



CNC LATHES SERIES

TNC-10/10A/15 SERIES

TNC-20A/30N/40N/40NE SERIES

- *FAST TURRET INDEXING*
- *HIGH ACCURACY MACHINING &
LONGER LIFE TIME*
- *COMPLETE SPINDLE WITH PULLEYS
DYNAMIC BALANCE TEST*

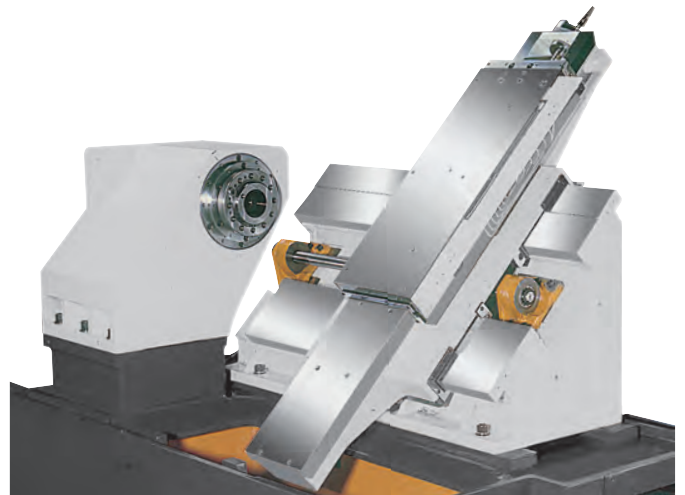
CNC-TAKANG

CNC-TAKANG CO., LTD.
MANUFACTURER & EXPORTER

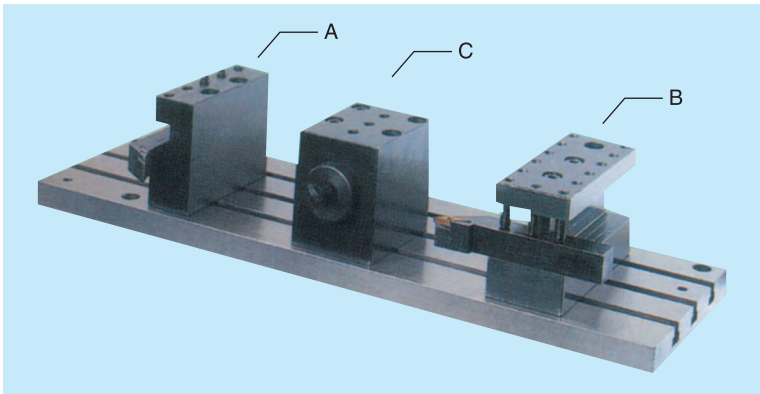
TNC-10 / 10A / 15

FEATURES:

The 45° bed is a one piece, close grained casting mounted on a cast-iron base. Widely spaced hardened and ground slideways combined with the 32 mm dia. Z axis ball screw give exceptional rigidity. The slideways are coated with Teflon to eliminate stick-slip, minimise wear and maintain long term accuracy.



TNC-10



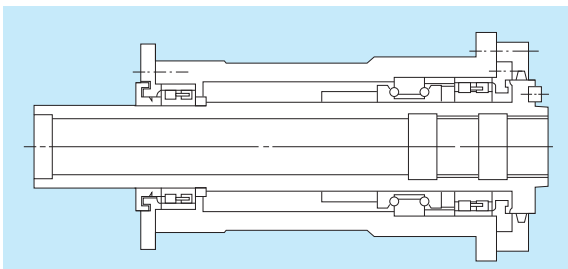
▲ ADDITIONAL SUB-PLATE FOR CUTTING TOOLS PRESET

The gang-tooling concept is an exceptionally rapid method of presenting a variety of different tools to the work-piece without the delays of turret retraction and indexing, thus eliminating unproductive, NON-machining time.

Removable sub-plates are utilized that accommodate a wide range of turning tools as well as a milling head.

Easily pre-set for individual jobs, fast, accurate and efficient turning, milling, and off-center drilling and tapping can easily be accomplished in one chucking.

The entire tooled sub-plate can be removed simply, then stored until the job is repeated or if preferred, the tools may be easily re-arranged on the sub-plate and set-up for a different job.



▲ RIGID HIGH SPEED SPINDLE

The main spindle is supported by five precision angular contact bearings combining high accuracy with rigidity for heavy metal removal.



▲ HEADSTOCK

The headstock design allows efficient heat dissipation for maximum thermal stability.

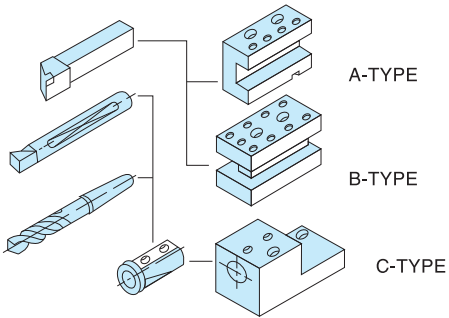


◀ OPERATOR CONVENIENCE BY FANUC

The built-in control console is always accessible to the operator and contains all manual, semi-automatic, and CNC function controls.

TNC-10/10A/15

▼ TOOLING SYSTEM

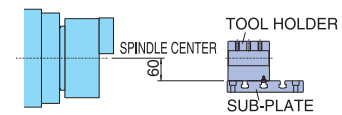
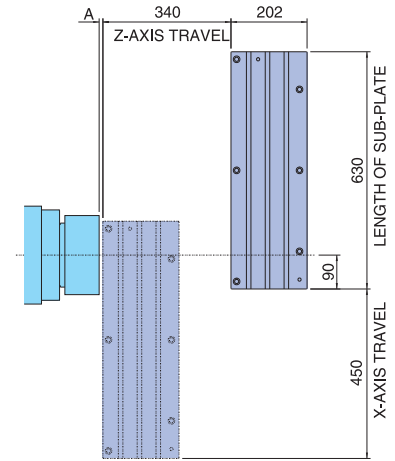


▼ WORK RANGE

TNC-10 / 10A / 15

A: 10 (TNC-10 / 10A)
A: 60 (TNC-15)

CHUCK SIZE:
TNC-10 : 6"
TNC-10A : 8"
TNC-15 : 10"



