EAGLE

Flexible High Tech Solutions for Industry

"Those who look a little harder discover a lot more"

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Machine Tools

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EAGLE Customized Efficiency

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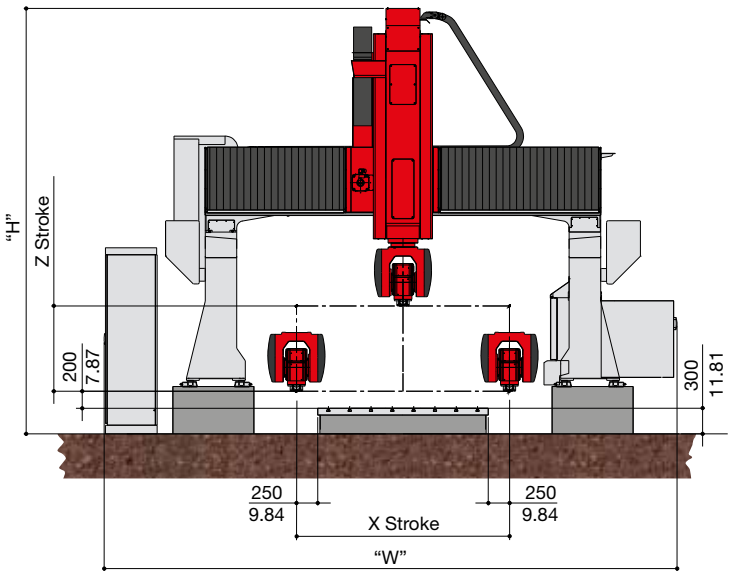
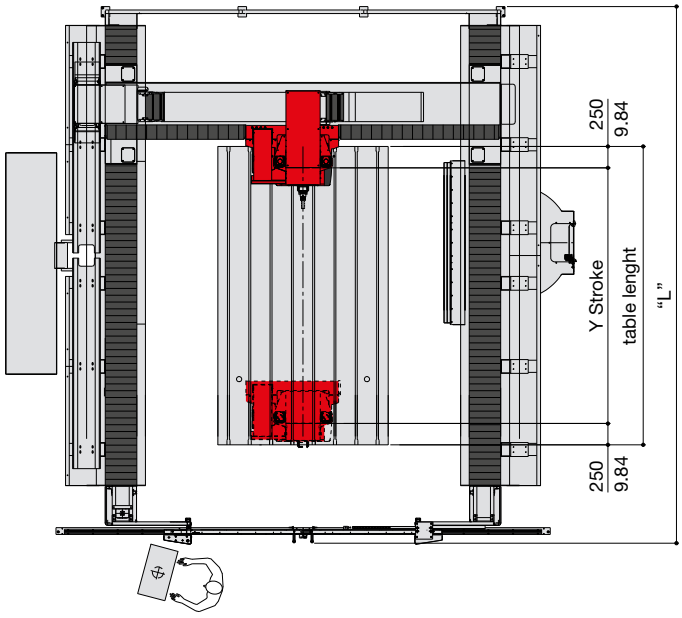
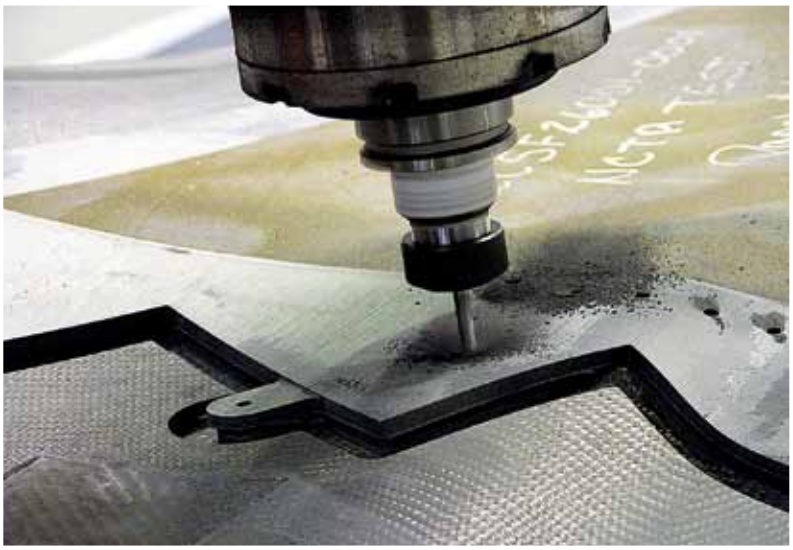
		EAGLE 1000/2T K 20/30/45/80/105	EAGLE 1500/2T K 20/30/45/80/105	EAGLE 2000/2T K 30/45/80/105	EAGLE 2500/2T K 30/45/80/105
Interpolated axes		5	5	5	5
X Stroke	mm in	2.500 - 4.000 98.4 - 157.5	2.500 - 4.000 98.4 - 157.5	4.000 157.5	5.000 196.8
Y Stroke	mm in	2.000 - 3.000 - 4.500 8.000 - 10.500 78.7 - 118 - 177 315 - 413.4	2.000 - 3.000 - 4.500 8.000 - 10.500 78.7 - 118 - 177 315 - 413.4	3.000 - 4.500 8.000 - 10.500 118 - 177 315 - 413.4	3.000- 4.500 8.000 - 10.500 118 - 177 315 - 413.4
Z Stroke	mm in	1.000 39.4	1.500 55.1	2.000 78.7	2.500 98.4
X - Y Axes rapid feedrate	m/min ipm	85 3,347	85 3,347	70 2,756	70 2,756
Z Axis rapid feedrate	m/min ipm	40 1,575	40 1,575	40 1,575	40 1,575
A Axis rotation		0° ÷ +115° or ± 105°	0° ÷ +115° or ± 105°	0° ÷ +115° or ± 105°	0° ÷ +115° or ± 105°
C Axis rotation		± 270° or continuous	± 270° or continuous	± 270° or continuous	± 270° or continuous
A Axis rapid feedrate	rpm	20 or 12	20 or 12	20 or 12	20 or 12
C Axis rapid feedrate	rpm	30 or 19	30 or 19	30 or 19	30 or 19
Spindle power S6(40%) / S1	kW HP	20/16 or 28/20 27/21 or 37.5/26.8	20/16 or 28/20 or 54/40 27/21 or 37.5/26.8 or 72.4/53.6	20/16 or 28/20 27/21 or 37.5/26.8	20/16 or 28/20 27/21 or 37.5/26.8
Spindle torque S6(40%) / S1	Nm ft-lb	40/30 or 55/38 30/22 or 40.5/28	40/30 or 55/38 or 70/51 30/22 or 40.5/28 or 52.2/38.1	40/30 or 55/38 30/22 or 40.5/28	40/30 or 55/38 30/22 or 40.5/28
Spindle speed	rpm	14.500 or 28.000	14.500 or 28.000 or 28.000	14.500 or 28.000	14.500 or 28.000
Din 69893-1 milling tool taper		HSK-A63	HSK-A63	HSK-A63	HSK-A63
W + H + L	mm in	6.800 x 5.000 x 5.300/16.000 267 x 197 x 208/629	8.400 x 5.800 x 5.300/16.000 330 x 228 x 208/629	9.800 x 7.500 x 8.300/18.000 “L” 385 x 295 x 326/707	10.800 x 8.500 x 8.300/18.000 424 x 334 x 326/707







