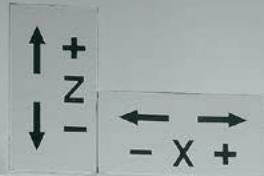


# G-SERIES<sup>®</sup>

READY FOR ANY CHALLENGE



High-speed triple-axis  
graphite machining centers

# G-SERIES

## THE GRAPHITE ARTISTS

Immense particulate resistance – optimal for graphite processing.  
Premium performance for high-speed applications.

### Triple-axis machining center G 700

**FAST MACHINE AVAILABILITY!**



#### G 700

|                                        |                 |
|----------------------------------------|-----------------|
| X / Y / Z-axis travel paths (mm)       | 750 x 700 x 500 |
| X / Y / Z-axis high-speed mode (m/min) | 30              |
| Max. table load (kg)                   | 500             |

- Completely enclosed working area including vacuum-extraction for state-of-the-art graphite processing
- High level of geometrical and dimensional accuracy thanks to compact portal design
- Comprehensively equipped base version contributes an unexcelled price/performance ratio
- Stable and rigid portal design featuring reliable resistance to high temperatures
- Absolute direct measuring systems
- Thermal compensation system counteracts spindle expansion
- Cooling system for the recirculating ball-screw assembly
- 25,000 rpm, HSK-E50, motor spindle
- Graphite extraction system

## Triple-axis machining center G 1000

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The expert contact person for  
your questions and requests:

Sebastian Herr

Takumi Product Manager

Phone +49 (89) 905094 - 99

[takumicnc.eu](mailto:takumicnc.eu)

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### G 1000

|                                        |                   |
|----------------------------------------|-------------------|
| X / Y / Z-axis travel paths (mm)       | 1,020 x 700 x 500 |
| X / Y / Z-axis high-speed mode (m/min) | 30                |
| Max. table load (kg)                   | 800               |

- Completely enclosed working area including vacuum-extraction for state-of-the-art graphite processing
- High level of geometrical and dimensional accuracy thanks to compact portal design
- Comprehensively equipped base version contributes an unexcelled price/performance ratio
- Stable and rigid portal design featuring reliable resistance to high temperatures
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# TECHNICAL SPECIFICATIONS AT A GLANCE

| DESIGNATION                            | G 700                                                                                                                                                                                                          | G 1000                |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>TRAVEL PATHS</b>                    |                                                                                                                                                                                                                |                       |
| X-axis (mm)                            | 750                                                                                                                                                                                                            | 1,020                 |
| Y-axis (mm)                            | 700                                                                                                                                                                                                            | 700                   |
| Z-axis (mm)                            | 500                                                                                                                                                                                                            | 500                   |
| <b>OPERATING RANGE</b>                 |                                                                                                                                                                                                                |                       |
| Spindle nose table (mm)                | 150 - 650                                                                                                                                                                                                      | 180 - 680             |
| Distance between columns (mm)          | 850                                                                                                                                                                                                            | 1.080                 |
| Table clamping surface L x W (mm)      | 810 x 620                                                                                                                                                                                                      | 1,050 x 700           |
| Table load (uniform) (kg)              | 500                                                                                                                                                                                                            | 800                   |
| T-slots (DIN 650)                      | 5 x 18 x 125                                                                                                                                                                                                   | 6 x 18 x 125          |
| <b>MAIN SPINDLE</b>                    |                                                                                                                                                                                                                |                       |
| Spindle taper                          | HSK 50 E                                                                                                                                                                                                       | HSK 50 E              |
| Drive type                             | Motor                                                                                                                                                                                                          | Motor                 |
| Max. spindle speed (U/min)             | 25.000                                                                                                                                                                                                         | 25,000                |
| S1/S6 spindle power (kW)               | 20 / 26                                                                                                                                                                                                        | 20 / 26               |
| S1/S6 spindle torque (Nm)              | 10.4 / 13.5                                                                                                                                                                                                    | 10.4 / 13.5           |
| <b>FEED</b>                            |                                                                                                                                                                                                                |                       |
| X/Y/Z-axis high-speed mode (m/min)     | 30 / 30 / 30                                                                                                                                                                                                   | 30 / 30 / 30          |
| X/Y/Z-axis machining feed (m/min)      | 20                                                                                                                                                                                                             | 20                    |
| <b>TOOL CHANGER</b>                    |                                                                                                                                                                                                                |                       |
| Type tool changer                      | Double gripper                                                                                                                                                                                                 | Double gripper        |
| Magazine capacity                      | 24                                                                                                                                                                                                             | 30                    |
| Max. tool diameter (mm)                | 75                                                                                                                                                                                                             | 75                    |
| With unoccupied adjacent stations (mm) | 120                                                                                                                                                                                                            | 120                   |
| Max. tool length (mm)                  | 300                                                                                                                                                                                                            | 300                   |
| Max. tool weight (kg)                  | 7                                                                                                                                                                                                              | 7                     |
| <b>OTHER DATA</b>                      |                                                                                                                                                                                                                |                       |
| Compressed-air supply (bar)            | 6                                                                                                                                                                                                              | 6                     |
| Electrical power supply (kVA/A)        | 50 / 125                                                                                                                                                                                                       | 50 / 125              |
| Shipping weight (kg)                   | 7,000                                                                                                                                                                                                          | 9,100                 |
| Required floor space (mm)              | 2,890 x 4,510 x 2,870                                                                                                                                                                                          | 3,950 x 4,600 x 2,950 |
| <b>STANDARD</b>                        |                                                                                                                                                                                                                |                       |
|                                        | <ul style="list-style-type: none"> <li>• Heidenhain TNC 640 control system</li> <li>• 25,000<sup>rpm</sup>, HSK 50 E, motor spindle</li> <li>• Compensation of thermal spindle expansion</li> </ul>            |                       |
| <b>OPTIONAL</b>                        |                                                                                                                                                                                                                |                       |
|                                        | <ul style="list-style-type: none"> <li>• Touch probe system for tool measurement</li> <li>• Touch probe system for workpiece measurement</li> <li>• Cooling system for the recirculating ball screw</li> </ul> |                       |

