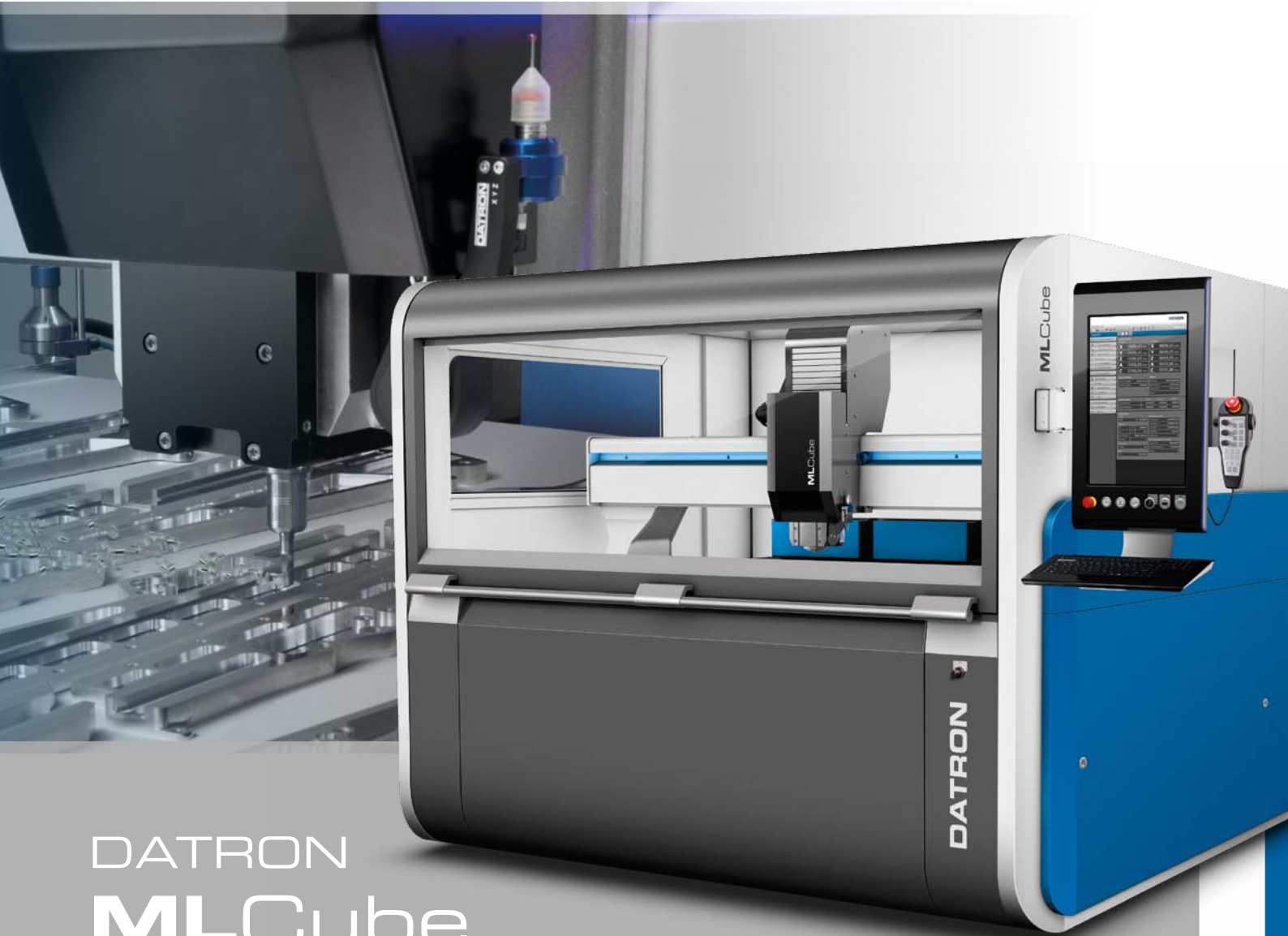


# NEW!

**DATRON**  
Smart Manufacturing Solutions



## DATRON **MLCube**

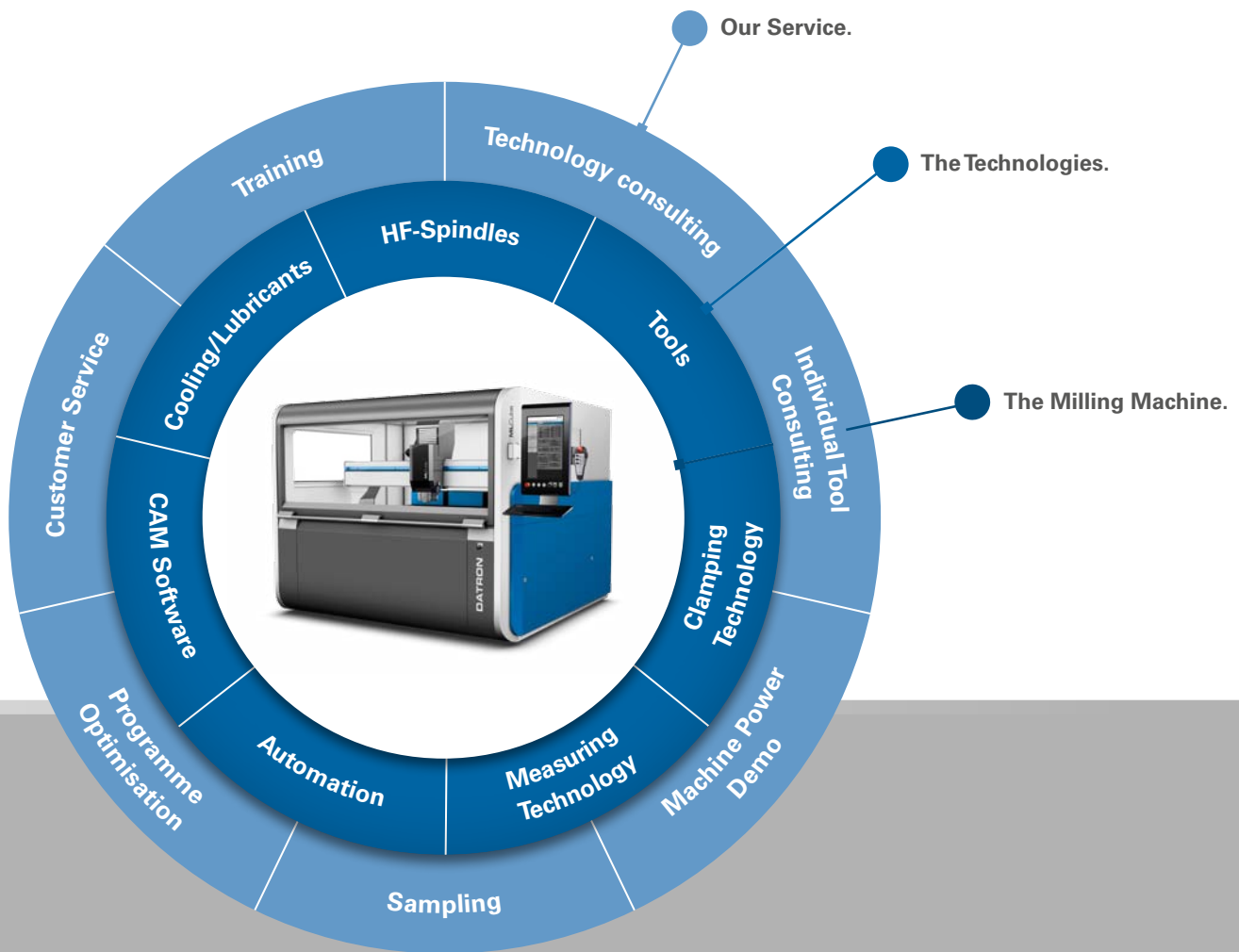
milling, drilling and engraving  
**Large-format – fast – dynamic**



More than just machine construction –

# Absolutely everything from DATRON's expert hands

We at DATRON see ourselves as your partner for successful production. Our service: everything from one source. DATRON offers not only cutting-edge machine construction with "Made in Germany" solidity and reliability: we accompany you through the entire workflow from technology consulting over the sales process, optimal maintenance and repair services up to training and give you tips for energy-saving and cost-reducing production.



