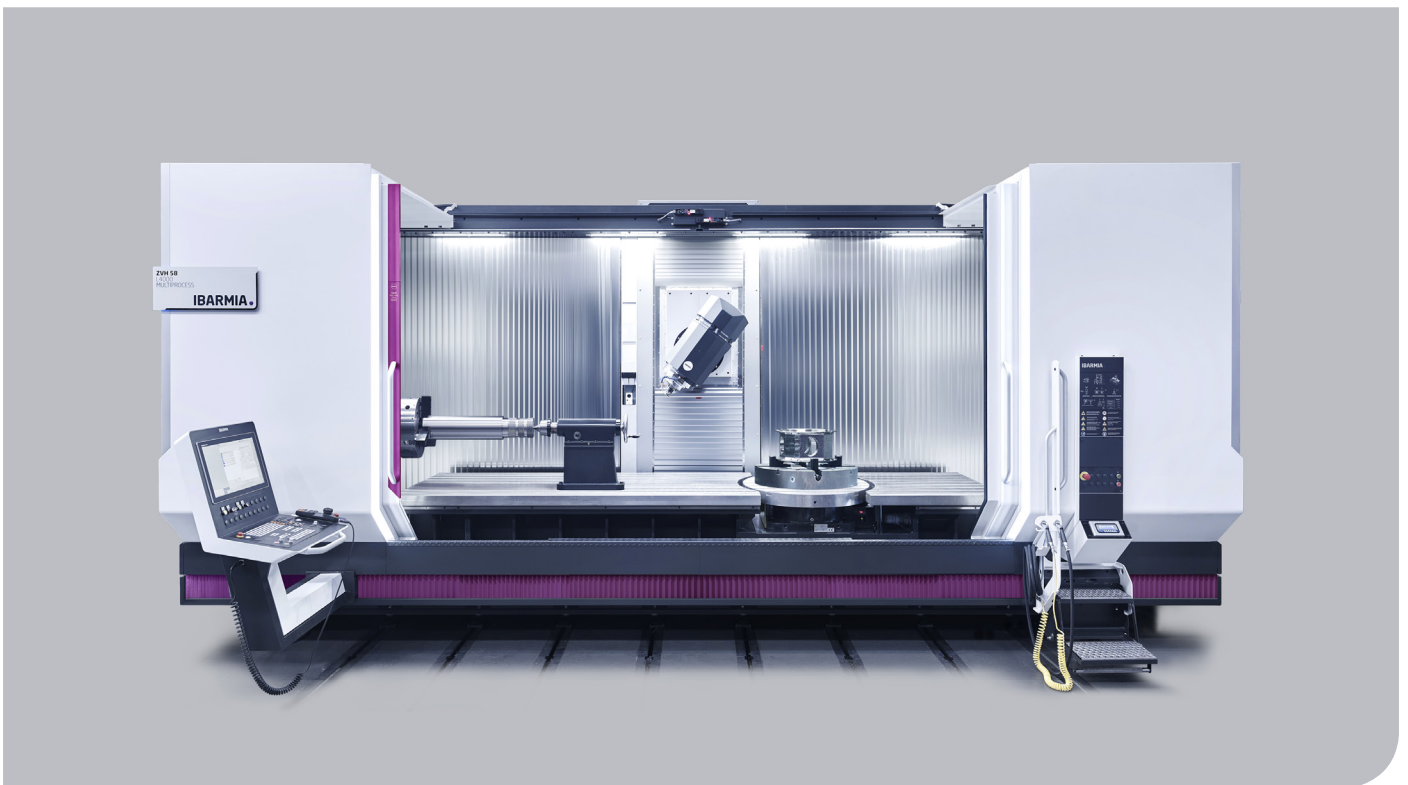


**IBARMIA.**

# ZVH MULTIPROCESS

60

## TECHNICAL SPECIFICATIONS



### ZVH MULTIPROCESS

Combine 5 axis vertical and/or horizontal multitasking capacity with a fixed table so you can be ready for any job at the shortest notice.



**Z SERIES**

**ZVH MULTIPROCESS****ZVH 60****STROKES**

-X axis travel (length)	mm	1600 - 12000
-X axis travel working in 2 areas (vertical)	mm	2x 465 (L1600) - 2x 2665 (L6000)
-Y axis travel (cross)	mm	1100
-Z axis travel (vertical)	mm	1100 (Op. 1300)
-B axis head range	°	+/-105
-Maximum swing diameter (C axis integrated rotary table)	mm	1500

**TABLE**

-Fixed table dimensions	mm	L1600-2200: X+400 mm; <L3000: X+600 mm & Y +50 mm
-Maximum table load capacity	Kg/m <sup>2</sup>	2000
-Number of "T" slots		9
-"T" slots size	mm	18 H7
-Distance between "T" slots	mm	125
-Min. / Max. distance spindle nose / table	mm	V (0----1100) - H (375----11475)
-Table height	mm	1075

