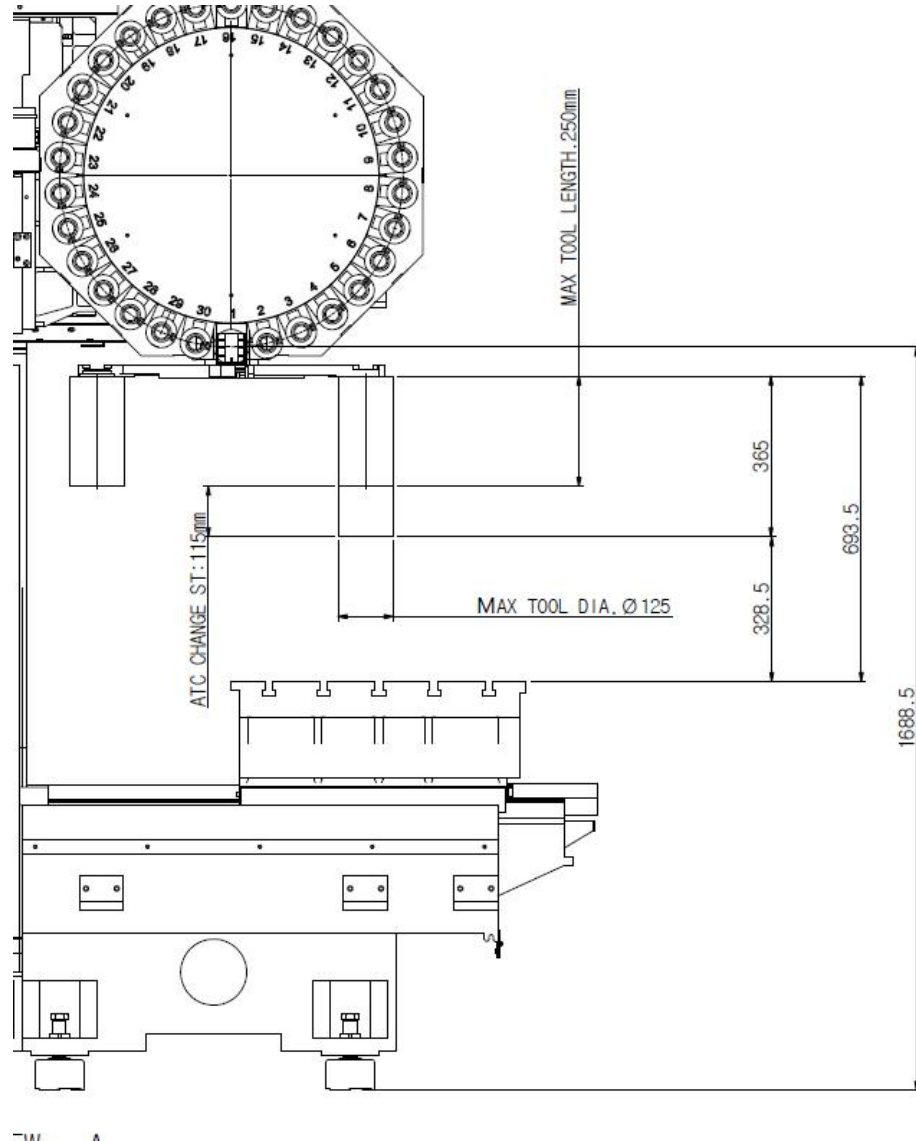
Machine Layout



Machine Layout(200mm HIGH COLUMN)



Machine Layout



SMART
MACHINE TOOL

A detailed 3D CAD model of a complex industrial machine, possibly a press or a mold. The machine features a large, dark grey frame with various mechanical components, including a prominent yellow workpiece or mold cavity in the center. The design is intricate, showing multiple levels and moving parts, suggesting a sophisticated manufacturing process. The model is rendered in a clean, technical style with clear lines and distinct colors for different components.

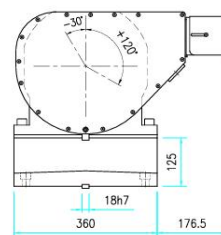
Technical drawing of the PS-150P motor unit. The drawing includes a top view and a side view. The top view shows a circular motor body with a central shaft. Dimensions for the top view include a total width of 536.5, a central shaft diameter of 14, and a mounting flange diameter of 14H7. The side view shows the motor's profile with dimensions for the total height (542), the mounting flange height (163), and the motor body height (140). A callout indicates the mounting flange is made of M6*P1*15DP material with a P.C.D. of 75.

