

# BRIDGE TYPE/ HORIZONTAL

### **MACHINING CENTERS**

Stable performers for exceptional precision



# AGILE ASSISTANT FOR MULTI-FACETED MILLING

### CREATORS' BRAND

### **CNC** machines since 1968

At HURCO® we develop and produce CNC machining centers to satisfy any requirement. As a manufacturer with more than 50 years of experience in the CNC sector, we have a precise appreciation of your own unique production and manufacturing requirements. Our horizontal and bridge-type machining centers are versatile and can be adapted to your specific needs. These characteristics enable milling of large components with complex geometries quickly, easily, and precisely.

**Easy,** with our dialog-based CNC control system that guides you intuitively from the drawing to the finished workpiece.

**Fast,** with dialog-based programming of powerful spindles, the ergonomic MAX®5 control system, and dual-screen setup for a complete overview during work – all of which support maximum efficiency of your horizontal or bridgetype machining center.

**Precise,** thanks to numerous software functions such as 3D correction of tools and optional workpiece and tool setting.

Our approach is shaped by experience, garnered in partner-ships extending over many years with an array of clients representing a broad range of manufacturing sectors. This is how each HURCO® machine tool has been optimized to satisfy your company's diverse requirements. We source the components from premium brands and suppliers who have earned our confidence. We produce our machines in accordance with the highest quality standards: Our quality management system boasts ISO 9001:2015 certification.

### With expertise and passion

HURCO® is one of the largest and highest-performing international manufacturers of CNC machining and turning centers. For more than 50 years, our high-quality products have been used in the aerospace and aeronautics, machine construction, medical technology, power and energy, transport, and computer technology sectors around the globe.

At HURCO®, you benefit from the unbeatable combination of machine and control system expertise. Our MAX®5 control system is an in-house development designed to minimize your training and programming times. Ready to make your production operation easier, faster, and more precise? We're happy to help you figure out which model of CNC machining center is right for you and draw up a quote accordingly. That's how we ensure that your equipment is perfectly adapted to the production needs of your company. Your questions about our machines, the fastest control system in the industry, and maintenance and repair of your machining center will be answered by your personal contact at HURCO Werkzeugmaschinen GmbH.

### **TECHNICAL SPECIFICATIONS**

THE CTADIE

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Designation	BX 40i	BX 50i	BX 50Ti	<b>BX</b> 60i	DCX 22i	DCX 32i
Travel distances						
X-axis (mm)	1,020	1,250	1,350	1,600	2,200	3,200
Y-axis (mm)	700	950	950	1,300	1,700	2,100
Z-axis (mm)	500	580	600	700	750	920
B-axis (°)						
C-axis (°)						
W-axis (mm)						
Table						
Table dimensions (mm)	1,050 x 700	1,360 x 960	1,500 x 960	1,900 x 1,300	2,100 x 1,600	3,000 x 1,700
Max. table load (kg)	1,000	2,000	2,500	6,000	8,000	11,000
Min./max. distance, spindle nose to table (mm)	178 - 678	200 - 780	193 - 793	180 - 880	152 - 902	164 - 1,084
T-slots (mm)	6 x 18 H8 x 125	6 x 22 x 160	6 x 22 x 160	8 x 22 x 160	9 x 22 H8 x 180	7 x 22 H8 x 220
Spindle						
Max. spindle speed (rpm)	20,000	20,000	10,000	20,000	10,000/12,000/15,000	6,000/10,000
Spindle power (kW)	35	35	26	35	18 (SK 40)/26 (SK 50)	48
Spindle torque (Nm)	119	119	336	119	284/237/189	458/275
Feed						
Rapid travers X/Y/Z-axis (m/min)	36/36/36	36/36/36	36/36/36	36/36/36	32/32/24	15/15/10
Rapid travers B-axis/C-axis (rpm)						
W-axis (m/min)						
Tool changer						
Tool positions/optional	30/50	30/50	40	30/50	40/60	40
Max. tool diameter (mm)	75	80/75	125	80/75	75 (SK 40)/125 (SK 50)	125
Max. tool length (mm)	300	300	300	300	300	300
Max. tool weight (kg)	7	7	15	7	7 (SK 40)/15 (SK 50)	15
Other data						
Machine weight (kg)	9,100	9,240	13,000	20,000	21,000	35,000

