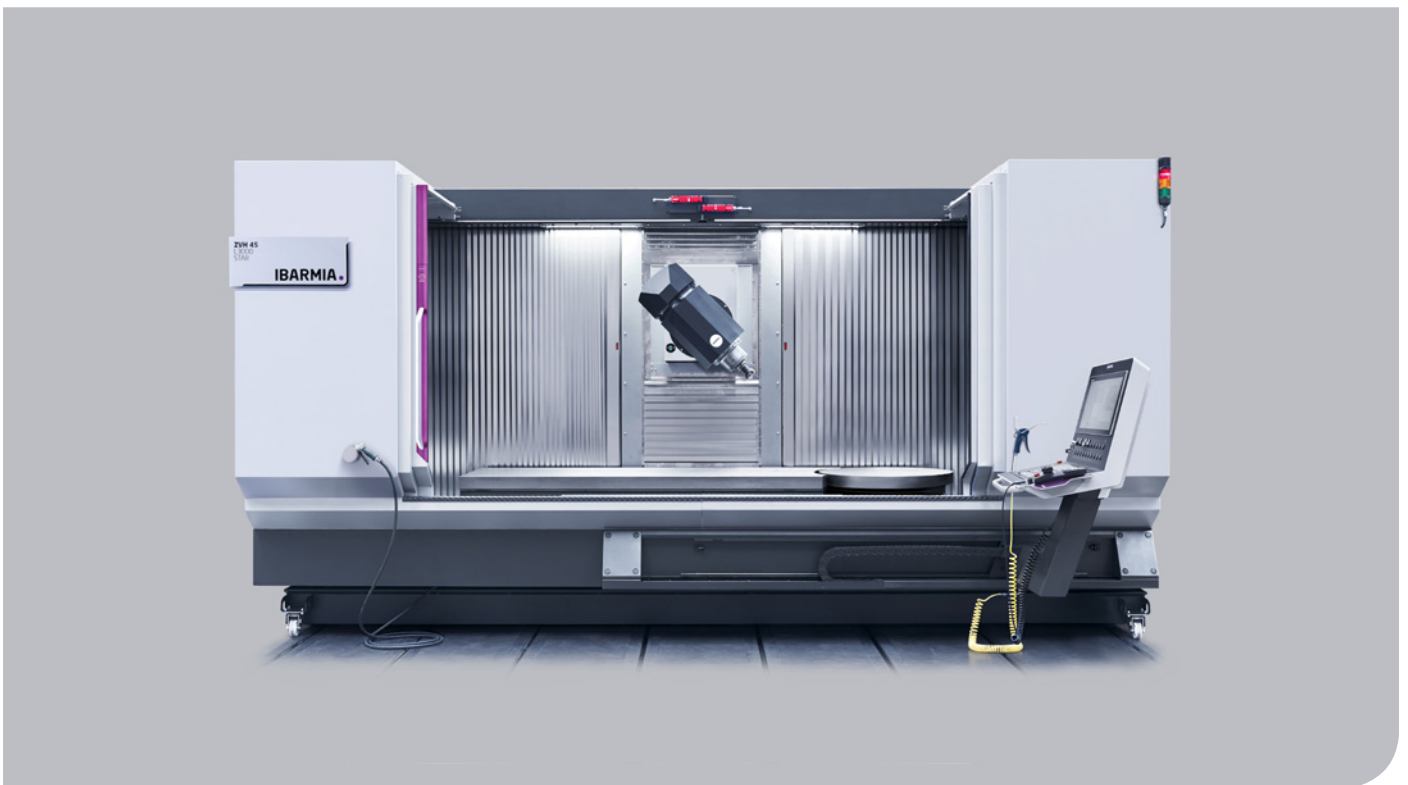


**IBARMIA.**

# ZVH 45 STAR EDITION

L1500 / L3000

## TECHNICAL SPECIFICATIONS



### ZVH STAR EDITION

The most aggressive moving column 5 axis machine, high technology in a combination of elements to meet a wide range of requirements for the quickest ROI.

