

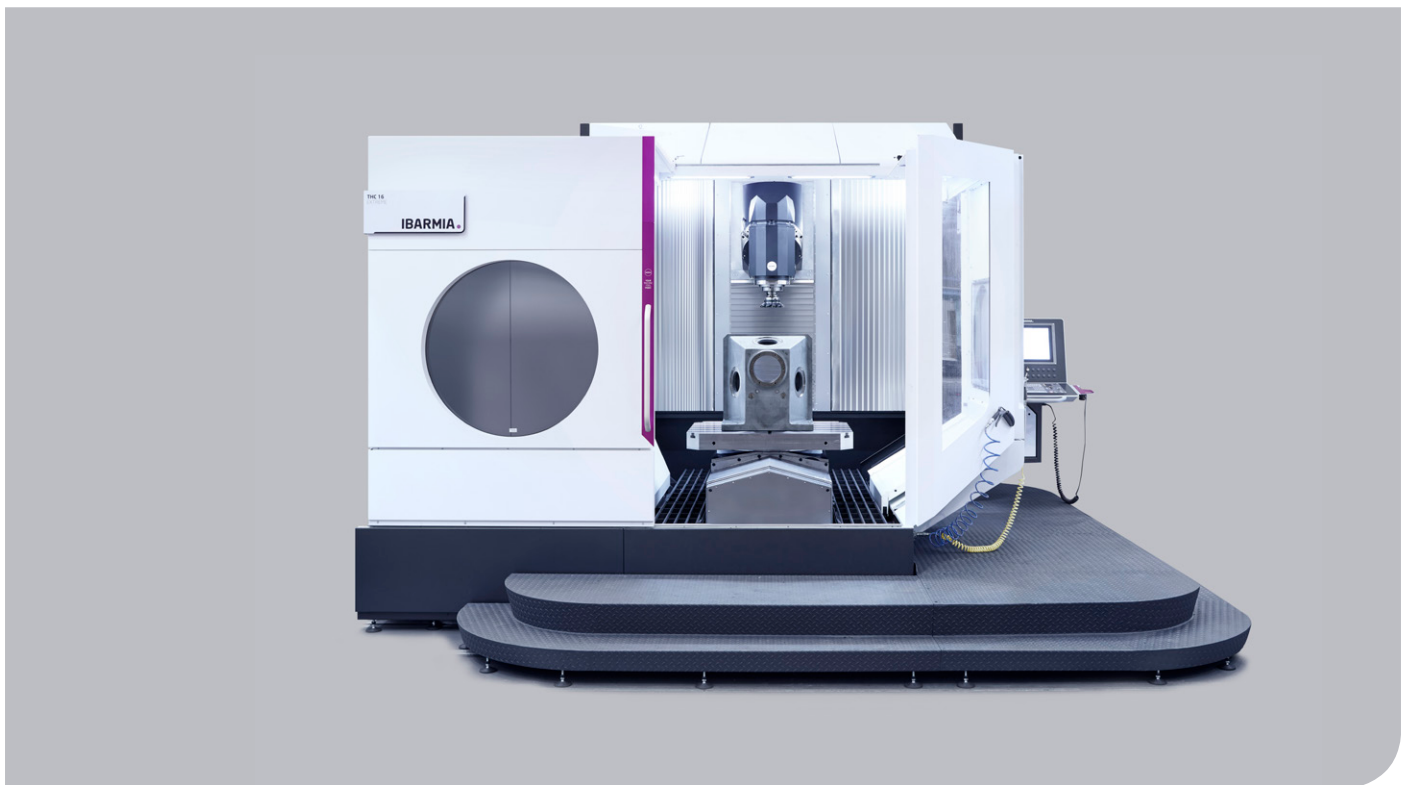
**IBARMIA.**

# T EXTREME

36 / 30 / 22 / 16 / 12

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## TECHNICAL SPECIFICATIONS



### T EXTREME

Power, accuracy and dynamics combined with excellent chip evacuation, ergonomics and intelligent production functions.



