

REGO-FIX®

瑞士“利高域”精密刀具夾具系統

Swiss “REGO-FIX” PRECISION TOOL Holding System

彈筒夾頭刀頭及彈筒夾頭

Collectholder & Collet



 野村精機(國際)有限公司
NOMURA SEIKI (INTERNATIONAL) LTD.

香港新界葵涌梨木道79號亞洲貿易中心3號地下
Shop No 3, G/F., Asia Trade Centre, 79 Lei Muk Road, Kwai Chung, N.T., Hong Kong

電話 Tel: (852) 2463-4863 / 2463-4874 傳真 Fax: (852) 2463-3905 / 2418-9629
電郵 E-mail: hknomura@netvigator.com 網址 Homepage: <http://www.hknomura.com>



powRgrip SYSTEM

®

FIX

REGO-

a gripping solution



Swiss
Precision
Tools

high-tech toolholding system

Modern processing strategies like HSC and HPC require better toolholding systems. The powRgrip® System offers a unique combination of the best run-out, high clamping power and optimal vibration dampening. This system meets all requirements for an efficient manufacturing process.

The REGO-FIX powRgrip® System clamps cutting tools safely and with high precision. The tool and collet are pressed into the toolholder with very high force by means of the powRgrip® hydraulic press. For unclamping the tool the compression cycle is simply reversed.

there is no quicker and more precise way

With just a few very simple steps the operator performs clamping or unclamping in less than 10 seconds, i.e. a full tool change is performed in less than 30 seconds.

your investment for the future

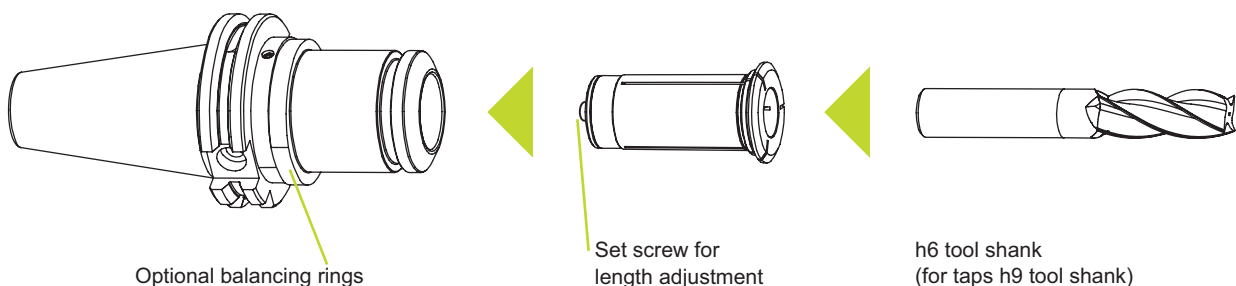
powRgrip® is a high quality, state of the art high-tech toolholding system. This is an investment that pays off by extended tool life and lower cost per part due to the higher material removal rate. The high vibration dampening yields much better surface finish than similar systems.

How powRgrip® System works

Toolholders in different types

Interchangeable PG collet

Quality cutting tool
carbide or HSS



User of precision

| | |
|----------------------|---|
| Company | ROBERT OTT AG, CNC – Cutting procedures, 5703 Seon, Switzerland Job shop |
| Employees | 30 |
| Equipment | 12 CNC Milling Centers, 9 CNC Lathes, other special machines |
| Manufacturing | Precision milling, Turning, Boring, Grinding (50% stainless steel) |
| Customers | Mechanical, Medical, Hydraulic and Pneumatic Industries |

You have decided to purchase a powRgrip® System. Why?

For us the high precision and the simple handling were important. During the trial runs on our shop floor we became convinced that powRgrip® was the right system for us.

Did you look at alternative systems?

Yes, but neither shrink-fit nor polygon systems showed comparable results. In addition other systems require a separate toolholder per clamping diameter.

For which applications do you use the powRgrip® System?

PG 25 is mainly used for roughing and hard milling up to 65 HRC; PG 15 is mainly used for finishing, boring and reaming.

Which improvements have you seen in your manufacturing with powRgrip®?

When roughing we were able to change from HSS to carbide cutting tools and got a 3 fold improvement in processing speed. On finishing we are running far higher feed rates and get much improved surface finish.

On reaming we get much better dimensional accuracy and improved surface finish.

Which additional advantage have you experienced with powRgrip®?

The main advantage is the extended tool life. Today we can run a certain tool for an entire shift without a tool change. This was not possible before. We are also saving tooling cost due to the much higher material removal rate possible with powRgrip®. Traditional tool holding systems did not allow us such savings in tooling cost and throughput times. Due to powRgrip®'s simple operation tool changes can now be performed by all operators in all three shifts.

Are there any applications in your manufacturing process that powRgrip® is not adequate for?

No, with powRgrip® we were able to perform all improvements that we had planned for. Today it seems that we are far from reaching the limits of the powRgrip® System.

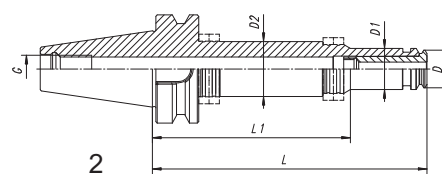
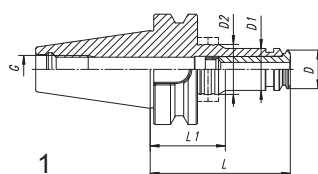
Questions presented to Mr. Robert Ott, General Manager

