

# μGrind and Hornet tool grinding chucks

and  
supplies



grinding deserves SOLUTIONS



The μGrind **automatic super chuck** will virtually **eliminate runout** in minutes, using two simple gauges.



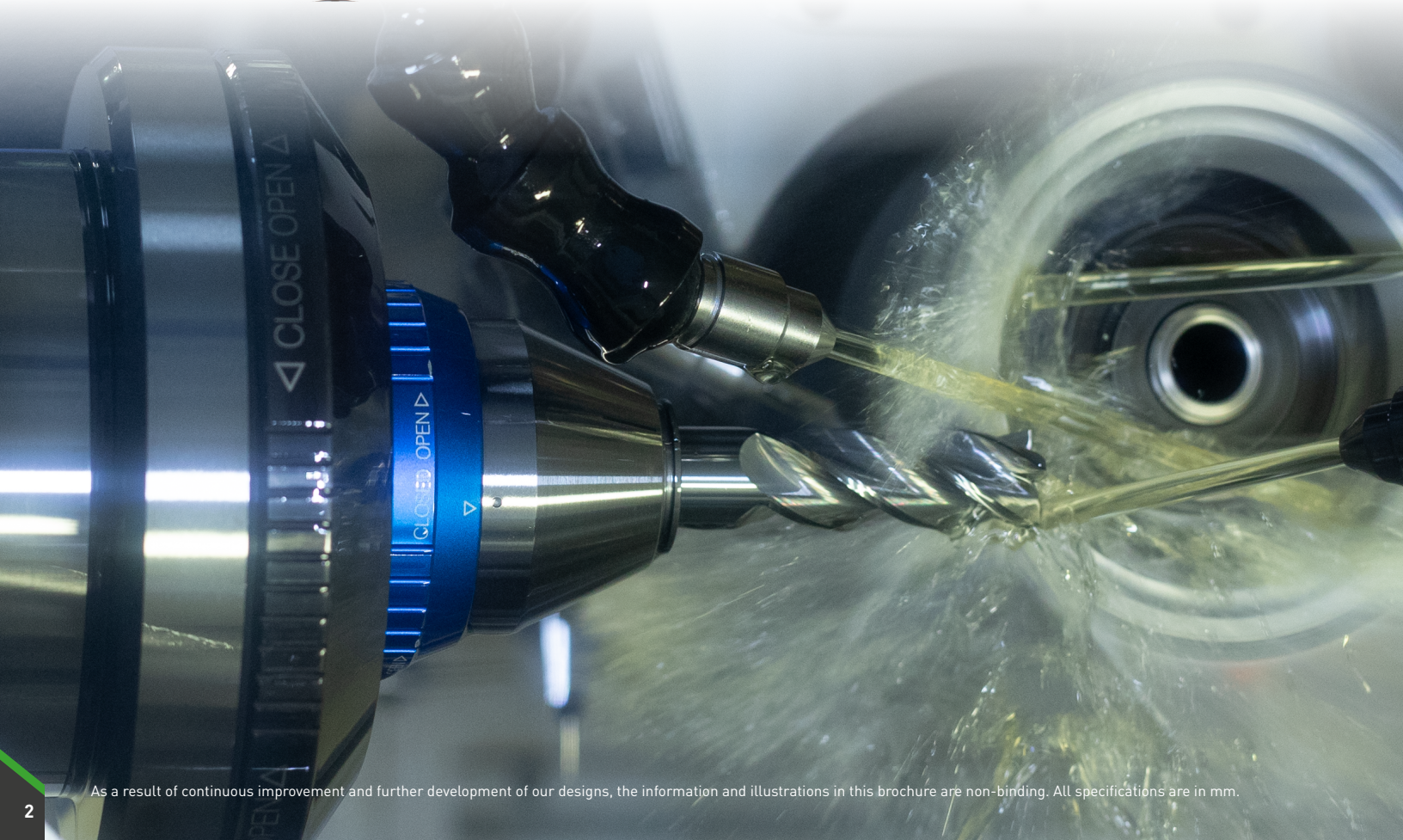
\* The color of the ring depends on the machine type.