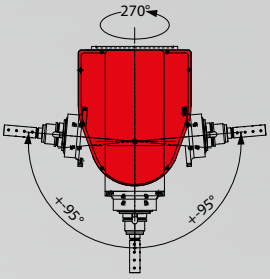
A competitive solution
High-speed 5-axis machining centre for milling, boring and trimming small to large size work-pieces in composite materials, sandwich structures, light alloys, resin and plastic.

Wide choice of configurations for customized performances
Various solutions for the best machine configuration to satisfy each need:
- Standard model with one working area
- Model with two working areas for pendular machining
- Model with automatic loading/unloading of the workbench

Easy access and perfect visibility
Great accessibility and visibility of the working area thanks to the machine gantry structure with moving bridge and wide frontal doors.

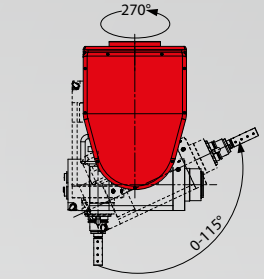
Precision, Dynamics and Flexibility when machining at high speed with 5 continu-ous axes

A superior head
The electrospindles offer always the best machining performance thanks to the cast-iron fork designed head which offers structural rigidity with efficient vibration damping proper-ties.



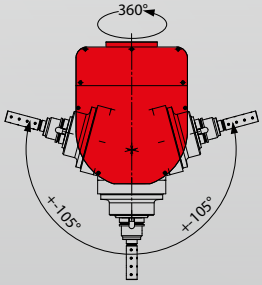
GHIBLI

kW (S6/S1)	28-20
Nm (S6/S1)	55-38
rpm	20.000
“A” axis	+/-95°
“C” axis	+/-270°
“A” axis (rpm)	19
“C” axis (rpm)	20



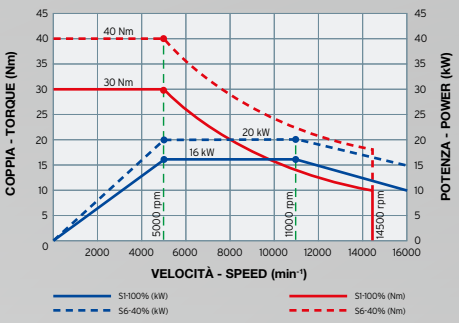
GALAXY HD

kW (S6/S1)	20-16	28-20	54-40
Nm (S6/S1)	40-30	55-38	70-51
rpm	14.000	28.000	28.000
“A” axis	0-115°	0-115°	0-115°
“C” axis	+/-270°	+/-270°	+/-270°
“A” axis (rpm)	20	20	20
“C” axis (rpm)	30	30	30