BT Toolholders

MAS 403

| Type | Form A+AD Part No. | Form AD+B Part No. | D [mm] | D1 [mm] | D2 [mm] | G [mm] | L [mm] | L1 [mm] | Figure | Balancing Rings |
|-----------------------|-----------------------|-----------------------|-----------|------------|------------|-----------|-----------|------------|--------|--------------------|
| BT 30 / PG 10 x 062* | 2130.71020 | – | 15.5 | 16 | – | M 12 | 62 | – | 1 | – |
| BT 30 / PG 10 x 080 H | 4130.71040 | – | 15.5 | 16 | 28.5 | M 12 | 80 | 35 | 1 | FWR 285 |
| BT 30 / PG 10 x 120 H | 4130.71060 | – | 15.5 | 16 | 28.5 | M 12 | 120 | 35 | 1 | FWR 285 |
| BT 30 / PG 10 x 160 H | 4130.71080 | – | 15.5 | 16 | 28.5 | M 12 | 160 | 35 | 1 | FWR 285 |
| BT 30 / PG 15 x 070 H | 4130.71530 | – | 22 | 24 | 28.5 | M 12 | 70 | 38.5 | 1 | FWR 285 |
| BT 30 / PG 15 x 120 H | 4130.71560 | – | 22 | 24 | 28.5 | M 12 | 120 | 77.5 | 1 | FWR 285 |
| BT 30 / PG 25 x 080 H | 4130.72540 | – | 33 | 40 | 40.5 | M 12 | 80 | 34.5 | 1 | FWR 405 |
| BT 30 / PG 25 x 120 H | 4130.72560 | – | 33 | 40 | 40.5 | M 12 | 120 | 34.5 | 1 | FWR 405 |
| BT 30 / PG 25 x 160 H | 4130.72580 | – | 33 | 40 | 40.5 | M 12 | 160 | 103.5 | 2 | FWR 405/405 |
| BT 40 / PG 10 x 080 H | 4140.71040 | 4140.71043 | 15.5 | 16 | 28.5 | M 16 | 80 | 40 | 1 | FWR 285 |
| BT 40 / PG 10 x 120 H | 4140.71060 | 4140.71063 | 15.5 | 16 | 32.5 | M 16 | 120 | 40 | 1 | FWR 325 |
| BT 40 / PG 10 x 160 H | 4140.71080 | 4140.71083 | 15.5 | 16 | 32.5 | M 16 | 160 | 40 | 1 | FWR 325 |
| BT 40 / PG 15 x 080 H | 4140.71540 | 4140.71543 | 22 | 24 | 28.5 | M 16 | 80 | 43 | 1 | FWR 285 |
| BT 40 / PG 15 x 120 H | 4140.71560 | 4140.71563 | 22 | 24 | 32.5 | M 16 | 120 | 73.5 | 1 | FWR 325 |
| BT 40 / PG 15 x 160 H | 4140.71580 | 4140.71583 | 22 | 24 | 32.5 | M 16 | 160 | 115.5 | 2 | FWR 325/285 |
| BT 40 / PG 25 x 080 H | 4140.72540 | 4140.72543 | 33 | 40 | 40.5 | M 16 | 80 | 39.5 | 1 | FWR 405 |
| BT 40 / PG 25 x 120 H | 4140.72560 | 4140.72563 | 33 | 40 | 40.5 | M 16 | 120 | 39.5 | 1 | FWR 405 |
| BT 40 / PG 25 x 160 H | 4140.72580 | 4140.72583 | 33 | 40 | 40.5 | M 16 | 160 | 103.5 | 2 | FWR 405/405 |
| BT 40 / PG 32 x 086* | 2140.73240 | 2140.73243 | 43 | 50 | – | M 16 | 86 | – | 1 | – |
| BT 50 / PG 10 x 120 H | 4150.71060 | – | 15.5 | 16 | 40.5 | M 24 | 120 | 51 | 1 | FWR 405 |
| BT 50 / PG 10 x 160 H | 4150.71080 | – | 15.5 | 16 | 40.5 | M 24 | 160 | 51 | 1 | FWR 405 |
| BT 50 / PG 15 x 120 H | 4150.71560 | – | 22 | 24 | 32.5 | M 24 | 120 | 73.5 | 1 | FWR 325 |
| BT 50 / PG 15 x 160 H | 4150.71580 | – | 22 | 24 | 32.5 | M 24 | 160 | 113.5 | 1 | FWR 325 |
| BT 50 / PG 25 x 100* | 2150.72550 | – | 33 | 40 | – | M 24 | 100 | – | 1 | – |
| BT 50 / PG 25 x 120 H | 4150.72560 | – | 33 | 40 | 50.5 | M 24 | 120 | 53 | 1 | FWR 505 |
| BT 50 / PG 25 x 160 H | 4150.72580 | – | 33 | 40 | 50.5 | M 24 | 160 | 91 | 2 | FWR 505/405 |
| BT 50 / PG 25 x 200 H | 4150.72590 | – | 33 | 40 | 50.5 | M 24 | 200 | 131 | 2 | FWR 505/405 |
| BT 50 / PG 32 x 100* | 2150.73250 | – | 43 | 50 | – | M 24 | 100 | – | 1 | – |

*Not prepared for Balancing Rings.



REGO-FIX®
 SWISS LINE
 pat. pend.
 PG25x080 H
 4240.72540.02



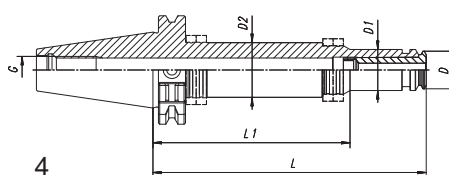
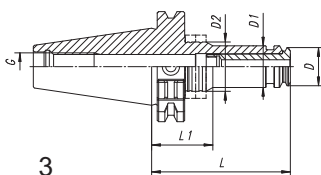
Swiss
 Precision
 Tools

TC Toolholders

DIN 69871

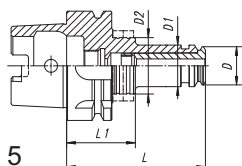
| Type | Form A+AD Part No. | Form AD+B Part No. | D [mm] | D1 [mm] | D2 [mm] | G [mm] | L [mm] | L1 [mm] | Figure | Balancing Rings |
|-----------------------|-----------------------|-----------------------|-----------|------------|------------|-----------|-----------|------------|--------|--------------------|
| TC 30 / PG 10 x 060* | 2230.71020 | – | 15.5 | 16 | – | M 12 | 60 | – | 3 | – |
| TC 30 / PG 10 x 073 H | 4230.71030 | – | 15.5 | 16 | 28.5 | M 12 | 73 | 32 | 3 | FWR 285 |
| TC 30 / PG 15 x 060* | 2230.71520 | – | 22 | 24 | – | M 12 | 60 | – | 3 | – |
| TC 30 / PG 15 x 080 H | 4230.71540 | – | 22 | 24 | 28.5 | M 12 | 80 | 35 | 3 | FWR 285 |
| TC 30 / PG 25 x 080* | 2230.72540 | – | 33 | 40 | – | M 12 | 80 | – | 3 | – |
| TC 40 / PG 10 x 080 H | 4240.71040 | 4240.71043 | 15.5 | 16 | 28.5 | M 16 | 80 | 32 | 3 | FWR 285 |
| TC 40 / PG 10 x 120 H | 4240.71060 | 4240.71063 | 15.5 | 16 | 28.5 | M 16 | 120 | 32 | 3 | FWR 285 |
| TC 40 / PG 10 x 160 H | 4240.71080 | 4240.71083 | 15.5 | 16 | 32.5 | M 16 | 160 | 32 | 3 | FWR 325 |
| TC 40 / PG 15 x 072* | 2240.71530 | 2240.71533 | 22 | 24 | – | M 16 | 72 | – | 3 | – |
| TC 40 / PG 15 x 080 H | 4240.71540 | 4240.71543 | 22 | 24 | 28.5 | M 16 | 80 | 35 | 3 | FWR 285 |
| TC 40 / PG 15 x 120 H | 4240.71560 | 4240.71563 | 22 | 24 | 32.5 | M 16 | 120 | 73.5 | 3 | FWR 325 |
| TC 40 / PG 15 x 160 H | 4240.71580 | 4240.71583 | 22 | 24 | 32.5 | M 16 | 160 | 115.5 | 4 | FWR 325/285 |
| TC 40 / PG 25 x 072* | 2240.72530 | 2240.72533 | 33 | 40 | – | M 16 | 72 | – | 3 | – |
| TC 40 / PG 25 x 080 H | 4240.72540 | 4240.72543 | 33 | 40 | 40.5 | M 16 | 80 | 32 | 3 | FWR 405 |
| TC 40 / PG 25 x 120 H | 4240.72560 | 4240.72563 | 33 | 40 | 40.5 | M 16 | 120 | 32 | 3 | FWR 405 |
| TC 40 / PG 25 x 160 H | 4240.72580 | 4240.72583 | 33 | 40 | 40.5 | M 16 | 160 | 103.5 | 4 | FWR 405/405 |
| TC 40 / PG 32 x 080* | 2240.73240 | 2240.73243 | 43 | 50 | – | M 16 | 80 | – | 3 | – |
| TC 50 / PG 25 x 081* | 2250.72540 | 2250.72543 | 33 | 40 | – | M 24 | 81 | – | 3 | – |
| TC 50 / PG 25 x 100 H | 4250.72550 | 4250.72553 | 33 | 40 | 50.5 | M 24 | 100 | 34.5 | 3 | FWR 505 |
| TC 50 / PG 25 x 160 H | 4250.72580 | 4250.72583 | 33 | 40 | 50.5 | M 24 | 160 | 103.5 | 4 | FWR 505/405 |
| TC 50 / PG 32 x 080* | 2250.73240 | 2250.73243 | 43 | 50 | – | M 24 | 80 | – | 3 | – |

