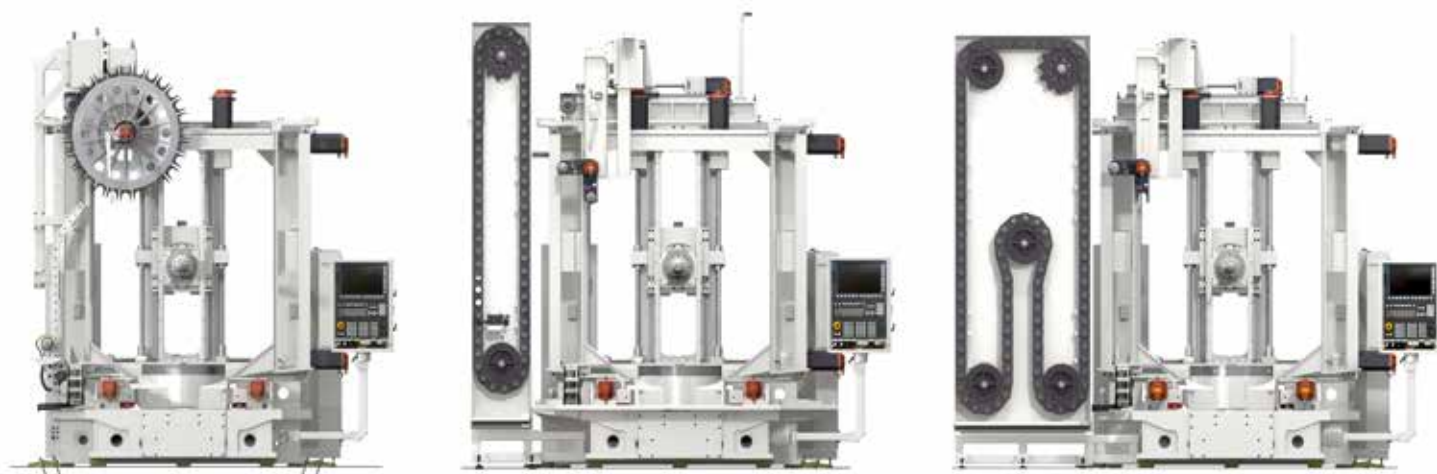




SPECHT® 800 / 800+



Horizontal Machining Centers



# Machines for Large Truck, Aerospace and General Industry Components

## A Large Range of Configurations

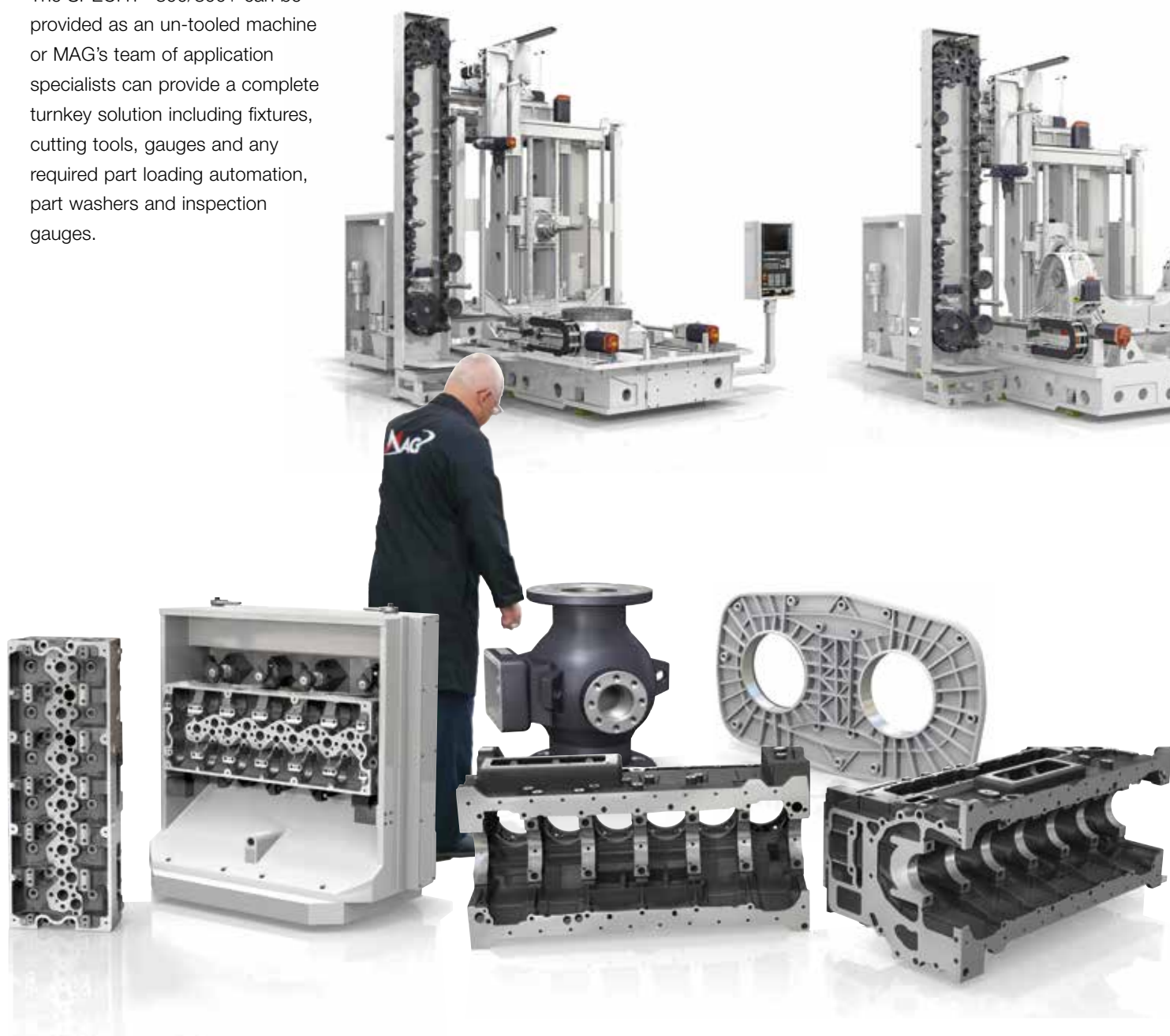
The SPECHT® 800/800+ family of machines is available with B, A or B/A rotary axis, several different tool storage capacities and a choice of motorized high speed spindles or high torque gearbox spindles, making them ideal for rough and finish machining Truck, Aerospace and General Industry components weighing up to 3000 kg and 1.5 m long.

## Unmatched Application Support

The SPECHT® 800/800+ can be provided as an un-tooled machine or MAG's team of application specialists can provide a complete turnkey solution including fixtures, cutting tools, gauges and any required part loading automation, part washers and inspection gauges.

## Part Loading Options

The SPECHT® 800/800+ is available as a manually loaded machine or with automatic part loading via robot or an overhead gantry system. Work holding fixtures can be manually or automatically operated and mounted directly to the rotary table for high volume automated cells or via pallet swapping systems for lower volume applications.

