



powRgrip® for medical/dental manufacturing
Trustworthy toolholding solutions

REGO-FIX 

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Introduction

The medical manufacturing miracle

powRgrip provides a healthy dose of productivity.

Absolute precision The components you manufacture help people and improve their quality of life. Whether you machine orthopedic devices, surgical instruments or dental bridges from titanium, Inconel®, stainless steel or cobalt chrome, powRgrip (PG) will allow you to consistently produce tight-tolerance parts with absolute precision. Let the REGO-FIX powRgrip toolholding system ensure the health of your machining operations with maximum productivity, lower cost per part and shorter cycle times.



Swiss quality standard

Our products marked Swiss made are manufactured at our headquarters in Tenniken, Switzerland.



Features and benefits

powRgrip outperforms all other tooling systems

Developed especially for high-speed cutting and high-performance cutting strategies, powRgrip optimizes productivity, improves precision and boosts flexibility to adapt to changing part machining needs.

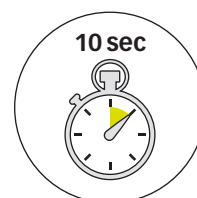
powRgrip gives you confidence and peace of mind in knowing that you run the most advanced toolholders ever made. Here is what makes powRgrip the best.

Speed/ease of use Tool change outs in less than 10 seconds and easy Z-height adjustments in any standard presetter without the need for expensive adjustment tools.

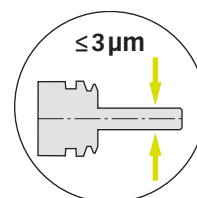
Precision Precisely engineered and balanced by design, powRgrip delivers TIR of $<0.0001"$ ($3\text{ }\mu\text{m}$), along with precise length adjustment repeatability of $<0.0004"$ ($10\text{ }\mu\text{m}$).

Quality Swiss-made and with all perfectly matched components for optimal fit, accuracy and long tool life.

Performance Toolholder-to-collet and collet-to-tool shank interfaces deliver superior clamping force, high-vibration dampening and extreme precision.



Tool ready for use in less than 10 seconds.



Total system runout TIR $\leq 3\text{ }\mu\text{m}$ at $3\times\text{D}$.



Strength Industry's highest clamping torque rating of 1,100 Nm.

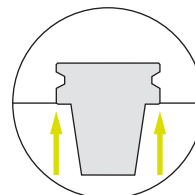
Reliability Accuracy and gripping forces that continue to meet or exceed original values even after extensive cycling.

Versatility Accommodates all types of tool shanks and materials in h6 tolerance and sizes from Ø 0.0079" – 1.0" (0.2 – 25.4 mm) with the same system to reduce tooling inventory.
*(REGO-PLUS licensed BIG PLUS® dual-contact holders also available.)

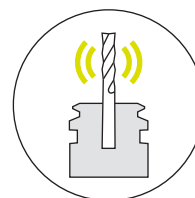
Safety Complete user safety without risk of injury from heat or pinch zones.

Warranty REGO-FIX guarantees the TIR of a properly maintained powRgrip holder and collet will not exceed 0.0001" and the impregnated surface treatment will not erode for five years or 20,000 cycles.

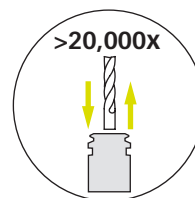
Key advantages



Higher toolholder stiffness due to taper (AT1) and face contact with REGO-PLUS holders.*



Excellent vibration dampening.



Maximum clamping force and low runout, even after 20,000 tool changes.

*THE BIG PLUS SYSTEM—licensed by BIG Daishowa—is manufactured at REGO-FIX in Switzerland under license according to BIG PLUS specifications.

How powRgrip works

powRgrip is a unique collet-holding system that consists of three main components — press fit assembly mounting units, collets and holders — all of which work in harmony. The result is the distinctive powRgrip toolholder-to-collet/collet-to-tool shank interfaces that give the system its extraordinary performance and holding capabilities.

Press-fit assembly mounting units Tabletop mounting units — either hydraulic manual pump style or automated — quickly press powRgrip collets into or remove them from system toolholders with up to nine tons of force.

Collets powRgrip collets feature high-precision tapers and a unique wear-resistant surface treatment that results in an extremely hard surface for unmatched longevity and repeatability.