*Not prepared for Balancing Rings.

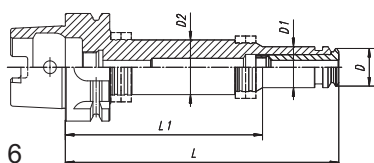


HSK-A Toolholders

DIN 69893/ISO 12164



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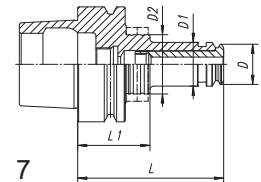
| Type | Part No. | D [mm] | D1 [mm] | D2 [mm] | L [mm] | L1 [mm] | Figure | Balancing Rings |
|---------------------------|------------|--------|---------|---------|--------|---------|--------|-----------------|
| HSK-A 32 / PG 15 x 075* | 2532.71530 | 22 | 24 | – | 75 | – | 5 | – |
| HSK-A 40 / PG 10 x 062* | 2540.71020 | 15.5 | 16 | – | 62 | – | 5 | – |
| HSK-A 40 / PG 15 x 080 H | 4540.71540 | 22 | 24 | 28.5 | 80 | 48 | 5 | FWR 285 |
| HSK-A 40 / PG 25 x 100 H | 4540.72550 | 33 | 40 | 40.5 | 100 | 51 | 5 | FWR 405 |
| HSK-A 50 / PG 10 x 080 H | 4550.71040 | 15.5 | 16 | 28.5 | 80 | 40 | 5 | FWR 285 |
| HSK-A 50 / PG 15 x 080 H | 4550.71540 | 22 | 24 | 28.5 | 80 | 40 | 5 | FWR 285 |
| HSK-A 50 / PG 25 x 100 H | 4550.72550 | 33 | 40 | 40.5 | 100 | 55 | 5 | FWR 405 |
| HSK-A 63 / PG 10 x 080 H | 4563.71040 | 15.5 | 16 | 32.5 | 80 | 40 | 5 | FWR 325 |
| HSK-A 63 / PG 10 x 120 H | 4563.71060 | 15.5 | 16 | 32.5 | 120 | 40 | 5 | FWR 325 |
| HSK-A 63 / PG 10 x 160 H | 4563.71080 | 15.5 | 16 | 32.5 | 160 | 40 | 5 | FWR 325 |
| HSK-A 63 / PG 10 x 200 H | 4563.71090 | 15.5 | 16 | 32.5 | 200 | 40 | 5 | FWR 325 |
| HSK-A 63 / PG 15 x 080 H | 4563.71540 | 22 | 24 | 32.5 | 80 | 40 | 5 | FWR 325 |
| HSK-A 63 / PG 15 x 120 H | 4563.71560 | 22 | 24 | 32.5 | 120 | 73.5 | 5 | FWR 325 |
| HSK-A 63 / PG 15 x 160 H | 4563.71580 | 22 | 24 | 32.5 | 160 | 115.5 | 6 | FWR 325/285 |
| HSK-A 63 / PG 25 x 100 H | 4563.72550 | 33 | 40 | 40.5 | 100 | 39 | 5 | FWR 405 |
| HSK-A 63 / PG 25 x 120 H | 4563.72560 | 33 | 40 | 40.5 | 120 | 39 | 5 | FWR 405 |
| HSK-A 63 / PG 25 x 160 H | 4563.72580 | 33 | 40 | 40.5 | 160 | 113.5 | 6 | FWR 405/405 |
| HSK-A 63 / PG 32 x 100* | 2563.73250 | 43 | 50 | – | 100 | – | 5 | – |
| HSK-A 63 / PG 32 x 120 H | 4563.73260 | 43 | 50 | – | 100 | – | 5 | FWR 505 |
| HSK-A 80 / PG 15 x 085 H | 4580.71540 | 22 | 24 | 32.5 | 85 | 40 | 5 | FWR 325 |
| HSK-A 80 / PG 25 x 100 H | 4580.72550 | 33 | 40 | 50.5 | 100 | 49 | 5 | FWR 505 |
| HSK-A 80 / PG 32 x 105 H | 4580.73250 | 43 | 50 | – | 105 | – | 5 | FWR 505 |
| HSK-A 100 / PG 10 x 085 H | 4500.71040 | 15.5 | 16 | 40.5 | 85 | 42.6 | 5 | FWR 405 |
| HSK-A 100 / PG 10 x 160 H | 4500.71080 | 15.5 | 16 | 40.5 | 160 | 55.3 | 5 | FWR 405 |
| HSK-A 100 / PG 15 x 085 H | 4500.71540 | 22 | 24 | 40.5 | 85 | 42.6 | 5 | FWR 405 |
| HSK-A 100 / PG 15 x 160 H | 4500.71580 | 22 | 24 | 40.5 | 160 | 165.4 | 6 | FWR 405/285 |
| HSK-A 100 / PG 25 x 100 H | 4500.72550 | 33 | 40 | 50.5 | 100 | 44.5 | 5 | FWR 505 |
| HSK-A 100 / PG 25 x 160 H | 4500.72580 | 33 | 40 | 50.5 | 160 | 44.5 | 6 | FWR 505/405 |
| HSK-A 100 / PG 25 x 200 H | 4500.72590 | 33 | 40 | 50.5 | 200 | 44.5 | 6 | FWR 505/405 |
| HSK-A 100 / PG 32 x 106 H | 4500.73250 | 43 | 50 | – | 106 | – | 5 | FWR 505 |

*Not prepared for Balancing Rings.