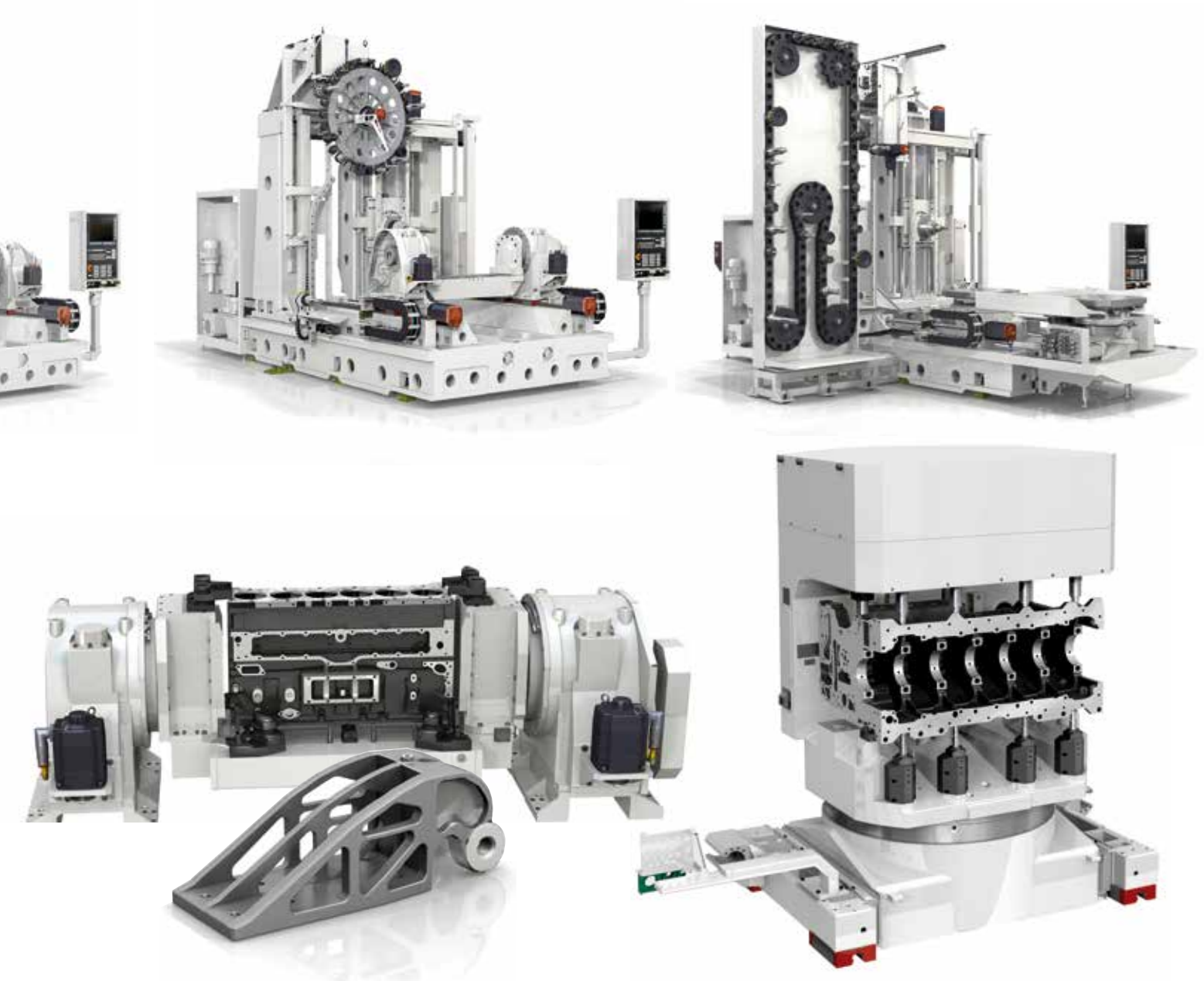


### Rigid Machine Structure

The SPECHT® 800/800+ features a Box-In-Box design mounted onto a one piece cast base along with a moving table fixture for outstanding stiffness and machining accuracy. Dual ball screws and servo drives in each axis provide best-in-class speed, acceleration, machining thrust and accuracy. The machine is a powerhouse capable of heavy stock removal for rough machining and smooth vibration free cutting for precision finish machining.

### Compact Machine Footprint

The SPECHT® 800/800+ are designed with fully integrated electrical systems, fluid power enclosures and space saving tool changing systems, to provide a best-in-class machine envelope and minimize costly floor space requirements.



## Machine Features

- ▶ Box-In-Box design with a moving table fixture for outstanding stiffness and machining accuracy
- ▶ Dual ball screw drives in all axes for maximum feed force and stiffness
- ▶ Motorized or gear driven spindles to provide the optimum spindle speed and torque for any application
- ▶ High speed tool exchange and storage systems for (28), (60) or (100) HSK100 cutting tools
- ▶ Loading and clamping of workpieces can be manual or automatic using overhead gantry, pedestal or rail mounted robots
- ▶ Pallet exchange systems in three size ranges: 800 x 800, 800 x 1000 and 1000 x 1000 pallet sizes
- ▶ Heavy duty cast iron base with twin chip augers for high volume chip removal
- ▶ Wet, dry or Minimum Quantity Lubrication machining (MQL)
- ▶ Self-contained chip handling or individual pump backs (IPB) systems to central chip handling systems
- ▶ Choice of Fanuc 31i B or Siemens 840D CNC controls with simultaneous 4-axis control