PS.動力,迴授線客戶自備

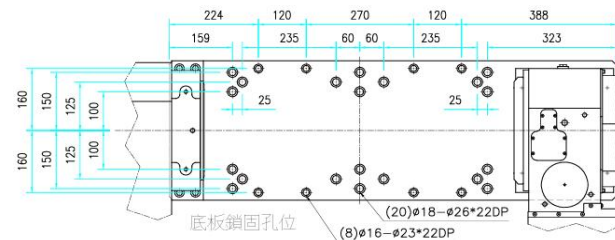
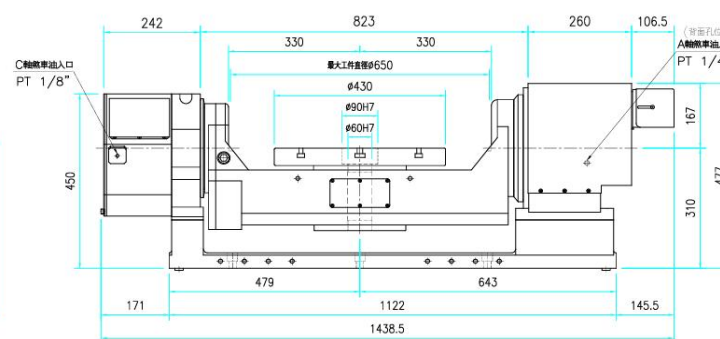
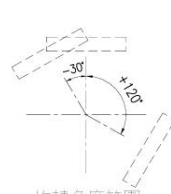
(4)M6*P1*15DP
P.C.D 75

536.5
14
14H7
393
391
542
163
140

盤面T溝尺寸(1:4)

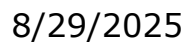


旋轉角度範圍

[illegible]

零件名稱	外型尺寸圖		版次	A	繪圖比例	1:13	繪圖	李德	泳	2024.07.31		 德士精科股份有限公司 TE-SHIN Precision Technology CO.,LTD. C.C.S-Customer confirmation sheet
零件圖號	DFW430DEX00001				投影法		數量	1 件/組		單位	mm	

SMART
MACHINE TOOL



Ballbar Test (Circularity)

- SMART NVD6700 achieve excellence circularity result of **3.2 micron**

1 퍼센트 2 값 3 표 4 테스트 조건

Ballbar diagnostics (%) XY 360각도 100mm 20250108-center1

Operator: 20220212
Date: 2025-Jan-08 16:14:25

RENISHAW

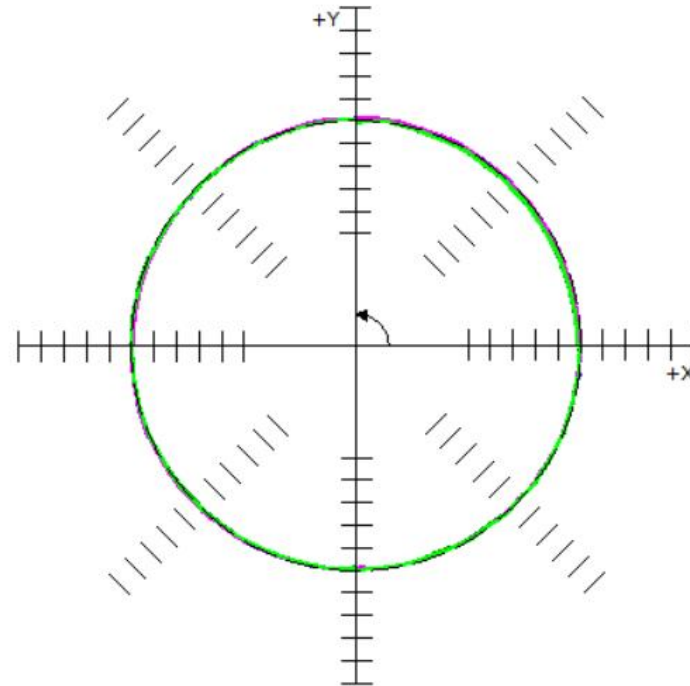
Machine: Quick check
QC20-W: 3RGK51, Last calibrated: 2021-09-28

18% Reversal spikes Y
▲ -1.0μm
▼ -1.0μm
15% Straightness X
-1.8μm
14% Lateral play X
▶ -0.1μm
◀ -1.2μm
10% Backlash X
▶ 0.3μm
◀ 0.6μm
10% Cyclic error Y
↑ 0.5μm
↓ 0.6μm

Circularity

3.2μm

- Run 1
- Run 2
- Fit 1
- Fit 2



10.0μm/div