# DATRON **ML**Cube

## Large-surface machining of aluminium and other high-tech materials

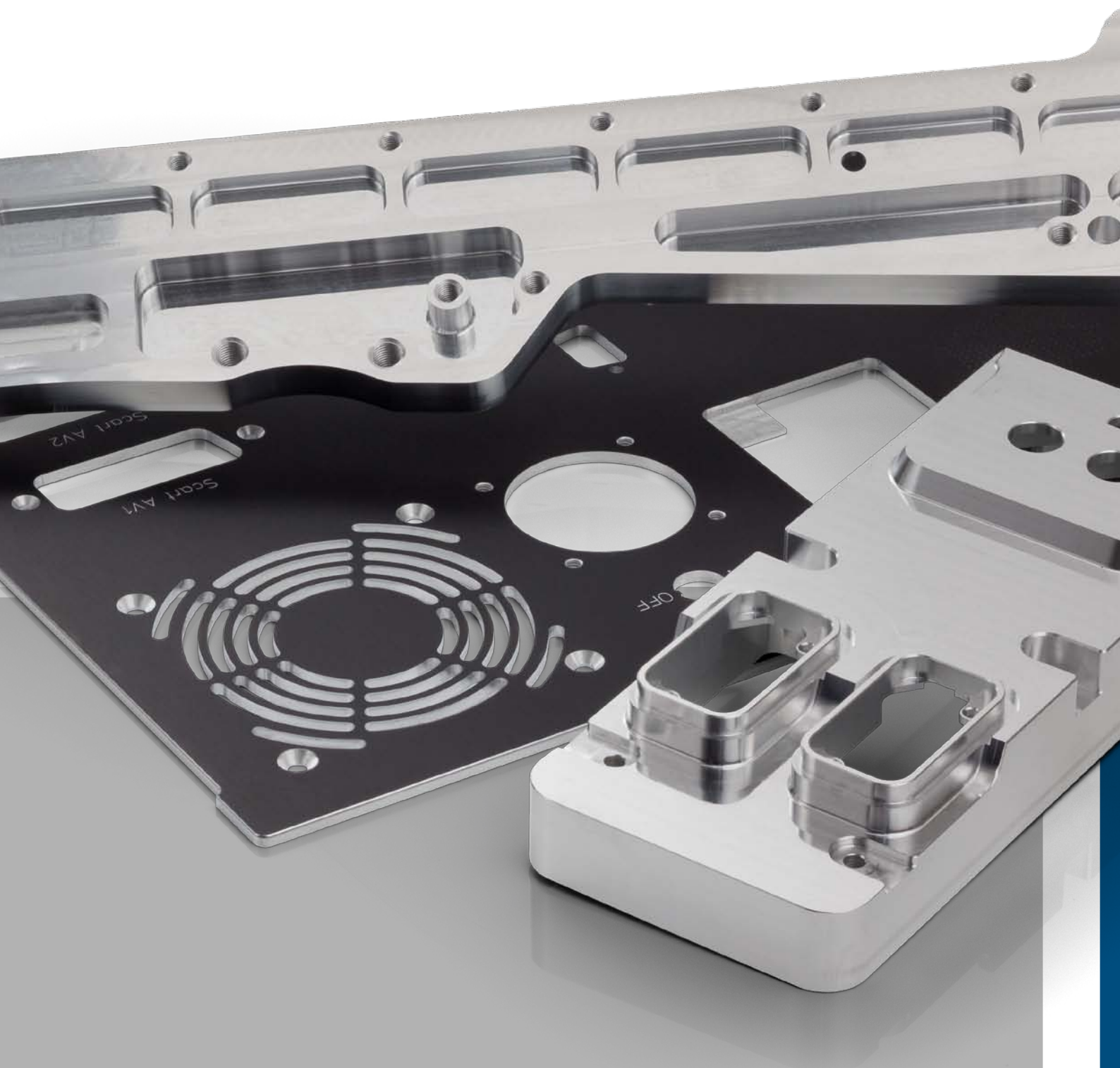
The DATRON MLCube is the best choice for cost-effective sheet machining, for example, for the production of front panels, housings, profiles and other aluminium workpieces milled in nested form.

Other non-ferrous metals or composite materials can also be processed most efficiently with the MLCube. Its short setup times and its ability to use different clamping techniques simultaneously, its very low power consumption and its excellent price-performance ratio – even for low production volumes – provide long-term and extremely high profitability.

### **Your benefits at a glance:**

- Extremely large working area requiring little floor space.
- New automatic vacuum clamping technology associated with electrically enabling / disabling different segments.
- Available with table cutout for vertical clamping technology, appropriate for machining high components (optional).
- Contour smoothing package PerfectCut for fast, accurate and contour faithful HSC milling with excellent surface quality: your machine is more powerful and stays “fit” longer, even in cases of high-volume production (optional).
- New chip drawer concept with individually removable containers to improve working ergonomics.

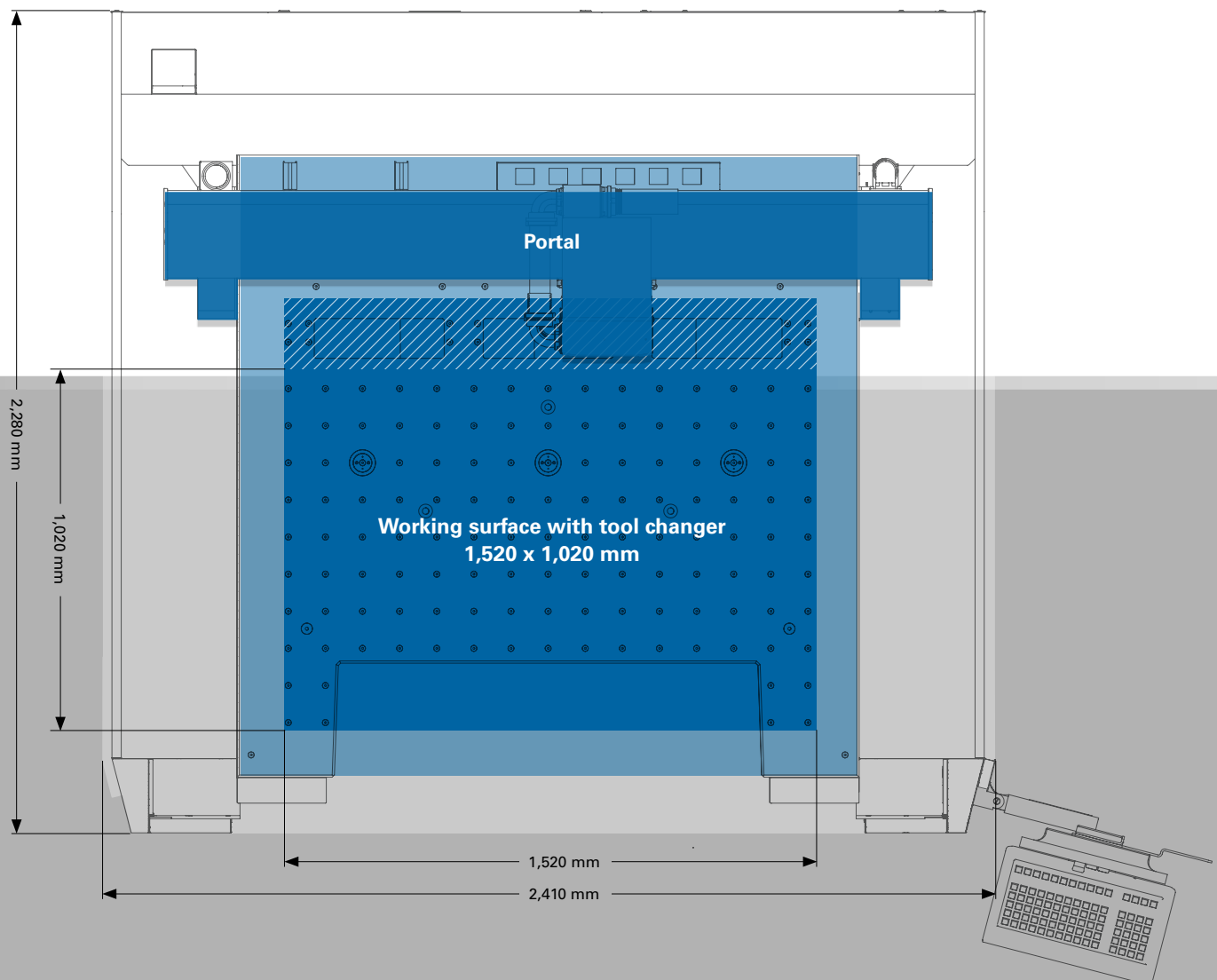




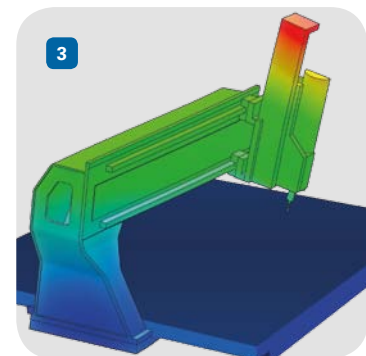
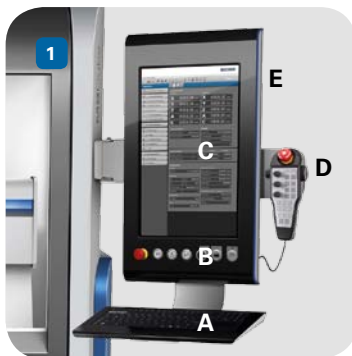
# MLCube Highlights

You have special tasks to perform –  
we have the solution for you

- **High dynamics** through optimised control and mechanical construction designed for acceleration and rigidity
- **Very high clamping performances** with the smallest tools by means of high-speed precision spindles with up to 60,000 rpm and 0.6 kW to 3.0 kW output
- **Stiff, vibration-free design** of the machine allows excellent surface finishes when machining
- **High precision** due to high-quality linear guides, ball screw spindles, HSK-E 25 tool inserts (optional) and precision-crafted structural elements
- **New electrically switchable vacuum technology** allows working flexibly and cost-effectively due to very short set-up times



Extremely large working area with a small footprint at the same time.