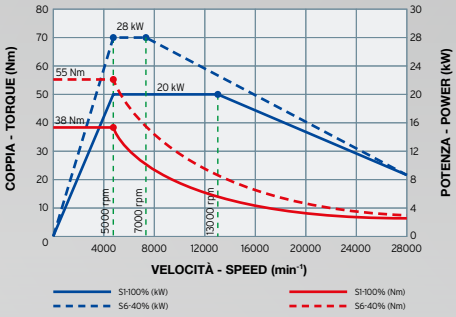
FANTIC

kW (S6/S1)	28-20
Nm (S6/S1)	55-38
rpm	28.000
“A” axis	+/-105°
“C” axis	endless
“A” axis (rpm)	19
“C” axis (rpm)	20



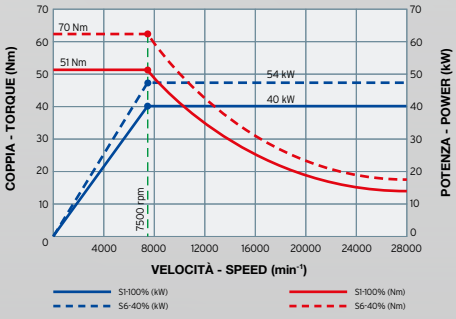
M 30/14

16KW electrospindle with a 30 Nm class S1 continuous torque and a rotation speed of 14500 rpm, the ideal solution for machining composite materials and resin from rough milling to precision finishing operations of light alloys.



M 38/28

A 20 kW electrospindle with a 38 nm continuous torque in s1 and 28,000 rpm is the ideal choice for high-speed machining requirements for steel and light alloy from rough milling to precision surface finishing operations.



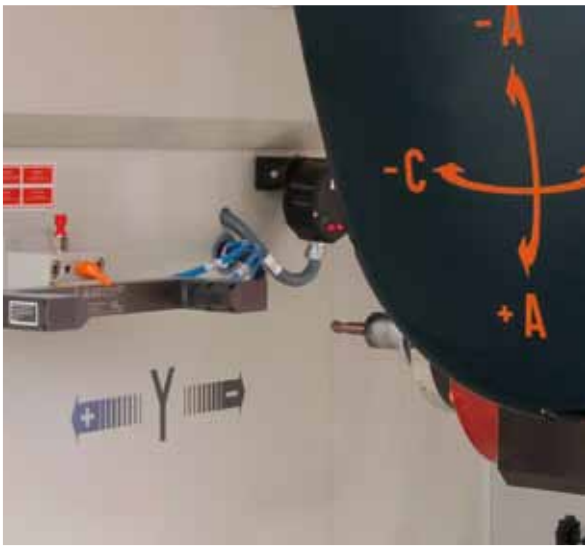
M 51/28

Electrospindle featuring a power of 40 kW, continuous torque of 51 Nm in S1 duty and 28.000 rpm: the ideal choice for customers requiring high-speed machining on either steel or light alloys, from rough-machining up to precision finishing.

High-speed, Performance and Precision
The carriage and beam travel on properly dimensioned recirculating roller guideways en-sure machining precision and stability. Carriage and beam drive assemblies consist of a precision rack and pinion system, whereas the ram is driven by a ball screw and pre-loaded ball nut assembly. Axis motion is powered by ultimate generation digital ser-vodrives and brushless servomotors.

Wide choice of electrospindles
The Eagle machining centre can be supplied with a wide range of electrospindles depend-ing on the type of material to be machined. Machining precision is always guaranteed by the thermal stabilising system which consists of a special software designed and devel-oped to compensate natural thermal expansion and drift in the electrospindles when ma-chining conditions vary.

Simple and reliable tool magazine
The wheel-type tool magazine can hold up to 30 tools with diameters of up to 140mm and 300mm in length. Completely isolated from the work area, this tool magazine ensures the greatest reliability with reduced tool changeover times. Upon request Eagle can be sup-plied with rack-design tool magazine for holding up to 150 tools. The tool magazine can be equipped with an automatic chip coding system containing tool data and information.



Dust extraction and ceiling enclosure
When machining composite materials and resin, Eagle can be fitted with an efficient and effective dust extraction system which is installed on the spindle nose. In addition, top-roof bellows can be fitted to the machining centre creating a complete enclosure isolating the machine from the surrounding areas.

Monitoring and in-process inspections
Eagle can be supplied with a laser tool presetter and a radio frequency probe for acquiring work-piece size and coordinates.

The ideal cooling system
Depending on the type of machining operation, the tool cooling system can use a coolant liquid which flows inside and outside the spindle (60 L/min) at an internal operational pressure of up to 40 bar, or incorporate a spray mist system, or simply use compressed air.

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