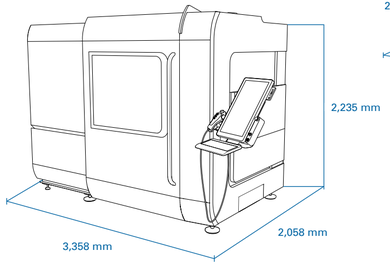
Technical Data



Full table
- Machining area

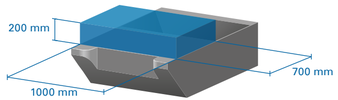
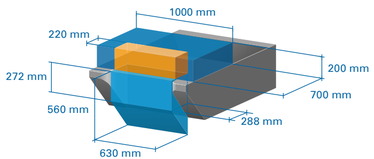


Table with breakout
- Machining area on the table
- Machining area in the vertical clamping area
- Max. work piece size in the vertical clamping area



	DATRON MXCube	
Machining table made of mineral cast	Table types: + Full table + Table with breakout	Standard: + Integrated conical thread + Integrated vacuum and compressed air connections Optional: + Vacuum distributor
Portal height	205 mm	
Machining area (X x Y x Z)	1,000 mm x 700 mm x 200 mm	
Max. traverse path (X x Y x Z)	1,040 mm x 850 mm x 270 mm	
High-frequency spindle	+ Power: 8.0 kW + Type: synchronous, vector-controlled + Speed (max.): 34,000 rpm + Tool insert: HSK-E32	
Tool changer	+ Up to 110 tools + Tool diameter max. 24 mm	
Minimum-quantity cooling lubrication system	Optional + 4-nozzle spray ring + 9-litre coolant tank	+ Tool internal cooling lubrication + Second coolant tank (9 liters)
Positioning feed x/y	40 m/min	
Positioning feed z	28 m/min	
Direct absolute path-measuring systems	All axes	
Control system	DATRON next with 24“ multi-touch operating terminal including keyboard	
Rotary axis (4th axis)	Optional	
Chip conveyor	Scraper conveyor, optional	
Dimensions (W x D x H) without terminal	2,702 mm x 1,859 mm x 2,235 mm	
Dimensions (W x D x H) with terminal, folded out	3,358 mm x 2,058 mm x 2,235 mm	
Weight	3,800 kg	

We are glad to provide you with detailed information:
+49 (0)6151-1419-0

by E-Mail
info@datron.de

or online at:
www.datron.de

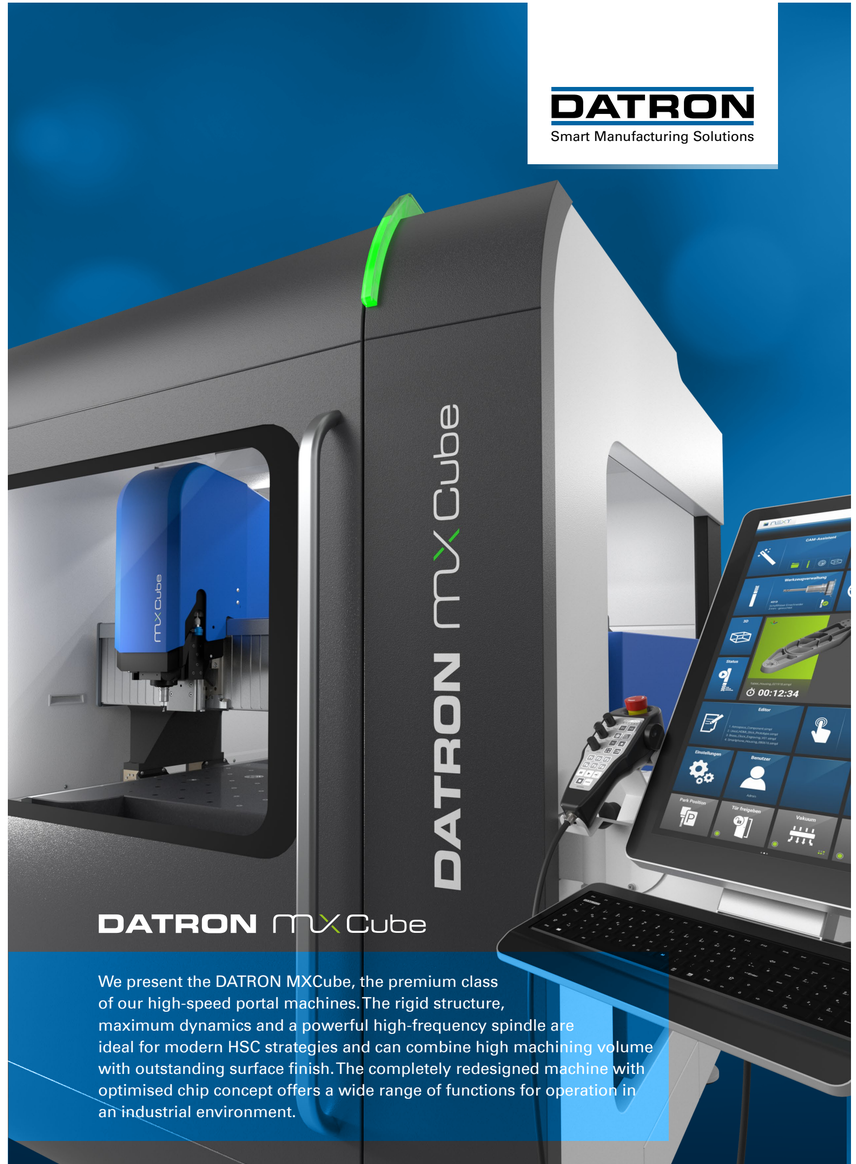
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DATRON AG
In den Gänsäckern 5
64367 Mühltal, Germany