We developed the μGrind in close cooperation with leading tool grinding professionals specifically to achieve high precision clamping in that field.

The chuck uses specialized shallow taper (<1°) collets for outstanding clamping force. Plus the collets can be changed in seconds without any tools or readjustment, enabling quick diameter changes.

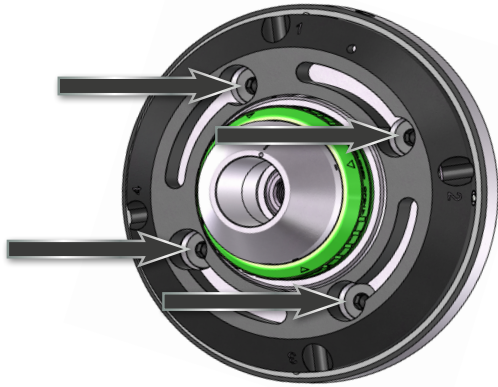
The chuck is “self-clamping,” (it clamps the tool without external force and releases upon activation of a push rod). The chuck is also isolated from the grinding machine except at the face of the workhead. A spring-like mechanism applies a constant pull on the collet to clamp the tool. Because that linkage is not rigid and not connected to the machine, the collet (and therefore the tool blank) cannot be pulled crooked.

Setup requires just a few minutes and neither special skills nor tools. You can even virtually eliminate axial runout (weeble-wobble) just by adjusting screws.

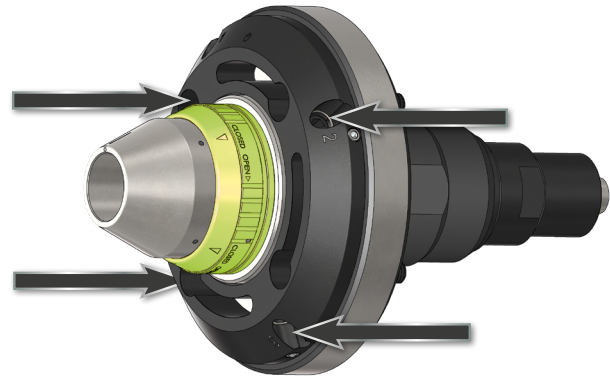




Setup - Concentric with the machine



Setup - Parallel with the machine (eliminating axial runout)



It's quick and easy to eliminate both radial and axial runout (weeble wobble), and the chuck repeats! The μGrind super chuck yields a **new dimension in grinding precision**.