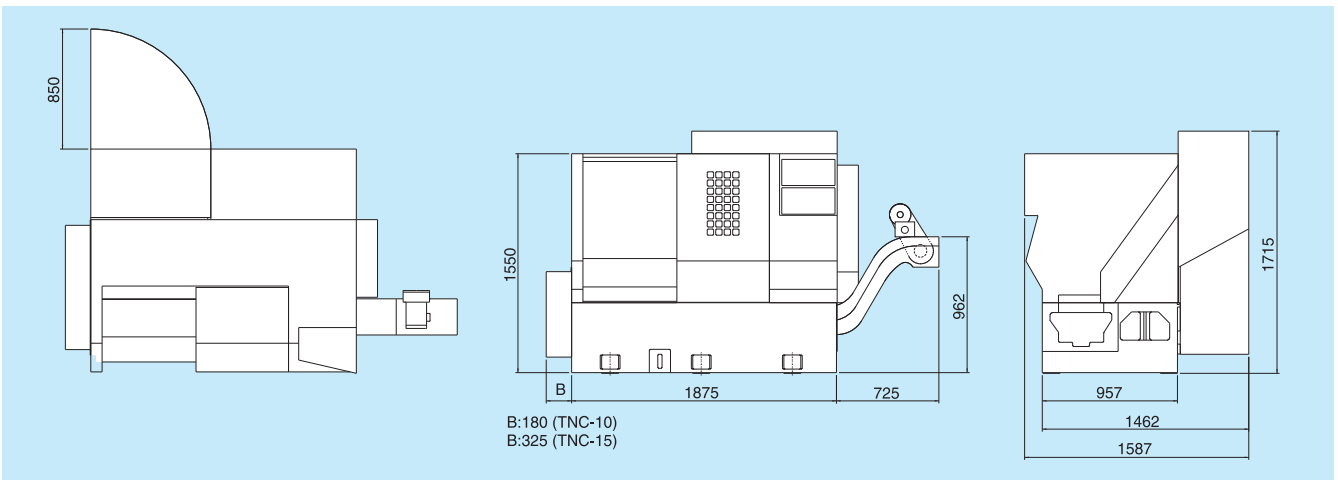
▼ FLOOR SPACE

TNC-10 / 10A

LxWxH: 2780x1587x1715mm

TNC-15

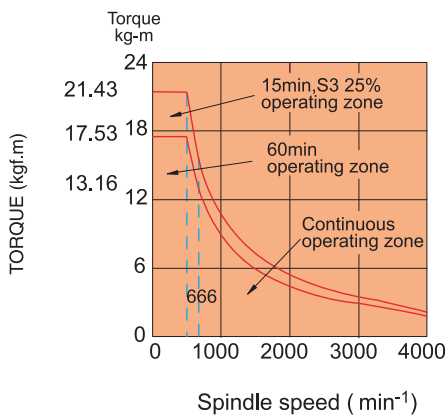
LxWxH: 2925x1587x1715mm



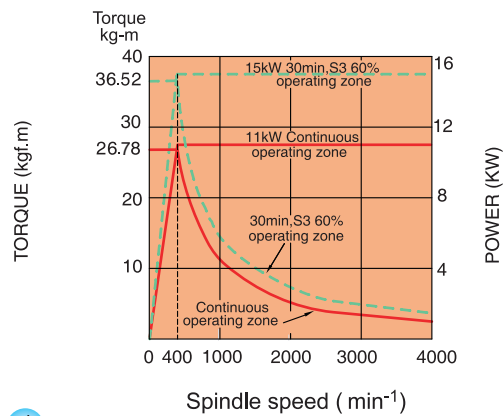
▼ OUTPUT TORQUE

--- 30min, 50%ED Operating Zone
— Continuous Operating Zone

TNC-10 / TNC-10A FANUC β iP18 Motor



TNC-15 FANUC α iP22 Motor



SPECIFICATIONS

MODEL	DESCRIPTION	TNC-10	TNC-10A	TNC-15
Capacity	Swing over bed / Sub plate	Dia. 400 / 120 mm (15.7" / 4.7")	Dia. 400 / 120 mm (15.7" / 4.7")	Dia. 400 / 120 mm (15.7" / 4.7")
	Sub plate length	630 mm (24.8")	630 mm (24.8")	630 mm (24.8")
	Hydraulic chuck	Dia. 160 mm (6")	Dia. 210 mm (8")	Dia. 254 mm (10")
Spindle	Spindle nose	A2-5	A2-6	A2-8
	Spindle bearing diameter	Dia. 90 mm (3.5")	Dia. 100 mm (3.9")	Dia. 130 mm (5.1")
	Spindle bore	Dia. 56 mm (2.2")	Dia. 62 mm (2.4")	Dia. 87 mm (3.4")
	Bar capacity	Dia. 45 mm (1.7")	Dia. 52 mm (2")	Dia. 75 mm (2.9")
	Spindle taper	MT 6	1:20	1:20
	Spindle speed	40 ~ 4000 R.P.M	40 ~ 4000 R.P.M	40 ~ 3200 R.P.M
Slides	Longitudinal carriage travel (Z)	340 mm (13.3")	340 mm (13.3")	340 mm (13.3")
	Cross slide travel (X)	450 mm (17.7")	450 mm (17.7")	450 mm (17.7")
	X axis rapid traverse	15 M/min	15 M/min	15 M/min
	Z axis rapid traverse	15 M/min	15 M/min	15 M/min
Tool holder	ID Tool holder dia.	Dia. 40 mm (1.6")	Dia. 40 mm (1.6")	Dia. 40 mm (1.6")
	OD Tool holder size	20 x 20 mm	25 x 25 mm	25 x 25 mm
Bed	Width	560 mm (22")	560 mm (22")	560 mm (22")
	Slant angle	45°	45°	45°
Motor	Spindle	βilP 18 9/11 kw	βilP 18 9/11 kw	ailP 22 11/15 kw
	X Axis servo motor	1.8 kw	1.8 kw	1.6 kw
	Z Axis servo motor	1.8 kw	1.8 kw	3.0 kw
	Hydraulic motor	0.75 kw	0.75 kw	0.75 kw
	Coolant pump	0.375 kw	0.375 kw	0.375 kw
	Lubrication pump	25 w	25 w	25 w
Miscellaneous	Power requirement	22 KVA	22 KVA	22 KVA
	X axis ball screw dia.	Dia. 32 mm (1.3")		
	Z axis ball screw dia.	Dia. 32 mm (1.3")		
	Packing size	2920 x 1810 x 2100 mm (114.9" x 71.2" x 82.6")	2920 x 1810 x 2100 mm (114.9" x 71.2" x 82.6")	3230 x 1810 x 2100 mm (127.1" x 71.2" x 82.6")
	Gross weight	3500 kgs	3500 kgs	3800 kgs

※THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

■ STANDARD ACCESSORIES:

1. Hydraulic hollow chuck with cylinder
2. Tool holder type A, B, C, (one of each)
3. Center sleeve, Dia. 8, 10, 12, 16, 20, 25, 32, MT 2 and MT 3 (one of each)
4. Sub-plate
5. Coolant system
6. Automatic lubrication system
7. Work light
8. Chip conveyor

■ OPTIONS:

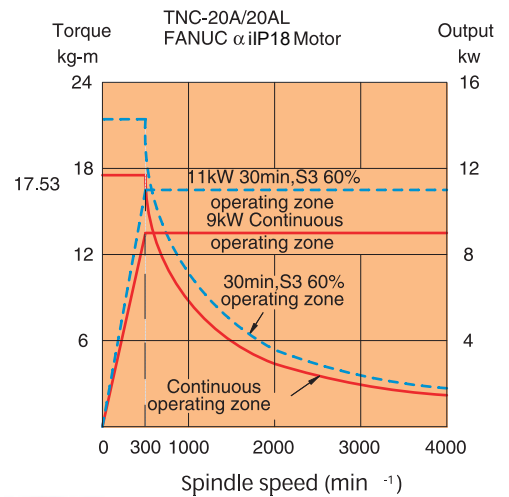
1. Spindle Orientation Indexing (15°)
2. Chuck air cleaner
3. Bar feeder
4. Parts catcher
5. Bar puller
6. Auto door
7. Additional type A, B and C tool holders and sleeves
8. Additional Sub-plate
9. Milling attachment
10. V8 turret
11. Collet chuck and collets

FEATURES

- High rigidity and heavy cutting
- 30 degree slant bed structure are easily for chip removals
- Easy operation
- Enclosed electrical cabinet
- Heat exchanger to maintain low temperature in electrical cabinet
- Programmable tailstock
- Separated coolant tank



▼ MAIN SPINDLE MOTOR OUTPUT AND TORQUE (OPT.)



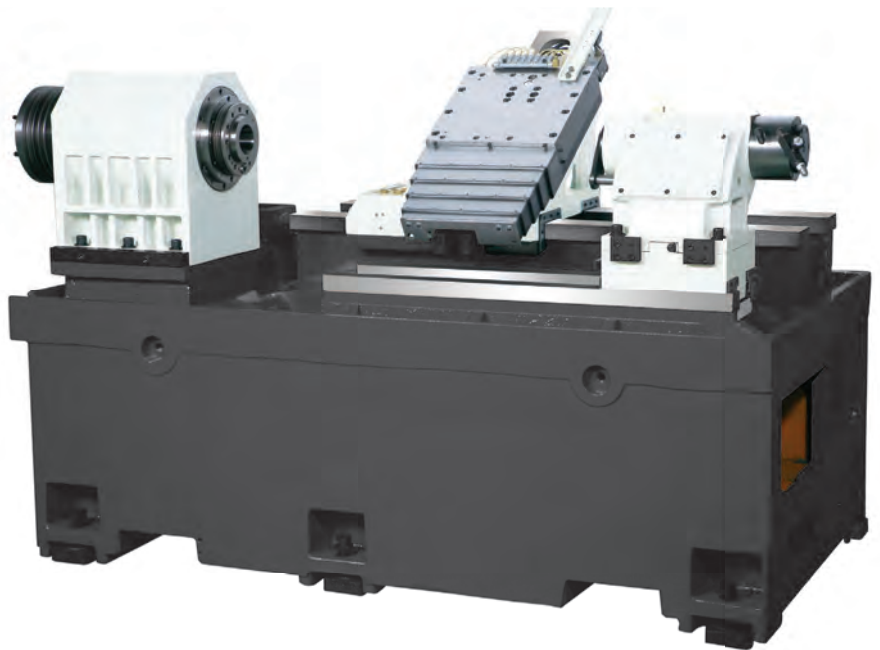
TNC-20A

▼ HIGH RIGID BED STRUCTURE

High tension mechanite cast Iron. Ground and heat treated to offer hardness over HS 70.

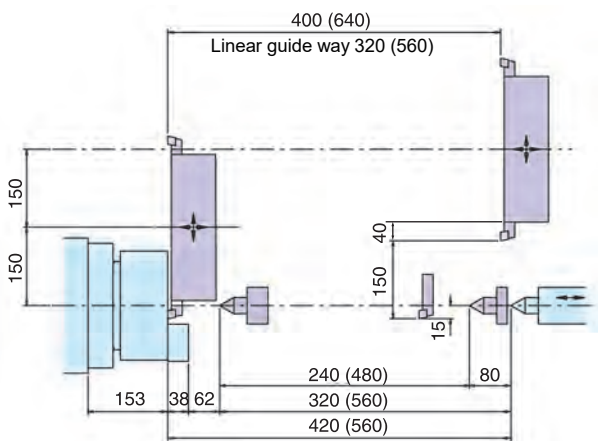
Teflon are coated on all of the slide surfaces, fully ground and scraped to provide a high precision movement as well as positionability.

The space are design in accordance with Ergonomics to offer a smallest machine at high performance utilization on the space and sites. Operations are easily and safely as a matter of Ergonomics design.