**TILTINH HEAD**

-Turning torque	Nm	800
-Position clamping force	Nm	6000

**MAIN SPINDLE**

-Spindle taper		Standard: HSK A 100 - Option: Capto C8
-Maximum speed	rpm	Standard: 12.000 - Option: 7000
-Maximum power	kW	Standard: 84 - Option: 75
-Maximum torque	Nm	Standard: 452 - Option: 871

**CONTROLS**

-Available digital controls		Fanuc / Heidenhain / Siemens
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**FEED**

-Feed thrust X-Y-Z 100% (S3 40%)	N	X: 15.021 (22.971) / Y: 12.154 (17.255) / Z: 10.649 (15.529)
-Rapid feed for positioning X-Y-Z	m/min	45
-Maximum working feed X-Y-Z	m/min	30
-Rapid feed for positioning in B axis	rpm	50

**ACCURACY VDI / DGQ3441**

-Positioning accuracy Tp X-Y-Z (1000 mm)	µm	10
-Repeatability	µm	5
-Measuring system on B axis		Rotary scale
-Positioning accuracy Tp B	s	8"

**ZVH MULTIPROCESS****ZVH 60****CAPACITIES**

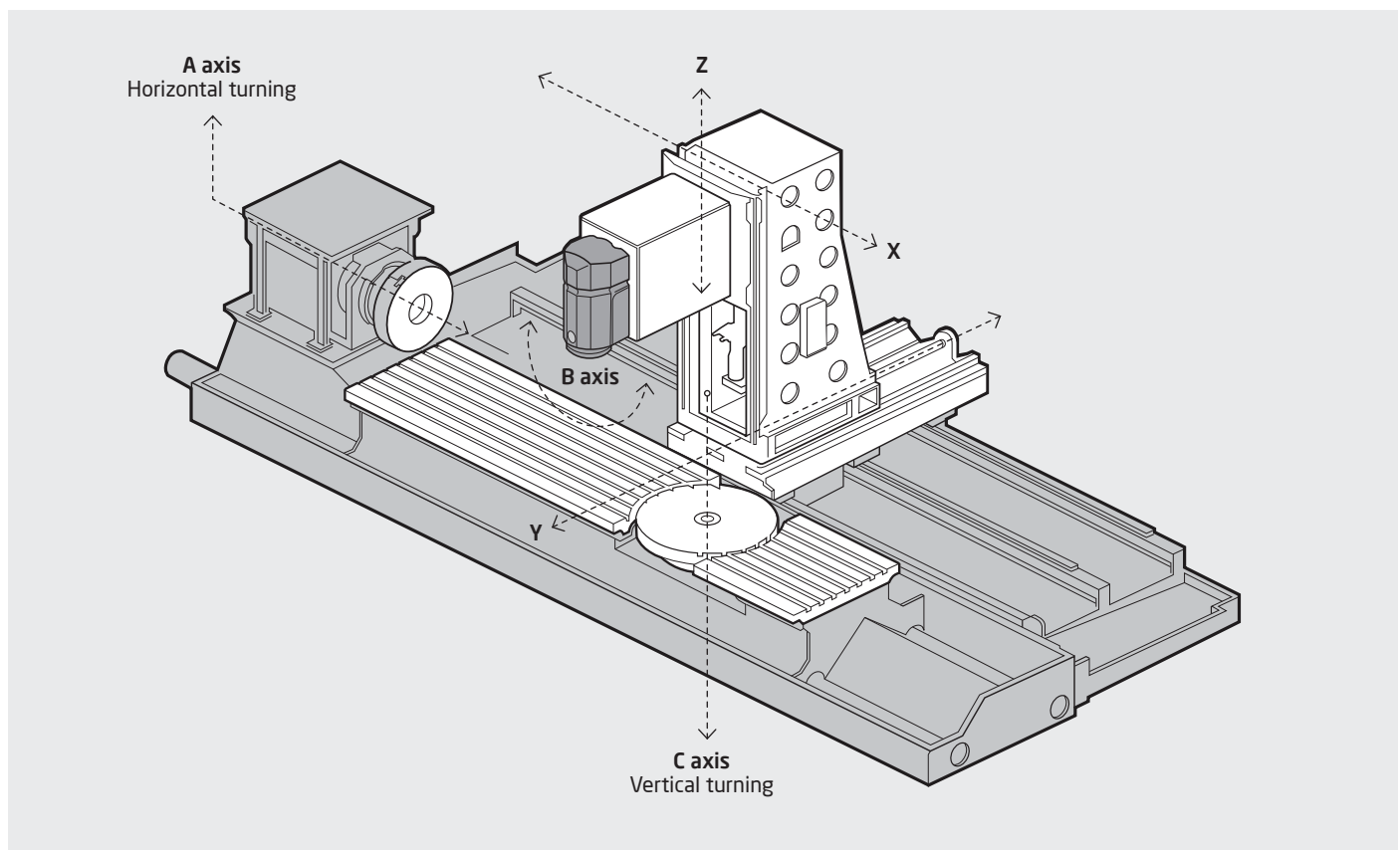
-Milling capacity in steel St 60	cm <sup>3</sup> /min	1100
-Drilling capacity in steel St 60	Ø mm	70
-Tapping de roscado en acero St 60	mm	M45