Available in two models L1500 and L3000.



**Z SERIES**

**ZVH STAR EDITION****STAR 1500****STAR 3000****STROKES**

|  |    |        |      |
|--|----|--------|------|
| -X axis travel (length)                                  | mm | 1500   | 3000 |
| -X axis travel working in 2 areas (vertical)             | mm | -      | 1200 |
| -Y axis travel (cross)                                   | mm | 800    |      |
| -Z axis travel (vertical)                                | mm | 800    |      |
| -B axis head range                                       | °  | +/-105 |      |
| -Maximum swing diameter (C axis integrated rotary table) | mm | 1100   |      |

**TABLE**

|  |                   |                                |             |
|--|-------------------|--------------------------------|-------------|
| -Fixed table dimensions                    | mm                | 1700x850 mm                    | 3000x850 mm |
| -Maximum table load capacity               | Kg/m <sup>2</sup> | 1500                           |             |
| -Number of "T" slots                       |                   | 5                              |             |
| -"T" slots size                            | mm                | 1x18(H7) / 4x18(H12)           |             |
| -Distance between "T" slots                | mm                | 125                            |             |
| -Min. / Max. distance spindle nose / table | mm                | V (0----800) - H (360----1160) |             |
| -Table height                              | mm                | 1000                           | 1050        |

**TILTINH HEAD**

|                          |    |      |  |
|--------------------------|----|------|--|
| -Turning torque          | Nm | 782  |  |
| -Position clamping force | Nm | 6000 |  |

**MAIN SPINDLE**

|                 |     |                                    |        |
|-----------------|-----|------------------------------------|--------|
| -Spindle taper  |     | Standard: SK 40 - Option: HSK A-63 |        |
| -Maximum speed  | rpm | 12.000 - Option: 15.000            | 12.000 |
| -Maximum power  | kW  | 46                                 |        |
| -Maximum torque | Nm  | 200                                |        |

**CONTROLS**

|                             |  |   |  |
|-----------------------------|--|---|--|
| -Available digital controls |  | Standard: Fanuc 31i-B - Option: Heidenhain TNC 640 HSCI |  |
|-----------------------------|--|---|--|

**FEED**

|                                       |       |  |  |
|---------------------------------------|-------|--|--|
| -Feed thrust X-Y-Z 100% (S3 40%)      | N     | X: 12.020 (19.120) / Y: 8500 (13.600) / Z: 8558 (13.700) |  |
| -Rapid feed for positioning X-Y-Z     | m/min | 40   |  |
| -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 STAR EDITION****STAR 1500****STAR 3000****CAPACITIES**

|                                    |                      |     |
|------------------------------------|----------------------|-----|
| -Milling capacity in steel St 60   | cm <sup>3</sup> /min | 900 |
| -Drilling capacity in steel St 60  | Ø mm                 | 50  |
| -Tapping de roscado en acero St 60 | mm                   | M33 |