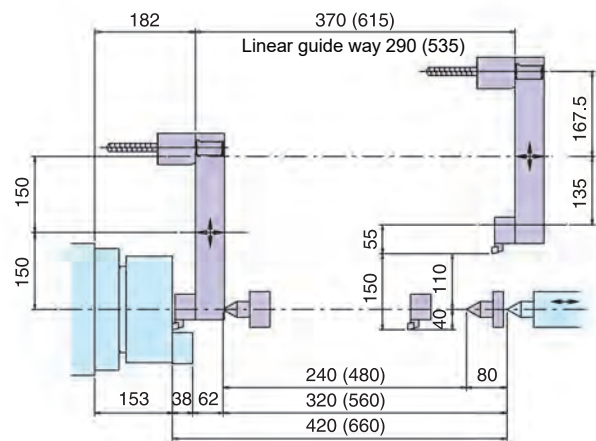


▼ WORK RANGE Unit: mm () for TNC-20AL

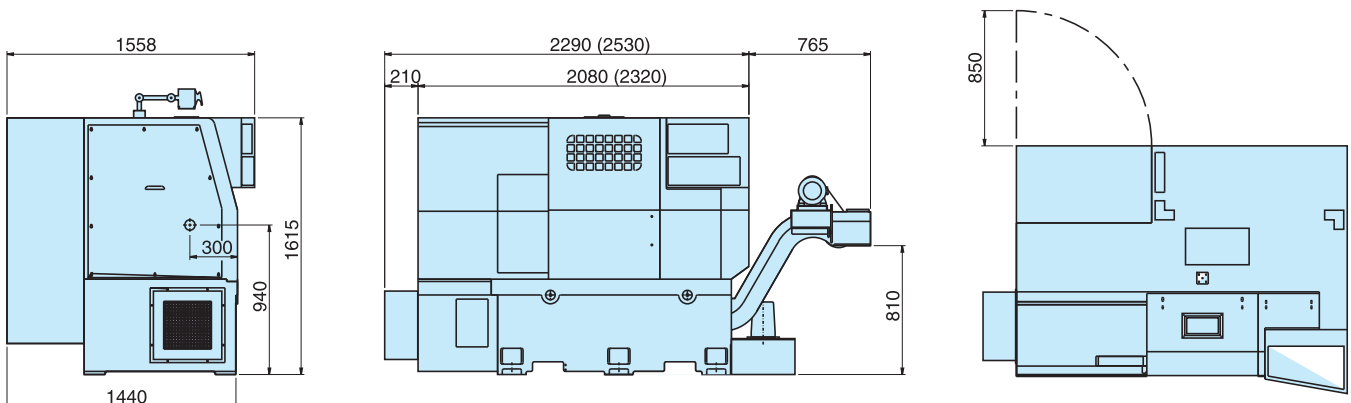
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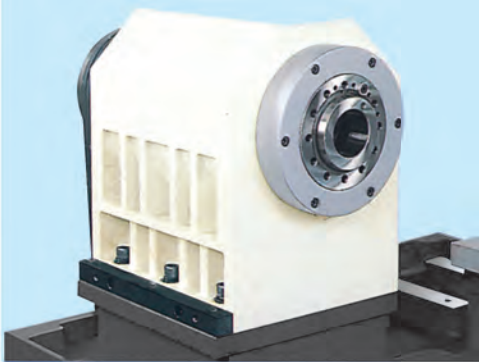


VDI



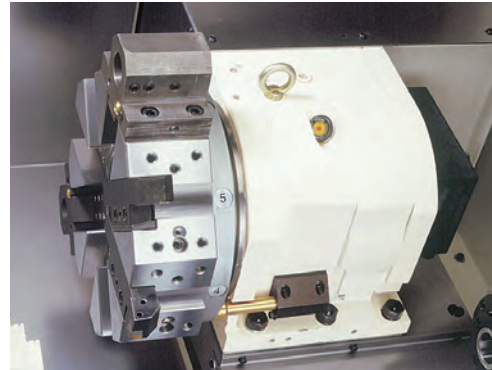
▼ FLOOR SPACE Unit: mm () for TNC-20AL





▲ HIGH PRECISION SPINDLE

This spindle is equipped with double row high precision roller bearings and angular contact thrust double row bearings.



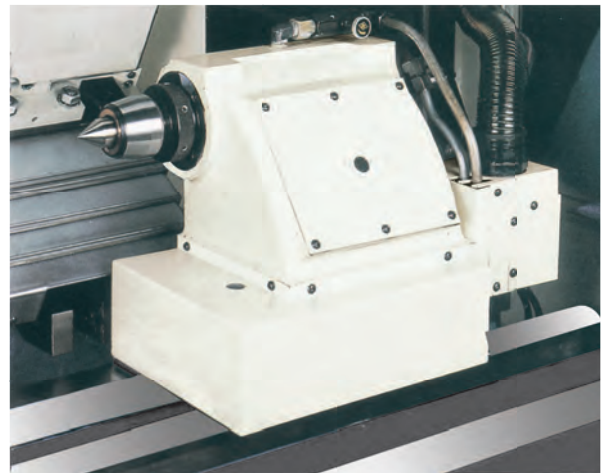
▲ HIGH SPEED AND HIGH ACCURACY TURRET

Hydraulic turret driven by gears and clutch providing a high accuracy. With random system which can be rotated bi-directions to offer a quickest tool change. The tool to tool change time is minimum to 0.2 sec. In case of the longest distance tool change, there is only with 1 second tool change time.



▲ MULTI-PURPOSE MILLING, TAPPING AND DRILLING ON THE DRIVING TOOL TURRET

1. 8 or 12 tools are available on the turret.
2. 6 driving tools are available on the turret offering milling, drilling and tapping operations.
3. Advanced Fanuc controller to offer 0.001 degree resolution accuracy
4. 3 / 5 HP for the driving tool servo motor.
5. 25-4000 RPM for the driving tool turret.



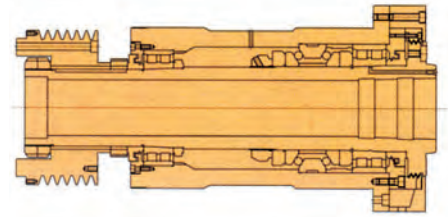
▲ PROGRAMMABLE TAILSTOCK (OPT.)