HSK-E Toolholders

DIN 69893/ISO 12164

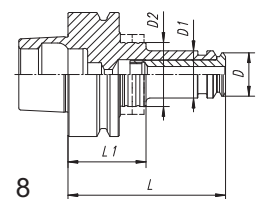
| Type | Part No. | D [mm] | D1 [mm] | D2 [mm] | L [mm] | L1 [mm] | Figure | Balancing Rings |
|--------------------------|------------|-----------|------------|------------|-----------|------------|--------|--------------------|
| HSK-E 25 / PG 10 x 055* | 2525.71014 | 15.5 | 16 | – | 55 | – | 7 | – |
| HSK-E 32 / PG 10 x 060* | 2532.71024 | 15.5 | 16 | – | 60 | – | 7 | – |
| HSK-E 32 / PG 10 x 080 H | 4532.71044 | 15.5 | 16 | 22.5 | 80 | 33 | 7 | FWR 225 |
| HSK-E 32 / PG 15 x 075* | 2532.71534 | 22 | 24 | – | 75 | – | 7 | – |
| HSK-E 40 / PG 10 x 062* | 2540.71024 | 15.5 | 16 | – | 62 | – | 7 | – |
| HSK-E 40 / PG 10 x 080 H | 4540.71044 | 15.5 | 16 | 22.5 | 80 | 34 | 7 | FWR 225 |
| HSK-E 40 / PG 10 x 120 H | 4540.71064 | 15.5 | 16 | 22.5 | 120 | 41 | 7 | FWR 225 |
| HSK-E 40 / PG 10 x 160 H | 4540.71084 | 15.5 | 16 | 28.5 | 160 | 48 | 7 | FWR 285 |
| HSK-E 40 / PG 15 x 080 H | 4540.71544 | 22 | 24 | 28.5 | 80 | 48 | 7 | FWR 285 |
| HSK-E 40 / PG 15 x 120 H | 4540.71564 | 22 | 24 | 28.5 | 120 | 48 | 7 | FWR 285 |
| HSK-E 40 / PG 25 x 090* | 2540.72544 | 33 | 40 | 34 | 90 | 38 | 7 | – |
| HSK-E 40 / PG 25 x 100 H | 4540.72554 | 33 | 40 | 40.5 | 100 | 51 | 7 | FWR 405 |
| HSK-E 50 / PG 10 x 080 H | 4550.71044 | 15.5 | 16 | 28.5 | 80 | 40 | 7 | FWR 285 |
| HSK-E 50 / PG 10 x 120 H | 4550.71064 | 15.5 | 16 | 28.5 | 120 | 40 | 7 | FWR 285 |
| HSK-E 50 / PG 10 x 160 H | 4550.71084 | 15.5 | 16 | 28.5 | 160 | 40 | 7 | FWR 285 |
| HSK-E 50 / PG 15 x 080 H | 4550.71544 | 22 | 24 | 28.5 | 80 | 40 | 7 | FWR 285 |
| HSK-E 50 / PG 15 x 120 H | 4550.71564 | 22 | 24 | 28.5 | 120 | 73.5 | 7 | FWR 285 |
| HSK-E 50 / PG 25 x 100 H | 4550.72554 | 33 | 40 | 40.5 | 100 | 55 | 7 | FWR 405 |
| HSK-E 63 / PG 15 x 080 H | 4563.71544 | 22 | 24 | 32.5 | 80 | 40 | 7 | FWR 325 |
| HSK-E 63 / PG 25 x 100 H | 4563.72554 | 33 | 40 | 40.5 | 100 | 39 | 7 | FWR 405 |



HSK-F Toolholders

DIN 69893/ISO 12164

| Type | Part No. | D [mm] | D1 [mm] | D2 [mm] | L [mm] | L1 [mm] | Figure | Balancing Rings |
|--------------------------|------------|-----------|------------|------------|-----------|------------|--------|--------------------|
| HSK-F 63 / PG 10 x 080 H | 4563.71045 | 15.5 | 16 | 32.5 | 80 | 40 | 8 | FWR 325 |
| HSK-F 63 / PG 15 x 080 H | 4563.71545 | 22 | 24 | 32.5 | 80 | 40 | 8 | FWR 325 |
| HSK-F 63 / PG 25 x 100 H | 4563.72555 | 33 | 40 | 40.5 | 100 | 39 | 8 | FWR 405 |
| HSK-F 63 / PG 32 x 100* | 2563.73255 | 43 | 50 | – | 100 | – | 8 | – |



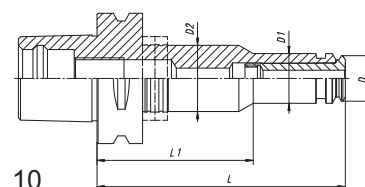
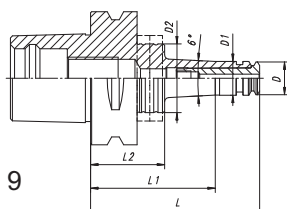
*Not prepared for Balancing Rings.

Toolholders compatible with Coromant Capto

Licensed by SANDVIK

| Type | Part No. | D [mm] | D1 [mm] | D2 [mm] | L [mm] | L1 [mm] | L2 [mm] | Figure | Balancing Rings |
|--------------------|------------|--------|---------|---------|--------|---------|---------|--------|-----------------|
| C3 / PG 10 x 055* | 2803.71010 | 15.5 | 16 | – | 55 | 34 | – | 9 | – |
| C3 / PG 15 x 067* | 2803.71520 | 22 | 24 | – | 67 | – | – | 9 | – |
| C4 / PG 10 x 060* | 2804.71020 | 15.5 | 16 | 22.5 | 60 | 59 | 33 | 9 | – |
| C4 / PG 10 x 080 H | 4804.71040 | 15.5 | 16 | 22.5 | 80 | 59 | 33 | 9 | FWR 225 |
| C4 / PG 15 x 062* | 2804.71520 | 22 | 24 | 28.5 | 62 | 33 | – | 10 | – |
| C4 / PG 15 x 080 H | 4804.71540 | 22 | 24 | 28.5 | 80 | 33 | – | 10 | FWR 285 |
| C5 / PG 10 x 060* | 2805.71020 | 15.5 | 16 | 28.5 | 60 | 59 | 33 | 9 | – |
| C5 / PG 10 x 080 H | 4805.71040 | 15.5 | 16 | 28.5 | 80 | 59 | 33 | 9 | FWR 285 |
| C5 / PG 10 x 120 H | 4805.71060 | 15.5 | 16 | 28.5 | 120 | 99 | 33 | 9 | FWR 285 |
| C5 / PG 15 x 065* | 2805.71520 | 22 | 24 | – | 65 | – | – | 9 | – |
| C5 / PG 15 x 080 H | 4805.71540 | 22 | 24 | 28.5 | 80 | 33 | – | 10 | FWR 285 |
| C5 / PG 15 x 120 H | 4805.71560 | 22 | 24 | 32.5 | 120 | 75.5 | – | 10 | FWR 325 |
| C5 / PG 25 x 080* | 2805.72540 | 33 | 40 | – | 80 | – | – | 9 | – |
| C5 / PG 25 x 100 H | 4805.72550 | 33 | 40 | 40.5 | 100 | 33 | – | 10 | FWR 405 |
| C6 / PG 10 x 080 H | 4806.71040 | 15.5 | 16 | 32.5 | 80 | 59 | 35 | 9 | FWR 325 |
| C6 / PG 10 x 120 H | 4806.71060 | 15.5 | 16 | 32.5 | 120 | 99 | 35 | 9 | FWR 325 |
| C6 / PG 10 x 160 H | 4806.71080 | 15.5 | 16 | 32.5 | 160 | 139 | 35 | 9 | FWR 325 |
| C6 / PG 15 x 080 H | 4806.71540 | 22 | 24 | 32.5 | 80 | 35 | – | 10 | FWR 325 |
| C6 / PG 15 x 120 H | 4806.71560 | 22 | 24 | 32.5 | 120 | 75.5 | – | 10 | FWR 325 |
| C6 / PG 15 x 160 H | 4806.71580 | 22 | 24 | 32.5 | 160 | 115.5 | – | 10 | FWR 325 |
| C6 / PG 25 x 085* | 2806.72540 | 33 | 40 | – | 85 | 35 | – | 9 | – |
| C6 / PG 25 x 100 H | 4806.72550 | 33 | 40 | 40.5 | 100 | 35 | – | 10 | FWR 405 |
| C6 / PG 25 x 120 H | 4806.72560 | 33 | 40 | 40.5 | 120 | 35 | – | 10 | FWR 405 |
| C6 / PG 25 x 160 H | 4806.72580 | 33 | 40 | 40.5 | 160 | 35 | – | 10 | FWR 405 |
| C6 / PG 32 x 090* | 2806.73240 | 43 | 50 | – | 90 | – | – | 9 | – |
| C8 / PG 25 x 092* | 2808.72540 | 33 | 40 | – | 92 | – | – | 9 | – |
| C8 / PG 32 x 090* | 2808.73240 | 43 | 50 | – | 90 | – | – | 9 | – |