Holders With equally precise tapers that match those of the collets, powRgrip factory-balanced toolholders deliver superior runout and vibration dampening as well.



Cutting tool



powRgrip® collet



powRgrip® toolholder



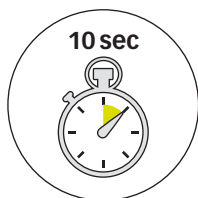
Automatic clamping unit PGU



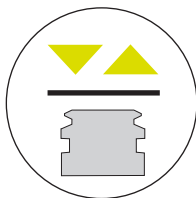
Manual clamping unit PGC



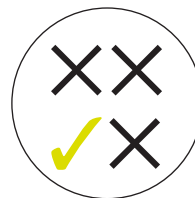
Key advantages



Clamp the tool safely and securely by pushing just one button. The clamping will take less than 10 seconds, without the use of heat.



Clamp tools with maximum clamping force and best runout in the powRgrip collet and toolholder.



Smart System — no setting of parameters required. Clamping pressure is controlled by the insertion of the respective clamping insert (APG). There are five clamping inserts available for the clamping of different collet sizes.

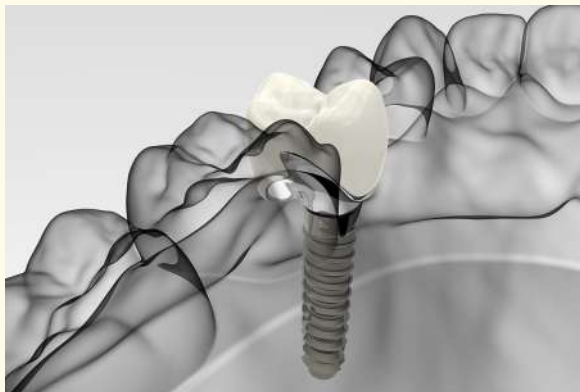
powRgrip for medical/dental manufacturing

Tackle any machining challenge.

Remarkable versatility Regardless of the medical or dental components you produce, the powRgrip product line offers special ancillary technologies and accessories as well as specific sizes that will further enhance your part machining operations.

powRgrip 6 (PG 6) Slim-nose PG 6 toolholders provide exceptional access when drilling or milling tight, difficult-to-reach features in small complex parts. As the smallest powRgrip toolholder, the PG 6 features a minimal outside diameter of 0.4" (10.160 mm) and a clamping diameter from 0.008" to 0.125" (0.203 mm to 3.175 mm) for less tool interference and to effortlessly maneuver tiny cutters and drills into tight part cavities.

powRgrip 10, 15, 25 and 32 For challenging materials such as titanium, Inconel®, stainless steel or cobalt chrome frequently used to manufacture knees, hips, orthopedics and surgical tools, PG 10, 15, 25 and 32 provide excellent surface finish and superior TIR for enhanced tool life.







powRgrip solutions

Sizes and specifications for medical/dental manufacturing

REGO-FIX offers the industry's widest variety of collet and holder types, lengths and diameters. Specific to medical and dental part machining, that selection includes smaller diameter and high-speed holder types as well as the means to hold cutting tools as small as 0.0079" (0.2 mm) in diameter.

powRgrip Toolholders

Sizes and styles include:

HSK 25, 32, 40, 50 and 63
BT+ 30*
CAPTO C3, C4, C5 and C6

REGO-FIX Q System PG toolholders are balanced by design to G2.5 @ 25,000 rpm for steep taper holders and up to 90,000 rpm for HSK holders. Type H toolholders are ready to accept the Hi-Q balancing system rings which allow precision balancing of the system up to 80,000 rpm, depending on the balancing rings used.

powRgrip Collets

Popular sizes are:

PG 6
PG 10
PG 15
PG 25
PG 32

PG collets are available in Standard, Coolant Flush and secuRgrip versions.

