

PreMill

MMD Werkzeugmaschinen GmbH
The house of experience

HM 400 / HM 630

Powered by MMD

Controllers:

- Siemens 828 D SL (standard)
- Siemens 840 D SL
 - Mitsubishi M70 / 700
 - Fanuc 0i MD

Standard accessories

- **Siemens 828 D SL**
- **Direkt spindle 10000 U/min**
- **Spindle oil cooler (activ)**
- **Heat exchanger at switch cabinet**
- **Auto Power Off (APO)**
- **Rigid Tapping**
- **RS232/Ethernet/USB**
- **Userfriendly ful housing and covers for guides**
- **Linear guides (rollers)**
- **Coolant supply: ring flushing at spindle and sidewise adjustable coolant nozzles water/air**
- **IKZ 30 Bar**
- **Chip conveyor (hinge) with chip tray**
- **2 spiral conveyor in Z direction**
- **Chip flushing**
- **Cleaning guns water/air**
- **Electr. handwheel**
- **Signal lamp 3 colors LED**
- **Working space light LED (Planonlight)**
- **Central lubrication LHL (grease)**
- **CE**
- **Manuals**

Optional accessories

- **Air condition at switch cabinet**
- **Hinge belt type chip conveyor**
- **Oil Skimmer**
- **Oil fog lubrication**
- **Extraction**
- **IKZ 70 Bar**
- **Air through spindle**
- **Direct position sensor Heidenhain**
- **Tool measuring**
- **3D Workpiece measuring**
- **etc.**

Accuracy

- Positioning $\pm 0.005 \text{ mm}$
- Repeatability $\pm 0.003 \text{ mm}$

- All machines are made in accordance to VDI/DGQ3441
- Laser measuring
- Renishaw
- Vibration check milling spindle
- ISO 9001



- All machines are able to be equipped with direct position sensor make Heidenhain.

HM 400



Machine design



Stepped bed
X axis

Pallet carrier



Tool magazine disc
type

Active spindle
cooling
standard



Internal cooling (option)

30 Bar with double filter system (standard)

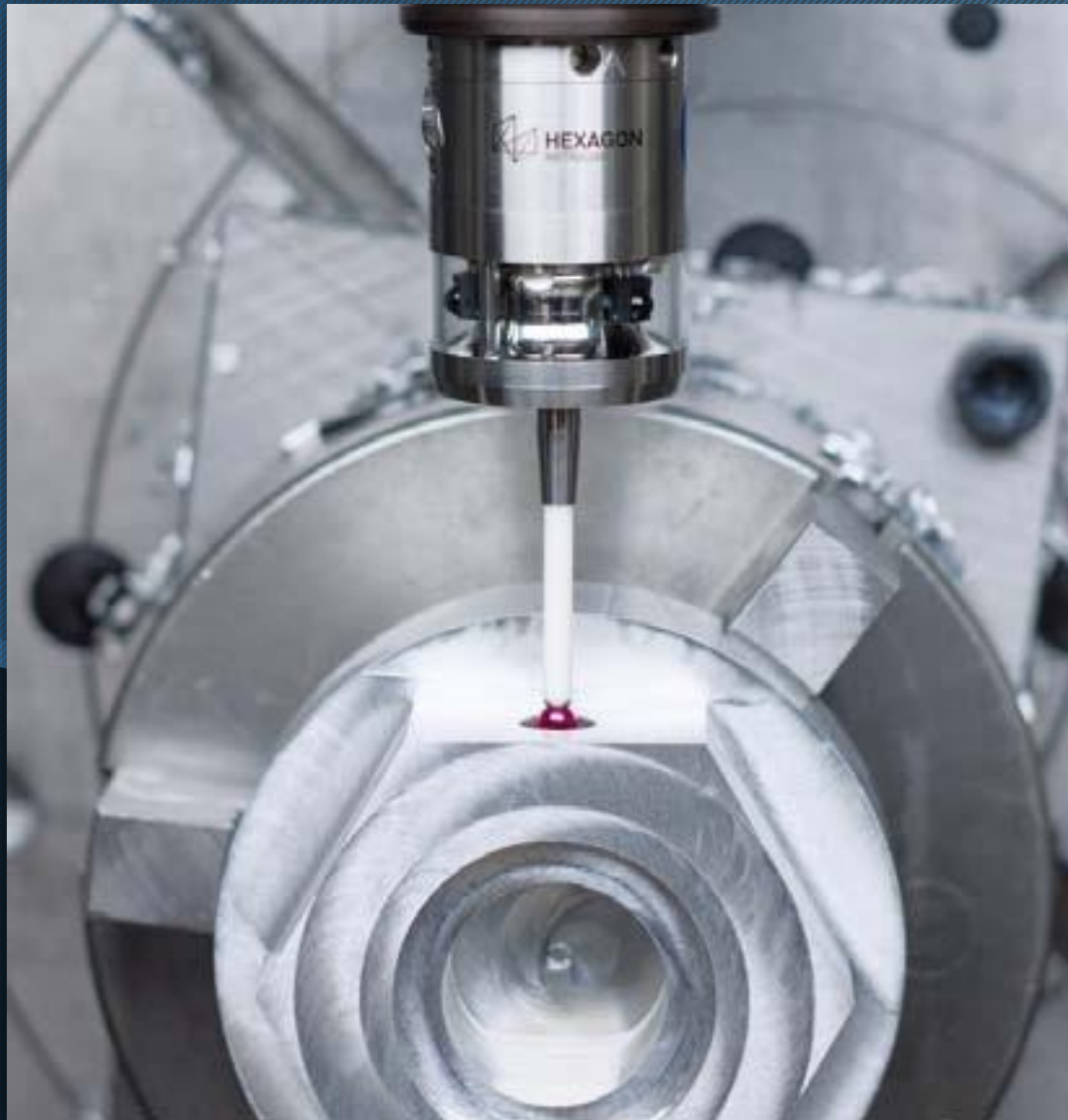


70 Bar with 300l extra tank

Air through spindle (option)