*Not prepared for Balancing Rings.





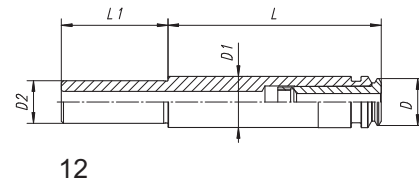
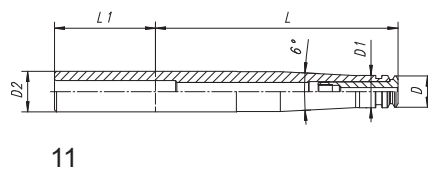
Toolholders with Cylindrical Shank

DIN 1835 B+E

| Type | Part No. | D [mm] | D1 [mm] | D2 [mm] | L [mm] | L1 [mm] | L2 [mm] | Figure | Balancing Rings |
|----------------------|------------|--------|---------|---------|--------|---------|---------|--------|-----------------|
| CYL 10 / PG 10 x 120 | 2610.71020 | 15.5 | 16 | 10 | 120 | 40 | – | 12 | – |
| CYL 20 / PG 10 x 120 | 2620.71020 | 15.5 | 16 | 20 | 120 | 50 | – | 11 | – |
| CYL 20 / PG 10 x 160 | 2620.71040 | 15.5 | 16 | 20 | 160 | 50 | – | 11 | – |
| CYL 20 / PG 10 x 200 | 2620.71060 | 15.5 | 16 | 20 | 200 | 50 | – | 11 | – |
| CYL 20 / PG 15 x 120 | 2620.71520 | 22 | 24 | 20 | 120 | 50 | – | 12 | – |

Applications

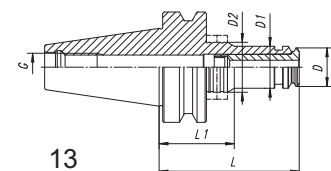
PG cylindrical shank toolholders can be used with REGO-FIX powRgrip® toolholders as extensions. For light machining and drilling applications only.



BT-OM Toolholders without Drive Slots

HAAS/HURCO

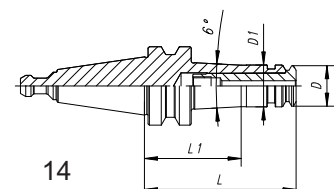
| Type | Part No. | D [mm] | D1 [mm] | D2 [mm] | G [mm] | L [mm] | L1 [mm] | Figure | Balancing Rings |
|--------------------------|------------|--------|---------|---------|--------|--------|---------|--------|-----------------|
| BT-OM 30 / PG 15 x 070 H | 4130.71538 | 22 | 24 | 28.5 | M 12 | 70 | 38.5 | 13 | FWR 285 |
| BT-OM 30 / PG 25 x 080 H | 4130.72548 | 33 | 40 | 40.5 | M 12 | 80 | 34.5 | 13 | FWR 405 |



ISO Toolholders

HAAS

| Type | Part No. | D [mm] | D1 [mm] | L [mm] | L1 [mm] | Figure |
|----------------------|------------|--------|---------|--------|---------|--------|
| ISO 20 / PG 10 x 058 | 2420.71015 | 15.5 | 16 | 58 | 37 | 14 |

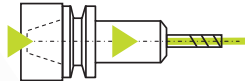


powRarip SYSTEM

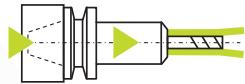
REGO-FIX®



PG Standard
Metallically sealed for coolant through tools



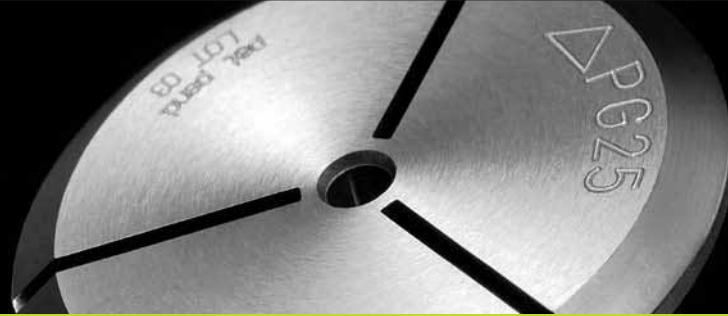
PG-CF Coolant Flush
With coolant channels for peripheral cooling



PG-MB Microbore
For tool shanks
Ø 0.2 – 1.5875 mm (1/16")

PG 10-MB Microbore Collets

| Ø [mm] | Ø [Inch] | Ø [Inch] | PG 10-MB Part No. |
|-----------|-------------|-------------|----------------------|
| 0.200 | 0.0079 | – | 1710.00209 |
| 0.300 | 0.0118 | – | 1710.00309 |
| 0.400 | 0.0157 | – | 1710.00409 |
| 0.500 | 0.0197 | – | 1710.00509 |
| 0.600 | 0.0236 | – | 1710.00609 |
| 0.700 | 0.0276 | – | 1710.00709 |
| 0.800 | 0.0315 | – | 1710.00809 |
| 0.900 | 0.0354 | – | 1710.00909 |
| 1.000 | 0.0394 | – | 1710.01009 |
| 1.500 | 0.0591 | – | 1710.01509 |
| 1.5875 | 0.0625 | 1/16" | 1710.01589 |