30N / 40N / 40NE

FEATURES

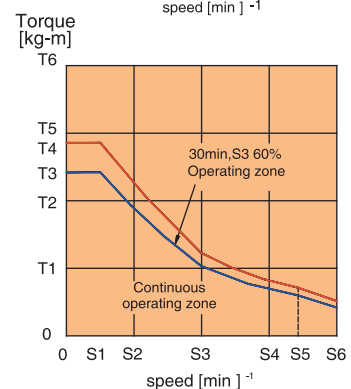
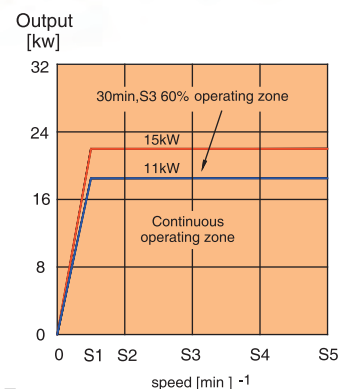
- High rigidity and heavy cutting
- 45 degree slant bed structure are easily for chip removals
- Easy operation
- Enclosed electrical cabinet
- To assure high accuracy machining & machine life, spindle bearing housing with high precision grinding machining complete spindle with pulleys dynamic balance test.
- Programmable tailstock
- Separated coolant tank

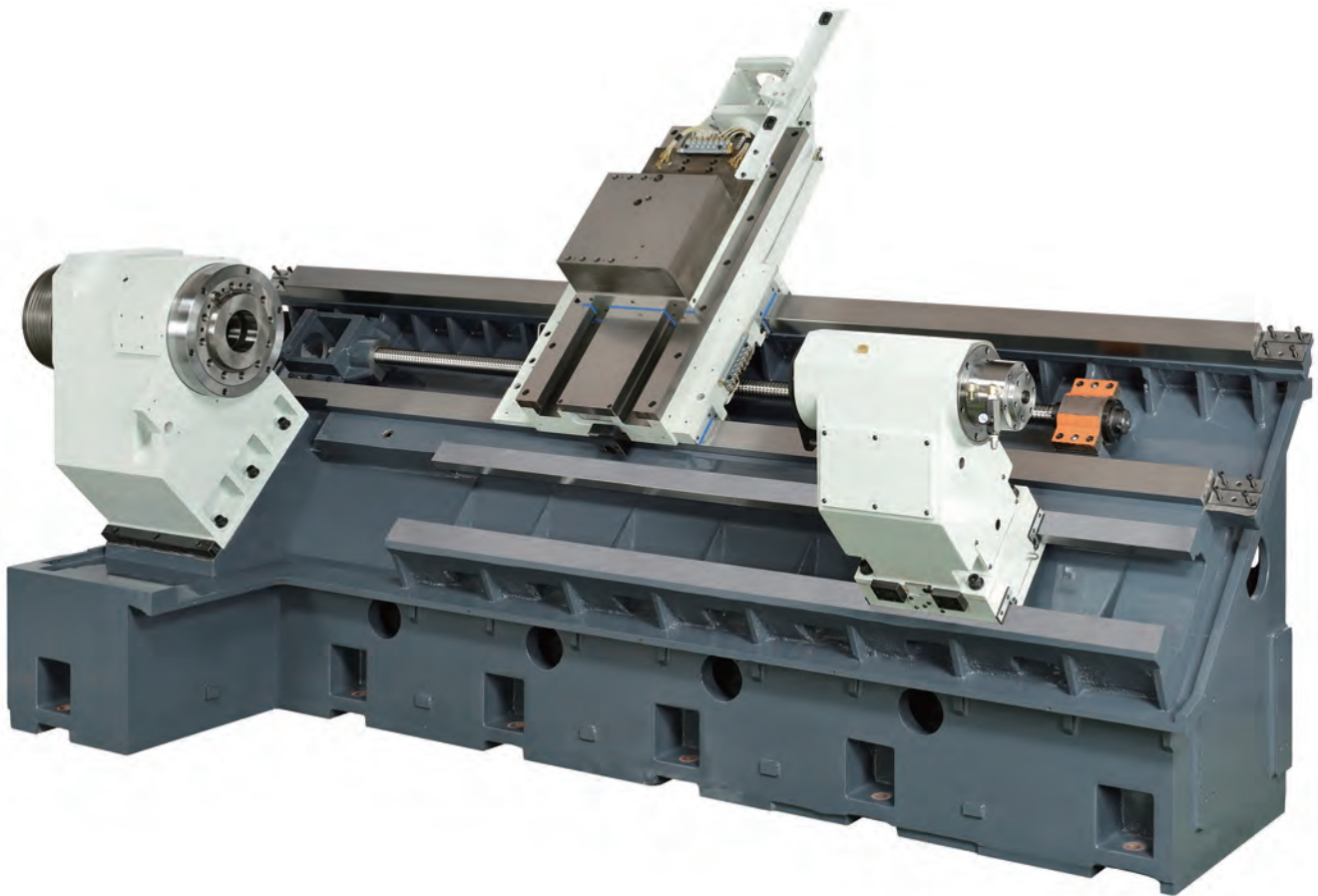
▼ SPINDLE BEARINGS



▼ MAIN SPINDLE MOTOR OUTPUT AND TORQUE TNC-30N / TNC-30NL

	Speed [min] ⁻¹					Torque [Nm]					
	S1	S2	S3	S4	S5	T1	T2	T3	T4	T5	T6
Motor	500	1500	3000	4500	6000	50	100	140	190	220	300
Spindle i=0.6	300	900	1800	2700	3600	83	167	233	317	333	500





▲ HIGH RIGID BED STRUCTURE

High tension mechanite cast Iron. Ground and heat treated to offer hardness over HS 70. Teflon are coated on all of the slide strfaces, fully ground andscraped to provide a high precision movement as well as positionability.

The space are design in accordance with Ergonomics to offer a smallest machine at high performance utilization on the space and sites. Operations are easily and safely as a matter of Ergonomics design.



▲ HIGH PRECISION SPINDLE

This spindle is equipped with double row high precision roller bearings and angular contact thrust double row bearings.



