

AXILE[®] DC12

Double-column type
5-Axis Vertical



TOM Award



National Award



ISO 9001:2015



ISO 14001:2015

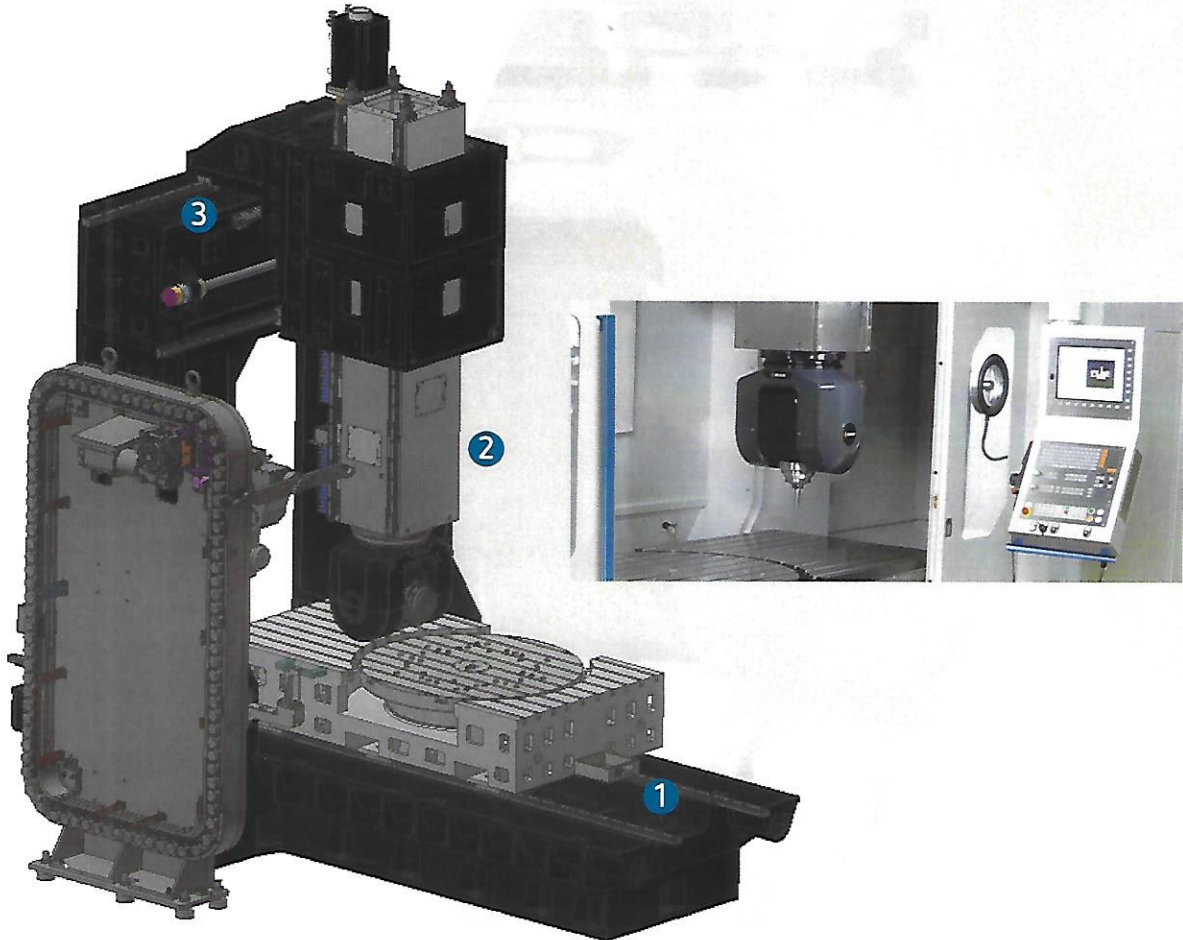


ISO 50001:2011

Structure

AXILE Double Column type 5-Axis Machining Center, DC12 combines heavy cutting and high-speed 5-axis machining capabilities in one.

A profitable performer especially excellent for precision machining for extra heavy parts with complex contouring.



