

Technical data

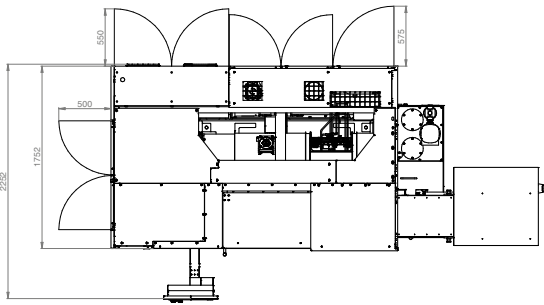
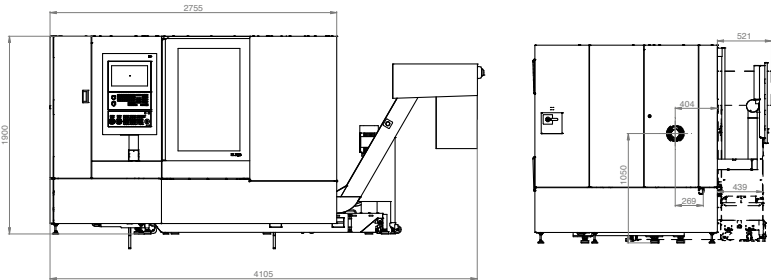
			KL 285	KL285 MC	KL 285 Y	KL 285 SMC	KL 285 SY
Working space	Swing diameter over bed	mm	670	670	670	670	670
	Swing dia over cross carriage	mm	410	410	410	410	410
	Max. turning dia.	mm	340*	340*	340*	304*	304*
	Standard turning dia.	mm	285	285	285	285	285
	Max. turning length	mm	550	550	550	-	-
	Max. distance between spindle noses	mm	-	-	-	757	757
	Max. bar capacity	mm	65	65	65	65	65
Axis travels	X Axis	mm	243	243	243	168	168
	Z Axis	mm	610	610	610	610	610
	Y Axis	mm	-	-	±50	-	±50
Rapid traverse	X / Z Axes	m/min	30	30	30	30	30
	Y Axis	m/min	-	-	15	-	15
Main spindle	Spindle nose		A6	A6	A6	A6	A6
	Max. speed	min ⁻¹	5 000	5 000	5 000	5 000	5 000
	Torque S1	Nm	200	200	200	200	200
	Output S1	kW	19	19	19	19	19
Counter spindle	Spindle nose		-	-	-	A5	A5
	Max. speed	min ⁻¹	-	-	-	6000	6000
	Torque S1	Nm	-	-	-	100	100
	Output S1	kW	-	-	-	17	17
Tool head	Number of positions		12	12	12	12	12
	Hole dia. VDI	mm	40	40	40	40	40
	Max. speed of tool spindle	min ⁻¹	-	4 500	4 500	4 500	4 500
	Max. torque S1/S3-40%	Nm	-	16 / 21	16 / 21	16 / 21	16 / 21
	Output S1	kW	-	3,04	3,04	2,6	2,6
Tailstock	Sleeve taper - MORSE		Mo 5	Mo 5	Mo 5	-	-
Machine dimensions and weight	Length × width × height	[mm]	2 755 × 1 752 × 1 900				
	Weight	[kg]	5 900	5 900	5 900	5 900	5 900

* Standard cutter holder, external cutter ejected by 40 mm.

Special accessory

- Direct measurement in X1, Y1, Z1 axis
- Clamping - chucks, collets
- Manual airblast
- Tool measuring probe
- Tool measuring probe - motorised
- Tailstock with rotary bushing (tip Mo4)
- Fixed centre of the tailstock Mo4
- Rotary tip of the tailstock Mo5
- Automatic electric sliding of the working space cover
- Chip conveyor – outlet in the rear of the machine
- Tool head VDI 30
- Tool head BMT 55
- Tool head Direct drive (12,000 rpm) - VDI 30
- Tailstock ball screw
- Visiport
- Shovel
- Unit with frequency converter