Measuring HEXAGON m&h

3D workpiece measuring



Button/Laser tool measuring



* other brands possible on customers demand

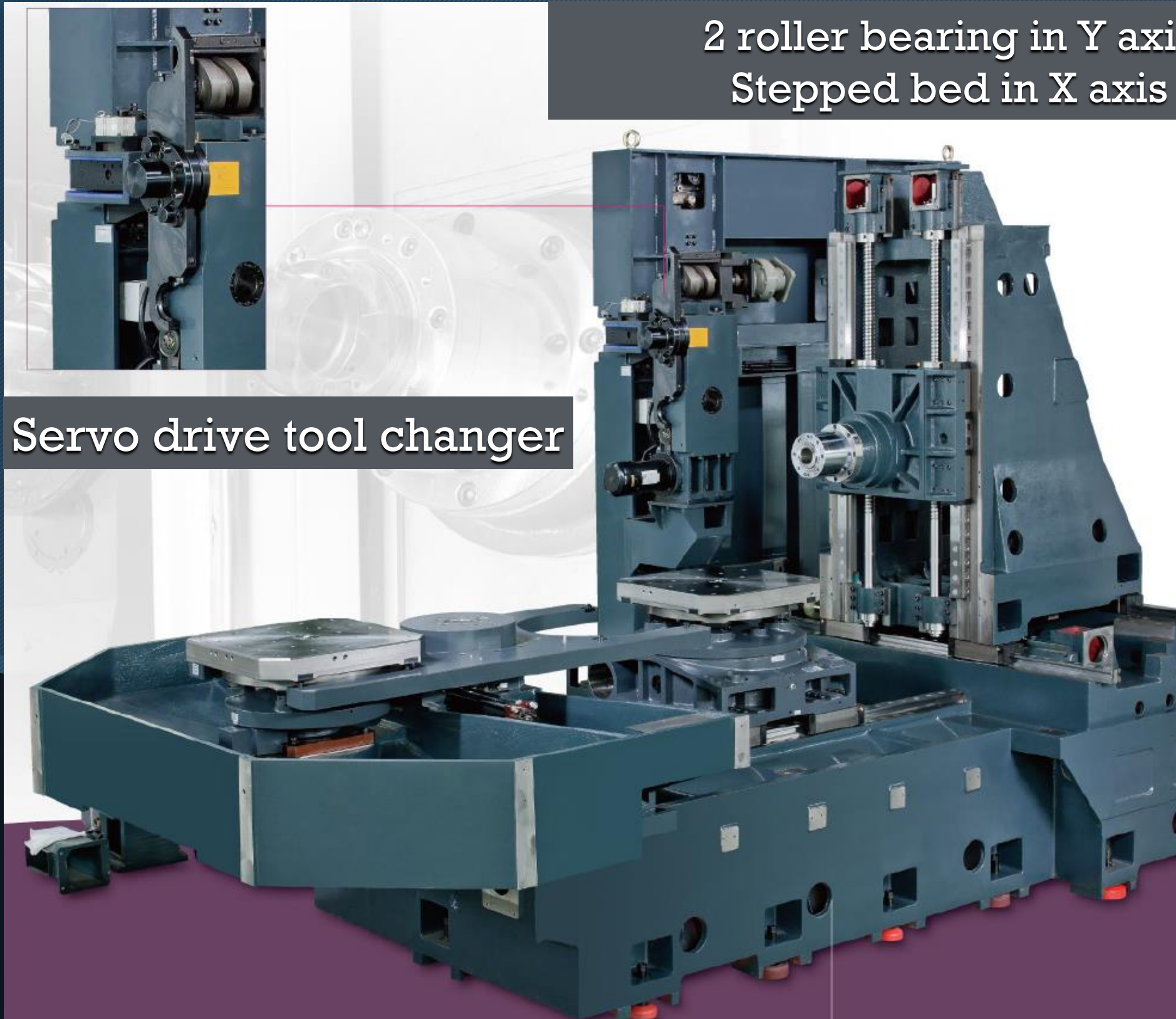
HM 630

HM 630



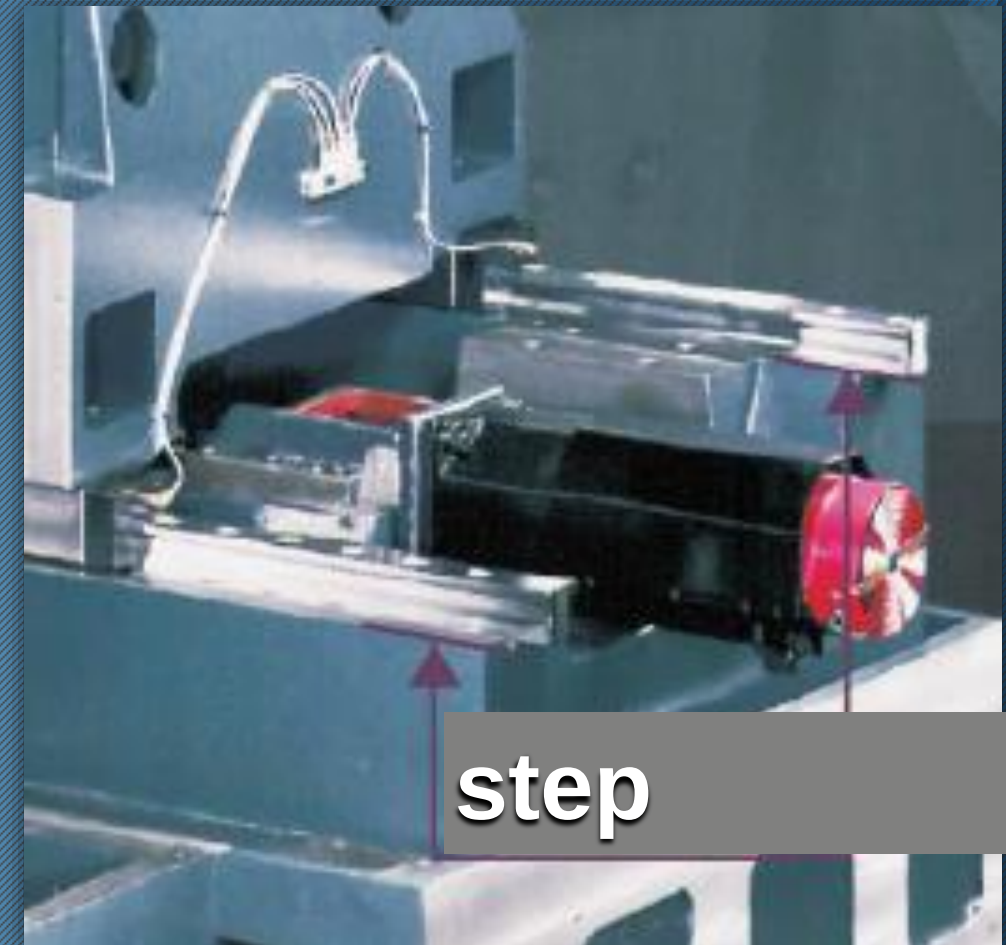