### **THE FLEXIBLE**

### THE EFFICIENT

DCX 42i	BX 40Ui	DCX 32-5Si	DCX 3226 HT-5Si	<b>HBMX 55i</b>	HBMX 80i	HBMX 120i
4,200	950	3,200	3,200	1,400	2,000	3,000
2,600	550	2,100	2,450	1,390	1,780	1,780
1,100	500	900	1,100	1,100	1,650	1,650
	+100/-30	+100/-30	±110			
	360	±360	±360			
					500	500
4,000 x 2,100	Ø 398	3,000 x 1,700	3,000 x 2,100	1,120 x 1,250	1,440 x 1,600	1,440 x 1,600
16,000	250	11,000	14,000	4,000	6,300	6,300
160 - 1,260	90 - 590	66 - 966	201 - 1,301	0 - 1,555	130 - 2,280	130 - 2,280
9 x 22 H8 x 220	6 x 14 mm x 60°	7 x 22 H8 x 220	9 x 22 x 220	7 x 24 x 160	9 x 24 x 160	9 x 24 x 160
6,000/10,000	18,000	18,000	12,000	454/2,500	454/2,500	454/2,500
80	35	63	53	30/22	30	30
764/458	119	106	253	1,500/412	1,500/412	1,500/412
12.5/12.5/10	36/36/36	15/15/10	15/15/10		10/10/10	10/10/10
	25/25	120/80			1	1
				500	4	4
30/50	30/50	40/60	40/60	60	60/90	60/90
76	76	76	240	120	120	120
300	300	300	300	400	400	400
15	7	7	30	25	25	25
45,000	9,400	37,700	43,800	19,500	23,500	26,000

## **BX SERIES**

# THE STABLE FOR MAXIMUM PRECISION AND SURFACE QUALITY



STABLE STRUCTURE, PRECISE PRODUCTION

### BX 40i

Travel distances X/Y/Z-axis (mm)	1,020/700/500
Rapid travers X/Y/Z-axis (m/min)	36/36/36
Table dimensions (mm)	1,050 x 700
Table load (kg)	1,000
Max. spindle speed (rpm)	20.000



### BX 50i

Travel distances X/Y/Z-axis (mm)	1,250/950/580
Rapid travers X/Y/Z-axis (m/min)	36/36/36
Table dimensions (mm)	1,360 x 960
Table load (kg)	2,000
Max. spindle speed (rpm)	20,000



### BX 50Ti

Travel distances X/Y/Z-axis (mm)	1,350/950/600
Rapid travers X/Y/Z-axis (m/min)	36/36/36
Table dimensions (mm)	1,500 x 960
Table load (kg)	2,500
Max. spindle speed (rpm)	10,000



### BX 60i

Travel distances X/Y/Z-axis (mm)	1,600/1,300/700
Rapid travers X/Y/Z-axis (m/min)	36/36/36
Table dimensions (mm)	1,900 x 1,300
Table load (kg)	6,000
Max. spindle speed (rpm)	20,000

The highly stable HURCO® bridge-type machining centers for the fast, highly precise production of large and heavy workpieces with stringent surface quality requirements.

### BX 40i | BX 50i | BX 60i | BX 50Ti

- Precision: stable and rigid bridge-type design concept featuring excellent resistance to high temperatures
- Maximum table load of 1,000 to 6,000 kg, depending on the model
- Production at high speed, with spindle speeds of 10,000 to 20,000 rpm
- 30- or 50-station tool changer for machining complex components

# DCX SERIES

# THE SPACIOUS - FOR HEAVY AND LARGE WORKPIECES

PLENTY OF ROOM FOR PRECISION



### DCX 22i

 Travel distances X/Y/Z-axis (mm)
 2,200/1,700/750

 Rapid travers X/Y/Z-axis (m/min)
 32/32/24

 Table dimensions (mm)
 2,100 x 1,600

 Table load (kg)
 8,000

 Max. spindle speed (rpm)
 10,000/12,000/15,000

 15,000
 15,000



### **DCX 32i**

Travel distances X/Y/Z-axis (mm)	3,200/2,100/920
Rapid travers X/Y/Z-axis (m/min)	15/15/10
Table dimensions (mm)	3,000 x 1,700
Table load (kg)	11,000
Max. spindle speed (rpm)	6,000/10,000



### DCX 42i

The CNC bridge-type machining centers from HURCO® with long travel distances on all three axes and excellent machine access.

