DATRON Hybrid Production

Due to the technical processes used, dental indications additively manufactured of cobalt-chromium or titanium often come with a high surface roughness and so-called holding pins (supports). Especially in the dental field, where it is of utmost importance to achieve a perfect fit and a tight seal of crown margins, implant connections or occlusal surfaces, these parts are subjected to post-processing with the aid of high-precision milling machines. Thus, a combination of additive (laser sintering) and subtractive (milling) manufacturing takes place and opens up completely new production possibilities and business models.

DATRON supports you in this process from the idea to the implementation with especially adapted machine systems and a comprehensive range of accessories, such as measuring technol-

ogy, milling tools and appropriate software solutions plus consulting - tailored to your individual needs and requirements!

We understand dental

Our goal and motivation are to be always available for you on an equal footing as a contact with technically pioneering information. Therefore we investigate and develop our dental solutions not only at the company's ownTechnology Centre within the Muehltal company site but we also operate our own dental hotline to answer technical questions concerning your applications.

Due to our 40 years of machine construction and tool expertise with about 3,000 systems operating in the field, we are not only your competent partner for efficient production solutions, but with over 5 years of experience as manufacturers of sophisticated and durable solutions we have also become a leader on the dental market in dental milling/grinding machines and dental milling tools.

Our dental expertise makes itself manifest both in consulting and service through our team of dental technicians, dental engineers and machine-construction technicians and the high technical availability of our systems and service partners worldwide.





Technical Data DATRON D5 Linear Scales

Dimensions (W x H x D)	79 cm x 191 cm x 119 cm
Weight	approx. 900 kg
Precision spindle	1.8 kW, 50,000 1/min, HSK-E 25 tool insert
Tool changer	15 tools with tool length sensor and tool breakage recognition
Automation	Up to 8 blanks
Range of the Rotary-swivel-axis	A: up to $\pm 25^{\circ}$; B: up to $\pm 45^{\circ}$ (both sides)
Workpieces	Standard dental blanks with shoulder; ø 98.5 mm
Pneumatic connection	7 bar
Supply voltage	3 x 400 VAC/16 A
Power rating	4.000 VA (max. fuses 3 x 16 A)
Air consumption	200 l, dry

Recommended machine equipment*

Order Description		Article Number
1	DATRON D5 with DS-Axis	0A33013C
2	HF spindle 1.8 kW, HSK-E 25	included
3	Spindle cooling device	included
4	15fold tool changer HSK-E 25, Pos. 1-6	included
5	Automation for D5, Pos. 1–8	0A34120
6	Minimum quantity cooling/lubricating system, including spraying unit	included
7	Linear Scales	included
8	Workpiece holder for blanks (8 pieces)	0A34103
9	Tribos clamping device with reduction insert and 15 x HSK-E 25 collet chucks	0A01910F
10	HD camera for external screen	0A34201
11	Preparation for external exhauster	0A32204A
12	Start-up and briefing	0A31007D
14	Extinguishing system for titanium machining	0A34010

* Information about software and training available separately

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DATRON **D5** Linear Scales

Highly precise – Easy-to-use – High margins Lucrative in-house production of implant prosthetics