+49(0)6151-1419-0
info@datron.de
www.datron.de

DATRON_MXCube_020320_EN_Prosp_V2.3

DATRON
Smart Manufacturing Solutions



We present the DATRON MXCube, the premium class of our high-speed portal machines. The rigid structure, maximum dynamics and a powerful high-frequency spindle are ideal for modern HSC strategies and can combine high machining volume with outstanding surface finish. The completely redesigned machine with optimised chip concept offers a wide range of functions for operation in an industrial environment.

DATRON

HIGHLIGHTS

Automation & Handling

Heavy plates or clamping systems can be easily placed in the machining area manually or with a crane. It can also be integrated into an automation solution.

Functional cabin

Robust steel construction with advanced design for years of industrial operation. Excellent access to all functions facilitates operation and service. A large panel ensures clear visibility of machining. The conspicuous LED display shows the machine status from a distance.

DATRON HSC milling

High dynamics, high speeds and feed rates, a rigid portal structure and economical minimum-quantity cooling lubrication ensure optimal results for machining aluminium, non-ferrous metals.



Chip conveyor

Optionally available for installation on the right or left of the machine for reliable removal of chips from the machining area.

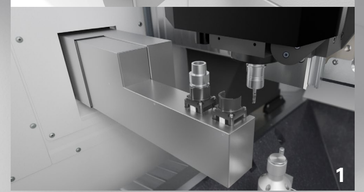
Compact base

Your DATRON Plus: extremely large machining area compared to the compact base.

DATRON next

The (r)evolutionary DATRON machine control system makes HSC milling easy, secure and convenient.

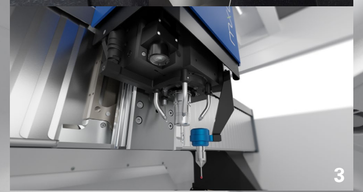




1 Tool changer

The tool changer with space for up to 110 tools is outside the machining area. It enables simultaneous loading and unloading of tools at all times.





2+3 Sensors

The tools are measured with a tool length sensor. The optionally available combination of an XYZ sensor with swivel arm and camera enables precise setup of the work piece zero point in seconds.

4 Chip concept

Steep angles >45° on all sloping surfaces ensure optimal chip removal.



5 Working area

A generous working area of 1000 mm x 700 mm that can be completely milled is ideal for machining plates and other flat components (batched milling et al) and gives you maximum flexibility with the use of multiple identical or different clamping systems without having to set up again (e.g. multiple clamping).

6 Machining table

The solid mineral cast machining table has ideal damping properties and can take a load up to 500 kg. It has integrated functional components such as connections for vacuum and compressed air supply and conical threads for quick and easy attachment of clamping systems.

7 Minimum-quantity cooling lubrication system

The DATRON minimum-quantity cooling lubrication system ensures reliable cooling with low coolant consumption during the machining process. The use of ethanol gives you machining results on your work pieces completely free from residues. An optional second coolant tank allows fully automatic switching between different coolants during machining. Internally cooled tools are also an optional extra.

8 Spindle

The vector-controlled 8 kW synchronous high-frequency spindle with a speed of 34,000 rpm and HSK-E32 provides a high machining volume over time. It gives you top results with continuous DATRON HSC milling.

9 Drive system

Ground threaded spindle with positioning feeds up to 40 m/min and compact servo motors enable maximum dynamics with very low power consumption. Direct absolute path-measuring systems on all axes ensure maximum repetitive accuracy of machining results.

10 Portal structure

The light-weight portal structure is optimised for the flow of forces and offers optimal rigidity for high accelerations with DATRON HSC milling. It is the basis for outstanding surface finishes.