### DCX 22i | DCX 32i | DCX 42i

- Excellent machining center access and long travel distances in the X, Y, and Z-axes make it possible to machine large and heavy components
- High degree of rigidity in the X, Y, and Z-axes for maximum stability
- Powerful spindles enable use of state-of-the-art tool technology
- Solid cast iron machine frame

# BXUi/DCX 5SiSERIES

### THE FLEXIBLE FOR PERFORMANCE ON 5 AXES



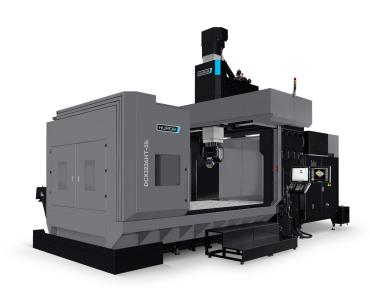
MORE POSSIBILITIES

Travel distances X/Y/Z-axis (mm)	950/550/500
Travel distances B-axis (°)	+100/-30
Travel distances C-axis (°)	360
Rapid travers X/Y/Z-axis (m/min)	36/36/36
Rapid travers B-axis/C-axis (rpm)	25/25
Table dimensions (mm)	Ø 398
Table load (kg)	250
Max. spindle speed (rpm)	18,000



### DCX 32-5Si

Travel distances X/Y/Z-axis (mm)	3,200/2,100/900
Travel distances B-axis (°)	+100/-110
Travel distances C-axis (°)	±360
Rapid travers X/Y/Z-axis (m/min)	15/15/10
Rapid travers B-axis/C-axis (rpm)	120/80
Table dimensions (mm)	3,000 x 1,700
Table load (kg)	11,000
Max. spindle speed (rpm)	18,000



### DCX 3226HT-5Si

Traver diotariose X, 1, 2 axis (min)	0,200, 2, 100, 1,100
Travel distances B-axis (°)	±110
Travel distances C-axis (°)	±360
Rapid travers X/Y/Z-axis (m/min)	15/15/10
Rapid travers B-axis/C-axis (rpm)	
Table dimensions (mm)	3,000 x 2,100
Table load (kg)	14,000
Max. spindle speed (rpm)	12,000

Travel distances X/Y/7-axis (mm) 3 200/2 450/1100

The 5-axis bridge-type machining center from HURCO® can be configured with a swivel head or pivot bridge based on the model. This maximizes flexibility in the production of components from the small to the large and highly complex.

### BX 40Ui | DCX 32-5Si | DCX 3226HT-5Si

- Stable, high-rigidity bridge-type design of the BX and DCX series that makes these machines perfect for machining particularly precise and complex workpieces with excellent surface quality
- Ease of access
- Capable of simultaneous 5-axis operation

- DCX: great for machining components that are large, heavy, and highly complex all in one
- DCX: large B-axis swivel range, +100°/-110°
- DCX 3226 HT-5 Si: milling spindle torque of 253 Nm

# HBMX SERIE

A TON OF POWER UNDER THE HOOD

### THE EFFICIENT – FOR HIGH-PERFORMANCE MACHINING



### **HBMX 55i**



### **HBMX 80i**

Travel distances X/Y/Z-axis (mm)	2,200/1,700/750
Rapid travers X/Y/Z-axis (m/min)	10/10/10
Table dimensions (mm)	1,600 x 1,440
Table load (kg)	6,300
Max. spindle speed (rpm)	2,500



### HBMX 120i

 Travel distances X/Y/Z-axis (mm)
 3,000/1,780/1,650

 Rapid travers X/Y/Z-axis (m/min)
 10/10/10

 Table dimensions (mm)
 1,600 x 1,440

 Table load (kg)
 6,300

 Max. spindle speed (rpm)
 2,500

Horizontal CNC boring mills from HURCO® have four axes to ensure both efficient and precise machining of particularly complex workpieces.