3 axes equipped with oversized linear guideways

Exhibit its heavy loading resistance and outstanding features

The spindle head on the DC12 is mounted on a 4-guide ram and equipped with advanced automatic compensation balancing system (SCBS)

Use of 4 roller guides to ensure rigidity in any machining direction using the Box-in-Box concept

Y-axis on beam with 3 guides, 2 front and 1 top with improved accuracy

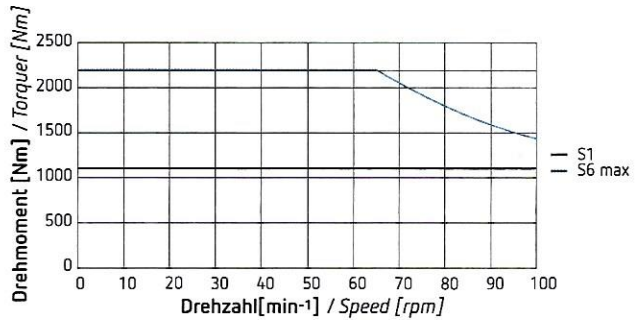
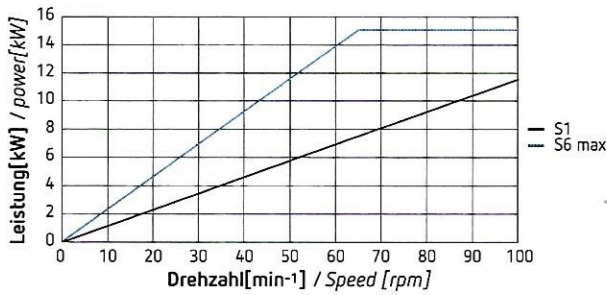
Allowing the ram to move smoothly and steadily guided all the time

B-axis head



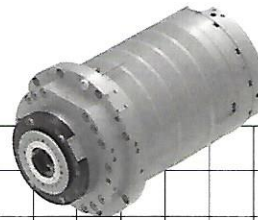
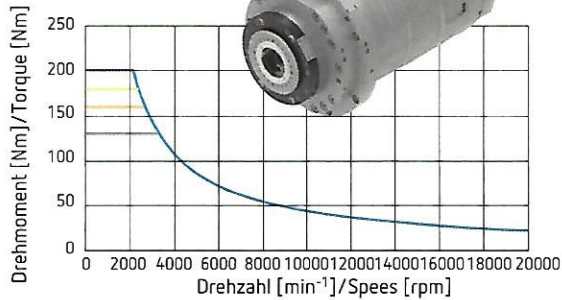
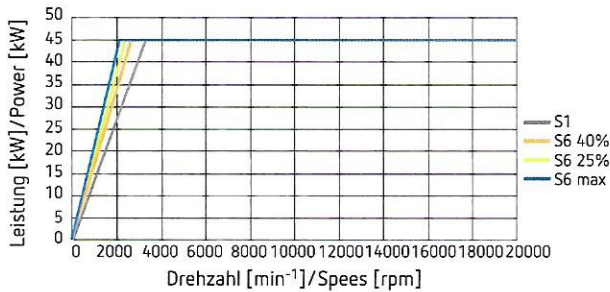
Swiveling head

Driving system	Tandem torque motor
Maximum speed	100 rpm
Torque (S1 / max)	1.100 Nm / 2.200 Nm
Power (S1 / max)	11,6 / 15 kW
Holding torque	2.160 Nm
Measuring system	Absolute encoder
Accuracy of encoder	+/- 5"



Built-in spindle

MT100L-S20 with HSK-A63



20.000 rpm	Motor type	Synchronous	Power (S1 / S6-40%)	45 / 45 kW
	Tool shank	HSK-A63	Torque (S1 / S6-40%)	130 / 160 Nm

Rotary table

Synchronous with cooling unit



Synchronous with cooling unit

Maximum Speed	100 rpm
Torque (S1 / max)	1.940 / 2.270 Nm
Power (S1 / max)	7 / 7 kW
Holding torque	9.000 Nm
Table diameter	1.200 mm
Maximum load	2.500 kg
Measuring system	Absolut encoder
Accuracy	+/- 5"