2 roller bearing in Y axis
Stepped bed in X axis

Servo drive tool changer



Stepped bed X axis

2 ball screws in Y - axis



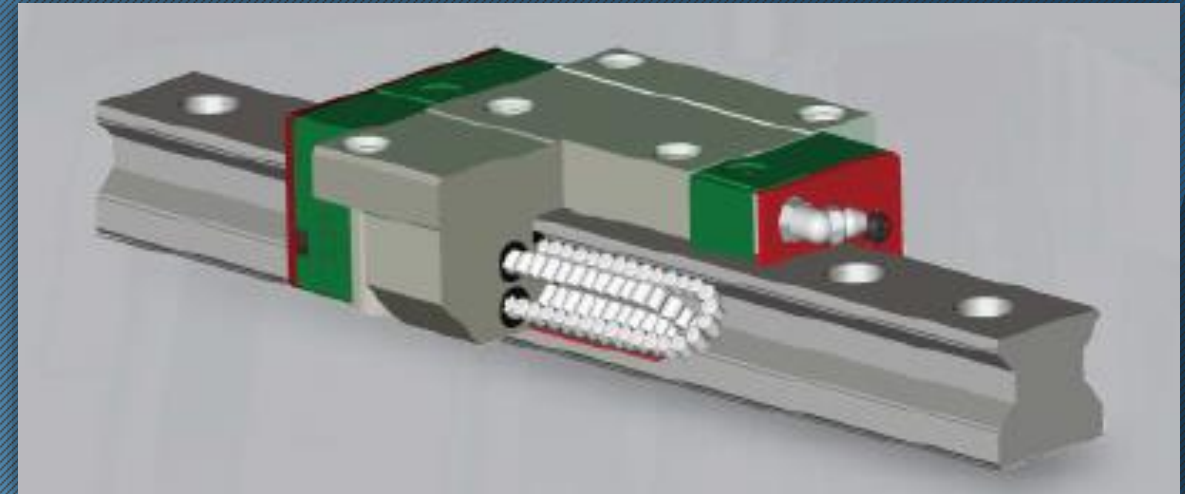
Central lubrication



LHL system (grease)