Collets PG Standard and PG-CF Coolant Flush

| Ø [mm] | Ø [Inch] | Ø [Inch] | PG 10 Part No. | PG 10-CF Part No. | PG 15 Part No. | PG 15-CF Part No. | PG 25 Part No. | PG 25-CF Part No. | PG 32 Part No. | PG 32-CF Part No. |
|-----------|-------------|-------------|-------------------|----------------------|-------------------|----------------------|-------------------|----------------------|-------------------|----------------------|
| 2.000 | 0.0787 | - | 1710.02000 | - | - | - | - | - | - | - |
| 2.500 | 0.0984 | - | 1710.02500 | - | - | - | - | - | - | - |
| 3.000 | 0.1181 | - | 1710.03000 | 1710.03002 | 1715.03000 | 1715.03002 | 1725.03000 | 1725.03002 | - | - |
| 3.175 | 0.1250 | 1/8" | 1710.03181 | 1710.03183 | 1715.03181 | 1715.03183 | 1725.03181 | 1725.03183 | - | - |
| 4.000 | 0.1575 | - | 1710.04000 | 1710.04002 | 1715.04000 | 1715.04002 | 1725.04000 | 1725.04002 | - | - |
| 4.763 | 0.1875 | 3/16" | 1710.04761 | 1710.04763 | 1715.04761 | 1715.04763 | 1725.04761 | 1725.04763 | - | - |
| 5.000 | 0.1969 | - | 1710.05000 | 1710.05002 | 1715.05000 | 1715.05002 | 1725.05000 | 1725.05002 | - | - |
| 6.000 | 0.2362 | - | 1710.06000 | 1710.06002 | 1715.06000 | 1715.06002 | 1725.06000 | 1725.06002 | 1732.06000 | 1732.06002 |
| 6.350 | 0.2500 | 1/4" | 1710.06351 | 1710.06353 | 1715.06351 | 1715.06353 | 1725.06351 | 1725.06353 | 1732.06351 | 1732.06353 |
| 7.000 | 0.2756 | - | - | - | 1715.07000 | 1715.07002 | 1725.07000 | 1725.07002 | 1732.07000 | 1732.07002 |
| 7.938 | 0.3125 | 5/16" | - | - | 1715.07941 | 1715.07943 | 1725.07941 | 1725.07943 | 1732.07941 | 1732.07943 |
| 8.000 | 0.3150 | - | - | - | 1715.08000 | 1715.08002 | 1725.08000 | 1725.08002 | 1732.08000 | 1732.08002 |
| 9.000 | 0.3543 | - | - | - | 1715.09000 | 1715.09002 | 1725.09000 | 1725.09002 | 1732.09000 | 1732.09002 |
| 9.525 | 0.3750 | 3/8" | - | - | 1715.09521 | 1715.09523 | 1725.09521 | 1725.09523 | 1732.09521 | 1732.09523 |
| 10.000 | 0.3937 | - | - | - | 1715.10000 | 1715.10002 | 1725.10000 | 1725.10002 | 1732.10000 | 1732.10002 |
| 11.000 | 0.4331 | - | - | - | - | - | 1725.11000 | 1725.11002 | 1732.11000 | 1732.11002 |
| 11.113 | 0.4375 | 7/16" | - | - | - | - | 1725.11111 | 1725.11113 | 1732.11111 | 1732.11113 |
| 12.000 | 0.4724 | - | - | - | - | - | 1725.12000 | 1725.12002 | 1732.12000 | 1732.12002 |
| 12.700 | 0.5000 | 1/2" | - | - | - | - | 1725.12701 | 1725.12703 | 1732.12701 | 1732.12703 |
| 14.000 | 0.5512 | - | - | - | - | - | 1725.14000 | 1725.14002 | 1732.14000 | 1732.14002 |
| 14.288 | 0.5625 | 9/16" | - | - | - | - | 1725.14291 | 1725.14293 | 1732.14291 | 1732.14293 |
| 15.875 | 0.6250 | 5/8" | - | - | - | - | 1725.15881 | 1725.15883 | 1732.15881 | 1732.15883 |
| 16.000 | 0.6300 | - | - | - | - | - | 1725.16000 | 1725.16002 | 1732.16000 | 1732.16002 |
| 18.000 | 0.7087 | - | - | - | - | - | 1725.18000 | 1725.18002 | 1732.18000 | 1732.18002 |
| 19.050 | 0.7500 | 3/4" | - | - | - | - | 1725.19051 | 1725.19053 | 1732.19051 | 1732.19053 |
| 20.000 | 0.7874 | - | - | - | - | - | 1725.20000 | 1725.20002 | 1732.20000 | 1732.20002 |
| 22.000 | 0.8661 | - | - | - | - | - | - | - | 1732.22000 | 1732.22002 |
| 22.225 | 0.8750 | 7/8" | - | - | - | - | - | - | 1732.22231 | 1732.22233 |
| 25.000 | 0.9843 | - | - | - | - | - | - | - | 1732.25000 | 1732.25002 |
| 25.400 | 1.0000 | 1" | - | - | - | - | - | - | 1732.25401 | 1732.25403 |



PG-TAP

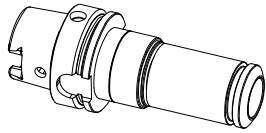
With internal square for tap shanks in the h9 tolerance field

PG 15-TAP Collets

| Ø [mm] | □ Square | Standard DIN | PG 15-TAP Part No. |
|--------|----------|--------------|--------------------|
| 3.500 | 2.700 | 371/376 | 1715.03505 |
| 4.500 | 3.400 | 371/376 | 1715.04505 |
| 6.000 | 4.900 | 371/376 | 1715.06005 |
| 7.000 | 5.500 | 371/376 | 1715.07005 |
| 8.000 | 6.200 | 371/376 | 1715.08005 |
| 9.000 | 7.000 | 371/376 | 1715.09005 |
| 10.000 | 8.000 | 371 | 1715.10005 |

PG 25-TAP Collets

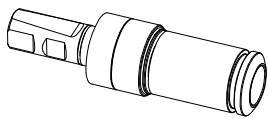
| Ø [mm] | □ Square | Standard DIN | PG 25-TAP Part No. |
|--------|----------|--------------|--------------------|
| 8.000 | 6.200 | 371/376 | 1725.08005 |
| 9.000 | 7.000 | 371/376 | 1725.09005 |
| 10.000 | 8.000 | 371 | 1725.10005 |
| 11.000 | 9.000 | 371/376 | 1725.11005 |
| 12.000 | 9.000 | 371/376 | 1725.12005 |
| 14.000 | 11.000 | 371/376 | 1725.14005 |
| 16.000 | 12.000 | 371/376 | 1725.16005 |