Machine dimensions



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KL 285

Turning machining centre

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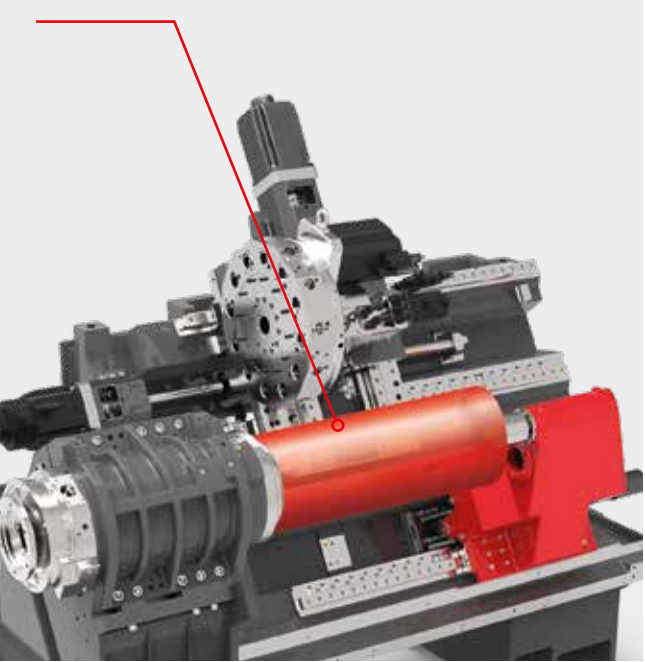
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Main features

- Bed structure – 60° from horizontal position
- Electrical spindle A6 (Siemens)
- Tool head (SAUTER VDI 40)
- Linear guide (Schneeberger size 35)
- Ball screws (NSK) - with nut cooling capability
- Hydraulic cylinder of the tailstock with admeasuring – pressure setting on the control panel
- Possibility of using a ball screw with the tailstock – by reason of minimum clamping force
- Components spreading heat and noise placed in the rear of the machine
- Hydraulic unit with proportional valves – setting the pressure on the control panel
- Setting the position of the chuck jaws on the control panel
- Ball screw drives without a gear (motor, clutch, ball screw), ball screws used with lower pitch by reason of securing higher positioning precision

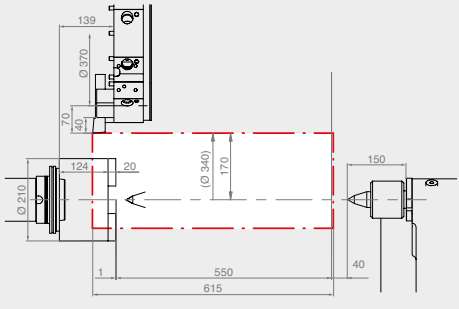
Working space

- Standard turning diameter 285 mm
- Max. turning length 550 mm

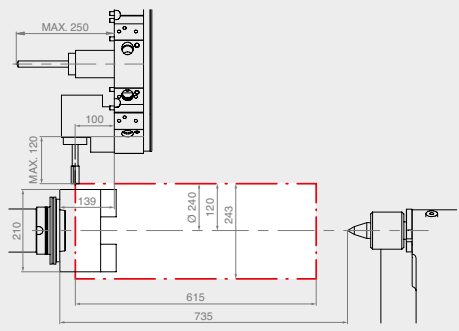


- 1 | Bed
- 2 | Headstock console
- 3 | Electrical spindle
- 4 | Tool head
- 5 | Rolling guide
- 6 | Tailstock

