



MEDTECH SOLUTIONS

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ROLLOMATIC PARTNER TO MEDICAL TECHNOLOGY SUPPLIERS

The medical industry demands accurate and high-end cutting tool solutions that are consistently reliable and comply with the strictest standards. Rollomatic is committed to maintaining exceptionally high quality parameters in the building of its machines. Renowned for its innovative capacity and expertise, Rollomatic is an expert in designing high-precision grinding solutions for the production of cutting tools used in surgical, orthopedic, dental and other medical applications.

Rollomatic is a privately owned Swiss company that specializes in the design and building of high-precision CNC machines for grinding cutting tools, cylindrical grinding and laser machining of ultra-hard materials. Rollomatic's industrial robotics division offers automation solutions to enhance its customers' competitiveness.

DENTAL

Dental instrument manufacturers rely on Rollomatic's expertise in a field that demands exceptional attention to detail. Rollomatic specializes in designing high-precision CNC machines that are used for manufacturing rotary dental cutting tools and for blank preparation. Some of the Rollomatic machines are specifically designed to produce dental burs, CAD/CAM burs and drilling instruments for implantology.

Applications: Dental surgical burs | Instruments made from solid carbide, steel and stainless steel | Endodontic and dental rotary burs and drills | Implantology drills and taps | Lindemann endmills | CAD/CAM endmills | Gates-Glidden instruments

DENTAL BURS

The first category of instruments is intended for dentists and orthodontists who perform cutting operations on teeth or crowns. To produce these types of burs, Rollomatic proposes compact and highly productive grinding centers that are specifically designed to deliver superior machining quality.



> GRINDSMART®NANO5

The 5-axis grinding center GrindSmart®Nano5 has been designed to manufacture medical, dental and industrial cutting tools with diameters up to 6.35 mm (1/4") in HSS, stainless steel and carbide material.

- Compact design, minimal footprint
- Increased efficiency and productivity
- Fast, accurate and repeatable grinding process



CAD/CAM MILLING

Rollomatic offers grinding machines that specifically produce carbide endmills. These endmills are used for machining customized crowns, prostheses and other restoration parts which are shaped after capturing a virtual 3D model. Some dental practices even have a small digitally controlled machine that can create a crown in just a few hours.



> GRINDSMART®660XW

6-axis grinding machine designed for the production of rotary cutting tools from Ø 0.1 to 12.7 mm offering an ultra-efficient lean grinding process.

- Innovative kinematics integrated in a very compact enclosure
- Production stability and extreme precision
- All operations in one single machine



IMPLANTOLOGY

This category consists of stainless steel drills and burs that are used in implantology to prepare the bone prior to implant insertion. The accuracy of the implant placement is crucial to the success of the treatment at the conclusion of the surgical procedure. To meet these demands, Rollomatic offers exceptionally versatile machines that are capable of designing and producing all types of geometries, providing outstanding reliability and precision.



> GRINDSMART®630XW

Universal 6-axis grinding machine designed for the geometry of a large variety of high-performance cutting tools in the applications range from Ø 0.1 to 20.0 mm.

- Compact design, minimal footprint
- Excellent flexibility and precision
- Low energy consumption

> SHAPESMART®NP50

5-axis precision cylindrical pinch/peel grinding machine designed for blank preparation of the steps with tapers and radii as well as the shank, including the attachment.

- Rollomatic's innovative pinch and peel grinding process enables superior surface finishes
- Unattended production for large and small batches
- Capability to grind up to ten different geometries in a single setup



ORTHOPEDICS AND SURGERY

Medical devices, surgical techniques and the instruments required are constantly evolving in terms of volume and complexity. Rollomatic addresses this by developing highly reliable and efficient grinding machines to produce orthopedic and surgical instrument that meet the highest technical and regulatory standards.