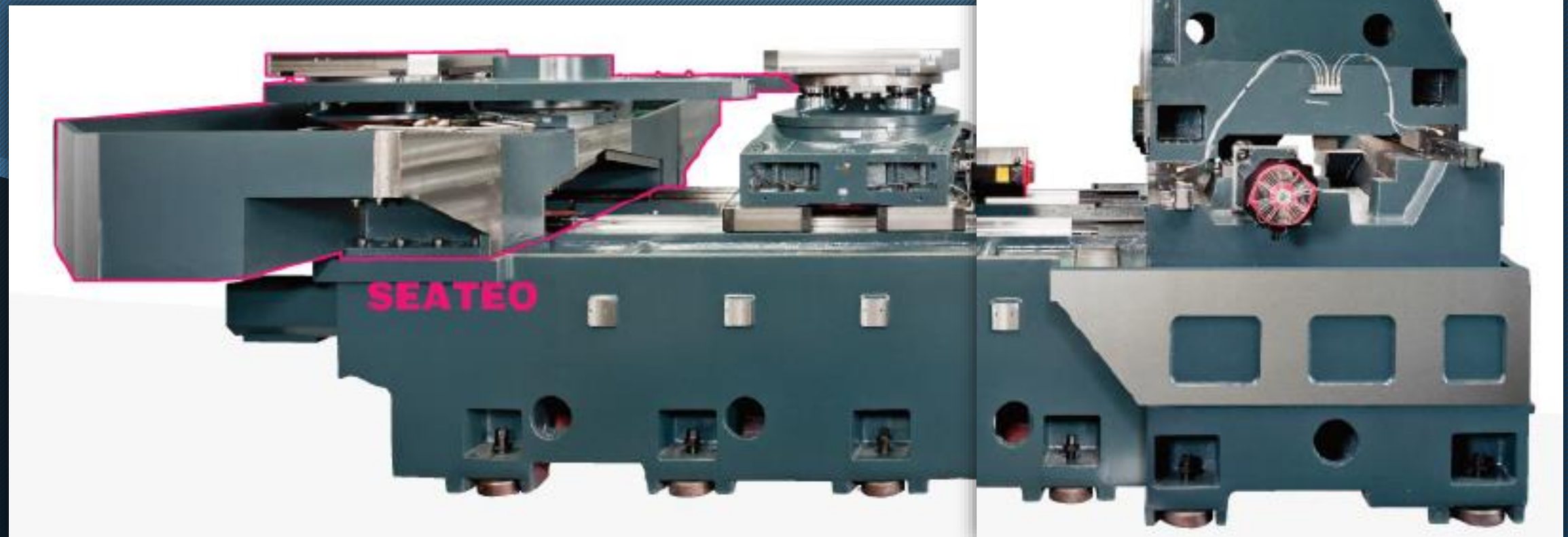
Linear roller bearings

Direct drive

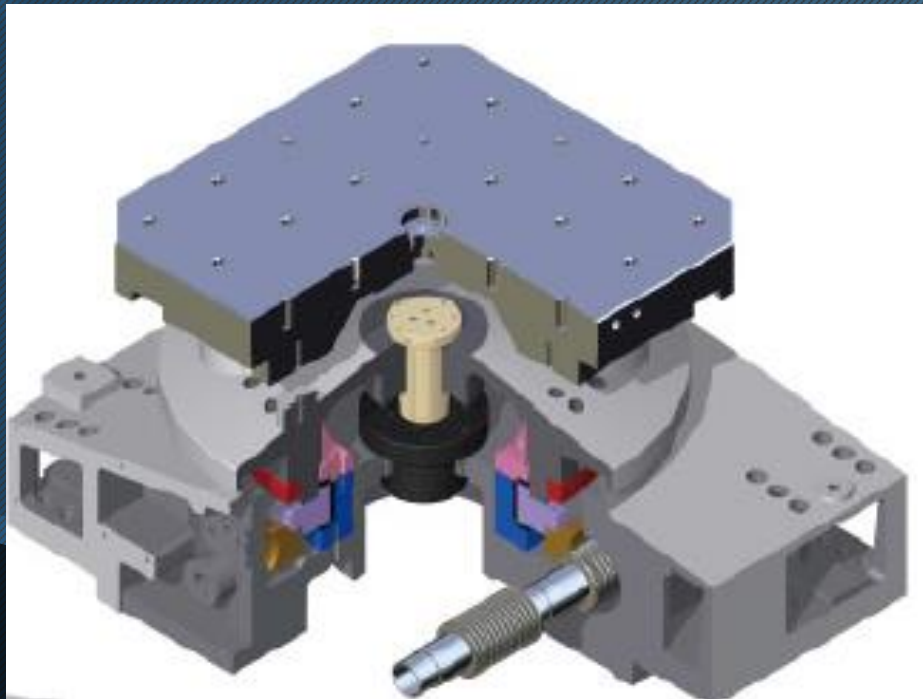


Auto. Pallet changer