### 1 Operating terminal with vertical monitor (optional)

- A Chip-proof IP68 keyboard with fatigue-free short-stroke keys and integrated touchpad.
- B Easily accessible controls with extra quick launch buttons for "Release door", "Spindle on/ off" and "Run macro" as well as a USB 2.0 port.
- C Chip-proof monitor with high-resolution vertical display for optimal representation.
- D Ergonomic hand-held control unit.
- E Integrated signal lamps in the portal (optional) and at the side of the operating terminal to display the machine status.

### 2 New optimised chip concept

The segmentation of the chip drawer in individually removable chip containers allows easy, ergonomic and time-saving chip removal.

### 3 Mechanical system optimised for dynamism

The MLCube owes its high dynamics and quality to the completely-new mechanical structure, characterised by its optimal ratio of weight to stiffness.

Through intensive FEM calculations, the mechanics for highly dynamic machining could be further optimised.

A reinforced polymer concrete table enables an optimal vibration damping which leads to perfect milling results.



# Technical Data **MLCube**

**Energy-saving:**

Very low power consumption at high cutting rates due to the use of energy-efficient aggregates.

**Money-saving:**

Accessible to purchase and to run.

**Space-saving:**

Great operating range with an exceptionally small footprint.





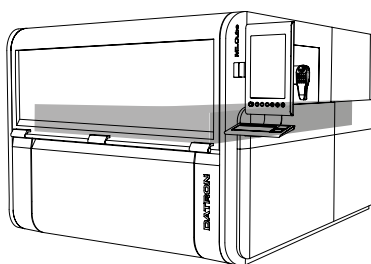
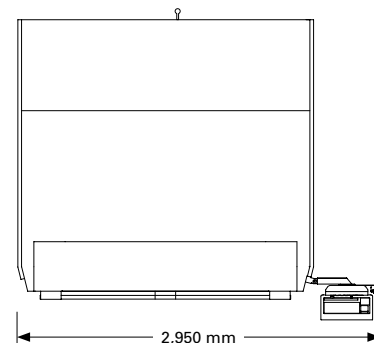
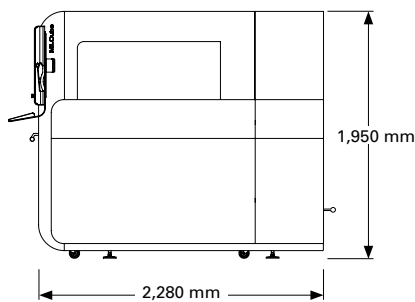
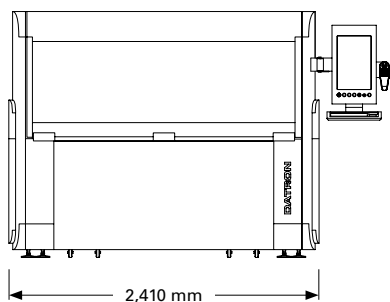
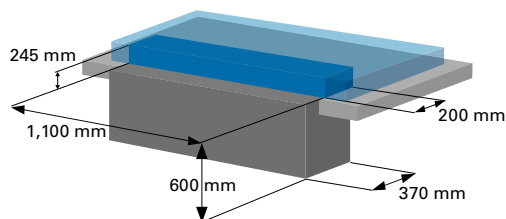
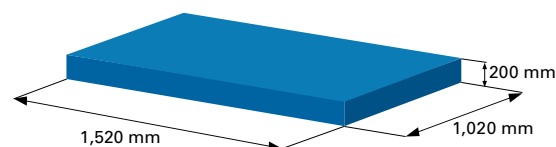


Table with cut-out:

- Table
- Machining area within the vertical clamping area
- Maximum workpiece size


Full Table:  
Machining area


Technische Daten	DATRON MLCube	
Machine table	Solid polymer concrete table with steel frame, extremely stiff portal structure with double-sided Y drive with concealed guides	
Traverse path (X x Y x Z)	1,520 mm x 1,150 mm x 245 mm; with 1,020 mm tool change in Y	
Portal passage	200 mm	
Dimensions without operating terminal (W x D x H)	2,410 mm x 2,280 mm x 1,950 mm	
Taper chuck integrated into the table	✓	
Fast digital servo control with Microsoft® Windows® control computer	✓	
Comfortable hand-held control unit	✓	
Drive system: Brushless servo motors with absolute encoders, ball screw spindle for each axis	✓	
Minimal quantity lubrication	✓	
Machining spindle	Precision high-frequency spindles from 0.6 kW to 3.0 kW with up to 60,000 rpm	
Tool changer with integrated length sensor	5fold with HSK tool holder (up to 36fold) 15fold with direct shank tool holder (up to 45fold)	
Feeds	Up to 22 m/min	
Positioning feeds	Up to 22 m/min	
Weight	Approx. 2.500 kg	
Article Number	0A03300A (with cut-out section)	0A03300B



**Status display** by means of signal LEDs integrated into the operating terminal and the portal to display machine status (optional).



**Precision spindle** with a concentricity better than 2 µm and HSK-E 25 tool insert (optional).



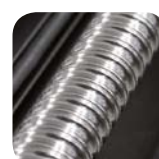
**XYZ measuring system** integrates measuring functions and foolproof material tolerance compensation (optional).



**Resource-saving:** Minimum quantity cooling lubrication starting at 30 ml/h. Minimal cleaning required (optional).



**Up to 60,000 rpm:** High cutting performance with small tools. Highly dynamic HSC control.



**Precision ball screw spindles** and linear guides from leading vendors. Brushless direct drives in all axes.



**Tool changer** allows flexible implementation of the most diverse milling applications

# HSCPro Control System

Easy to learn – highly productive

The HSCPro control technology, especially developed by DATRON, is the basis for the high performance of DATRON CNC milling machines.

Due to its high-performance fieldbus connection it allows imaging of the most complex machining procedures and offers other strengths:

- Powerful path processing/planning
- High-speed data processing rate up to 8,000 records per second
- High-performance control computer
- Drive amplifier from renowned manufacturers
- Brushless servo motors

The DATRON HSCPro control system is extremely powerful yet easy to use. This is achieved by a clear DATRON Windows®-based user interface and programming with plain text commands. The menu navigation is intuitive so that even complex applications can be programmed easily.

Multiple macro commands are available for demanding milling, drilling and engraving applications. Likewise, existing library functions can be used or new ones can be created by the operator. CAD interfaces allow the use of already existing data.



## HSCPro gives you maximum machine performance

### HSCPro – Easy to use:

- easy to learn intuitive menu navigation
- fast operation by means of DATRON shortcuts
- simple programming of powerful macro commands

### Numerous functions:

- many milling cycles come pre-configured (e.g. pockets, holes, threads, conical countersinks)
- continuous expansion through application-specific macros possible
- protected areas as collision protection for clamping devices
- different measurement cycles to calibrate the workpiece (including partial measurement field)
- programme-controlled vacuum technology
- PerfectCut contour smoothing filter

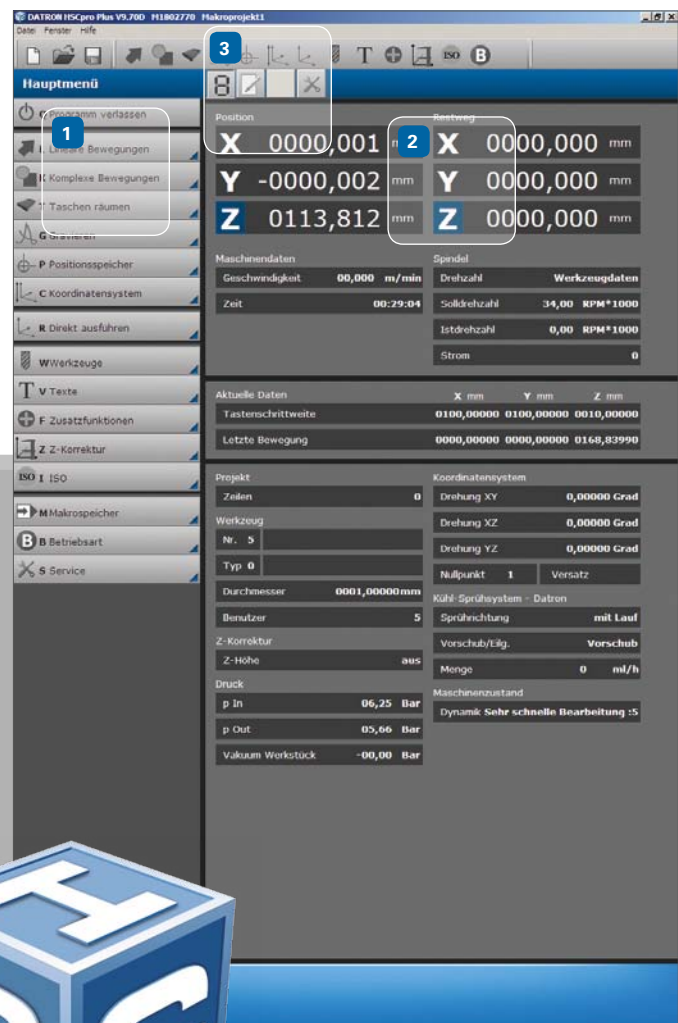
- Pre-calculation of the machining time
- powerful engraving commands
- extensive font libraries
- graphical representation of the milling machining paths

### Maximum compatibility:

- interfaces with all common CAD/CAM systems
- Import of DIN/ISO programming codes (DIW 66025)
- Import of HPGL, drilling data and CL-Print

### User interface HSCPro v9

- 1 Navigation with keyboard shortcuts for fast selection of machine functions.
- 2 Clear view of the machine status by means of a handsome representation
  - Position of the axes
  - Tool information
  - Spindle data
  - Cooling-lubricating system, etc.
- 3 Different operating modes such as editor, simulation, fast setting over keyboard shortcuts.