# HEIDENHAIN- CONTROL SYSTEM

The latest control system for  
state-of-the-art production tasks

## Heidenhain TNC 640

### STANDARD:

- Dialog programming
- ISO NC programming
- FK free contour programming
- Expanded milling and boring cycles
- Touch probe system cycles
- Programming in parallel mode
- Integrated help system
- Simulation graphics
- Block scan of up to 1,024 blocks
- Block processing time of 0.5 ms
- ≥ 21 GB data memory capacity
- ≥ 2 GB RAM
- 15.1 inch LCD-display
- Smallest input increment of 0.01  $\mu\text{m}$  or 0.0001°
- 2 x gigabit Ethernet adapter
- 4 x USB ports
- RS-232-C and RJ-45 interfaces
- Expanded data interface for remote access
- Dynamic collision monitoring (DCM)

### OPTIONAL:

- DXF converter
- CAD viewer
- Adaptive feed control (AFC)
- Heidenhain DNC
- Remote Desktop Manager
- Expanded tool management

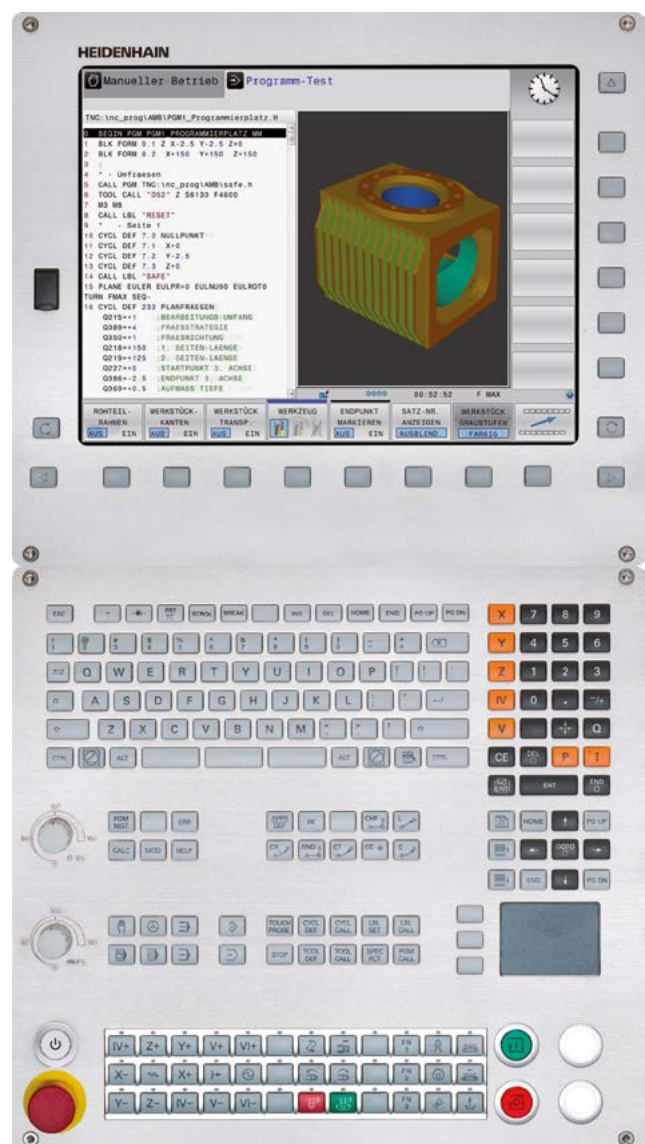


Image source: HEIDENHAIN

# WE ARE TAKUMI AND ARE HERE TO HELP

Takumi is a technology leader in the development, production and technical application of high-speed machining centers. Customers and partners in Europe, America, Taiwan and China have been putting their trust in us for over 30 years.

## The company

Takumi develops and produces high-speed CNC portal machining centers marked by a consistent focus on tool-making and mold-making. Our customers' needs define the consistent focus of what we do: Many years of close collaboration with users have furnished us with detailed insights into customer requirements, while extensive market analysis furnishes the foundation for every one of our product development projects. As our consistent objective is to offer customers a comprehensive product range providing the perfect reflection of their variegated requirements.

We produce high-quality, highly efficient machines. Our production processes rely exclusively on components from original equipment manufacturers and specialist suppliers providing premium products, frequently furnished by firms with whom we can look back on many years of close mutual cooperation. Our production practices conform to demanding quality specifications and our quality management is certified in accordance with ISO 900: 2008.

Takumi has been part of HURCO since July 2015. HURCO is a globally successful standard-bearer in CNC control system and machine technology. The US-based parent company with its headquarters in Indianapolis, Indiana relies on its production facilities in Taiwan, Italy and China to serve customers throughout Europe, Asia and North America.

## The industrial areas

- Astronautics
- Aviation
- Automotive
- Energy
- Machines and systems
- Tool-making and mold-making
- Medical technology
- Optics
- Science and research

### **Takumi**

A brand of HURCO Werkzeugmaschinen GmbH

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