**T SERIES**

**T EXTREME****T 36****T 30****T 22****T 16****T 12****STROKES**

|                                                            |    |                               |             |             |             |            |
|------------------------------------------------------------|----|-------------------------------|-------------|-------------|-------------|------------|
| -X axis travel (length)                                    | mm | 3600                          | 3000        | 2200        | 1600        | 1200       |
| -Y axis travel (cross)                                     | mm | 2300                          | 2000        | 1600        | 1300        | 1100       |
| -Z axis travel (vertical)                                  | mm | 1900                          | 1700        | 1500        | 1200        | 1000       |
| -Head tilting range (B - A)                                | °  | B: -15°/+195° - A: -45°/+135° |             |             |             |            |
| -C axis turning range                                      | °  | 360°                          |             |             |             |            |
| -Maximum swing diameter                                    | mm | 3600                          | 3000        | 2200        | 1600        | 1200       |
| -Piece maximum height                                      | mm | 2150                          | 1950        | 1750        | 1700        | 1600       |
| -Distance spindle nose-table. Vertical position (B axis)   | mm | 100 / 2000                    | 100 / 1800  | 100 / 1600  | 100 / 1300  | 100 / 1100 |
| -Distance spindle nose-table. Horizontal position (B axis) | mm | 100 / 2000                    | 100 / 1800  | 100 / 1600  | 100 / 1300  | 100 / 1100 |
| -Distance spindle nose-table. Vertical position (A axis)   | mm | -115 / 1785                   | -115 / 1585 | -115 / 1385 | -115 / 1085 | -115 / 885 |
| -Distance spindle nose-table. Horizontal position (A axis) | mm | 260 / 2160                    | 260 / 1960  | 260 / 1760  | 260 / 1460  | 265 / 1265 |

**TABLE**

|                              |     |           |           |           |           |         |
|------------------------------|-----|-----------|-----------|-----------|-----------|---------|
| -Table dimensions            | mm  | 1600x1600 | 1250x1600 | 1250x1250 | 1000x1000 | 800x800 |
| -Maximum table load capacity | Kg  | 25.000    | 20.000    | 10.000    | 6.000     | 4.000   |
| -Nominal speed               | rpm | 1,5       |           |           |           |         |
| -Maximum speed               | rpm | 5         | 5         | 5         | 8         | 8       |
| -Nominal torque              | Nm  | 18.000    | 13.000    | 6000      | 3800      | 2800    |
| -Positioning accuracy        | s   | +/-4"     |           |           |           |         |
| -"T" slots                   |     | Parallel  |           |           |           |         |
| -Number of "T" slots         |     | 13        | 9         |           | 7         |         |
| -"T" slots size              | mm  | T22       |           |           | T18       |         |
| -Distance between "T" slots  | mm  | 125       |           |           |           | 100     |

**TILTING HEAD**

|                          |    |      |  |  |  |  |
|--------------------------|----|------|--|--|--|--|
| -Turning torque          | Nm | 1210 |  |  |  |  |
| -Position clamping force | Nm | 7000 |  |  |  |  |

**MAIN SPINDLE**

|                 |     |                                                        |  |  |  |  |
|-----------------|-----|--------------------------------------------------------|--|--|--|--|
| -Spindle taper  |     | Standard: SK 50 - Option: BT 50 / HSK A-100 / Capto C8 |  |  |  |  |
| -Maximum speed  | rpm | Standard: 12.000 - Option: 7000                        |  |  |  |  |
| -Maximum power  | kW  | Standard: 84 - Option: 75                              |  |  |  |  |
| -Maximum torque | Nm  | Standard: 452 - Option: 871                            |  |  |  |  |

**FEED**

|                                         |       |           |             |           |       |       |
|-----------------------------------------|-------|-----------|-------------|-----------|-------|-------|
| -Maximum working feed X-Y-Z axes        | m/min | 30        |             |           | 50    | 60    |
| -Rapid feed for positioning X-Z axes    | m/min | 40        |             |           | 50    | 60    |
| -Rapid feed for positioning Y axis      | m/min | 30        |             |           | 50    | 60    |
| -X-Y-Z axes acceleration                | m/s²  | 1,5/1,5/2 | 1,7/1,8/2,2 | 2/2,1/3,3 | 4/4/5 | 4/5/5 |
| -Rapid feed for positioning in B-A axes | rpm   | 50        |             |           |       |       |

**T EXTREME****T 36****T 30****T 22****T 16****T 12****ACCURACY VDI / DGQ3441**

|                                          |    |              |    |   |   |
|------------------------------------------|----|--------------|----|---|---|
| -Positioning accuracy Tp X-Y-Z (1000 mm) | μm | 12           | 10 | 7 | 6 |
| -Repeatability                           | μm | 7            |    | 5 |   |
| -Measuring system on B-A axes            |    | Rotary scale |    |   |   |
| -Positioning accuracy B-A axes           | s  | +/- 5        |    |   |   |

**CAPACITIES**

|                                    |         |      |
|------------------------------------|---------|------|
| -Milling capacity in steel St 60   | cm³/min | 1100 |
| -Drilling capacity in steel St 60  | Ømm     | 70   |
| -Tapping de roscado en acero St 60 | mm      | M 45 |

**TOOL MAGAZINE**

|                                    |    |                                     |
|------------------------------------|----|-------------------------------------|
| -Number of tools                   |    | Standard: 60. Option: 120, 240, 360 |
| -Maximum tool length               | mm | 450                                 |
| -Maximum tool weight               | kg | 20                                  |
| -Maximum tool Ø with full magazine | mm | 125                                 |
| -Maximum tool Ø with free spaces   | mm | 250                                 |
| -Tool changing time                | s  | 6"                                  |
| -Chip to chip time                 | s  | 8"                                  |