▲ RIGID CROSS SLIDE AND SADDLE



▲ HIGH SPEED AND HIGH ACCURACY TURRET

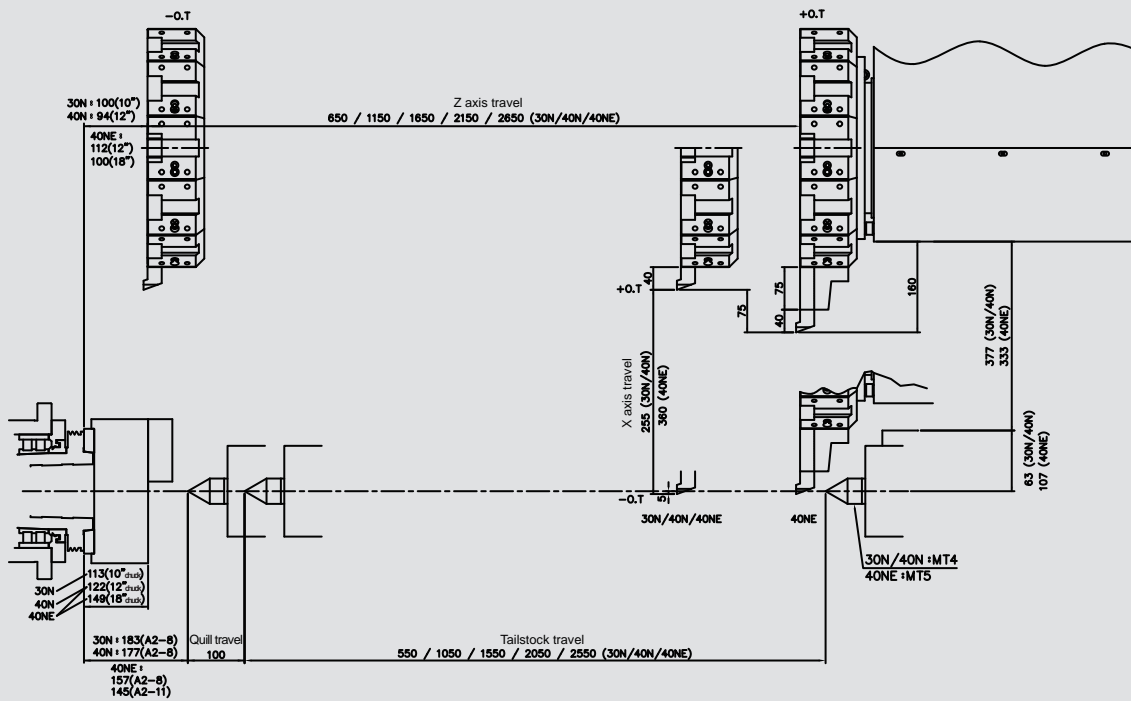
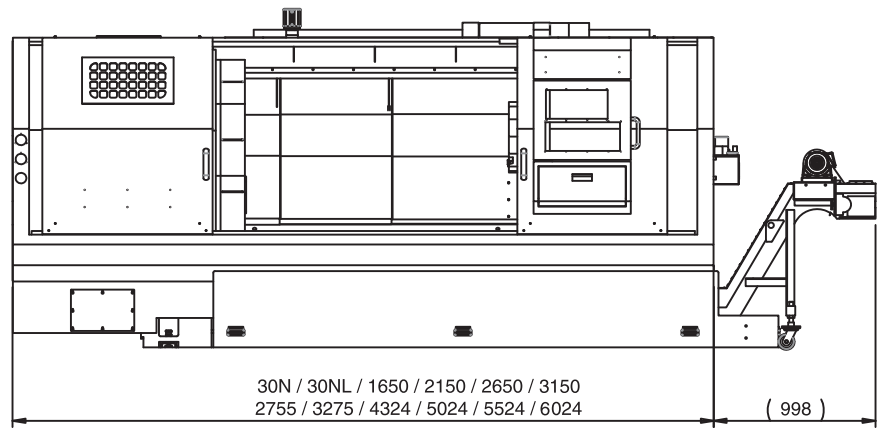
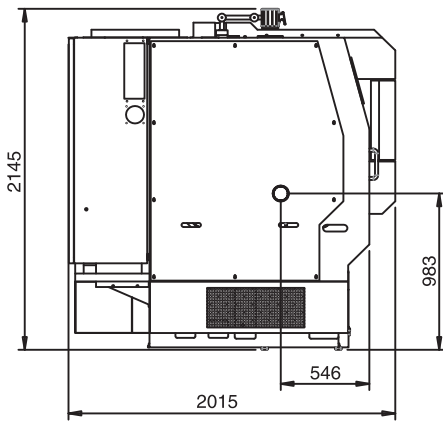
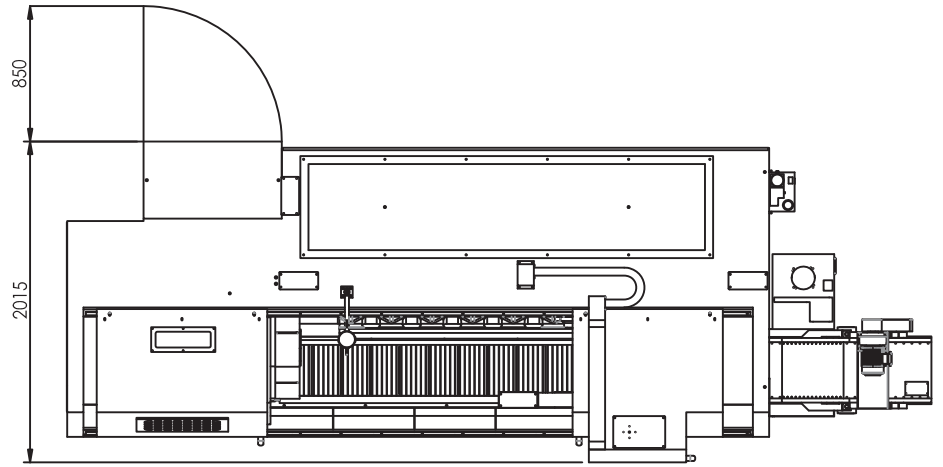
Hydraulic turret driven by gears and clutch providing a high accuracy. With random system which can be rotated bi-directions to offer a quickest tool change. The tool to tool change time is minimum to 0.25 sec. In case of the longest distance tool change, there is only with 1 second tool change time.