# PerfectCut

Fast, precise and contour accurate HSC milling  
for excellent surface quality

To achieve ideal reproductions of most complex geometries in HSC milling, DATRON has invented the surface smoothing package PerfectCut. With PerfectCut your DATRON M10 Pro, M8Cube and C5 achieve utmost performance levels and machine perfect surfaces and contours without the need for post-processing – enhancing your productivity!



## Production increase



You achieve high-quality milling results faster

- Significant improvement of manufacturing quality at shorter machine run times
- Less optimisation efforts when programming
- No reworking needed usually

## Better surface quality in a shorter time

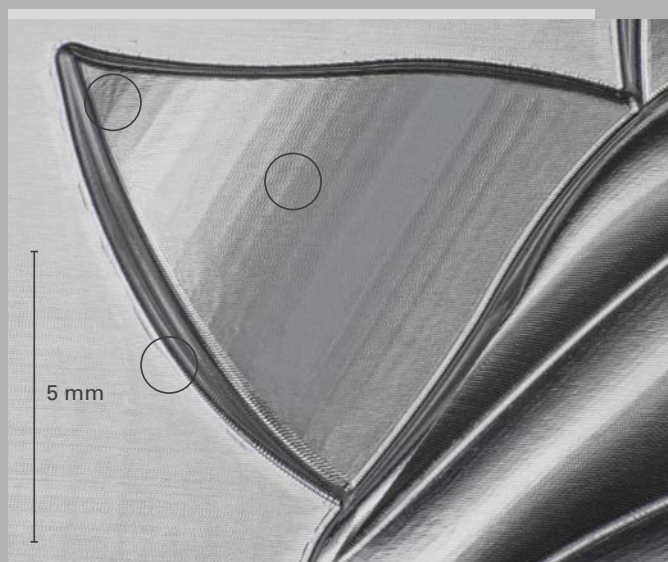


Achievement of better surface finish of workpieces within the same or shorter production time

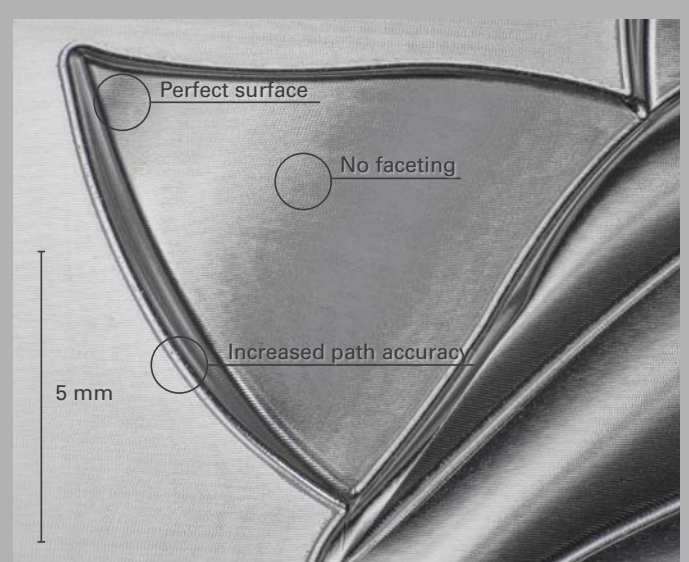
- Increased path accuracy
- No faceting
- Perfect surface



Original size

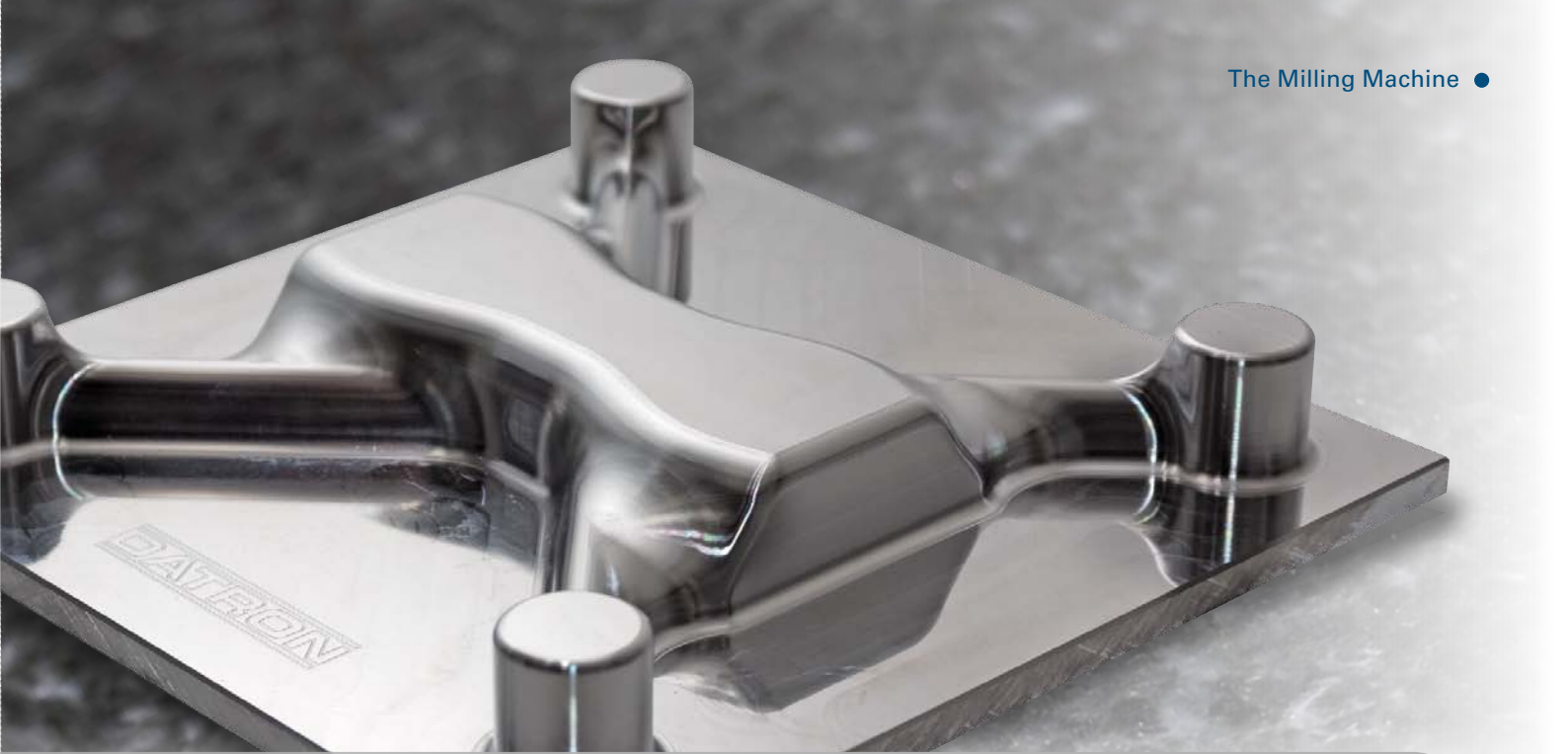


Before



After





### Your lead particularly in micromachining



You can mill even the smallest free-form surfaces and complex geometries and get perfect results

- Very high surface quality with all materials
- Fast processing with very short segment lengths
- Finest NC blocks with maximum feed rates

### Perfect results, faster



Your productivity is taken to new heights

- Fast programming
- Fast calculation
- Fast production

### Your machine is protected



Your machine stays „fit“ longer, even at high-volume production

- Less stress on all mechanic parts (especially the spindle) due to smooth running
- Higher capacity while protecting resources
- Increased end mill durability

# Fields of Application of the M8Cube

The high-speed milling technology of the DATRON M8Cube provides outstanding results in the following industries and applications:

## Electronics

- Front panels and housings
- Membrane keyboards
- Test adapter drilling
- 3D rapid prototyping
- Drilling and milling of test devices
- Milling of solder frames
- PCB milling



## Aerospace

- Machining of aluminium plates
- Machining of aluminium profiles
- Precision drilling



## Mould and model construction

- 3D aluminium moulds
- 3D rapid prototyping
- Graphite electrodes
- Small steel moulds



## Printing

- Engraving of 3D stamps
- Construction of stamping dies
- Hot stamping dies
- Stamping tools



## Automotive supply

- Machining of aluminium profiles
- Small steel moulds
- Precision CNC machining



# Technologies That Make You Even More Successful!

## Clamping technology

Whether pneumatic or vacuum clamping technology: DATRON systems feature high flexibility, high comfort of use and short changeover times. (option)



## Measuring technology

The XYZ sensor guarantees short setup times, increased precision and cost-effectiveness by automatically measuring reference edges and height profile. (option)



## Cooling/lubricating system

Ecologically and economically optimised processes with minimum quantity cooling lubrication and correspondingly increased durability. (option)



## HF spindles

High frequency spindles with speeds up to 60,000 rpm and high concentricity guarantee high cutting performance and perfect machining results when using small tools. (option)



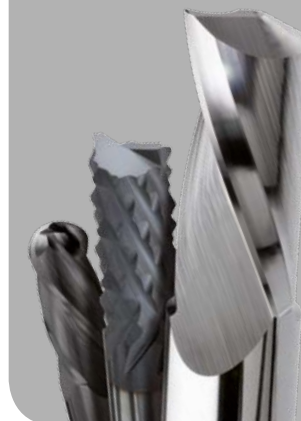
## Suction – CleanCut

Nearly chip-free work by means of highly-effective chip suction. No more time-consuming machine cleaning (optional).