HSK-A Tapping Chucks Softsynchro®

DIN 69893/ISO 12164

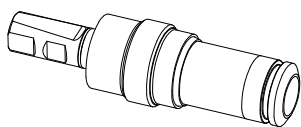
| Type | Part No. | Ø D [mm] | Ø D1 [mm] | Ø D2 [mm] | L [mm] | L1 [mm] | C Compression | T Tension | Figure |
|----------------------|------------|----------|-----------|-----------|--------|---------|---------------|-----------|--------|
| HSK-A 63 SSY / PG 15 | 2563.61507 | 22 | 24 | 34 | 114.5 | 53 | 0.5 | 0.5 | 15 |
| HSK-A 63 SSY / PG 25 | 2563.62507 | 33 | 40 | 45 | 131 | 58 | 0.5 | 0.5 | 15 |



Tapping Chucks with Cylindrical Shank Softsynchro®

DIN 1835 B+E

| Type | Part No. | Ø D [mm] | Ø D1 [mm] | Ø D2 [mm] | Ø D3 [mm] | L [mm] | L1 [mm] | L2 [mm] | C Compression | T Tension | Figure |
|--------------------|------------|----------|-----------|-----------|-----------|--------|---------|---------|---------------|-----------|--------|
| CYL25 SSY / PG 15* | 2625.61507 | 22 | 24 | 34 | 25 | 92 | 61.5 | 57 | 0.5 | 0.5 | 16 |
| CYL25 SSY / PG 25* | 2625.62507 | 33 | 40 | 45 | 25 | 109.5 | 73 | 57 | 0.5 | 0.5 | 16 |

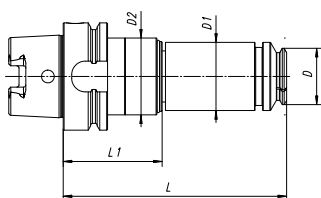


Tapping Chucks with Cylindrical Shank and Axial Compensation (Compression/Tension)

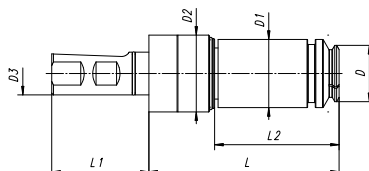
DIN 1835 B+E

| Type | Part No. | Ø D [mm] | Ø D1 [mm] | Ø D2 [mm] | Ø D3 [mm] | L [mm] | L1 [mm] | L2 [mm] | C Compression | T Tension | Figure |
|--------------------|------------|----------|-----------|-----------|-----------|--------|---------|---------|---------------|-----------|--------|
| CYL25 GSF / PG 15* | 2625.61508 | 22 | 24 | 38 | 25 | 99.5 | 61 | 57 | 5.0 | 7.5 | 17 |
| CYL25 GSF / PG 25* | 2625.62508 | 33 | 40 | 52 | 25 | 134 | 72.5 | 57 | 7.0 | 10.0 | 17 |

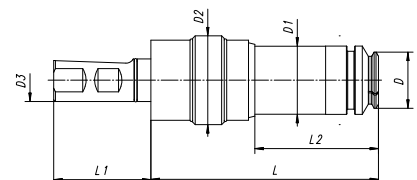
*To adapt the tapping chucks to different steep tapers, use the appropriate Weldon toolholder.



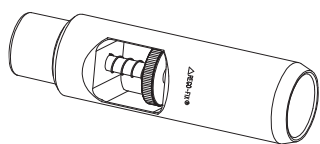
15



16



17



Presetting Tool optional

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.

| Type | Part No. | Description |
|--------|------------|-----------------------|
| VEW 10 | 7619.10000 | PG 10 Presetting Tool |
| VEW 15 | 7619.15000 | PG 15 Presetting Tool |
| VEW 25 | 7619.25000 | PG 25 Presetting Tool |
| VEW 32 | 7619.32000 | PG 32 Presetting Tool |



Taper Cleaner additional

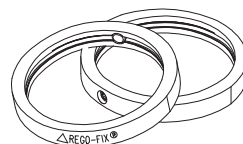
Provides a quick and easy method of cleaning the powRgrip® holder bore of oil and debris before insertion of the tool.

| Type | Part No. | Description |
|---------|------------|-------------------------------------|
| TKCP 10 | 7657.10000 | Taper Cleaner for PG 10 Toolholders |
| TKCP 15 | 7657.15000 | Taper Cleaner for PG 15 Toolholders |
| TKCP 25 | 7657.25000 | Taper Cleaner for PG 25 Toolholders |
| TKCP 32 | 7657.32000 | Taper Cleaner for PG 32 Toolholders |

Set Cleaning Paper additional 1th Set

Is a soft, absorbant paper specially prepared for cleaning the powRgrip® holder bore. The paper is lint-free and chemically neutral. For one time use only! Each pack contains 250 sheets.

| Type | Part No. | Description |
|--------|------------|--------------------------------|
| CPS 10 | 7658.10000 | Set cleaning paper for TKCP 10 |
| CPS 15 | 7658.15000 | Set cleaning paper for TKCP 15 |
| CPS 25 | 7658.25000 | Set cleaning paper for TKCP 25 |
| CPS 32 | 7658.32000 | Set cleaning paper for TKCP 32 |



Hi-Q® Balancing Rings optional

The new powRgrip® toolholders also accept the new REGO-FIX Hi-Q® Balancing Ring system.

| Type | Part No. | Outside Ø [mm] | Balancing Capacity [gmm] |
|-------------|------------|----------------|--------------------------|
| SET FWR 225 | 7490.22500 | 30.5 | 16.00 |
| SET FWR 285 | 7490.28500 | 36.5 | 22.00 |
| SET FWR 325 | 7490.32500 | 40.5 | 28.00 |
| SET FWR 405 | 7490.40500 | 48.5 | 40.00 |
| SET FWR 505 | 7490.50500 | 60.5 | 85.00 |



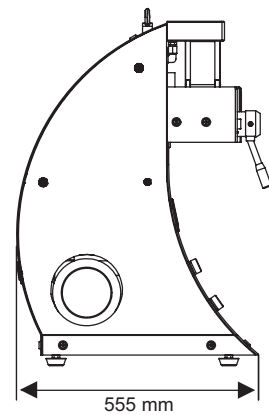
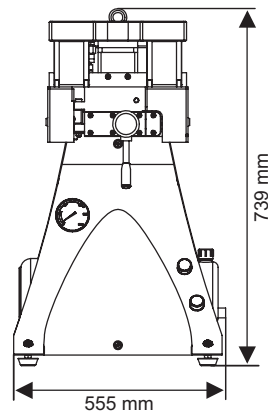
Torque Screwdriver optional

The torque screwdriver is a special Torx style wrench that is preset to the recommended torque rating of 0.9 Nm for tightening the REGO-FIX Hi-Q® Balancing Rings.

| Type | Part No. | Description |
|------------|------------|----------------------------|
| TSD 0.9 Nm | 7159.09000 | TORX 8 for Balancing Rings |