**TOOL MAGAZINE**

-Number of tools		30. Optional: 40, 60, 80 and more available on request.
-Maximum tool length	mm	400
-Maximum tool weight	Kg	20
-Maximum tool Ø with full magazine	mm	125 (100 with 60-80 ATC)
-Maximum tool Ø with free spaces	mm	200
-Tool changing time	s	10"
-Chip to chip time	s	12"

**GENERAL**

-Machine painted in 3 colours	RAL	White 9010, Ligth Grey 9006, Dark Grey 7021
-Total power installed	kW	60
-Power connection voltage	V	400 V / 50 Hz
-Required compressed air pressure	bar	6
-Machine length (L1600 / L6000)	mm	5850 (L1600) - 11.650 (L6000)
-Aproximate net weight (L1600 / L6000)	kg	25.000 / 42.500



**TURNING TABLES**

-Vertical C axis ø525 mm • Maximum load 600 kg • +/-5"	700 rpm / 34,2 kW / 328 Nm
-Vertical C axis ø800 mm • Maximum load 3000 kg • +/-4"	500 rpm / 40kW / 1380 Nm
-Vertical C axis ø1000 mm • Maximum load 3500 kg • +/-4"	500 rpm / 40 kW / 1760 Nm
-Vertical C axis ø1200 mm • Maximum load 6000 kg • +/-4"	500 rpm / 83 kW / 4000 Nm
-Horizontal B axis ø180 mm • Maximum load 250 kg • +/-5"	3000 rpm / 24 kW / 100 Nm
-Horizontal B axis ø280 mm • Maximum load 700 kg • +/-5"	2000 rpm / 51,5 kW / 820 Nm
-Horizontal B axis ø380 mm • Maximum load 1500 kg • +/-5"	1800 rpm / 78 kW / 1400 Nm

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## INCLUDED ITEMS IN STANDARD CONFIGURATION

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- 5 axis model: longitudinal X, transversal Y, vertical Z, tilting head B, combined with C and/or A axis MULTIPROCESS rotary table.
- Direct measuring on linear axes X / Y / Z.
- Measuring by rotary scale on rotary axes B / C / A.
- Travelling on lineal guides and ball screws.
- Servomotors with braking system for the axes.
- Rack and pinion system on machines from 6000 mm long.
- Hydraulic counter weight for the head.
- Electrospindle thermal compensation.
- 30 tool ATC magazine.
- Air blast for tool cleaning.
- Totally encapsulated working area.
- Vertical covers on X axis (steel bellows).
- Safety windows.
- Illumination of working area.
- Double auger system for chip evacuation.
- Removable lateral pannels.
- Moving and rotary control panel (360°) along machine bed (except L1600).
- Touch screen 19".
- Chip Conveyor with integrated coolant tank.
- External coolant system around the spindle.
- Programmable central lubrication system.
- Climatised electrical cabinet.
- Machine levelling elements.
- Informative cartel in black methacrylate.
- SMART POINT machine data monitoring system.

## OPTIONAL ITEMS

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- Coolant through spindle.
- NSM software and division wall of working areas.
- Transport cart for the division wall.
- ATC magazines up to 200 tools (fixed magazines, rack type...).
- Pick up stations integrated in the machine to hold special tools and angular heads.
- Special tool magazines up to 400 positions managed by arm robot.
- Tool measuring and touch systems.
- C axis integrated rotary tables up to  $\varnothing 1200$  mm.
- Big diameter rotary tables up to  $\varnothing 2000$  mm together with the fix table.
- Bolt on rotary tables to be used either in horizontal or vertical axis.
- Special working table configurations: moving tables, trunnion fixtures...
- Steam and mist aspiration system.
- Spray and air guns.
- "Comfort" pack: Sliding access stairway along the longitudinal travel with supports for air and water guns.
- "Illumination" pack: LED lights with acoustic signal indicating the state of the machine, integrated into the sides.
- 3 light tower with acoustic signal indicating the state of the machine.
- Camera settings and display mode.
- CNC control with touch screen up to 24".
- Advanced HMI.
- Portable electronic hand-wheel with support in the control pannel.