## CNC milling tools

Due to years of experience and intensive communication with our customers, we develop tools especially designed for high-speed machining.





DATRON

## Module Clamping Technology

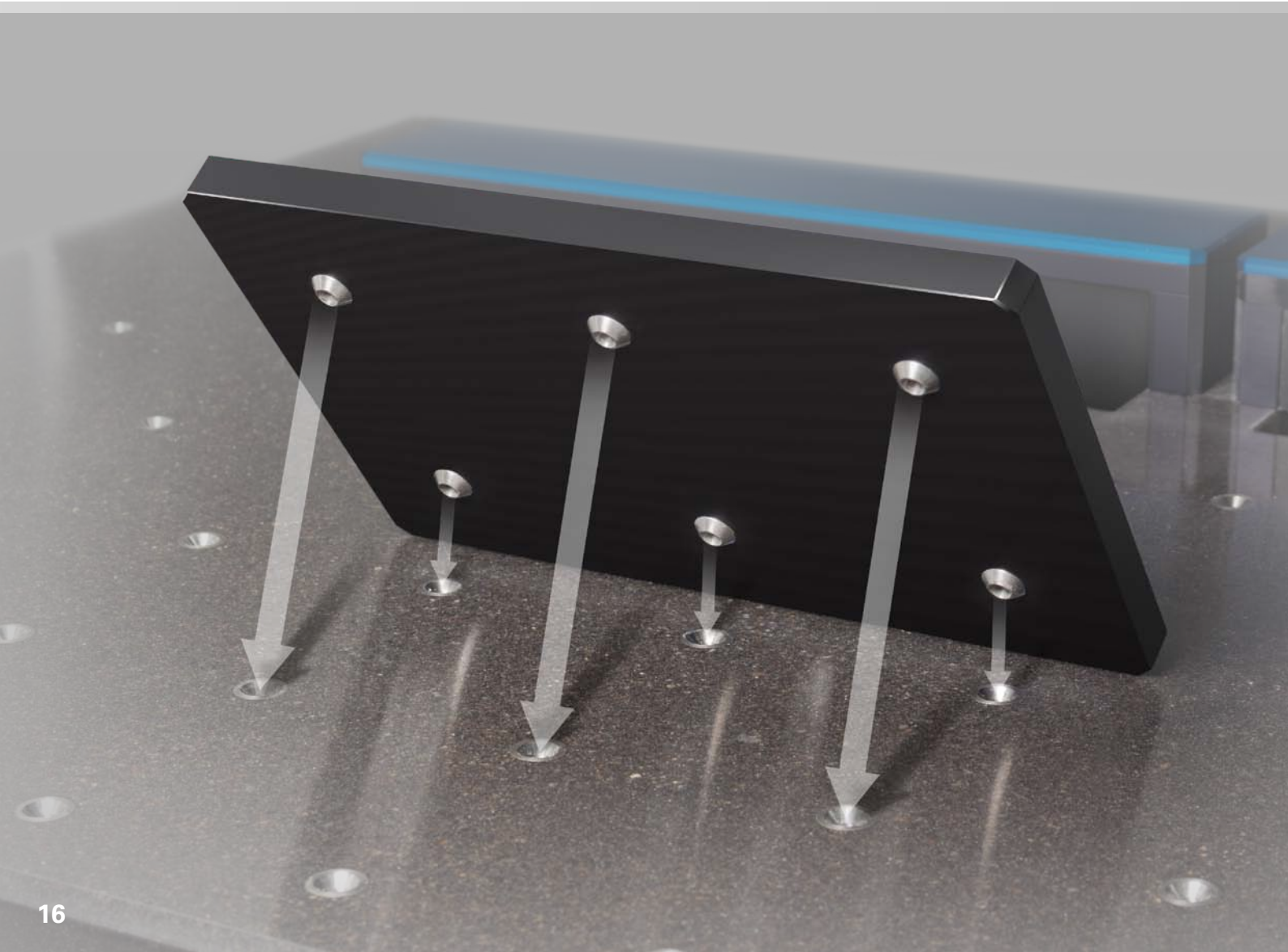
The end of tedious and long screwing and setup times!

**Cost-effective production by clamping within seconds:**


Setup times can be often reduced significantly with DATRON's modular clamping technology. The module plates are clamped directly onto the machine table using conical centring sleeves.

This applies to all machines with integrated cone clamping systems and allows very fast changing of clamping modules.

DATRON offers a variety of ready-made module clamping solutions: module clamping plates with vacuum, T-slots with short-stroke clamping elements, clamping chucks or vices. We will also be happy to design the custom clamping solutions you may need. Benefit from our experience of hundreds of machines installed.





Module Clamping Technology	Description
<p>Module clamping plates</p> 	<p>Clamping elements such as vices can be fastened onto the module clamping plates. The modules are fastened to the machine table by screwing. Recurrent clamping stations can be installed on these base plates and set up when required.</p>
<p>T-slot module clamping plates e.g. for short-stroke clamps</p> 	<p>T-slot module clamping plates offer room for application-specific clamping solutions or the combination of short-stroke clamping elements and fixed clamping jaws. The modules are mounted onto the machine table either by screwing or by vacuum suction.</p>
<p>Vakuum module clamping plates</p> 	<p>The new electronically switchable DATRON vacuum clamping technology is suitable for clamping of workpieces and sheet materials in all formats. Several similar or different workpieces can be clamped at the same time. DATRON's special cardboard VacuCard™ is used to distribute the vacuum under the workpiece and as sacrificial layer. Vacuum module clamping plates are available in different sizes.</p>
<p>DATRON Compact centric clamps and multifunction clamps</p> 	<p>Encapsulated DATRON compact centric clamps are 100% protected against soiling. Due to their especially developed slider geometry with a guide length of 150 mm, they are the first fully encapsulated compact centric clamps. Malfunctions due to soiling and jammed chips are something of the past.</p>
<p>Rotary axis with tailstock</p> 	<p>The rotary axis is particularly suitable for multisided machining of long workpieces, for circular engravings or for drilling in radial direction. Clamping is done using DATRON's module clamping technique, allowing a variable clamping length. The rotary axis is impact-free and provides high precision and torsional stiffness.</p>

DATRON

# Vakuum Clamping Technology

Plug & Play for easy handling!

**Extremely simple and easy to use. Put the parts in place - ready! The high holding forces of DATRON's vacuum plates hold even the smallest parts. The patented special cardboard VacuCard++ is the perfect sacrificial layer.**

All DATRON machines can be equipped with the DATRON vacuum clamping technology, allowing very high holding forces due to its especially developed design, even in case of shapes that are difficult to clamp otherwise and the thinnest sheet materials. The vacuum module clamping plates, available in various sizes, are divided into segments which can be operated separately.

## Advantages:

- very short set-up times
- time-efficient optimum utilization machining
- deformation and vibration-free clamping of thin sheets
- allows complete milling around workpieces and separating them

## Application:

- clamping of sheet materials
- clamping of flat housings
- clamping of difficult to hold materials and shapes



### Casters

To facilitate the assembly of the vacuum plates, these have smooth-rolling casters starting from size 700 x 500 mm. The sheets can thus be positioned with little effort on the machine table. They also facilitate the protection of the machine table surface.



### Recessed grips

To ensure safe handling of the vacuum plates, they possess cut-outs that serve as recessed grips.



### Limit stops

Workpieces can be aligned precisely at the edges of the vacuum panels using pivotable limit stops. Workpieces are fully accessible for machining by sinking the limit stops.