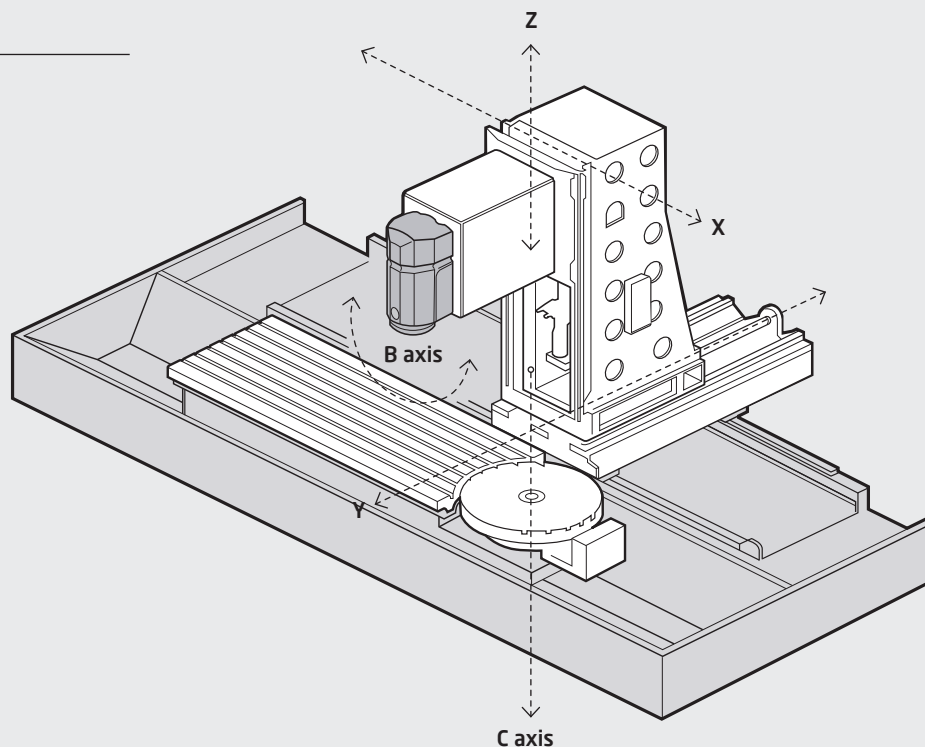
**TOOL MAGAZINE**

|                                    |    |     |                 |
|------------------------------------|----|-----|-----------------|
| -Number of tools                   |    | 60  | 40 (Option: 60) |
| -Maximum tool length               | mm | 350 | 350             |
| -Maximum tool weight               | Kg | 7   | 8               |
| -Maximum tool Ø with full magazine | mm | 75  | 90              |
| -Maximum tool Ø with free spaces   | mm | 127 | 150             |
| -Tool changing time                | s  | 8"  |                 |
| -Chip to chip time                 | s  | 10" |                 |

**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  | 5902  | 7102   |
| -Aproximate net weight (L1600 / L6000) | kg  | 15.000                                      | 18.500 |

STAR 3000



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## INCLUDED ITEMS IN STANDARD CONFIGURATION

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- STAR 3000: 4 axis model: longitudinal X, transversal Y, vertical Z, tilting head B.
- STAR 1500: 5 axis model: longitudinal X, transversal Y, vertical Z, tilting head B, rotary table C.
- $\varnothing$ 800 mm C axis integrated rotary table in STAR 1500.
- Direct measuring integrated on linear axes X / Y / Z.
- Measuring by rotary scale on B rotary axis.
- Travelling on lineal guides and ball screws.
- Servomotors with braking system for the axes.
- Hydraulic counter weight for the head.
- Air blast for tool cleaning.
- External coolant system around the spindle (12 bar).
- Coolant through spindle (22 bar).
- 60 tool ATC magazine (STAR 1500) / 40 tool ATC magazine (STAR 3000).
- Vertical covers on X axis (steel bellows).
- Totally encapsulated working area.
- Illumination of working area.
- Side windows for long parts.
- Moving control panel (STAR 3000).
- Touch screen 19".
- Fanuc 31i-B control.
- Electronic hand-wheel
- Chip Conveyor with integrated coolant tank.
- Spray and air guns.
- Programmable central lubrication system.
- Climatized electrical cabinet.
- Machine levelling elements.

## OPTIONAL ITEMS

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- Heidenhain TNC 640 HSCI control.
- NSM software and division wall of working areas.
- $\varnothing$ 800 mm C axis integrated rotary table in STAR 3000.
- Bolt on rotary tables to be used either in horizontal or vertical axis.
- 60 tool ATC magazine (STAR 3000).
- Tool measuring and touch systems.
- Steam and mist aspiration system.
- 3 light tower with acoustic signal indicating the state of the machine.