



powRgrip® for job shops

Superior toolholding strength, versatility
and accuracy

REGO-FIX 

table of contents

Introduction	01
Features and benefits of powRgrip	02
How powRgrip works	04
powRgrip for job shops	06
Product sizes and specifications	08
Accessories	09





Introduction

powRgrip delivers job shop flexibility and performance

The most advanced toolholder ever made.

Machining challenges Your job shop faces a wide variety of workpiece shapes, sizes and materials that often require multiple machining operations as well as a range of different cutting tools. Your machines and tooling have to be fast, flexible and ready to handle anything that comes through the door, whether it's roughing, tapping, milling, micro finishing and small detail work or heavy machining applications and long tool overhang situations. But most importantly you need a tooling system without limitations when it comes to holding all your different types of cutting tools regardless of their material make up.

Optimized machining operations Only the REGO-FIX powRgrip (PG) system lets you hold any type of cutter. Whether tools are made from solid-carbide, high-speed steel, cobalt or ceramics — with or without Weldon flats — the PG system handles them all, and does so cost effectively with the same high-precision holders. With powRgrip, you eliminate the need to switch back and forth between different tooling systems simply because you changed cutter types. You'll also save time and money while significantly boosting your overall machining accuracy.



Swiss quality standard

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



Features and benefits

powRgrip toolholding outperforms all other tooling systems

Developed especially for high-speed cutting and high-performance cutting strategies, powRgrip optimizes productivity and improves precision for fast machining of high-quality parts.

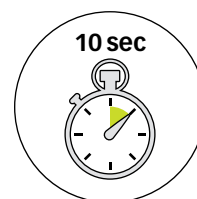
Here is what makes powRgrip the best.

Versatility Accommodate 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 and REGO-FIX CAPTO** holders also available.)

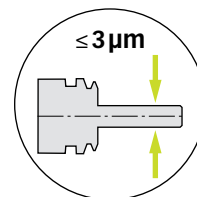
Speed/ease of use Tool change outs in less than 10 seconds and easy Z-height adjustments in any standard presetter without the need for expensive adjustment tools.

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

Precision Precisely engineered and balanced by design, powRgrip delivers TIR of <0.0001" (3 µm), along with precise length adjustment repeatability of <0.0004" (10 µm).



Tool ready for use in less than 10 seconds.



Total system runout TIR ≤3 µm at 3 x D.



Safety Complete user safety without risk of injury from heat or pinch zones or toxic fumes emitted from heat shrink units.

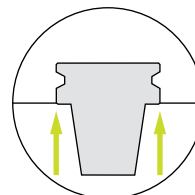
Quality Swiss-made and with all perfectly matched components for optimal fit, accuracy and long tool life.

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

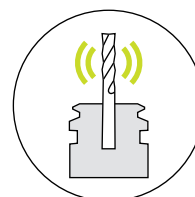
Strength Industry's highest clamping torque rating of 1,100 Nm.

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.

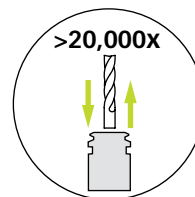
Key advantages



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

**REGO-FIX CAPTO—licensed by Sandvik Coromant—is manufactured at REGO-FIX in Switzerland under license according to CAPTO 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. Moreover, powRgrip is a system that grows with your high-precision toolholding needs. Start with a manual pump-style unit then seamlessly progress to the fully automatic assembly and presetter unit.

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.

Press-fit automatic preset units A fully automatic assembly and presetter unit is also an available option through the joint partnership with ZOLLER. Called the »venturion 600«, this powerful unit combines tool clamping and setting in a single system to guarantee maximum parts quality and economic efficiency in your manufacturing process.

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 as provide either coolant-through or peripheral cooling capabilities.



Cutting tool



powRgrip® collet



powRgrip® toolholder



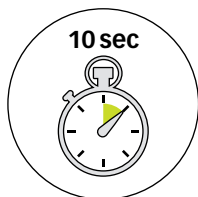
Automatic clamping unit PGU



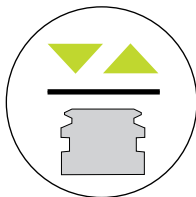
Manual clamping unit PGC



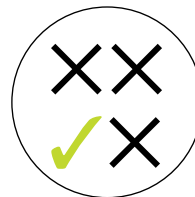
Key advantages



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 job shops

Tackle any machining challenge.

Remarkable versatility Whether you machine small or large components from titanium, Inconel®, alloys, aluminum or stainless steels, the powRgrip product line offers special ancillary technologies and accessories as well as specific sizes that will further optimize your part machining operations.