#### Individual fields

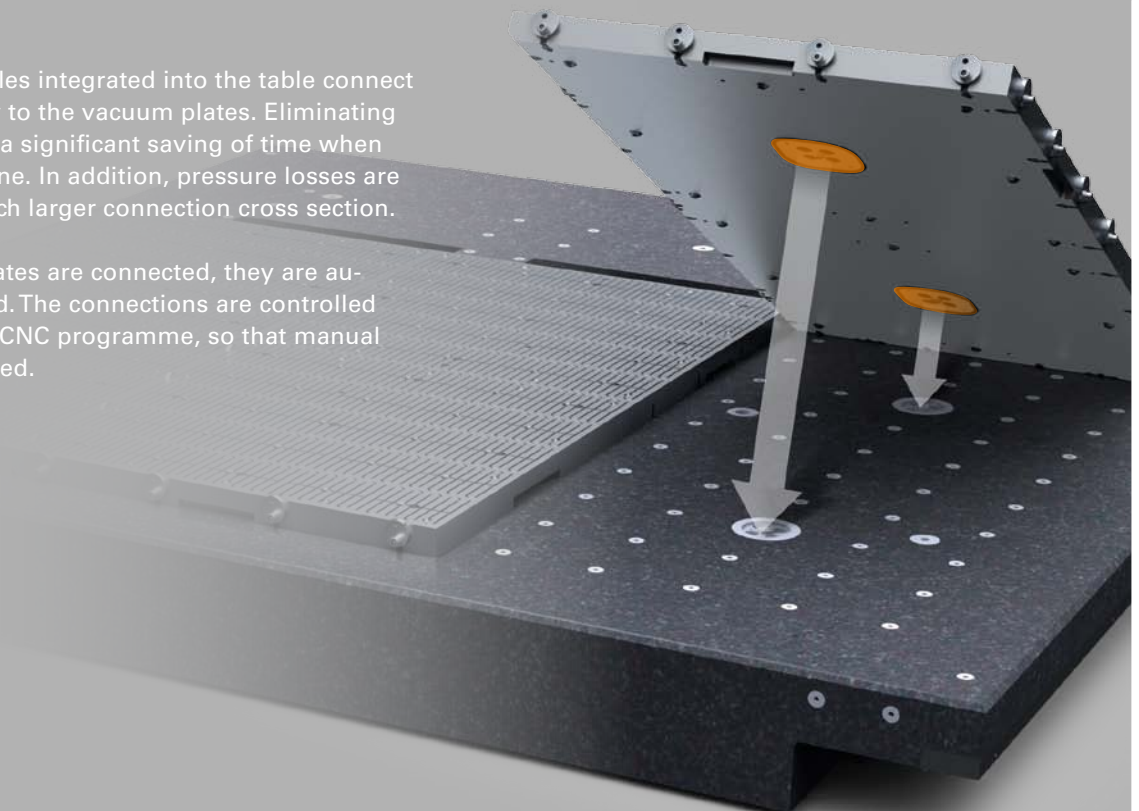
In order to be able to clamp workpieces of different shapes and sizes, DATRON offers vacuum plates divided into individual fields, which can be activated application-specific. Pressure losses can be significantly minimised this way.

## Vacuum distribution

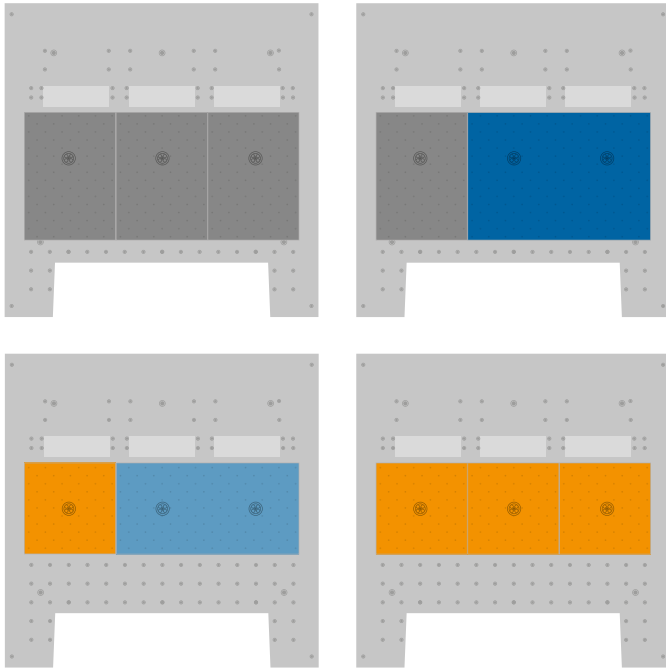
### Connection nozzles integrated into the table

The connection nozzles integrated into the table connect directly and securely to the vacuum plates. Eliminating the tubing results in a significant saving of time when setting up the machine. In addition, pressure losses are lower due to the much larger connection cross section.

Once the vacuum plates are connected, they are automatically grounded. The connections are controlled electrically from the CNC programme, so that manual operation is eliminated.



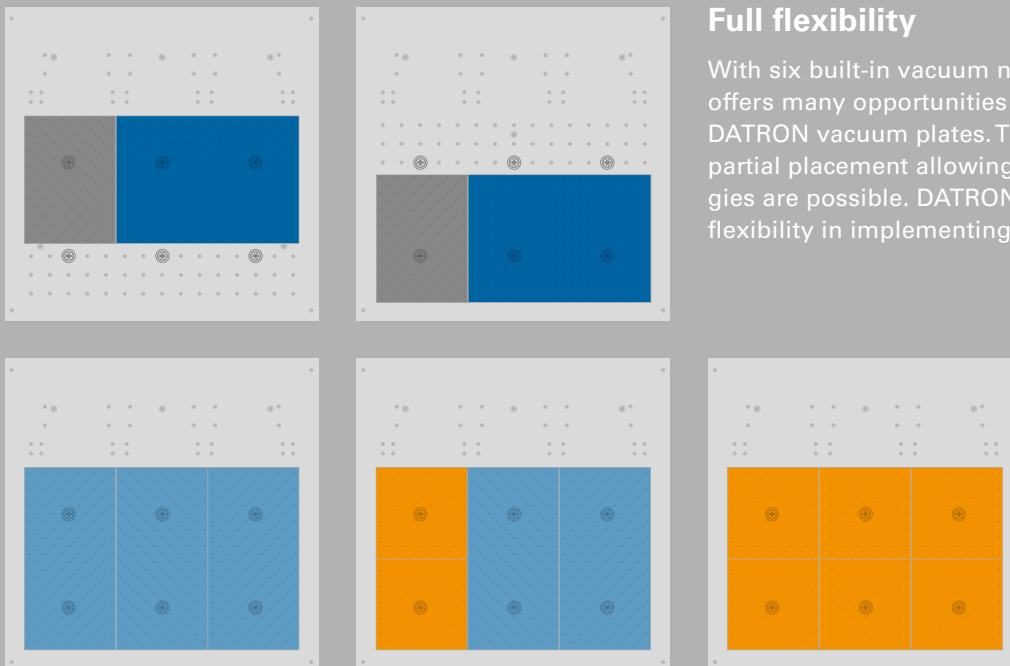
## Sheet clamping: **Table with front cut-out**



### Variable positioning

DATRON's table version with front cut-out has three integrated vacuum connection nozzles, allowing variable positioning of the DATRON vacuum plates with the formats from 500 x 500 mm to 1000 x 700 mm.

## Sheet clamping: **Full table**



### Full flexibility

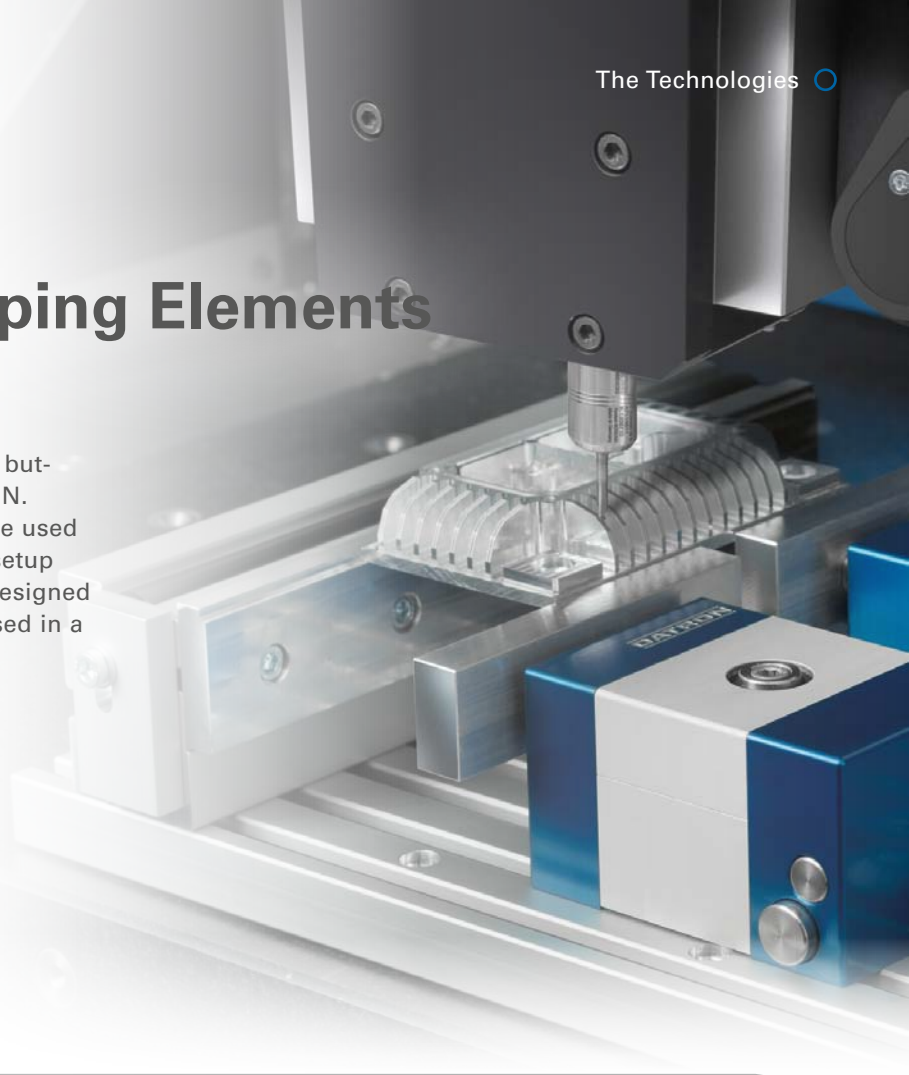
With six built-in vacuum nozzles, DATRON's full table offers many opportunities for workpiece placement with DATRON vacuum plates. Thus, both full-surface and partial placement allowing additional clamping technologies are possible. DATRON's full table allows maximum flexibility in implementing different machining projects.