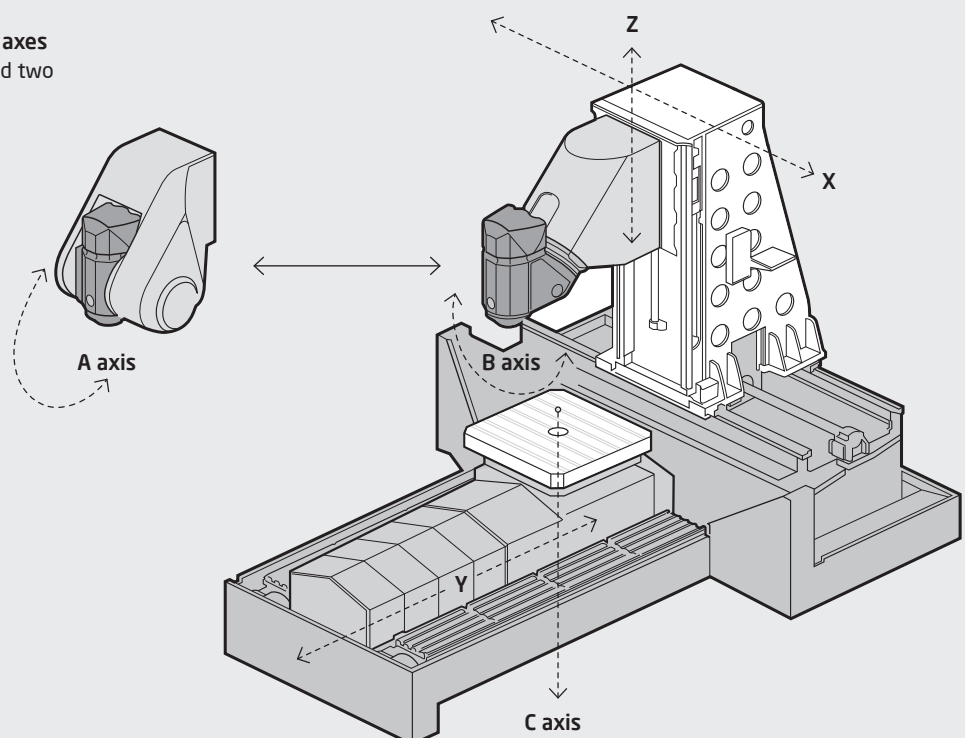
**CONTROLS**

|                             |  |                              |
|-----------------------------|--|------------------------------|
| -Available digital controls |  | Fanuc / Heidenhain / Siemens |
|-----------------------------|--|------------------------------|

**Machining up to 5 simultaneous axes**  
combining the table rotary axis and two  
available rotary headstocks:

**THR\_**  
A axis headstock  
(-45°/+135°)

**THC\_**  
B axis headstock  
(-15°/+195°)



**T EXTREME****T 36****T 30****T 22****T 16****T 12****GENERAL**

|                                   |     |                                             |        |        |        |        |
|-----------------------------------|-----|---------------------------------------------|--------|--------|--------|--------|
| -Machine painted in 3 colours     | RAL | White 9010, Light Grey 9006, Dark Grey 7021 |        |        |        |        |
| -Total power installed            | kW  | 120                                         | 100    | 100    | 95     | 95     |
| -Power connection voltage         | V   | 400 V / 50 Hz                               |        |        |        |        |
| -Required compressed air pressure | bar | 6                                           |        |        |        |        |
| -Approximate net weight           | kg  | 87.000                                      | 50.000 | 39.000 | 32.000 | 25.000 |

**INCLUDED ITEMS IN STANDARD CONFIGURATION**

- 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.
- Hydraulic counter weight for the head.
- Electrospindle thermal compensation.
- 60 tool ATC magazine.
- Air blast for tool cleaning.
- Totally encapsulated working area.
- Vertical covers on X axis (steel bellows).
- Illumination of working area.
- Longitudinal endless screws for chip evacuation. (double screw in T36-T30 models).
- Rotary control panel.
- Touch screen 19".
- Chip Conveyor with integrated coolant tank.
- External coolant system around the spindle.
- Programmable central lubrication system.
- Climatized electrical cabinet.
- Stairs to machine access.
- Machine levelling elements.
- Informative display in black methacrylate.

**OPTIONAL ITEMS**

- Coolant through spindle.
- ATC magazines up to 240 tools.
- Special tool magazines up to 400 positions managed by arm robot.
- Automatic pallet changer APC (rotopallet, pallet-pool).
- Tool measuring and touch systems.
- Steam and mist aspiration system.
- Spray and air guns.
- "Illumination" pack: LED lights with acoustic signal integrated into the machine.
- 3 light tower with acoustic signal.
- Camera settings and display mode.
- CNC control with touch screen up to 24".
- Advanced HMI.
- Portable electronic hand-wheel with support in the control panel.