



The industry standard www.takumicnc.eu

3-AXIS

H-SERIES: H AS IN HIGH-END

Compact, universal and dynamic high-speed portal machining centers for advanced requirements.

- Stable and rigid portal design for high thermal stability and great surface finish quality
- Compact design for minimal space requirements
- Excellent price / performance ratio thanks to comprehensive basic equipment

MODELS: H6/H7/H10/H12/H13/H16/H22/H32



G-SERIES: THE GRAPHITE ARTIST

High-grade and particle-resistant – optimized for the machining of graphite.

- Fully enclosed working area including gradation for state-of-the-art graphite processing
- High level of shape and dimensional accuracy thanks to a compact portal design
- Comprehensive basic equipment for an excellent price / performance ratio

MODELS: G 700 / G 1000



VC-SERIES: A WORLD OF POSSIBILITIES

Mid-range bed type CNC machines.

- Affordable models for a cost-optimized investment
- · Compact design for minimal footprint

MODELS: VC 0852 / VC 1052 / VC 1200



5-AXIS

U-SERIES: PRECISION COMES STANDARD

A high level of precision, thermal stability and maximum rigidity: U-Series models offer large, easily accessible working areas for less footprint.

THE PERFECTIONISTS U 400 / U 600

- Optimized for machining small and medium-sized workpieces
- High level of rigidity thanks to a portal design
- Thermal stability for long program runtimes
- Easy loading of workpieces thanks to machine doors that open wide

THE GRANDMASTER U 800

- Optimized for large and heavy workpieces
- High level of rigidity and less footprint thanks to a compact gantry design
- A-axis with torque drive on both sides, C-axis with torque drive
- Almost no backlash, exceptional axis thrust and clamping torque, low-maintenance

MODELS: U 400 / U 600 / U 800







Takumi U 800: Kessler swivel bridges with three torque drives



Takumi U 800: Fully enclosed working area

TECHNICAL SPECIFICATIONS

3-AXIS MODELS

DESIGNATION	H 6	H 7	H 10	H 12	H 13	H 16	H 22S	H 22T	H 32S
TRAVEL									
X-axis (mm)	550	750	1,020	1,350	900	1,600	2,200	2,200	3,200
Y-axis (mm)	600	600	700	950	1,300	1,300	1,650	2,250	1,650
Z-axis (mm)	350	500	500	600	700	700	800	800	800
A-axis (°)									
C-axis (°)									
MACHINE CAPACITY									
Table clamping surface L x W (mm)	600 x 600	810 x 620	1,050 x 700	1,500 x 960	900 x 1,400	1,900 x 1,300	2,400 x 1,600	2,400 x 2,100	3,320 x 1,600
Table load (uniform) (kg)	500	500	800	2,500	3,500	6,000	8,000	8,000	8,500
SPINDLE									
Spindle taper	HSK 40 E	BBT 40 / HSK 63 A / SK 40 ^{BigPlus}	BBT 40 / HSK 63 A / SK 40 ^{BigPlus}	BBT 40 / BBT 50 / HSK 63 A / SK 40 BigPlus / SK 50 BigPlus	BBT 40 / BBT 50 / HSK 63 A / SK 40 ^{BigPlus} / SK 50 ^{BigPlus}	BBT 40 / BBT 50 / HSK 63 A / SK 40 ^{BigPlus} / SK 50 ^{BigPlus}	BBT 40 / BBT 50 / HSK 63 A / SK 40 BigPlus / SK 50 BigPlus	BBT 40 / BBT 50 / HSK 63 A / SK 40 ^{BigPlus} / SK 50 ^{BigPlus}	BBT 40 / BBT 50 / HSK 63 A / SK 40 ^{BigPlus} / SK 50 ^{BigPlus}
Drive type	Motor	In-Line	In-Line	In-Line	In-Line	In-Line	In-Line	In-Line	In-Line
Max. spindle speed (rpm)	36,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
FEED									
X/Y/Z-axis rapid (m/min)	30 / 30 / 30	32 / 32 / 32	32 / 32 / 32	30 / 30 / 30	30 / 30 / 30	30 / 30 / 30	20 / 20 / 20	20 / 16 / 20	16 / 20 / 20
X/Y/Z-axis cutting feedrate (m/min)	12	20	20	20	20	20	12	12	12
A/B/C-axis rapid (m/min)									
A/B/C-axis cutting feedrate (m/min)									
STANDARD									
	H 6: TNC 620, H 7/H 10: TNC 640			Heidenhain TNC 640 control system 15,000 rpm, SK 40 BigPlus, In-Line spindle			• Heidenhain TN	C 640 control sy:	stem
				Internal coolant feed through the spindle (ICF 30 bar)			• Internal coolant feed through the spindle (ICF 30 bar)		
	Compensation of thermal spindle expansion			Compensation of thermal spindle expansion			Compensation of thermal spindle expansion		
							• Cooling system	n for the recircula	ting ball screw
OPTIONAL									
	Touch probe system for tool measurement			• Touch probe system for tool measurement			Touch probe system for tool measurement		
	Touch probe system for workpiece measurement			Touch probe system for workpiece measurement			Touch probe system for workpiece measurement		
	• Rotary table (4 th /5 th axis)			• Rotary table (4 th /5 th axis)			• Rotary table (4 th /5 th axis)		
	• H 7/ H 10: Cooli ball screw	ng system for the	erecirculating	Cooling system	n for the recircula	ting ball screw			