Add REGO-FIX's secuRgrip technology, Xtended Length Toolholders and PG 32 collets to your powRgrip system and tackle any machining challenge. Easily handle it all, from the heaviest roughing applications to the most precise drilling and reaming operations, with just a single toolholding solution.

secuRgrip System For the ultimate in cutting tool security, secuRgrip combines powRgrip's tremendous gripping strength with a patented locking key system that consists of four elements — a threaded insert, toolholder with thread, PG 25-SG or PG 32-SG collet, and safety nut. Together, these elements provide an added degree of confidence for special applications such as heavy-duty material removal and the machining of expensive castings or complex parts. The secuRgrip system has a TIR of 0.0001" and enables manufacturers to preset tool heights.

REGO-FIX Xtended Length Toolholder with MFD Technology

Xtended Length powRgrip toolholders come in lengths up to 14" and in nose versions of PG 10, PG 15 and PG 25 for machining applications that require longer reach or present clearance challenges, especially in horizontal milling machines.

The Xtended Length holders feature REGO-FIX's MICRO-FRICTION DAMPENING® (MFD) technology that allows the holders to dissipate vibrations faster than standard long reach holders. Dampening the vibrations faster means that the cutting tool, part and spindle will experience fewer vibrations, resulting in better surface finishes, longer tool life and reduced spindle wear.

PG 32 Special large-size powRgrip PG 32 collets provide extreme clamping capability and are especially well-suited for machining challenging cast irons such as CGI and ADI materials. Tapping is also possible with the SSY Softsynchro® tapping PG holders and collets (accepts h9 tool shanks).





△ REGO-FIX[®]
Swiss Made
power grip[®] at the end
HSK-E40 / 66x0.46
2540/700/4101

Werkzeug
Werkzeug



[powRgrip solutions](#)

Sizes and specifications for job shops

powRgrip is available in a wide selection of holder types, lengths and diameters, including smaller diameter and high-speed holder types for machining tight-tolerance and high-precision parts as well as those larger toolholder-spindle interface tapers and styles required for large part applications.

powRgrip toolholders

Sizes and styles include:

CAT 40 and 50
CAT+ 40 and 50*
SK 30, 40 and 50
BT 30, 40 and 50
BT+ 30, 40 and 50*
HSK 25, 32, 40, 50, 63, 80 and 100
HD Rigid taper design
CAPTO C3, C4, C5, C6 and C8**

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

powRgrip collets are precisely engineered to exact tolerances and accommodate a wide range of tool diameters ranging from 0.2 mm to 25 mm (0.0625" to 1.00"). Regardless of size or type, the collets clamp all h6 tool shanks — Cylindrical, Weldon and Whistle-Notch — in all shank materials, including solid carbide and high-speed steel (HSS).

Popular sizes are:

PG 6 PG 25
PG 10 PG 32
PG 15

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

Tapping PG Collets available in inch and metric sizes.

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

** REGO-FIX CAPTO—licensed by Sandvik Coromant—is manufactured at REGO-FIX in Switzerland under license according to CAPTO specifications.



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 wiper 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 provides high-efficiency cleaning with a double-walled design made from heavy-duty steel. The multi-frequency operating system ensures optimal cleaning conditions for most tool system components.

ER collet and micRun System options

For more traditional toolholding requirements, REGO-FIX offers two other system options.

ER collet system REGO-FIX ER collets are available in both standard and ultra precision (UP) quality levels, and when combined with REGO-FIX ER toolholders and ER clamping nuts, provide a high-accuracy system. ER collet options include the smallest ER series from ER 8, ER 11 and ER 16 for micro-drilling and micro-milling applications, to the larger ER 20, ER 25, ER 32 and ER 40 series for more heavy-duty machining.

micRun high-precision collet system The REGO-FIX micRun System features special high-quality ER style collets, or MR collets, and unique matching micRun toolholders that offer the best TIR (under 3 microns at 3xD) combined with the highest clamping force of any ER type collet system offered. The micRun System is a great alternative for demanding machining applications, ranging from micro-machining applications (MR 11 and MR 16) to heavier milling, drilling, tapping and reaming needs (MR 25 and MR 32). It is especially designed for high-precision, high-speed and low-vibration operations.



REGO-FIX USA
Whitestown / IN 46075 / USA

Toll Free: 800.999.7346
Phone: 317.870.5959

info.usa@rego-fix.com
www.RegoUSA.com

COL 1149.2
01/2020