30N / 40N / 40NE



▲ PROGRAMMABLE TAILSTOCK

▼ FLOOR SPACE (mm)



▲ WORK RANGE (mm)

20A / 30N

SPECIFICATIONS

MODEL	DESCRIPTION	TNC-20A / AL	TNC-30N / 30NL	TNC30N x 1650 / 2150 / 2650 / 3150	
Capacity	Swing over bed	Dia. 460 mm (18.1")	Dia. 640 mm (25.2")	Dia. 600 mm (23.6")	
	Swing over saddle	Dia. 280 mm (11")	Dia. 430 mm (16.9")		
	Distance between center	460 / 660 mm (18.1" / 26") Linear guide way: 380 / 580 mm (15" / 22.8")	670 / 1150 mm (26.4" / 45.3")	1730 / 2230 / 2730 / 3230 mm (68.1" / 87.8" / 107.5" / 127.2")	
	Cutting Diameter	Dia. 270 mm (10.6") Direct / Dia. 220 mm (8.7") VDI	Dia. 480 mm (18.9") Direct / Dia. 440 mm (17.3") VDI		
	Hydraulic chuck	Dia. 210 mm (8")	Dia. 254 mm (10")		
	Bar capacity	Dia. 52 mm (2") / OPT Dia. 65mm (2.6")	Dia. 75 mm (3")		
	Bed width	360 mm (14.2")	480 mm (18.9")		
	Bed slant angle	30 degree	45 degree		
Spindle	Spindle nose	A2-6	A2-8		
	Spindle hole	Dia. 62 mm (2.4") / OPT Dia. 75 mm (3")	Dia. 87 mm (3.4")		
	Spindle taper	1/20			
	Spindle speed	40 ~ 4000 R.P.M	32 ~ 3200 R.P.M		
	Spindle motor	FANUC β iIP 18 (9/11 kw)	FANUC α iP 22 (11/15 kw)	FANUC α i18 (18.5/22 kw) + 2 steps gear box (1:4)	
	Spindle dia. (OD)	Dia. 100 mm (3.9")	Dia. 130 mm (5.1")		
Turret	Turret type	Hydraulic turret / Servo turret (OPT)			
	Tool station and size (OD)	8, 25 x 25 mm (1" x 1")	10 / 12 (OPT), 25 x 25 mm (1" x 1")		
	X travel	150 mm (5.9")	255 mm (10")		
	Z travel	400 / 640 mm (15.7" / 25.2") Linear guide way: 320 / 560 mm (12.6" / 20.5")	650 / 1150 mm (25.5" / 45.2")	1650 / 2150 / 2650 / 3150 mm (65" / 84.6" / 104.3" / 124")	
	Y travel	+ - 50mm (OPT)	+ - 60 mm (OPT)		
	Rapid traverse	X: 15 M/Min Z: 15 M/Min	X: 18 M/Min Z: 18 M/Min	X: 15 / 15 / 15 M/Min Z: 15 / 12 / 7 M/Min	
	ID Tool holder dia.	Dia. 32 mm (1.3")	Dia. 40 mm (1.6")		
Tailstock	Tailstock travel	240 / 480 mm (9.4" / 18.9")	550 / 1050 mm (21.6" / 41.3")	1550 / 2050 / 2550 / 3050 mm (61" / 80.7" / 100.3" / 120")	
	Quill travel	80 mm (3.1")	100 mm (3.9")		
	Quill diameter	Dia. 70 mm (2.8")	Dia. 110 mm (4.3") / OPT Dia. 160 mm (6.3")		
	Quill taper	MT4	MT4 (OPT MT5)		
Motor	Servo motor (X)	1.8 kw	3.0 kw		
	Servo motor (Z)	1.8 kw	3.0 kw		
	Coolant pump	0.37 kw			
	Hydraulic motor	1.5 kw			
Miscellaneous	Power requirement	22 KVA	30 KVA	30 KVA	
	X axis ball screw dia.	Dia. 32 mm (1.3")			
	Z axis ball screw dia.	Dia. 36 mm (1.4")	Dia. 40 mm (1.6")	Dia. 50 mm (2")	
	Packing size	3110 / 3350 x 2000 x 2050 mm (122.4" / 131.9 x 78.7" x 80.7")	4000 / 4550 x 2090 x 2250 mm (157.5" / 179.1 x 82.3" x 88.6")	5100 / 5800 / 6500 / 7200 x 2090 x 2250 mm (200.8" / 228.3" / 255.9" / 283.5" x 82.3" x 88.6")	
	Gross weight	4000 / 4600 kgs	5500 / 6500 kgs	8200 / 9400 / 10600 / 11800 kgs	

※THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

■ STANDARD ACCESSORIES:

- Hydraulic hollow chuck and cylinder
- Hydraulic turret and tool holders (for direct type disk only)
- Hydraulic tailstock for TNC-20A Series
Programmable hydraulic tailstock for TNC-30N Series
- Coolant system and hydraulic system
- Center sleeve, Dia. 8, 10, 12, 16, 20, 25,
MT 1 and MT 2 (one of each) for TNC-20A Series
Center sleeve, Dia. 12, 16, 20, 25, 32,
MT 2 and MT 3 (one of each) for TNC-30N Series
- Chip conveyer
- Operation manual

■ OPTIONS:

- Bar feeder
- Parts catcher
- C Axis / spindle index with driving tool turret
- Tool presetter
- Extra tool holder
- Sub spindle
- VDI Tool holders
- CE mark