DATRON

# Short-Stroke Clamping Elements

One-handed fast setup!

Brilliantly simple to use with the light touch of a button, yet they boast clamping forces of up to 750 N. DATRON's short-stroke clamping elements can be used wherever high flexibility, ease of use and short setup times are required. The clamping elements are designed for operation on a T-slot plate, but can also be used in a stationary manner.



## Short-Stroke Clamping Elements Overview

### KSE-AS

Short-stroke clamping element for automatic clamping operation

#### Advantages:

- Automatic opening and closing
- Fast changeover
- Adjustable clamping pressure
- Compact design

#### Application:

- Flexible clamping of different workpieces
- Mass production



### KSE-PH

Pneumatic-hydraulic short-stroke clamping elements

#### Advantages:

- One-handed operation
- Fast changeover
- Adjustable clamping pressure
- Compact design

#### Application:

- Flexible clamping of different workpieces
- Batch production



# DATRON

## Sensor XYZ

Awesome in every dimension

The XYZ sensor is a three-dimensional touch sensor. With its help you can considerably reduce setup times of your milling machine. You increase accuracy and reliability when referencing your workpiece.

By using the XYZ sensor, your production attains higher cost-effectiveness. Time-consuming setups are something of the past. The special feature is automatic compensation, even height tolerances of materials, for example for perfect bevels even of large components, precision depth-machining, and much more.

It is amazing how easy machining of some components can get with measuring sensor.

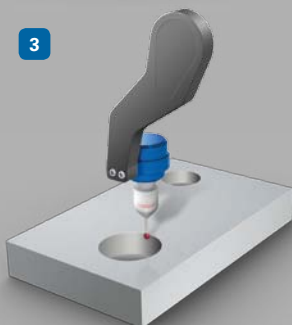
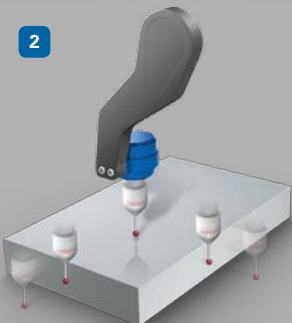
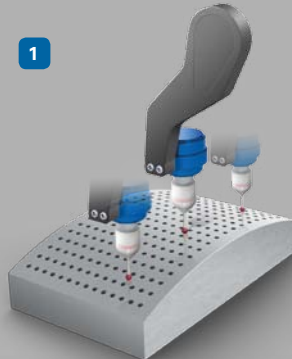


### How it works:

Just swing it into the machining area to increase production quality within seconds or to check dimensional accuracy: The XYZ sensor allows you to consistently optimise your production.

#### 1 Material surfaces

The surface of the material is measured by grid scanning. The altitude profile created this way is corrected immediately by the CNC programme or the engraving programme. Navigate away from any uncertainties quickly, easily and comfortably.



#### 2 Corners and edges

The edge of the material or the height of the workpiece can be calculated precisely with just one measurement. Three measurements allow determining both the height of the material and the exact position of a rectangular edge of a workpiece.

##### Advantage:

The determination of reference points on workpieces is achieved much more accurately with the XYZ sensor and within a fraction of the time of conventional methods.

#### 3 Centres of workpieces

The centres of circular or rectangular islands or cut-outs can be determined automatically.

##### Advantage:

The centre of the workpiece can be precisely determined within just a few seconds, without needing long setup times. For example, by measuring two holes drilled for reference, a non-angular clamping can be compensated by rotating the coordinate system.



# DATRON

## Cooling/lubrication systems

DATRON minimum quantity cooling lubrication systems are the result of years of application experience. Depending on the cooling medium, there are minimal residues or none at all. No cleaning, no degreasing: a great advantage for many applications.

### DATRON EK-M cooling/lubrication system

This minimum quantity cooling/lubrication system can be used with different coolants/lubricants and is designed for reliable and reproducible results in milling and engraving processes with particularly small amounts of fluid.

There are three different spray head variants available for this system:

#### EK-VM-R

The circular spray head for HSK-E 25 spindles has four nozzles and is used in connection with CleanCut and machines with 11-fold tool changer.

#### EK-VM-4+

Spray head with four adjustable nozzles and bundled jet. It can be used for both spindles with HSK or direct shank clamping.

### DATRON EK-D cooling/lubrication system

This cooling/lubrication system for ethanol is suitable for spindles with direct shank clamping. Ethanol is sprayed through two nozzles onto the workpiece and the tool. The heat energy generated during milling is withdrawn by the evaporation process. In addition, ethanol lubricates the flute of the tool, thus increasing its service life. Cleaning the workpieces after machining is eliminated due to the complete evaporation of ethanol.



DATRON

# CNC High Frequency spindles

Precision in the micron-range, speeds up to 60,000 rpm

DATRON offers the right spindle for every need: from ultra-powerful, precision high-speed spindles to robust and cost-effective "workhorses". High quality, precision and durability are common features of all DATRON high-frequency spindles.

The expert selection of the appropriate spindle for your particular application is a particularly important point when configuring your milling machine.

Our experts will advise you on the spindle that is the most efficient solution for you.

## PowerS

Powerful and extremely precise high-frequency spindle with HKS-E tool holder. For highest quality with high cutting performance. 3.0 kW at up to 40,000 rpm.

## HighS

This universal spindle for high-speed milling, drilling and engraving is available in three different versions:


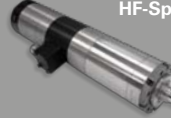
**HighS L0.6** with 0.6 kW and up to 60,000 rpm, direct shank clamping, air cooling through spindle insert

**HighS M1.8** with 1.8 kW at up to 48,000 rpm; HSK-E 25 tool insert

**HighS H2.0** with 2.0 kW at up to 60,000 rpm; direct shank clamping

## EcoS

A particularly robust and efficient high-frequency spindle with direct shank clamping and automatic tool changer. Speeds up to 28,800 rpm with 1.2 kW power.

Spindle type Spindle performance	Speed range (1/min)	Tool clamping technology	max. shank diameter/max. tool diameter for automatic tool changer (mm)	Internal cooling	Cooling/lubrication system
 HighS L0.6 HF-Spindel 0.6 kW	6,000 - 60,000	Direct shank clamping	8/14	Air	DATRON cooling lubrication system
 EcoS P1.2 HF-Spindel 1.2 kW	5,000 - 28,800	Direct shank clamping	8/14	Air	DATRON cooling lubrication system
 HighS H2.0 HF-Spindel 2.0 kW	6,000 - 60,000	Direct shank clamping	8/14	Liquid cooling	DATRON cooling lubrication system
 HighS M1.8 HF-Spindel 1.8 kW	5,000 - 48,000	HSK-E 25	10/20	Liquid cooling	Minimum quantity cooling lubrication systems 5l/9l with filling level sensor
 PowerS Synchro 3.0 HF-Spindel 3.0 kW	1,000 - 40,000	HSK-E 25	10/20	Liquid cooling	Minimum quantity cooling lubrication systems 5l/9l with filling level sensor



## DATRON CleanCut

Save time and work cleanly:  
the CleanCut suction system is highly effective.

DATRON's CleanCut system provides highly effective chip suction. By means of this suction technology especially developed for plate-machining, almost chip-free working is achieved. Time-consuming machine cleaning is no longer necessary.

Perfect for sensitive surfaces: chips are vacuumed off without any contact. Automatic extension and retraction of the suction head represent a further saving of time.

### Properties:

- Programme-controlled swinging in and out
- Precise adjustment of surface distance
- Contact-free suction
- Compatible with tool-changing station and XYZ sensor
- Automatic swinging in and out with parking function activated
- Available for spindles with direct-shank and HSK-E 25 inserts
- Possibility of minimum quantity lubrication

DATRON

# CNC Milling Tools

Profitable milling, drilling, and engraving

DATRON offers innovative HSC milling and engraving tools for even greater success in your production.