Technical data

TABLE

Table size	mm	2200 x 1200
Maximum table load	kg	2500
Rotary table top diameter	mm	Ø1200
LINEAR AXES		
X travel	mm	2200
Y travel	mm	1400
Z travel	mm	1000
Max feedrate X/Y/Z	m/min	36
Guideway type		Roller
Guideway size X/Y/Z	mm	55/55/45
ROTARY AXES		
Swiveling axis B -Head	deg	±110
Rotary axis C -Table	deg	360
Max speed axis B	rpm	100
Max speed axis C	rpm	100
SPINDLE		
Spindle speed	rpm	20.000
Spindle taper		HSK-A63
Power S1/S6-40%	kW	45/45
Torque S1/S6-40%	Nm	130/160

MEASUREING FEEDBACK

Linear axes type		Linear scale
Linear axes resolution	µm	0.001
Rotary axes type		Rotary
Rotary axes accuracy		±5"

TOOL CHANGER

Tool shank		HSK-A63
ATC type		Arm Type
Magazine positions		90T(Std)/120T(Opt)

Maximum tool length	mm	500
Maximum tool diameter (with adjacent pot empty)	mm	150
Maximum tool weight	kg	7
Maximum loading weight	kg	450

ACCURACY (VDI/DGQ 3441)

Positioning	mm	0.005
Repeatability	mm	0.005

THROUGH COOLANT SUPPLY (STANDARD)

High pressure pump	bar	20
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THROUGH COOLANT SUPPLY WITH SEPARATE TANK (OPTIONAL)

High pressure pump	bar	40/70
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CONTROL UNIT

Heidenhain TNC 640

Brand/Model

Siemens 840D sl

Fanuc 31iMB5

Layout

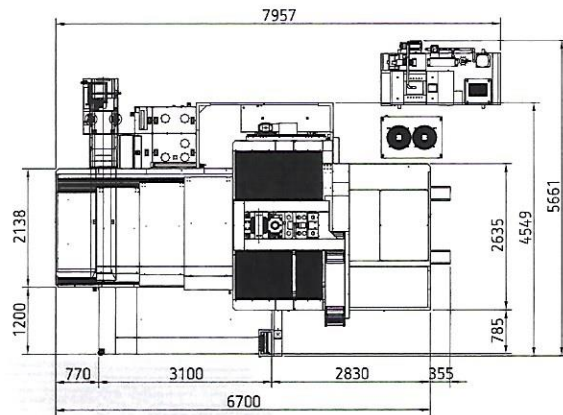
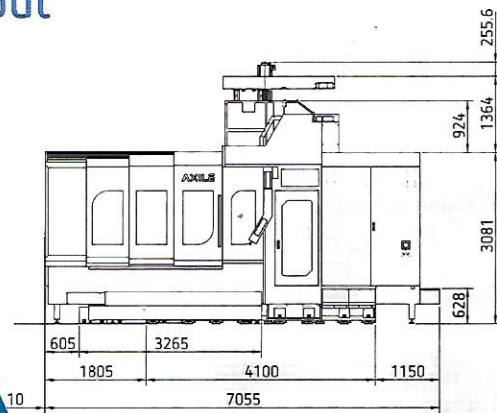
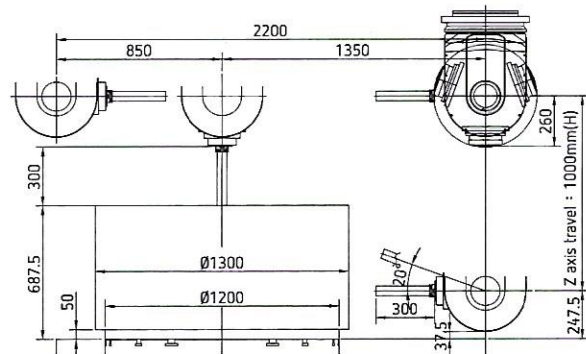
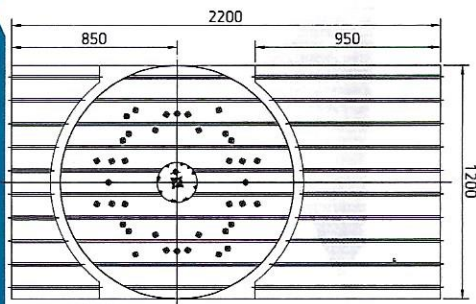


Table dimension & Interference



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