### HBMX 55i | HBMX 80i | HBMX 120i

- Gear-driven spindle
- B-axis as a full-fledged NC-axis for machining complex components

- Hardened box guideways
- Solid cast iron machine frame

# FUNCTIONS WITHADDED VALUE

## EASY MILLING WITH YOUR CUSTOMIZED MACHINE

You can individually and flexibly equip our machining centers with a wide range of machine options – for customized support in your production scenarios.



### **Workpiece** position detection

The workpiece zero point is determined electronically both in manual setup mode and fully automatically during the program run. Reduces machine downtime and the risk of manual adjustment errors.

- Determination of workpiece zero point and rotation:
  - Edge
  - Corner
  - Drill hole
  - Cylinder
  - Rectangular recess
  - Cuboid
- Measuring the workpiece



### Tool setting with touch probe

Get extra precision with the electronic measuring system for tools.

- Determination of tool length and diameter by exact measurement
- Tool breakage detection over length and if the tool is defectiv – use of a replacement tool
- Tool wear detection and compensation on both length and diameter

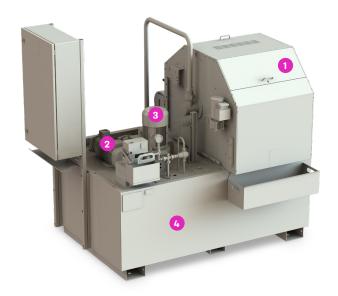
### Tool setting with laser

Maximize the accuracy of tool setting using a laser. This option is recommended for small and sensitive tools in particular.

- Determination of tool length and diameter by exact measurement
- Tool breakage detection over length and if the tool is defective – use of a replacement tool
- Tool wear detection and compensation on both length and diameter

### **Production package**

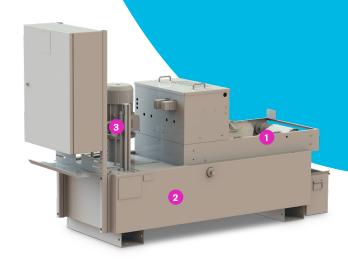
The production package includes a chip conveyor for reliable coolant cleaning and chip flushing, providing you with optimal support for the maintenance of your machine. A must-have for machining cast iron, brass, aluminum and comparable materials.



- 1 Paper belt filter
- Pumps for coolant
  Supply from outside and chip flushing
- 3 20 bar pump for internal coolant supply (optional: up to 70 bar) | HBMX up to 15 bar
- 4 Additional coolant tank (up to 1,350 l)

### **Bypass filtration system for ICF**

Effectively reduce the maintenance effort for your ICF system with a gravity belt filter for cleaning the cooling lubricants. Highly recommended for machining cast iron, brass, aluminum and comparable materials.



- 1 Gravity paper belt filter
- 2 280 I coolant tank
- 3 20 bar pump for internal coolant supply (optional: up to 70 bar) | HBMX up to 15 bar





# EVEN MORE OPTIONS FOR DOERS

### Cooling air via coolant nozzles:

Choice of cooling emulsion or cooling air via coolant nozzles. Programmable as "Coolant 2" or via M function

### Cooling air via spindle

As above, but supplied through the spindle. Prerequisite: Optional "internal coolant feed (ICF)"

### Rotoclear

Rotating viewing window for a clear view of the workpiece when working with coolant emulsion

<sup>&</sup>lt;sup>1</sup> not for HBMX or DCX 5-axis



HURCO® CNC control combines powerful MAX® 5 hardware with user-friendly WinMax software and optional features such as Solid Model Import.

### YOUR BENEFITS AT A GLANCE

- User-friendly operation. Perfection can be this easy with intuitive plain text conversational programming, you can intuitively set the control system according to your requirements.
- Minimal time required. Use of the control system can be learned quickly without any programming knowledge at all. It optimally supports your employees in achieving faster programming times with short, clearly arranged programs.
- Individual configuration. Choose from a variety of features (e. g. Solid Model Import) specific to your needs

- to ensure that your HURCO® control system perfectly meets your needs.
- **High profitability.** Even the production of highly complex parts and a higher capacity utilization of your operation can be mastered in no time.
- Measurable productivity. The functions of the control system and numerous automation features demonstrably increase your capacity.
- Greater employee satisfaction. Automate processes and give your employees more time for more complex activities.