#### Precision:

- Drilling from 0.1 mm
- Milling from 0.2 mm
- Thread milling from M1



#### Cost-effectiveness:

- Maximum cutting performance
- Maximum durability
- Maximum process safety



#### "Made in Germany" quality:

- Development
- Testing
- Production



#### DATRON Technology:

- intelligent geometries
- patented tools
- the most modern grinding machines



#### Individual tools:

- development and manufacture according to customer specifications
- suitable for specific applications
- production in the shortest time



## Milling Tools for Aluminium



### High Performance

High cutting performance, quiet operation and smooth surfaces: milling tools such as the patented single flute end mill with counterbalanced cut, DATRON'S two flute end mills for smoothing and planing or our threading tools, support you in profitable machining of light metals.



## Milling Tools for Plastics/Composites/Foams



### Wear-resistant

Due to optimal chip removal, extremely fast feed rates without melting and burr-forming are also possible with plastics.

The generation of single flute end mills with polish grinding for machining plastics, allows highest-quality surface-finishing.

With DATRON's special tools for foam machining, excellent surfaces and sharp edges can be manufactured in short processing time. A particular unique feature is chamfering workpieces in a single step!





## DATRON Customer Service

**From installation to many years of product support:  
You can count on us!**

DATRON guarantees maximum effectiveness in the operation of the machines, even many years after purchase – worldwide! By means of practical instruction and training, you will benefit from the full potential of our machines, right from the start.

The latest diagnostic tools and the in-depth expertise of our staff ensure smooth running of your production.

Our proven spare parts service and our customer-optimised maintenance programme minimize downtimes significantly. When you purchase a DATRON system, you receive much more than just a machine with controls: you get a team of experts that fully supports you!

**For more information about our Customer Service, please visit:**

**[www.service.datron.de](http://www.service.datron.de)**

## Decentralised

We are represented wherever we are needed. The local service team of our representatives abroad is at your disposal. Closeness saves time and money: for this reason, DATRON offers several service centres in Germany and worldwide at many of our more than 20 representative offices and agents.



## Cost-effective

Teleservices, e-Messenger, remote maintenance: we offer the latest information technologies for the fastest possible diagnoses and cost effective service.



## Friendly and Reliable

Our hotline will help you to find solutions and solve problems, even with software and programming issues. A comprehensive stock of spare parts guarantees short-test delivery times.



## Competence

Trained staff and many years of application experience and in-house practice guarantee the high quality of DATRON's service worldwide. As a result you get sound and competent advice and fast troubleshooting in the event of any malfunctioning problem.







## DATRON Technology Centre

Which machine is best for your manufacturing process depends on many individual parameters. Sound technical advice and the creation of samples are therefore part of our most important services. Accurate analysis of your production task forms the basis for our expert advice to optimise your entire production process.

### We offer:

- Creation of client-customised samples according to drawings (in printed or electronic form)
- Product demonstrations of our CNC milling machines
- Technological advice on CAD/CAM selection, clamping technology and DATRON's high-speed milling-tools

## DATRON Turnkey Solutions

With an extensive range of accessories and the knowledge of our experts, we optimise DATRON machine configuration for your production. Choose among several machine sizes and a range of powerful machining spindles.

The choice is yours: expand a particular machine with the appropriate clamping technology, the optimum cooling spray system, rotary axes, sensors, automation, CAD/CAM software packages and much more.

**We provide our customers with:**

- **Tailor-cut solutions**
- **Individual application advice**
- **Integrated clamping technology and automated solutions**
- **On-site installation and training**
- **Industry-leading service and support**



## Complete Process Chain

Profit from the profound knowledge of our experts in many fields of production technology. We will be happy to advise you in optimising all stages of the production chain: from CAD design to CAM data generation, clamping and measuring technology, tool and cooling technology up to the entire material flow.

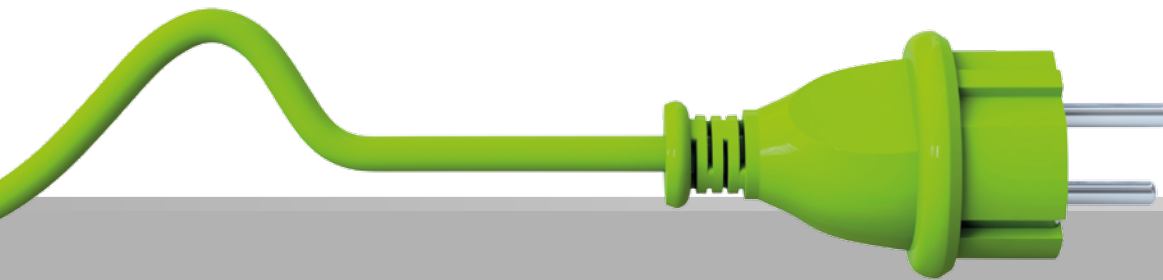
Tuning and optimising the entire process chain often leads to that crucial cost and quality advantage!



# DATRON

## Efficient and Energy-saving

Energy-efficient machines and the cost-effective use of resources play an increasingly important role in production processes. Through their innovative lightweight construction and energy-efficient drive technology, DATRON machines are more cost-effective already today. DATRON milling machines require on average less than 2.5 kW/h, even at high cutting capacities. The proprietary minimum quantity cooling lubrication system developed by DATRON also offers a highly cost-efficient and environmentally-friendly solution.



### **Saves energy:**

Very low power consumption by means of highest efficiency of all aggregates.



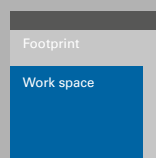
### **Saves money:**

Low-cost in purchase and operation.



### **Saves resources:**

Minimum quantity lubrication from 30 ml/hour. Minimal cleaning costs.



### **Saves space:**

Large machining table at extremely small footprint.





DATRON

## Innovative Technology “Made in Germany”

The name DATRON stands for high-quality machines and tools of the latest generation. In order to provide our customers with the best possible solution and to continuously improve our products, our experts are already working today on the production technologies of the future!

In close cooperation with universities and selected technology partners, DATRON pursues numerous research projects targeting more efficient and innovative manufacturing processes. Our innovation strength is proven by numerous patents; DATRON has been awarded three times the TOP 100 seal as one of the most innovative companies among the German small and mid-sized enterprises.

Quality and customer satisfaction are our top priority. “Made in Germany” is a key part of our product strategy. DATRON products are developed exclusively in Germany and made of extremely high-quality components.

With our certified total quality management system, we monitor and control the correct functioning of all processes, from product development over sales and delivery to service.

Reinforce your competitive lead even further with innovative DATRON products. Latest cutting technology, high quality and production efficiency are your key advantages.

# DATRON

## Machine Overview

DATRON's CNC milling machines and DATRON's quality tools are perfectly matched to each other. The combination of machine, tools and accessories ensures highest quality, precision and process reliability for your production.

**Powerful and highly accurate**

DATRON **M10 Pro**



**Productive and versatile**

DATRON **M8Cube**



**Compact and cost-effective**

DATRON **M7**  
DATRON **M75**



**Large-sized and efficient**

DATRON **MLCube**



**5-axis, precise and compact**

DATRON **C5**

DATRON **D5**



# DATRON

## About us

### DATRON AG

**Dedicated staff and innovative products**

We develop, produce and distribute innovative CNC milling machines for the machining of future-oriented materials such as aluminium and composite materials, dental milling machines for the efficient processing of all common denture materials in dental laboratories and high-performance dosing machines for industrial sealing and bonding applications.

Strong focus on customer value, a very good price-performance ratio, low power consumption and flexible adaptation through modular lightweight construction are a common feature of all our products. Standard solutions can be adapted to a very large extent to individual customer requirements.

Production and automation processes can be improved significantly due to components matched already during their development and the resulting superior technological features of DATRON's products. This not only leads to higher production quality, but also to lower manufacturing costs!

### DATRON's core products are:

#### **CNC milling machines for high-speed milling and 3D engraving**

Milling, drilling and engraving of aluminium, stainless steel, plastics and composites. High production speeds and results are achieved with speeds of up to 60,000 rpm.

We are the market leaders in Germany in the field of front panel and housing machining.

#### **Dental CAD/CAM milling/grinding machines**

The ultracompact 5-axis milling/grinding machines are suitable for machining all common dental materials. Equipped with 8-fold automation and 12-fold tool changer, DATRON's machines are the best choice for industrial dental mass production with high reliability, speed and precision.

#### **VDispenser®-Dispensing machines for precise and rapid bonding and sealing**

Our precise-volume dispensing technology is available and patented worldwide. Strong cost advantages result in mass production due to the high dispensing quality and speed of our systems.

#### **Tools for high-speed machining**

The quality of the tools is essential to determine machining results in high-speed machining. Our technological and advising expertise enables our customers to produce more economically than their competitors.

#### **Technical customer support**

Training, service hotline, maintenance, accessories and spare parts sales: Our professional service and expert advice in all fields leads to high customer satisfaction and to the "German Customer's Champion 2011" award.







## Your notes





**For detailed information call us at:**  
**+49 (0) 61 51 - 14 19 - 0**



**by email:**  
**info@datron.de**



**or online at:**  
**www.datron.de**

The information in this brochure includes current descriptions and/or performance features that may change due to ongoing development of our products. Some of the depicted machines include optional components. Descriptions and performance features are only binding if expressly agreed on in writing upon conclusion of the contract.

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