# Specifications for SPECHT® 800 / 800+

SPECHT® 800 [800+]		B-axis direct load	A-axis direct load
<b>Linear axis</b>			
X-axis	mm	1400	1400
Y-axis, disk [chain]	mm	1050 [1400]	1050 [1400]
Z-axis	mm	1400	1400
Rapid traverse X, Y, Z axes	m/min	60	60
Acceleration X, Y, Z axes	m/s	5	5
<b>Rotary axis</b>			
Axis speed	rpm	40	40
Axis resolution	dgr	360 000 x 0.001°	360 000 x 0.001°
Table size	mm	ø 900	-
Fixture services – table	ports	10+1	10+1
Interference diameter	mm	ø 1500	ø 1400
Interference height / length	mm	1475 [1775]	1680
Maximum table load	kg	3000	2000
<b>Tool storage</b>			
Spindle interface		HSK-A100	HSK-A100
Tool storage disk [options]		28 [60] [100]	28 [60] [100]
Maximum tool dia. disk [chain]	mm	140 [125]	140 [125]
Maximum tool dia. open pocket disk [chain]	mm	300 [325]	300 [325]
Chip-to-chip time disk [chain]	s	5.3 [5.3]	5.3 [5.3]
Tool length max.	mm	690	690
Tool weight max.	kg	25 [30]	25 [30]
<b>Spindle</b>			
Geared headstock (40% duty)	rpm / Kw / Nm	8000 / 78 / 2000	8000 / 78 / 2000
Geared headstock (40% duty)	rpm / Kw / Nm	6000 [10 000] / 47 / 1153	6000 [10 000] / 47 / 1153
Motor spindle (40% duty)	rpm / Kw / Nm	8000 / 38 / 378	8000 / 38 / 378
Motor spindle with draw bar (40% duty)	rpm / Kw / Nm	6000 / 52 / 250	6000 / 52 / 250

SPECHT® 800 [800+]		B- over A-axis direct load	B-axis pallet changer
<b>Linear axis</b>			
X-axis	mm	1400	1400
Y-axis, disk [chain]	mm	1050 [1400]	1050 [1400]
Z-axis	mm	1400	1400
Rapid traverse X, Y, Z axes	m/min	60	60
Acceleration X, Y, Z axes	m/s	5	5
<b>Rotary axis</b>			
Axis speed	rpm	40	40
Axis resolution	dgr	360 000 x 0.001°	360 000 x 0.001°
Table size	mm	ø 700	ø 900
Fixture services – table	ports	6+1	10+1
Interference diameter – A-axis	mm	ø 1400	-
Interference height / length – A-axis	mm	1680	-
Interference diameter – B-axis	mm	ø 1200	ø 1500
Interference height – B-axis [chain]	mm	850	1300 [1600]
Maximum table or pallet load	kg	1000	2500
<b>Tool storage</b>			
Spindle interface		HSK-A100	HSK-A100
Tool storage disk [options]		28 [60] [100]	28 [60] [100]
Maximum tool dia. disk [chain]	mm	140 [125]	140 [125]
Maximum tool dia. open pocket disk [chain]	mm	300 [325]	300 [325]
Chip-to-chip time disk [chain]	s	5.3 [5.3]	5.3 [5.3]
Tool length max.	mm	690	690
Tool weight max.	kg	25 [30]	25 [30]
<b>Spindle</b>			
Geared headstock (40% duty)	rpm / Kw / Nm	8000 / 78 / 2000	8000 / 78 / 2000
Geared headstock (40% duty)	rpm / Kw / Nm	6000 [10 000] / 47 / 1153	6000 [10 000] / 47 / 1153
Motor spindle (40% duty)	rpm / Kw / Nm	8000 / 38 / 378	8000 / 38 / 378
Motor spindle with draw bar (40% duty)	rpm / Kw / Nm	6000 / 52 / 250	6000 / 52 / 250



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## About FFG Europe & Americas

The FFG entities in Europe and North America unite major players from the German, Italian, Swiss and North American machine tool industry with a broad range of milling, turning, gear manufacturing technology and the knowhow of the renowned machine tool brands VDF Boehringer, Hüller Hille, Hessapp, IMAS, Jobs, MAG, Modul, Pfiffner, Rambaudi, Sachman, Sigma, SMS and Witzig & Frank. Since 1789, these brands have substantially contributed to the progress in industrial manufacturing and are well known as reliable and innovative equipment and systems solutions suppliers for the automotive and truck, aerospace, machine building, general machining, railway industry, energy and heavy engineering industries. While being an independent group, these entities benefit from the strengths and opportunities of the global Fair Friend Group. They stand for premium technology within FFG.



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