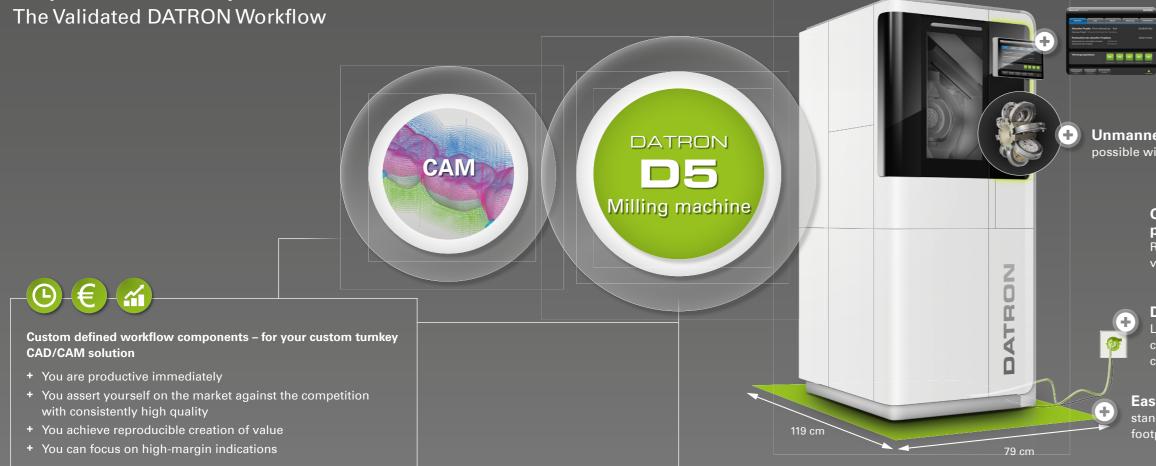
DATRON Dental CAD/CAM



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Fully in the hand of experts –



Turn-Key solution for your creation of value

Our DATRON workflow offers you the possibility of manufacturing attractive premium indications in a cost-effective manner with maximum process reliability. Leave the competition behind and get a competent contact associate: us.

With the D5-LS, DATRON provides you with a fully integrated CAD/CAM system as a complete turn-key solution. We have combined the leading suppliers of scanners and CAD/CAM solutions in the field of CAD/CAM implant prosthetics into an efficient partnership.

- Optimal coordination of all CAD/CAM components

- The greatest possible process reliability
 Productive in no time at all
 More freedom for dental technical work

Fully cost-effective

By focusing on indications with high contribution margins, you are offered the possibility of turning to finan-cially interesting applications, instead of concentrating on the price-sensitive crown and bridge market. This will give you an unassailable advantage over the competition in your product range and raise your profile as a leading manufacturer of premium-indications.

ROI calculation example for DATRON D5 LS



Full amortisation < 2 years

This calculation not only includes the pure machine investment but also ongoing costs such as materials, tools, labour costs for the CAD/CAM process, reserves for machine maintenance (including the spindle) and electricity!

Perfectly matched tool geometries for maximum durability and performance

We have been developing and manufacturing DATRON milling tools of the highest guality for over 20 years. Because only with high-quality tools perfectly matched to the machine, is it possible to produce high-quality indications.

More than 10,000 tool customers worldwide rely on the quality of DATRON milling tools and accessories. Made in Germany.

DATRON D5 IN OPERATION: the patient is delighted, the dentist happy, the lab successful.

Easy operating concept

Intuitive machine operation, tailored to the technical dental needs of the user, high process reliability within a short training period

Unmanned overnight operation possible with 8fold blank changer

Off-Site supervision of production by Remote View and Remote Control Function (optional) via PC/tablet

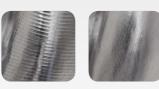
Durable cost savings

Low operating and consumption costs (energy, maintenance, tools, consumables, etc.)

Easy installation, prepared for 80 cm standard door frames with a minimum footprint (<1 m²) inside the lab



Premium indications that you can be proud of:



Surface achieved without (left) and with smoothing filter (right)



Polished surface quality

Our technology

- Very smooth running of the machine due to its stiff and low-vibration design with components made of steel and die-cast
- Software smoothing filter
- Optimised milling strategies and especially coated milling tools

The production result

Highly polished surfaces

Your advantage

Reworking is reduced to an absolute minimum

Scrupulous in 5 axes

Our Technology

- Powerful rotary/swivel axis
- Work angle of up to ±45°
- Work angle of the end mill to the workpiece is always optimal

The production result

Perfectly suitable indications

Your advantage

- Hardly any restrictions even in case of extreme divergences
- No reworking on thge cavity
- Long durability of milling tools

High precision for all indications through integrated linear scales

Our Technology

- Highly precise axes and dynamic drives
- Powerful spindle with HSK clamping technology
- Absolute accuracy of ±5 μ to 100 mm with integrated linear scales

The production result

Tension-free fit for even the most complicated implant work

Your advantage

Instant fit, even for complex geometries and long-span work