SPECIFICATIONS

MODEL	DESCRIPTION	TNC-40N / NL	TNC40N x 1650 / 2150 / 2650 / 3150
Capacity	Swing over bed	Dia. 640 mm (25.2")	Dia. 600 mm (23.6")
	Swing over saddle	Dia. 430 mm (16.9")	
	Distance between center	670 / 1150 mm (26.4" / 45.3")	1715 / 2215 / 2715 / 3215 mm (67.5" / 87.2" / 106.9" / 126.5")
	Cutting Diameter	Dia. 480 mm (18.9") Direct / Dia. 440 mm (17.3") VDI	
	Hydraulic chuck	Dia. 304 mm (12") / OPT Dia. 380 mm (15")	
	Bar capacity	Dia. 90 mm (3.5")	
	Bed width	480 mm (18.9")	
	Bed slant angle	45 degree	
Spindle	Spindle nose	A2-8	
	Spindle hole	Dia. 102 mm (4")	
	Spindle taper	1/20	
	Spindle speed	10 ~ 2500 R.P.M	
	Spindle motor	FANUC oil18 (18.5/22 kw) + 2 steps gear box (1:4)	
	Spindle dia. (OD)	Dia. 160 mm (6.3")	
Turret	Turret type	Hydraulic turret / Servo turret (OPT)	
	Tool station and size (OD)	10 / 12 (OPT), 25 x 25 mm (1" x 1")	
	X travel	255 mm (10")	
	Z travel	650 / 1150 mm (25.5" / 45.2")	1650 / 2150 / 2650 / 3150 mm (65" / 84.6" / 104.3" / 124")
	Y travel	+- 60 mm (OPT)	
	Rapid traverse	X: 18 M/Min Z: 18 M/Min	X: 15 / 15 / 15 M/Min Z: 15 / 12 / 7 M/Min
	ID Tool holder dia.	Dia. 40 mm (1.6")	
Tailstock	Tailstock travel	550 / 1050 mm (21.6" / 41.3")	1550 / 2050 / 2550 / 3050 mm (61" / 80.7" / 100.3" / 120")
	Quill travel	100 mm (3.9")	
	Quill diameter	Dia. 110 mm (4.3") / OPT Dia. 160 mm (6.3")	
	Quill taper	MT4 (OPT MT5)	
Motor	Servo motor (X)	3.0 kw	
	Servo motor (Z)	3.0 kw	4.0 kw
	Coolant pump	0.37 kw	
	Hydraulic motor	1.5 kw	
Miscellaneous	Power requirement	30 KVA	
	X axis ball screw dia.	Dia. 32 mm (1.3")	
	Z axis ball screw dia.	Dia. 50 mm (2")	
	Packing size	4000 / 4550 x 2090 x 2250 mm (157.5" / 179.1" x 82.3" x 88.6")	5100 / 5800 / 6500 / 6800 x 2090 x 2250 mm (200.8" / 228.3" / 255.9" / 267.7" x 82.3" x 88.6")
	Gross weight	6000 / 7000 kgs	8200 / 9400 / 10600 / 11500 kgs

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■ STANDARD ACCESSORIES:

- Hydraulic hollow chuck and cylinder
- Hydraulic turret and tool holders (for direct type disk only)
- Programmable hydraulic tailstock
- Coolant \ hydraulic and lubrication system
- Center sleeve, Dia. 12, 16, 20, 25, 32,
MT 2 and MT 3 (one of each)
- Chip conveyor
- Tool box with tools and manuals

■ OPTIONS:

- Bar feeder
- Parts catcher
- C Axis / spindle index with driving tool turret
- Tool presetter
- Extra tool holder
- Sub spindle
- VDI Tool holders
- CE mark

SPECIFICATIONS

MODEL	DESCRIPTION	TNC40NE x 650 / 1150	TNC40NE x 1650 / 2150 / 2650 / 3150
Capacity	Swing over bed	Dia. 800 mm (31.5")	Dia. 750 mm (29.5")
	Swing over saddle	Dia. 590 mm (23.2")	
	Distance between center	670 / 1150 mm (26.4" / 45.3")	1715 / 2215 / 2715 / 3215 mm (67.5" / 87.2" / 106.9" / 126.5")
	Hydraulic chuck	Dia. 304 mm (12") / OPT Dia. 380 mm (15") / OPT Dia. 450 mm (18")	
	Bar capacity	Dia. 90 mm (3.5") / OPT Dia. 117.5 mm (4.6") / OPT Dia. 140 mm (5.5")	
	Bed width	480 mm (18.9")	
	Bed slant angle	45 degree	
	Cutting Diameter	Dia. 720 mm (28.3") Direct / Dia. 650 mm (25.6") VDI	
Spindle	Spindle nose	A2-8 / OPT A2-11	
	Spindle hole	Dia. 102 mm (4") / OPT Dia. 130 mm (5.1") / 160 mm (6.3")	
	Spindle taper	1/20	
	Spindle speed	10 ~ 2500 R.P.M / OPT 10 ~ 2000 R.P.M. / 10 ~ 1650 R.P.M.	
	Spindle motor	FANUC α 18 (18.5/22 kw) + 2 steps gear box (1:4)	
	Spindle dia. (OD)	Dia. 160 mm (6.3") / OPT Dia. 180 mm (7") / 220 mm (8.7")	
Turret	Turret type	Hydraulic turret / Servo turret (OPT)	
	Tool station and size (OD)	10 / 12 (OPT), 25 x 25 mm (1" x 1")	
	X travel	360 mm (14.2")	
	Z travel	650 / 1150 mm (25.5" / 45.2")	1650 / 2150 / 2650 / 3150 mm (65" / 84.6" / 104.3" / 124")
	Y travel	+- 60 mm (OPT)	
	Rapid traverse	X: 18 M/Min Z: 18 M/Min	X: 15 / 15 / 15 M/Min Z: 15 / 12 / 7 M/Min
	ID Tool holder dia.	Dia. 40 mm (1.6")	
Tailstock	Tailstock travel	550 / 1050 mm (21.6" / 41.3")	1550 / 2050 / 2550 / 3050 mm (61" / 80.7" / 100.3" / 120")
	Quill travel	100 mm (3.9")	
	Quill diameter	Dia. 160 mm (6.3")	
	Quill taper	MT5	
Motor	Servo motor (X)	3.0 kw	
	Servo motor (Z)	3.0 kw	4.0 kw
	Coolant pump	0.37 kw	
	Hydraulic motor	1.5 kw	
Miscellaneous	Power requirement	30 KVA	
	X axis ball screw dia.	Dia. 32 mm (1.3")	
	Z axis ball screw dia.	Dia. 50 mm (2")	
	Packing size	4000 / 4550 x 2250 x 2250 mm (157.5" / 179.1" x 88.6" x 88.6")	5100 / 5800 / 6500 / 6800 x 2250 x 2250 mm (200.8" / 228.3" / 255.9" / 267.7" x 88.6" x 88.6")
	Gross weight	6300 / 7300 kgs	8500 / 9700 / 10900 / 11800 kgs

※THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

STANDARD ACCESSORIES:

- Hydraulic hollow chuck **and cylinder**
- Hydraulic turret and** tool holders (for direct type disk only)
- Programmable hydraulic tailstock
- Coolant \ **hydraulic and lubrication system**
- Center sleeve, **Dia. 12, 16, 20, 25, 32, MT 2 and MT 3** (one of each)
- Chip conveyor
- Tool box with tools and manuals**

OPTIONS:

- Bar feeder
- Parts catcher
- C Axis / spindle index with driving tool turret
- Tool presetter
- Extra tool holder
- Sub spindle
- VDI Tool holders
- CE mark

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