5-AXIS MODELS

G 700	G 1000	VC 0852	VC 1052	VC 1200	U 400	U 600	U 800	
750	1,020	860	1,020	1,270	550	600	800	
700	700	520	520	660	950	1,020	1,150	
500	500	610	610	610	500	500	750	
					+30 / -110	+30 / -110	+/- 120	
					360	360	360	
810 x 620	1.050 x 700	1.000 x 520	1.160 x 520	1.500 x 660	Ø 398	Ø 600	800	
				,			1,000	
300		300	730	1,300	230	300	1,000	
HSK 50 E	HSK 50 E	SK 40 ^{BigPlus}	SK 40 ^{BigPlus}	SK 40 BigPlus	SK 40 ^{BigPlus} / HSK 63 A	SK 40 ^{BigPlus} / HSK 63 A	HSK 63 A	
Motor	Motor	Belt * / In-Line *	Belt * / In-Line *	In-Line	In-Line	In-Line	Motor	
25,000	25,000	12,000 rpm * / 15,000 rpm *	12,000 rpm * / 15,000 rpm *	15,000 ^{rpm}	15,000	15,000	15,000	
30 / 30 / 30	30 / 30 / 30	36 / 36 / 24	36 / 36 / 24	36 / 36 / 24	36	36	48	
20	20	12	12	12	20	20	24	
					25 / - / 25	25 / - / 33	80 / - / 100	
				**	25 / - / 25	25 / - / 33	80 / - / 100	
Heidenhain TNC 640 control system 25,000 rpm, HSK 50 E, Motor spindle			riven spindle 12,000 rpn		Heidenhain TNC 640 control system Direct-driven spindle 15,000 rpm SK 40 BigPlus Internal coolant feed through the spindle (ICF 30 bar)			
Compensation of thermal spindle expansion					Compensation of thermal spindle expansion			
					• Heidenhain DCM – d	ynamic collision mor	itoring	
	n for tool	Touch probe system	for tool measurement		Touch probe system for tool measurement			
Touch probe system for workpiece measurement			or workpiece measure	ment	Touch probe system for workpiece measurement			
		• Rotary table (4 th /5 th a:	xis)		Motor spindle (Kessler or IBAK)			
 Cooling system for the recirculating ball screw 			through the spindle (IC	CF 30 bar)				
Tech culatiliz Dali Sci	ew							
	750 700 500 500 810 x 620 500 HSK 50 E Motor 25,000 30 / 30 / 30 20 Heidenhain TNC 64 system 25,000 rpm, HSK 50 E Compensation of th spindle expansion Touch probe system measurement Touch probe system workpiece measure	750 1,020 700 700 500 500 810 x 620 1,050 x 700 500 800 HSK 50 E HSK 50 E Motor Motor 25,000 25,000 30 / 30 / 30 / 30 / 30 / 30 20 20 Heidenhain TNC 640 control system 25,000 rpm, HSK 50 E, Motor spindle Compensation of thermal spindle expansion Touch probe system for tool measurement Touch probe system for workpiece measurement	Touch probe system for tool measurement Touch probe system for workpiece measurement Touch probe system for workp	Note	Touch probe system for tool measurement Touch probe system for workpiece measurement Touch probe system for tool measurement Touch probe system for workpiece measurement Touch probe system for tool mereasurement Touch probe system for tool mereasurement Touch probe system for workpiece measurement Touch probe system for workpiece measur	750	750	

^{*} Selectable standard equipment / ** performance data on request

HEIDENHAIN CONTROL

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

Heidenhain TNC 640

- · Dialog programming
- ISO NC programming
- FK free contour programming
- · Advanced milling and drilling cycles
- Touch probe system cycles
- Programming in parallel mode
- Integrated help system
- Simulation graphics
- · Lookahead of up to 1,024 blocks
- ≥ 21 GB data memory capacity
- •≥2 GB RAM
- 15.1 inch LCD-display
- Smallest input increment of 0.01 μm or 0.0001°
- · 2 x gigabit Ethernet adapter
- 4 x USB ports
- · RS-232-C and RJ-45 interface
- Expanded data interface for remote access
- Dynamic collision monitoring (DCM)



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 CNC high-speed portal machining centers with a clear focus on mold and die. Our customers' needs are at the heart of what we do. Many years of close collaboration with users give us detailed insight into customers' requirements and into each of our product developments based on comprehensive market analyses. We always want to offer our customers a complete product line that is perfectly in line with their varied needs.

We produce high-quality, highly efficient machines made only from components from premium brand manufacturers and specialist suppliers that have often cemented long-term partnerships with us. 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 technology leader in CNC control systems and machines that enjoys success around the globe. The US-based parent company with headquarter in Indianapolis, Indiana has production facilities in Taiwan, Italy and China and serves customers in Europe, Asia and North America.

Our customers benefit from this collaboration. HURCO GmbH Deutschland, which was founded in 1988 and is located in Pliening near Munich, has approximately 100 high qualified employees, making it a hub of expertise that manages sales and customer support throughout Europe.

The industrial areas

- Aerospace
- Automotive
- Energy
- · Mechanical and plant engineering
- · Mold and die
- Medical technology
- Optics
- Science and research

The expert contact person for your questions and requests:

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EIGHT REASONS FOR YOUR SUCCESS WITH TAKUMI

Decades of success

The Takumi philosophy

- A successful partner of industry and research for over 30 years
- Independent brand with independent product line since 2005
- Focus on mold and die
- Product development working closely with the customer
- Surface quality: Designed for the highest demands for highly precise workpieces
- Accuracy: Stable and rigid portal structure with resistance to high temperatures
- Direct drives in X / Y / Z
- In-Line or Motor spindle up to 36,000 rpm
- Sales and customer support thanks to a experienced HURCO network since 2016

Takumi

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