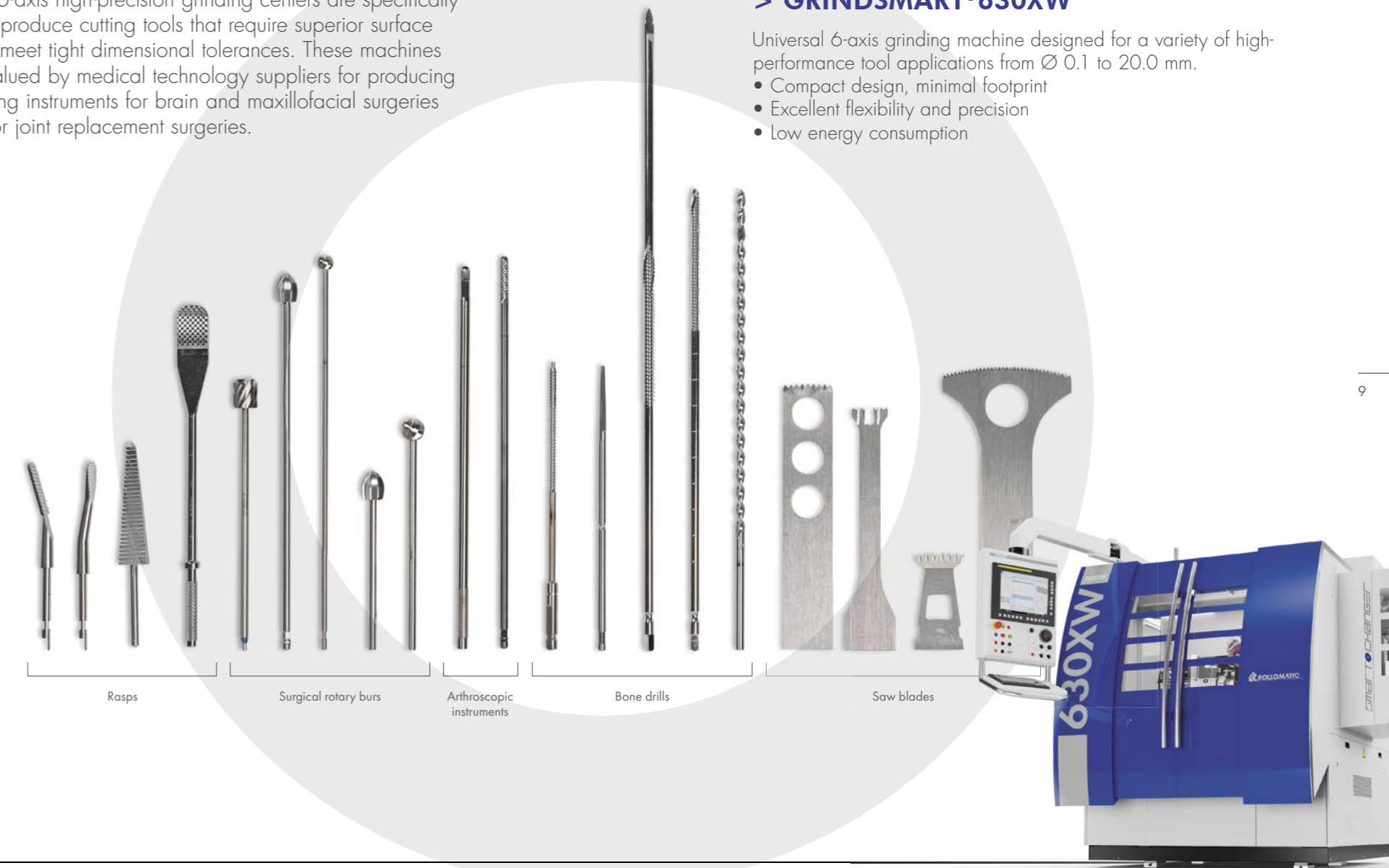
Applications: Shaver blades | Burs | Bone drills and reamers | Saw blades | Rasps | Cranial perforators | Endoscopic and arthroscopic instruments

Rollomatic's 6-axis high-precision grinding centers are specifically designed to produce cutting tools that require superior surface finishes and meet tight dimensional tolerances. These machines are highly valued by medical technology suppliers for producing surgical cutting instruments for brain and maxillofacial surgeries as well as for joint replacement surgeries.

> GRINDSMART®630XW

Universal 6-axis grinding machine designed for a variety of high-performance tool applications from Ø 0.1 to 20.0 mm.

- Compact design, minimal footprint
- Excellent flexibility and precision
- Low energy consumption



PLASTIC INJECTION MOLDING

Injection molding is commonly used in many types of industries. However, accuracy and repeatability are especially crucial in the medical sector for the final product. Rollomatic offers machining solutions for injection molding tools including cylindrical grinding machines that deliver a superior surface finish and maximum concentricity.

Applications: Inhalers | Syringes | Insulin pens | Diagnostic kits

Rollomatic's cylindrical grinding technology guarantees the most precise and efficient production of core pins as well as a wide range of round and non-round applications, meeting high tolerance levels and specific customer requirements and satisfying the rigorous demands of the application field.

> SHAPESMART®NP50

5-axis precision cylindrical pinch/peel grinding machine for a diameter range from 0.025 to 25.4 mm.

- Rollomatic's innovative pinch and peel grinding process enables superior surface finishes
- Unattended production for large and small batches
- Capability to grind up to ten different geometries in a single setup





ROLLOMATIC

The screenshot displays the SolidWorks software interface with the 'Relieving Parameters' dialog box open. The dialog is configured for 'Relieving' and shows the following parameters:

- Primary axis to control:** A
- Primary axis position:** G0
- Secondary axis to control:** C
- Secondary axis position:** G0
- Curve parameters (from I/O):** G0, angle C, Feed
- Relieving:** (checked)
- Postprocessor:** (checked)
- Primary axis to control:** A
- Primary axis position:** G0
- Secondary axis to control:** C
- Secondary axis position:** G0
- Curve parameters (from I/O):** G0, angle C, Feed

The background shows a 3D model of a part with a green surface and a purple relieved area. The bottom status bar indicates 'Ready'.

VirtualGrind®Pro is a highly flexible and high-performance software package developed by our team of engineers to cater to the diverse requirements of our users across various industries. VirtualGrind®Pro is intuitive and optimized specifically for Rollomatic grinding machines. With just a few clicks, users can effortlessly program and grind any kind of standard or complex cutting tool in a simple and efficient manner.

GrindSmart® machines are equipped with a comprehensive software suite, giving the designers options to create exactly the part they need. Furthermore, the customers will always be able to produce tools with the latest technology thanks to free software updates throughout the lifespan of the machine.

Rollomatic has extensive experience and expertise in the entire process of manufacturing tools for the MedTech industry, spanning from the preparation of grinding wheels to the measurement of finished tools. With this expertise, we offer invaluable guidance to our customers assisting them in identifying the optimal machining solutions to accomplish their objectives. Our machines and processes ensure control over crucial aspects such as surface finish, cutting edges, geometric accuracy, concentricity, tolerances, productivity and repeatability, guaranteeing the highest precision and quality.

SMART SERVICE

Rollomatic considers customer service a top priority. Our after-sales service has gained a reputation for its remarkable efficiency and accessibility. In order to guarantee service excellence, Rollomatic can be reached immediately via its hotline, promptly responds to emails, guarantees the availability of all stocked parts, delivers spare parts directly after the order is placed and rapidly provides on-site service to the customer when necessary.

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