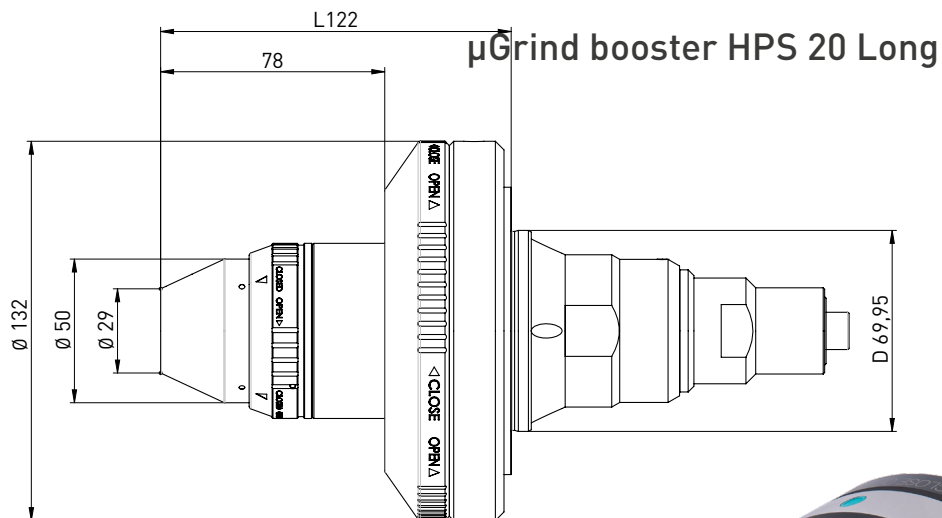
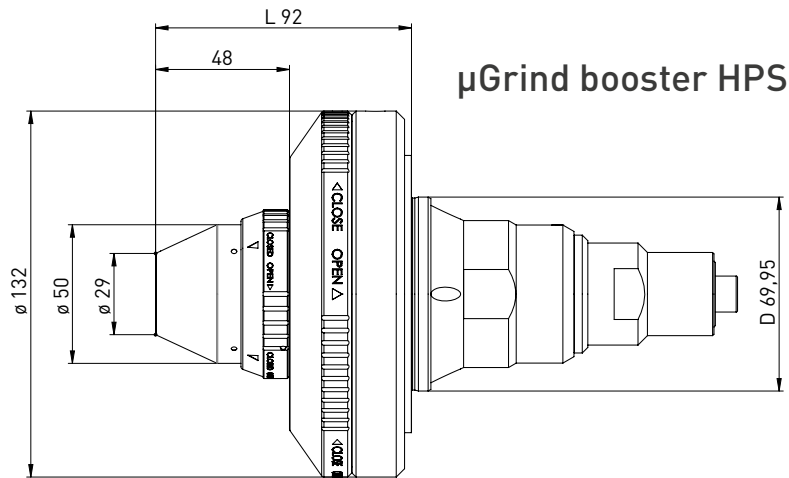
The world's most demanding tool manufacturers have proven that the μGrind offers highly productive and predictable performance with an unbeatable collection of benefits:



- Lets you virtually **eliminate both radial and axial runout** (weeble-wobble) without special tools or skill
- Lets you change diameters in seconds and **repeats within two microns** (under 1 tenth) at  $2\frac{1}{2} \times D$  without adjustment
- **Maintains TIR within 5 microns** (2 tenths) throughout the grind (assuming normal grinding forces)
- Performs like this over tens of thousands of clampings
- Requires a relatively short clamping length on the blank to achieve constant holding force and concentricity
- Features a tapered profile and smaller nose diameter than hydraulic holders for **better wheel clearance** and freedom from interference
- Offers **excellent dampening properties** for uniform material removal, optimized feed rates, excellent surface finish, and significantly reduced grinding wheel wear
- Suitable for both **high production and regrinding**

For tools up to  $\varnothing 20$  mm ( $\frac{3}{4}$ " ) on these machines:

- Haas
- Joerg S-tech
- Reinecker
- Saacke
- Schneeberger
- Schütte
- Star NXT
- TGT
- WALTER Helitronic Vision, Power, etc