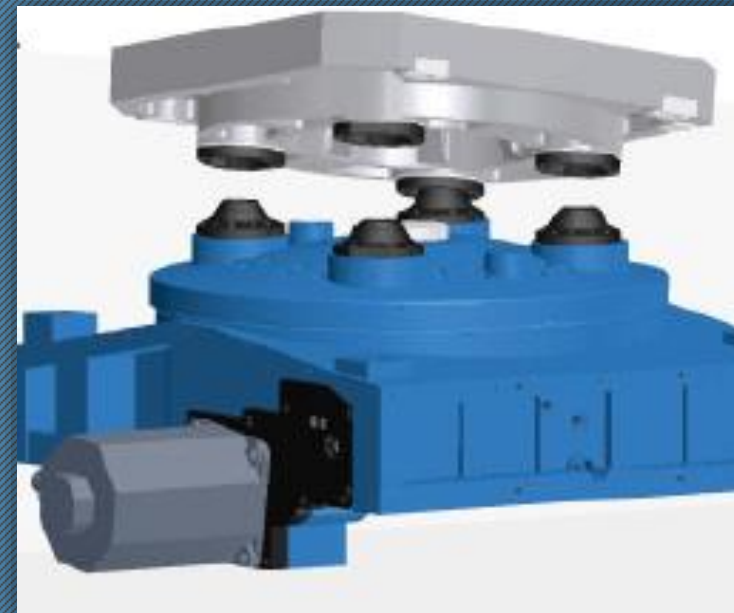
Index B axis 0.001° or 5°



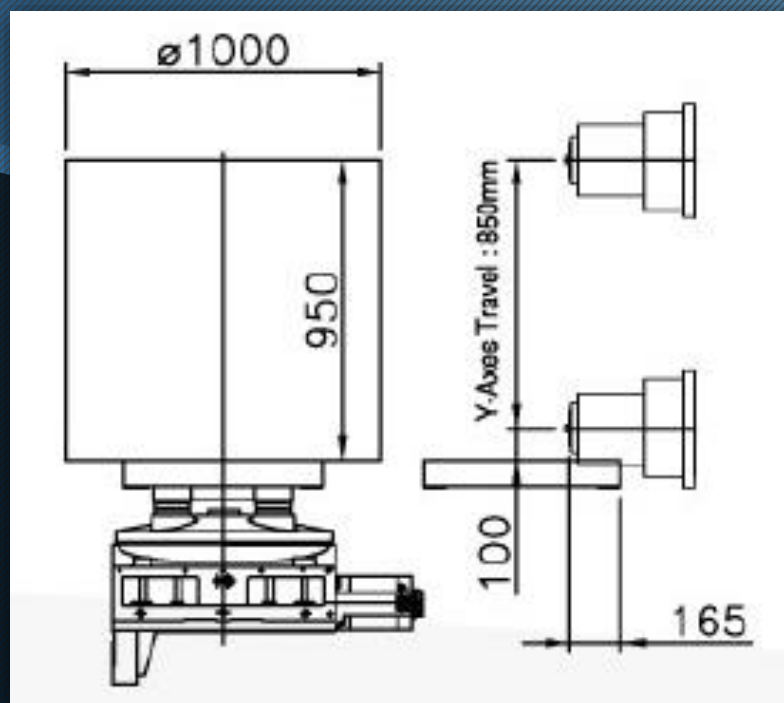
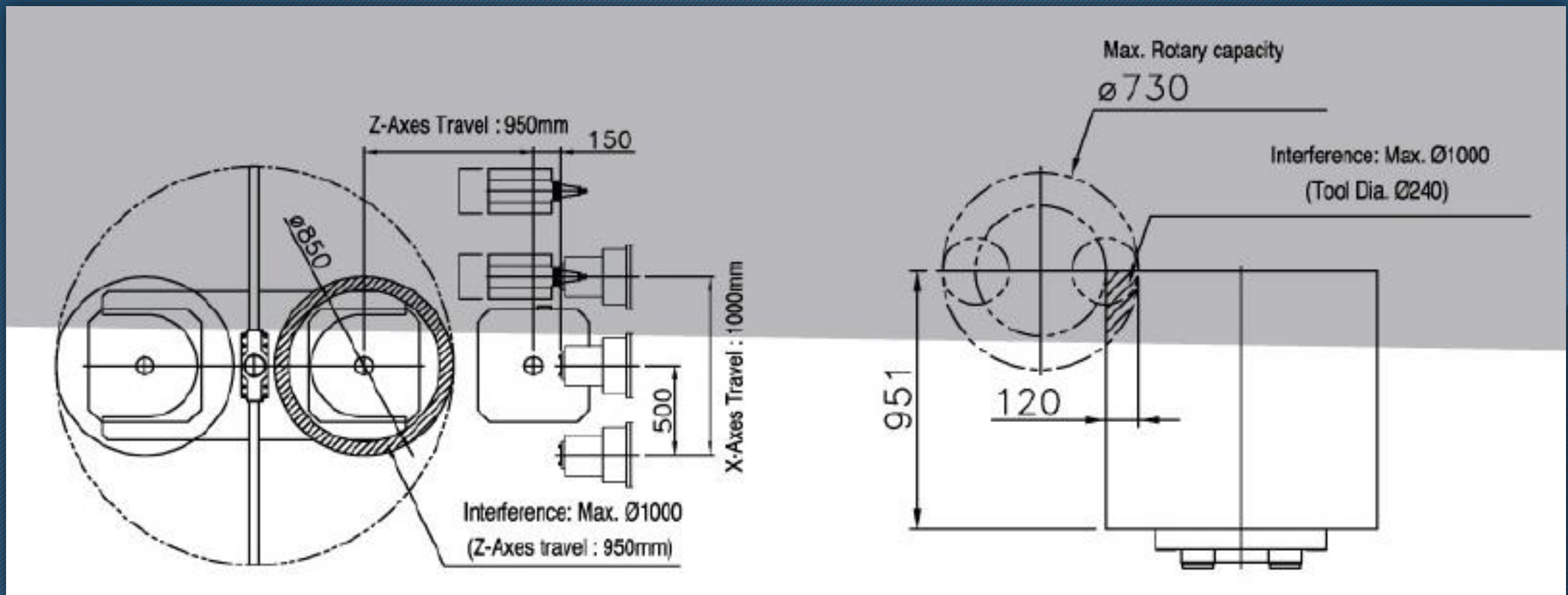
Function B axis