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Accessories

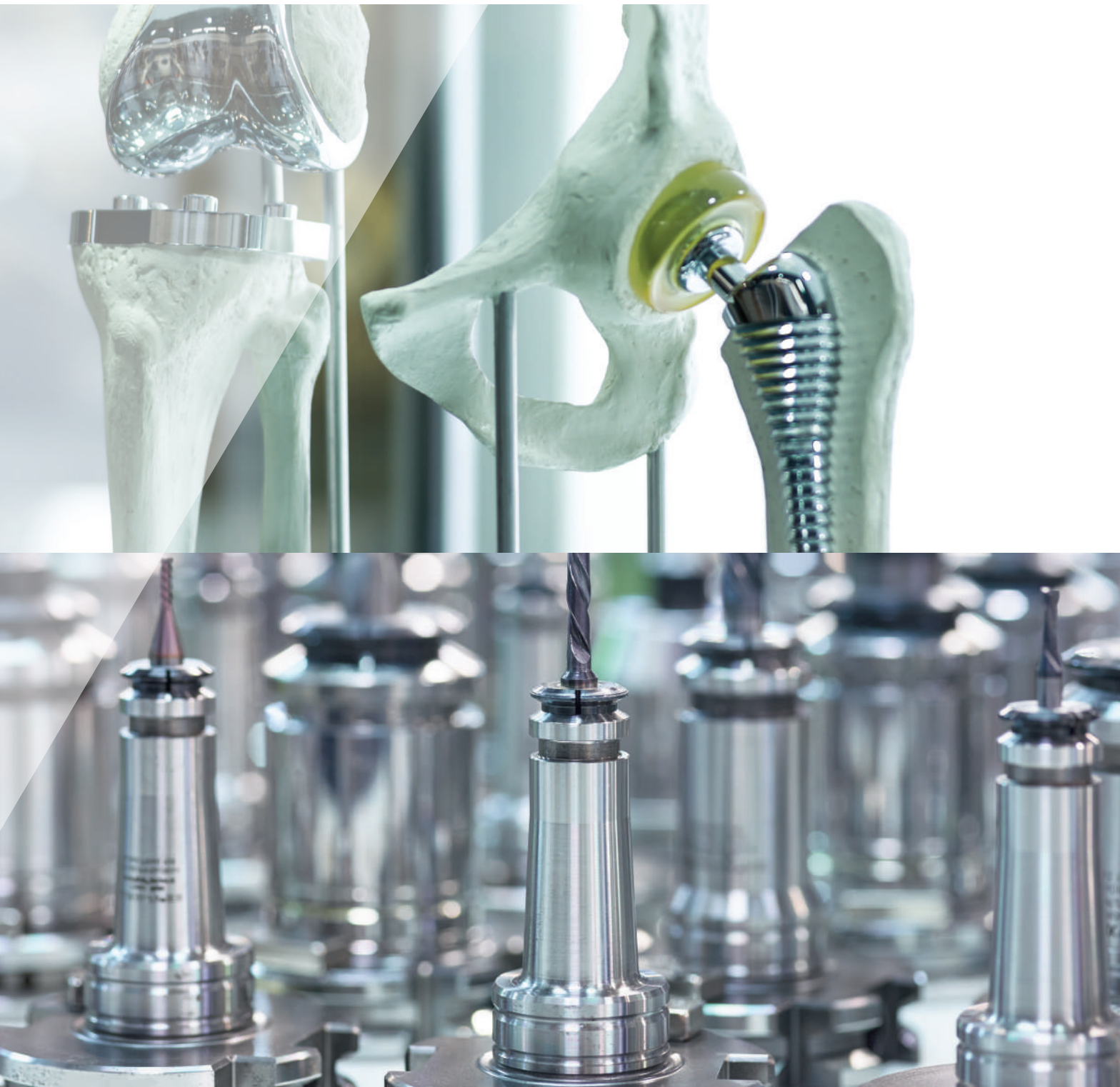
Enhance your tool life with the correct accessories for safe tool clamping.

Presetting Tool The powRgrip presetting tool accepts the powRgrip collets and is inserted into the toolholder. The tool has a small thumb wheel for precise tool length adjustments and allows maximum repeatability in the toolholder assembly.

Toolholder Taper Cleaner Special taper cleaner brush quickly and easily removes dirt and light rust from powRgrip holder bores before insertion of a tool/collet.

Cleaning Paper Set Soft, absorbent paper specifically prepared to clean the powRgrip holder bore. The paper is lint free, chemically neutral and for one time use only. It is packaged in containers of 250 sheets.

Ultrasonic Cleaner This cleaning system ensures proper cleaning of small powRgrip collets and holders, especially those used in micro machining medical and dental applications. The system's heavy-duty, double-wall steel design provides high efficiency cleaning and its multi-frequency operating system ensures optimum cleaning conditions for most tool system components.



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