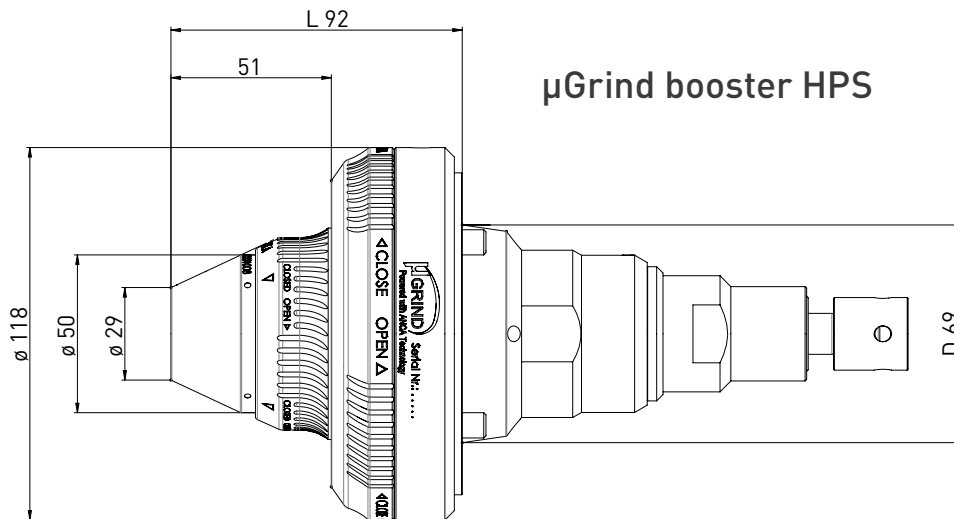


**Delivery includes:** push rod, alignment hammer, assembly tool, test certificate, operating instructions

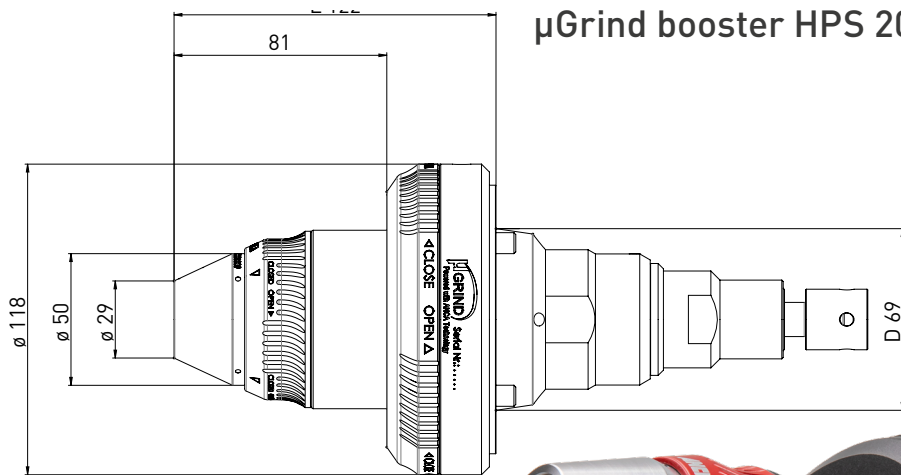


For tools up to  $\varnothing 20$  mm ( $\frac{3}{4}$ " ) on these machines:

- ANCA TX, MX, & FX
- Strausak ONE
- Vollmer VGrind



µGrind booster HPS



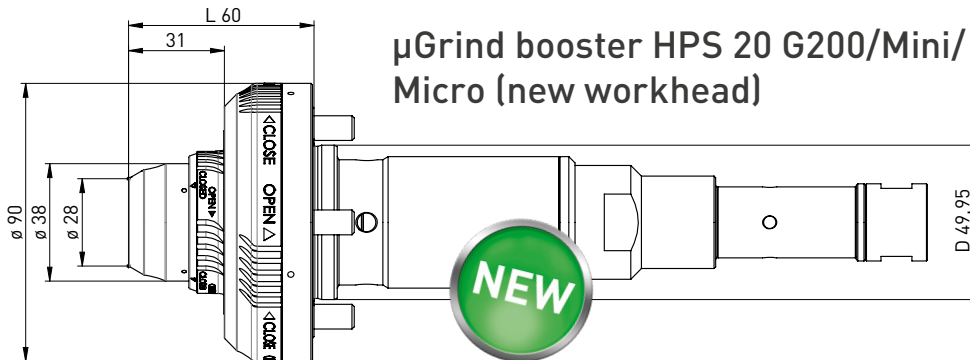
µGrind booster HPS 20 Long



**Delivery includes:** push rod, alignment hammer, assembly tool, test certificate, operating instructions

For tools up to  $\varnothing 12$  mm ( $\frac{1}{2}$ " ) on these machines:

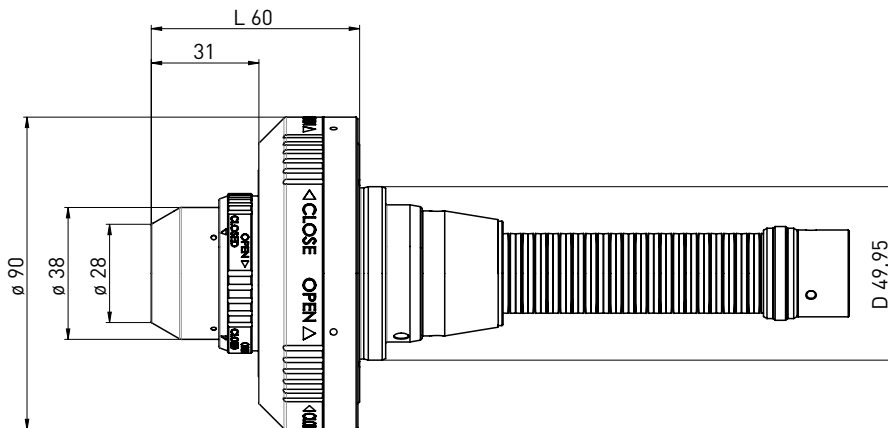
- WALTER Helitronic G200
- WALTER Helitronic Mini Automation
- WALTER Helitronic Micro (new blue-back workhead)



Approved for clamping sleeves up to  $\varnothing 12$  mm or  $\frac{1}{2}$  inch

## $\mu$ Grind booster HPS Micro (original workhead)

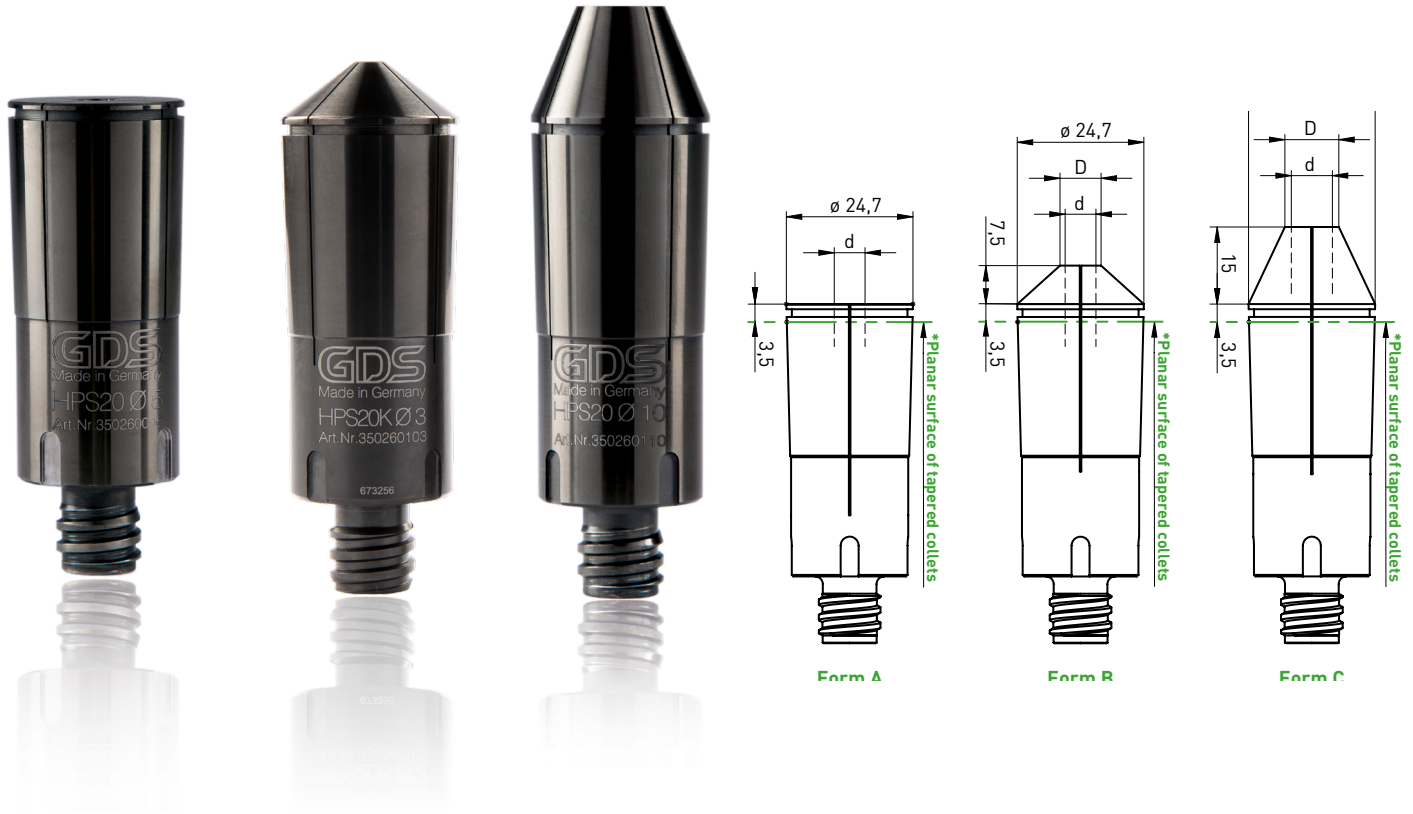
- WALTER Helitronic Micro (original workhead)