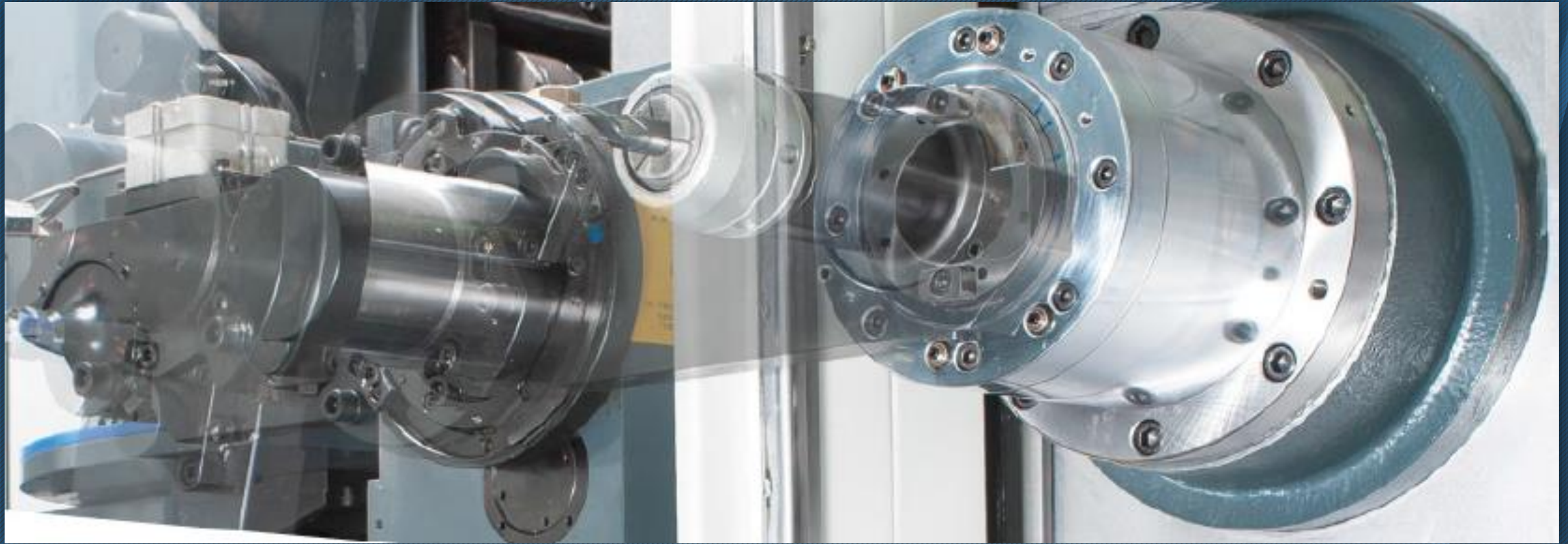
Worm gear drive



Pallet clamp

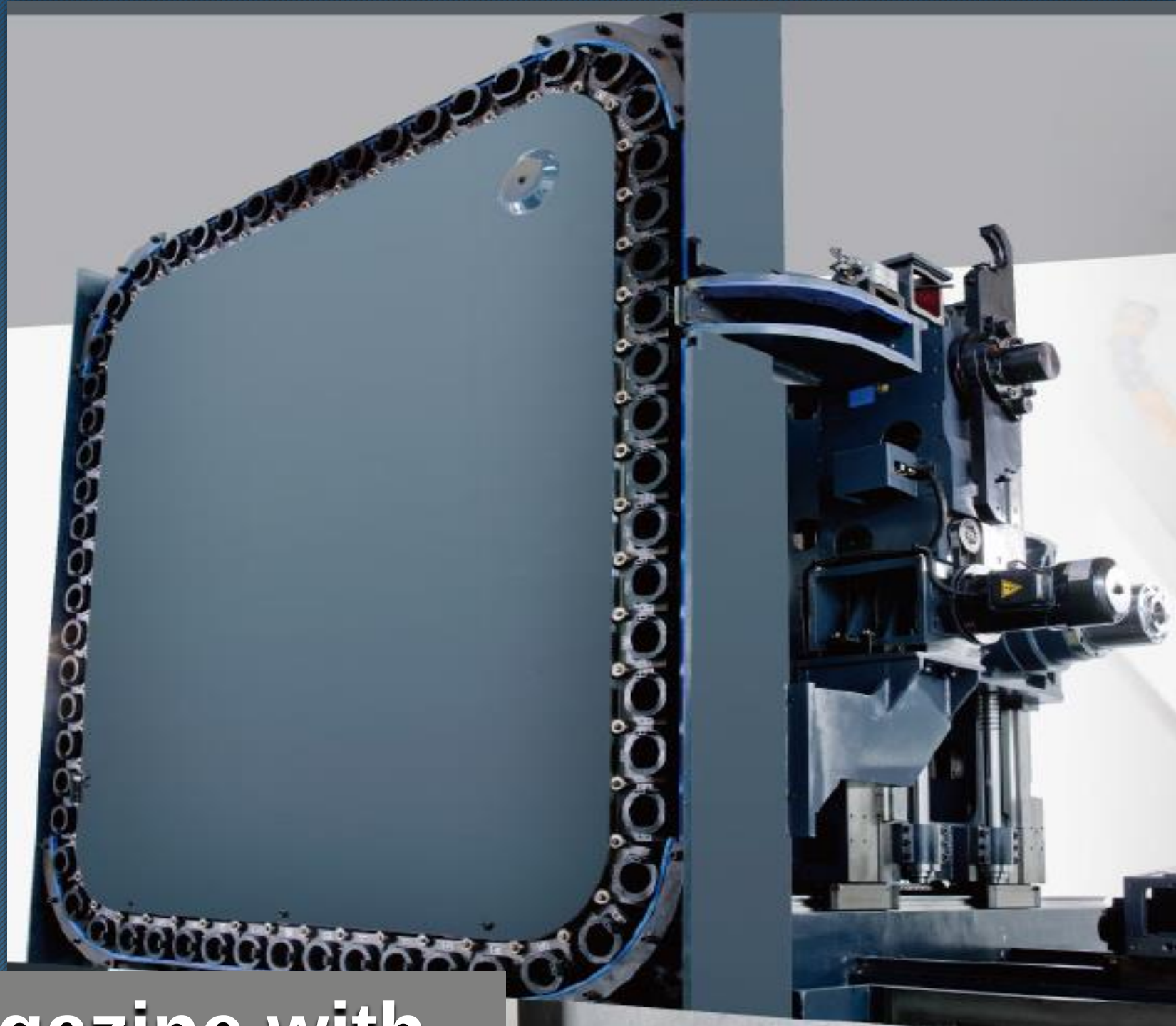


Working space
max. workpiece (HM 630)



Tool changer





**Tool magazine with
60 / 90*
tools**

Chip extraction