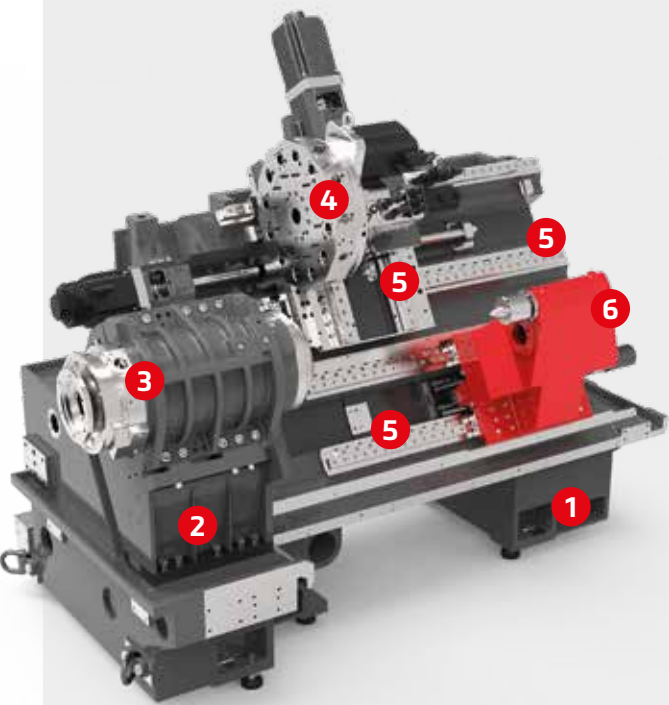
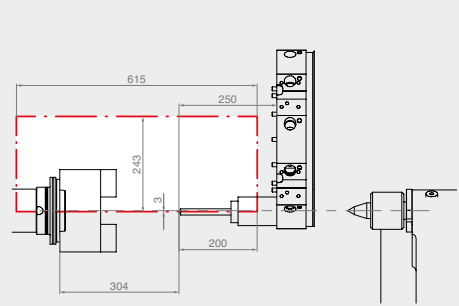
TURNING



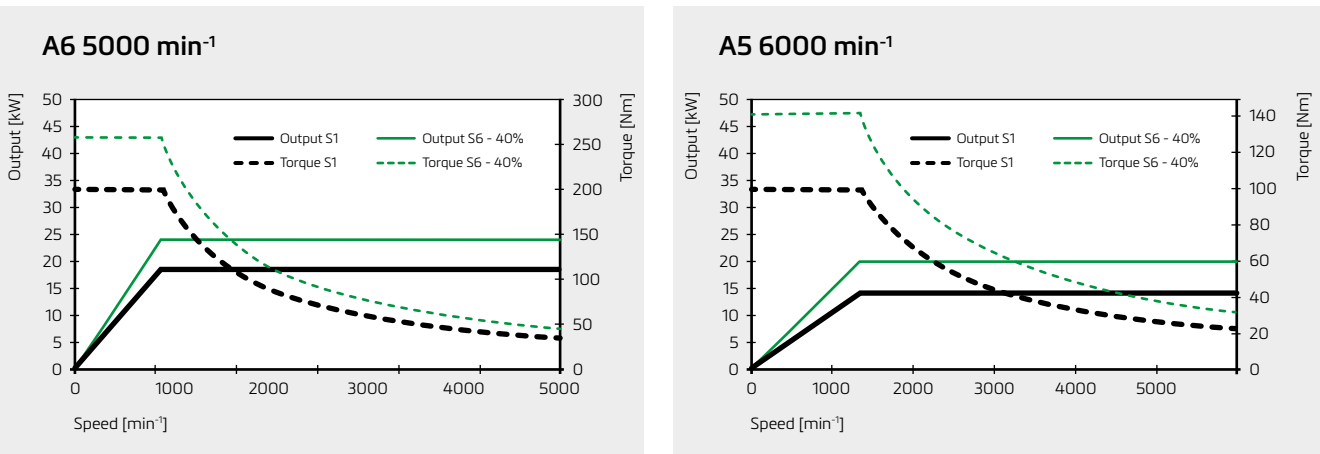
MILLING



DRILLING



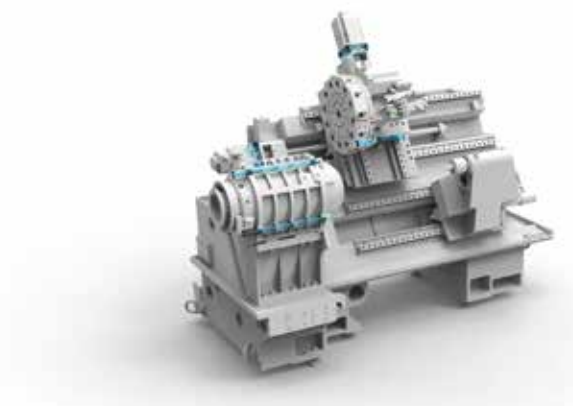
Spindle



Super Precision

Cooled main parts of the machine:

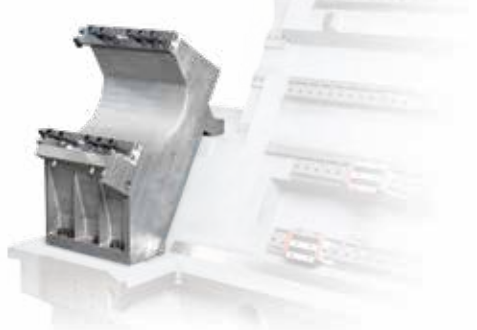
- Headstock
- Ball screw nuts
- Positioning of ball screws
- Flanges below motors
- Washers below the headstock



More accurate tool head - final disc machining of the tool head is provided after the complete assembly - This way is achieved the maximal perpendicularity which ensures the highest accuracy.

Headstock console from mineral cast-iron – better vibration absorption and lower temperature deformation

Direct linear measuring in X, Y, Z axes



The surface quality of sample workpieces comparable with grinding

- material steel 100Cr6+A - 52HRC
- F=0,05 min⁻¹, v=180 m/min, Ap=0,05mm
- Iscar tool - DNGA - 4M IB10HC

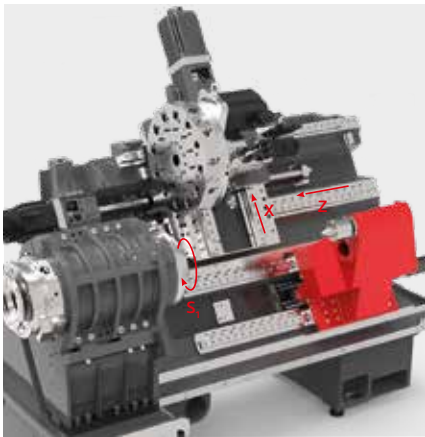


Positioning accuracy and repeatability according ČSN ISO 230-2

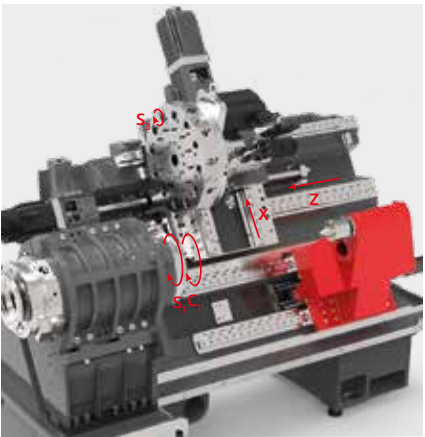
	X Axis [mm]	Y Axis [mm]	Z Axis [mm]
KL 285 QUICK	0,006	0,006	0,008
KL 285 Super precision	0,004	0,004	0,006

Technological variants

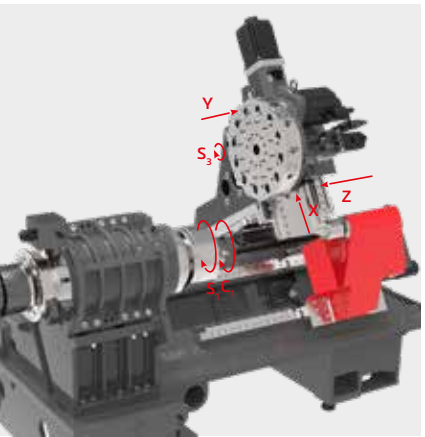
KL 285



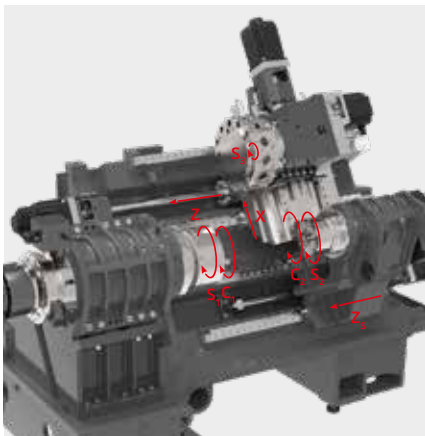
KL 285 MC



KL 285 Y



KL 285 SMC



KL 285 SY