**Delivery includes:** Push rod, alignment hammer, assembly tool, test certificate, operating instructions



**HPS 20:** For tools up to  $\varnothing 20$  mm ( $\frac{3}{4}$ " )



**HPS 32:** For tools up to  $\varnothing 32$  mm ( $1\frac{1}{4}$ " )



HPS collets feature a  $<1^\circ$  taper, for **maximum clamping force**. They hold the tool to within **5  $\mu$ m (2 tenths) runout throughout the grind**. (No other manufacturer makes any claims about what happens when you apply grinding forces.)

Plus HPS collets **can be changed in seconds without any tools or readjustment**, enabling quick diameter changes.

For tools up to  $\varnothing 32$  mm (1¼") on these machines:

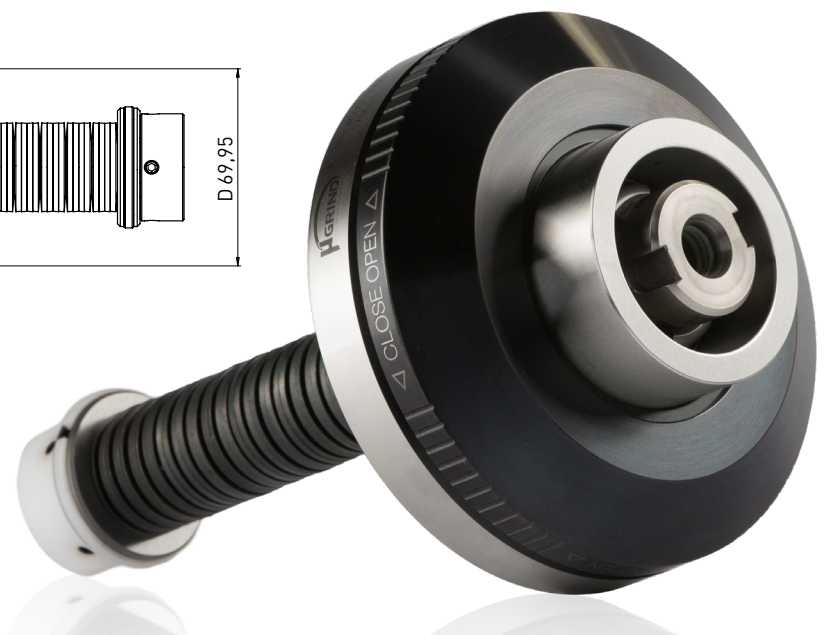
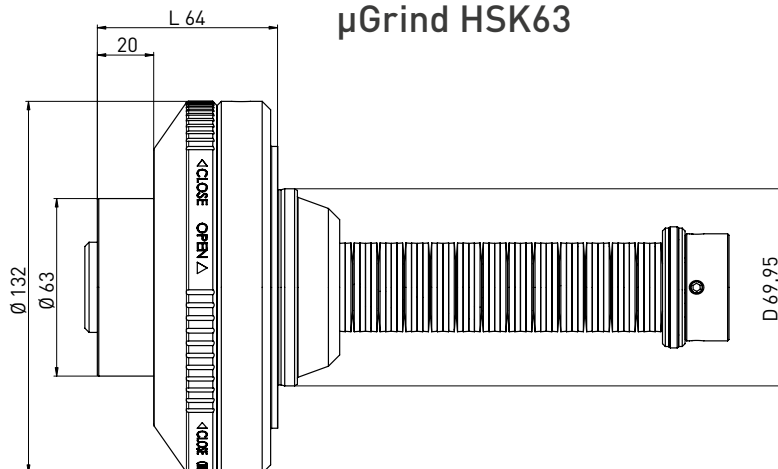
## μGrind booster HPS 32