Pallet flushing/chip flushing

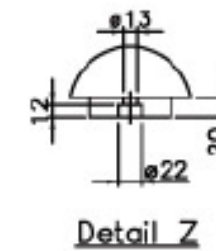
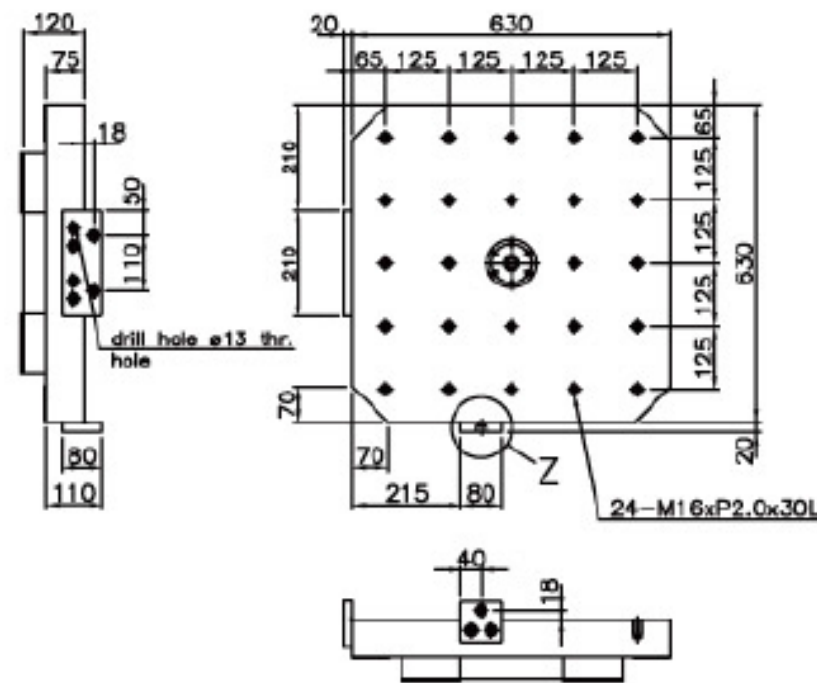
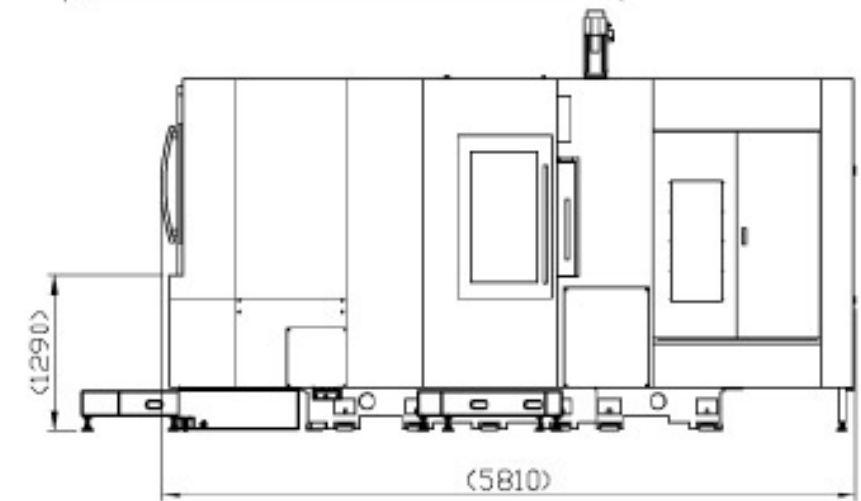
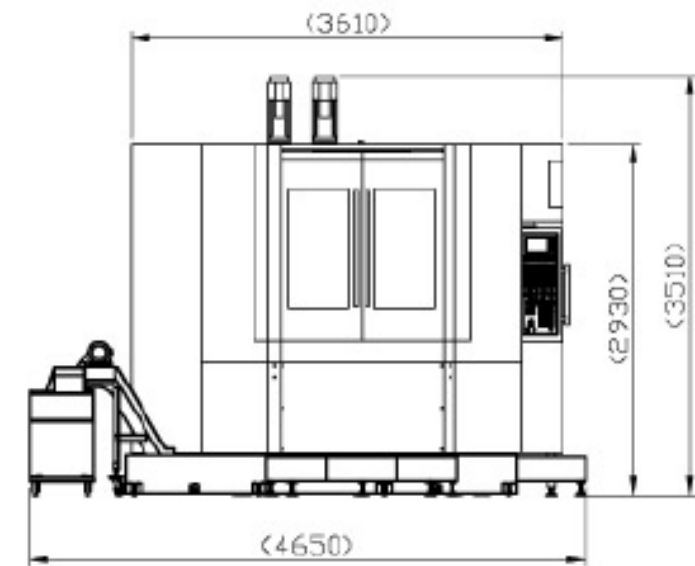
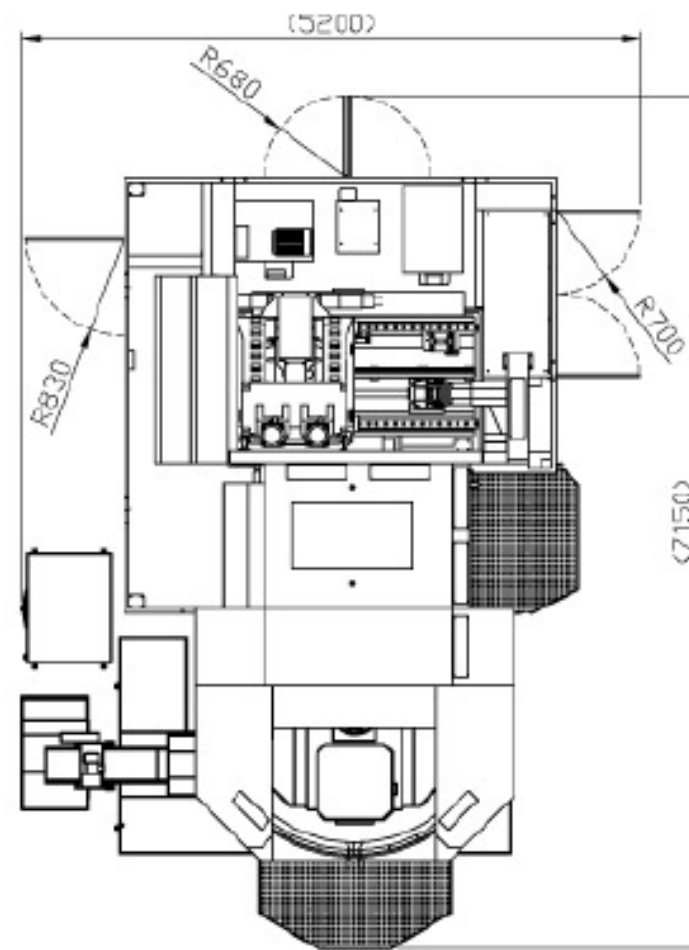