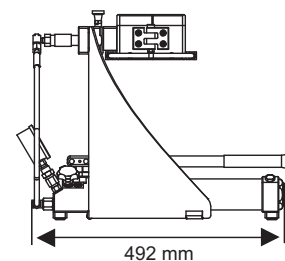
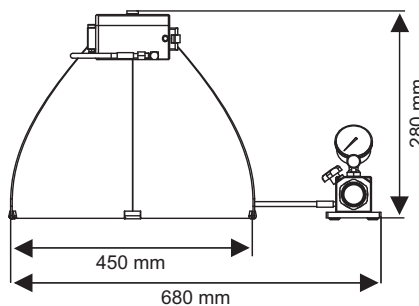
Automatic Clamping Unit PGU

| Type | Part No. | Description | Weight |
|------------|------------|--|--------|
| PGU 9000 E | 7610.90000 | powRgrip® Automatic Clamping Unit 230 V | 90 kg |
| PGU 9000 A | 7610.90100 | powRgrip® Automatic Clamping Unit 110 V | 90 kg |
| PGU 9000 J | 7610.90200 | powRgrip® Automatic Clamping Unit 100 V | 90 kg |
| APG 910 | 7611.10900 | PG 10 Clamping Insert for PGU 9000, Taper Cleaner included | – |
| APG 915 | 7611.15900 | PG 15 Clamping Insert for PGU 9000, Taper Cleaner included | – |
| APG 925 | 7611.25900 | PG 25 Clamping Insert for PGU 9000, Taper Cleaner included | – |
| APG 932 | 7611.32900 | PG 32 Clamping Insert for PGU 9000, Taper Cleaner included | – |



Manual Clamping Unit PGC

| Type | Part No. | Description | Weight |
|-----------|------------|--|--------|
| PGC 1000 | 7621.10000 | Manual Clamping Unit PG 10, Taper Cleaner included | 7 kg |
| PGC 1500 | 7621.15000 | Manual Clamping Unit PG 15, Taper Cleaner included | 12 kg |
| PGC 2500 | 7621.25000 | Manual Clamping Unit PG 25, Taper Cleaner included | 12 kg |
| PGS 1 | 7625.00100 | powRgrip® Compact Stand No. 1 | 4 kg |
| PGP 300 M | 7629.00300 | powRgrip® hand pump, 300 bar | 6 kg |

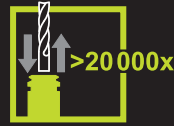


powRgrip SYSTEM

Features and Benefits



Clamping with clamping operation in less than 10 sec.



Highest transferable torque and superior runout, even after 20 000 tool changes



Runout of <3 microns



High flexibility
 ■ minimum clamping dia 0.2 mm
 ■ clamps any kind of tool material

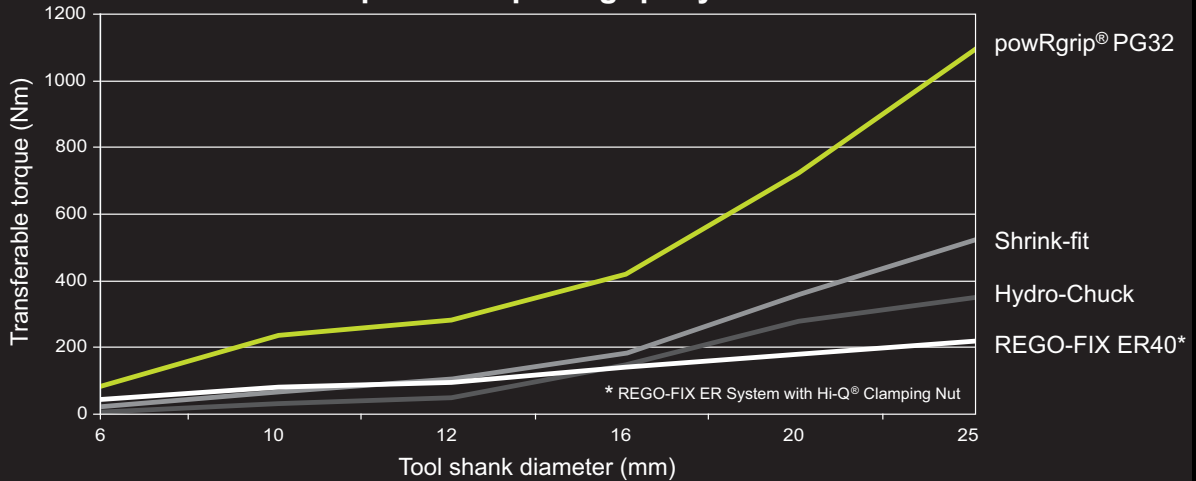


High vibration dampening due to interfacing surfaces toolholder-collet, collet-tool

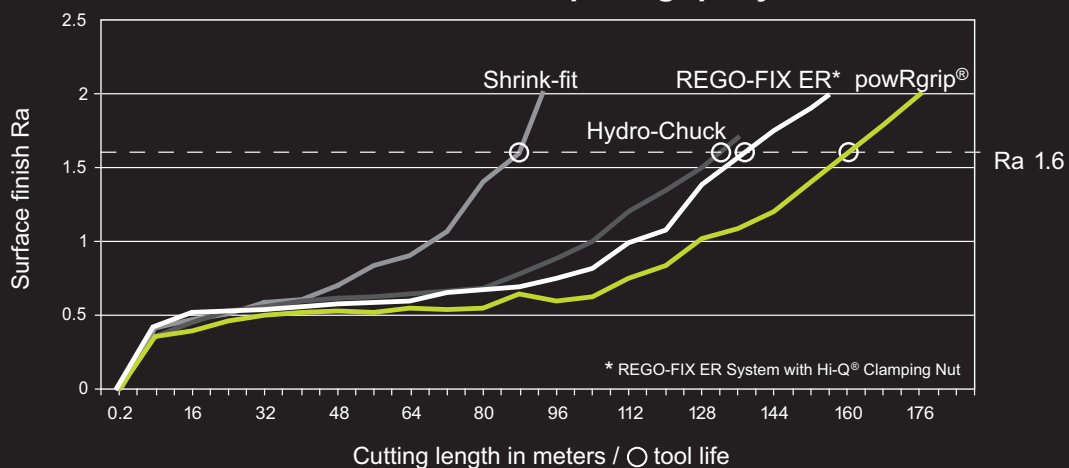


Precise length adjustment repeatability <10 microns

Transferable Torque of the powRgrip® System



Increased Cutter Tool Life with powRgrip® System



REGO-FIX AG
 Obermattweg 60
 4456 Tenniken/Switzerland
 Phone +41 61 976 14 66
 Fax +41 61 976 14 14

from Germany
 Phone +49 7621 15 04 60
 Fax +49 7621 57 87 16
www.rego-fix.com

REGO-FIX TOOL CORP.
 7752 Moller Road
 Indianapolis, IN 46268 USA
 Phone +1 317 870 59 59
 Fax +1 317 870 59 55