- ANCA TX, MX, & FX
- Haas Multigrind
- Joerg S-tech
- Reinecker
- Saacke
- Schneeberger
- Schütte
- Star NXT
- Strausak
- TGT
- Vollmer VGrind
- WALTER Helitronic Vision, Power, etc

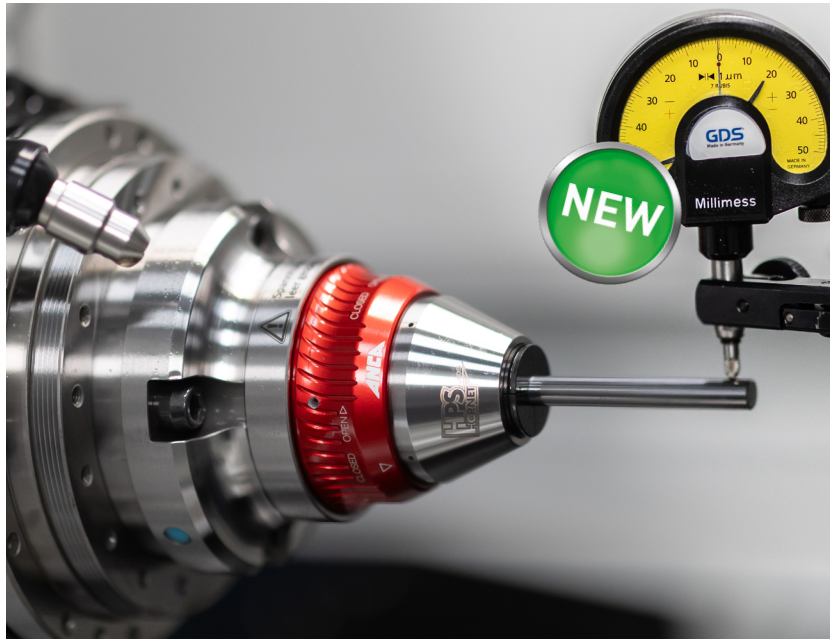
For HSK 63 tool holders on 50 taper machines:

## μGrind HSK63

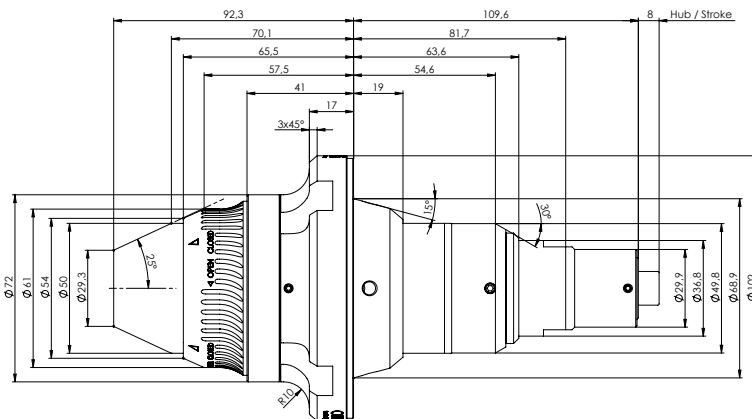




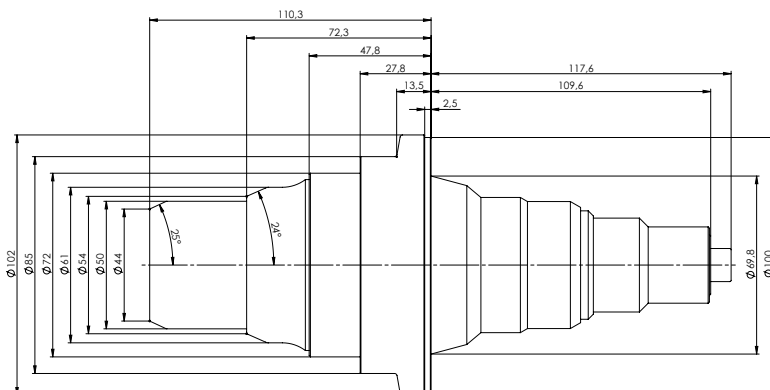
For tools up to  $\varnothing 32$  mm (1¼") on 50 taper machines



Hornet HPS 20



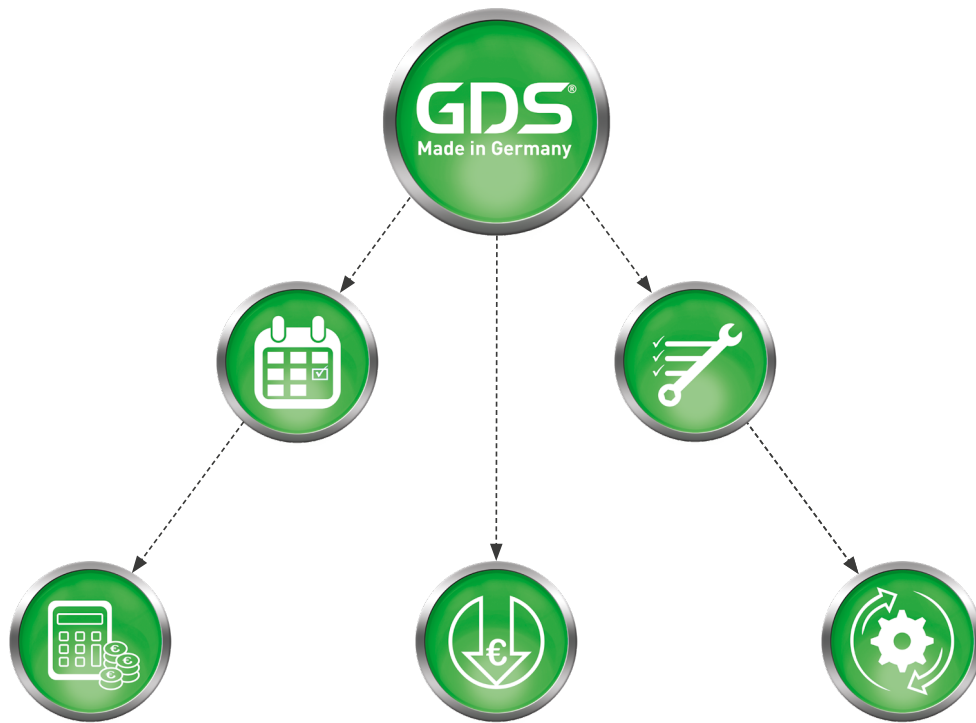
Hornet HPS 32



All the benefits of the  $\mu$ Grind super chuck—except for axial adjustment—with a thinner profile and a smaller investment:

- Lets you change diameters in seconds and **repeats within two microns** (under 1 tenth) at 2½ x D without adjustment
- **Maintains TIR within 5 microns** (2 tenths) throughout the grind (assuming normal grinding forces)
- Performs like this over tens of thousands of clampings
- Requires a relatively short clamping length on the blank to achieve constant holding force and concentricity
- Features a tapered profile and smaller nose diameter than hydraulic holders for **better wheel clearance** and freedom from interference
- Offers **excellent dampening properties** for uniform material removal, optimized feed rates, excellent surface finish, and significantly reduced grinding wheel wear
- Suitable for both **high production and regrounding**

# REVOLUTION IN TOOLGRINDING



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