Spiral conveyor



Hinge conveyor

Dimensions



Technical data

HM 400 / HM 630

	HM 630	HM 400
Steuerungen:	Siemens/Fanuc/Mitsubishi	Siemens/Fanuc/Mitsubishi
Wege:		
X - Achse	1000 mm	630 mm
Y - Achse	850 mm	630 mm
Z - Achse	950 mm	630 mm
Spindelmitte auf Paletten Oberfläche	100 - 950 mm	50 – 680 mm
Spindelnase auf Paletten Mitte	150 - 1100 mm	130 - 760 mm
Paletten Anzahl*	2	2
Tischgröße (L/B):	630 x 630 mm	400 x 400 mm
max. Werkstückgröße	Ø1000 x 950 mm	Ø400mm
max. Werkstückgewicht	1000 Kg	400 Kg
Wechselzeit Palette	14-16 sec.	12 - 20sec.
Indexierung	0.001° oder 1°	0.001° oder 5°
U/min	11.1 U/min	11.1 U/min
Hauptspindel:		
Hauptmotor bei 100 %ED	15/18.5 kW*	12kW*
Kraftübertragung	direkt	Direkt
U/min	10000/6000*	10000*
Spindelkonus DIN ISO	SK 40 / SK 50*	SK 40*
Spindelkühlung	Öl	ÖL
Eilgang X / Y / Z m/min	36/36/36	36/36/36
Vorschub m /min	10	10
Genauigkeit		
Positionsgenauigkeit	± 0.005 mm	± 0.005 mm
Wiederholgenauigkeit	± 0.003 mm	± 0.003 mm
Werkzeugwechsler		
Magazin/ opt.	60 / 90*	40 / 60 / 90*
max. Werkzeugdurchmesser	120 mm	80 mm
max. Werkzeugdurchmesser ohne Nachbarw.	240 mm	150 mm
max. Werkzeuglänge	400 mm	300 mm
max. Werkzeuggewicht	7kg/20 kg	7 kg
Abmaße:		
Hydraulikbehälter	60 l	60 l
Kühlmittelbehälter	500 l	250 l
IKZ	30 bar / 70 bar	30 bar / 70 bar
Späneförderer	Schanier*	Schanier*
Platzbedarf(L / B)	7150 x 5200	5830 x 4581
Höhe	3510	2735
Gewicht	20 to	12 to

Please call us and we will compile your
wanted machine.

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