### MAX® 5 CON-TROL SYSTEM

### WINMAX® 5 SOFTWARE

### A dream for users from design to result.

With MAX® 5, you can process sketches and drawings, read solid models for program creation, and program directly on the machine without an additional programming station.

**Supported by the best.** For the maximum performance of your HURCO® machine, we developed WinMax®5, a software program that is aligned exactly with the performance data of our machine tools and your needs as the user.

### Tailored to your needs in every respect

- · Ergonomic, rugged design
- Pull-out keyboard with adjustable inclination
- Height-adjustable, retractable console for minimal footprint<sup>1</sup>
- CAD/CAM support
- Solvent-resistant keyboard constructed in ABS polycarbonate
- Rotary override knobs in brushed stainless steel

### Spotlight on WinMax® 5

- Clearly displayed. Perform solid-model programming directly on the graphic display screen with simultaneous simulation of machining<sup>3</sup>
- Supportive. The software independently creates machining data sets based on automatically recognized contours and drilling patterns.<sup>2</sup>
- Practical. Recess and drill hole depths are automatically detected and stored in the data set.<sup>3</sup>



The versatility of the HURCO® control system makes complex work a cinch. The ability to quickly import data meshes with the multitude of machine options.

Gröbner Fertigungs GmbH

### SOLID MODEL IMPORT

Simply gain greater flexibility. With the advanced Solid Model Import function, you can import DXF and STEP data directly and import free-form surfaces as conversational data sets so that they can be directly produced on the machine.

### How does the feature benefit you?

- Fast 3-axis, 4-axis and 5-axis machining.
   Using Solid Model Import, you can program right at the control system simply, with the help of the solid model.
- Time-saving. Import solid models right at the control system – without the hassle of creating 2D drawings with dimensions.
- **Better overview.** You can switch between the solid model for programming and the simulation of the generated machining in the graphic view or display both in overlapping form.

<sup>&</sup>lt;sup>1</sup> Depending on model

<sup>&</sup>lt;sup>2</sup> Only with Solid Model Import or DXF

<sup>&</sup>lt;sup>3</sup> Only with Solid Model Import

# THE AGILE ASSISTANT CLOSE TO YOU

Do you already use HURCO® solutions in your company, or are you interested in them and have questions? You will find the right answers and services from a single source.

### HURCO®-SERVICES

### Personal contacts for your region

Our regional contact persons are at your service to provide advice and assistance regarding your HURCO® machine or general questions – even long after the successful installation of your machining center. Simply reach out to us by email or phone.

Phone +49 89 905 094 - 0 | info@hurco.de Mon. - Fri. 7:30 a.m. - 4:00 p.m.

### **Application advice**

There is a dedicated hotline for your user questions.

Phone +49 89 905 094 - 66 | awt@hurco.de Mon. - Fri. 8:00 a.m. - 4:00 p.m.

### Spare parts services & next day delivery

High spare parts availability at our Munich central warehouse and fast delivery of our spare parts means that your operation gets back up and running quickly from repairrelated downtime. On request, we can also replace your old spindle with either a reconditioned or new spare part.

Phone +49 89 905 094 - 55 | ersatzteile@hurco.de Mon. – Thurs. 8:00 a.m. – 5:00 p.m. | Fri. 8:00 a.m. – 4:00 p.m.

### Service

Our experienced service technicians will support you on site or via remote maintenance in the maintenance, care or repair of your HURCO® machine tools.

Phone +49 89 905 094 - 44 | service@hurco.de Mon - Thurs 7:00 a.m.- 5:00 p.m. | Fri. 7:00 a.m.- 4:00 p.m.

### Training & free tutorials

We give you the knowledge for getting the most out of your HURCO® machine and the MAX®5 control system – with customized on-site training for every user level and our free instructional videos on YouTube.



**HURCO® on YouTube:**@hurco-cnc-tooling-machines

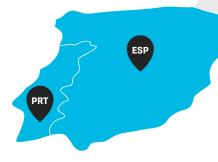
### **HURCO**<sup>®</sup> Refurbished

You can regularly score real bargains from us with demo and used machines under attractive conditions – including a manufacturer's warranty.



# OUR SALES OFFICESOUR OUR PARTNERS





DEU

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