

# Commissioning // Instruction manual

**VIPER S**

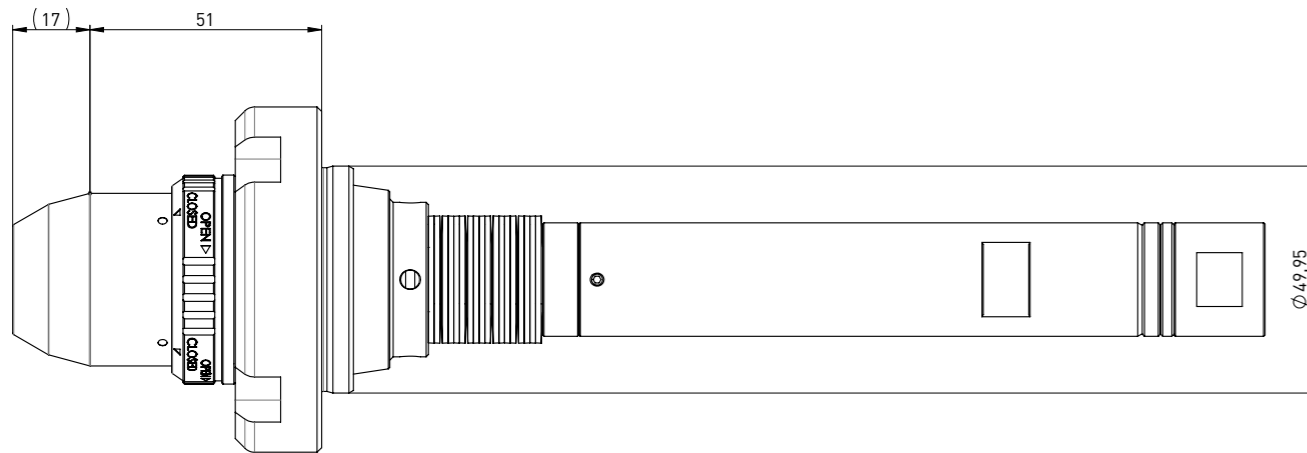
Nann 3148E Mini/G200



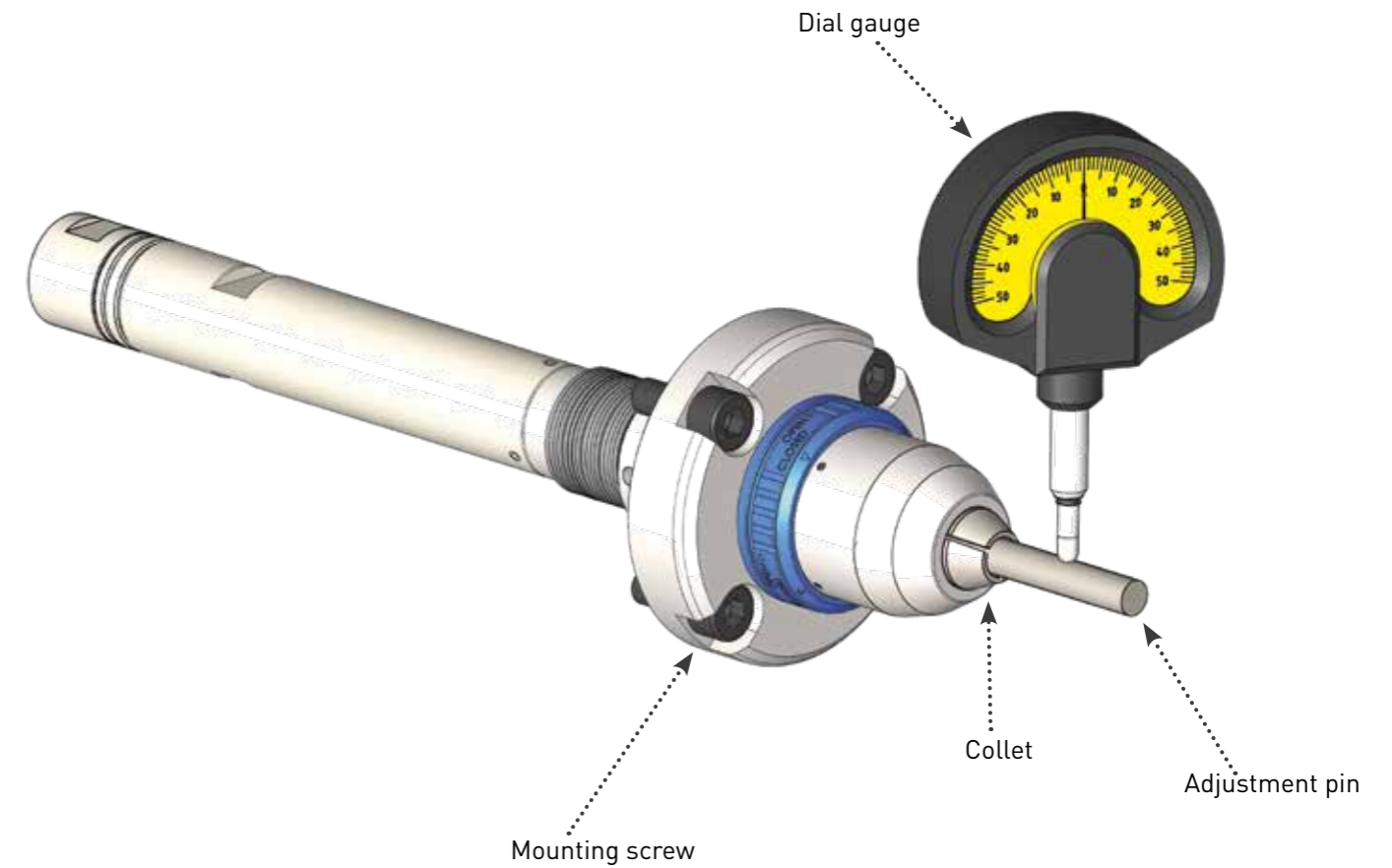
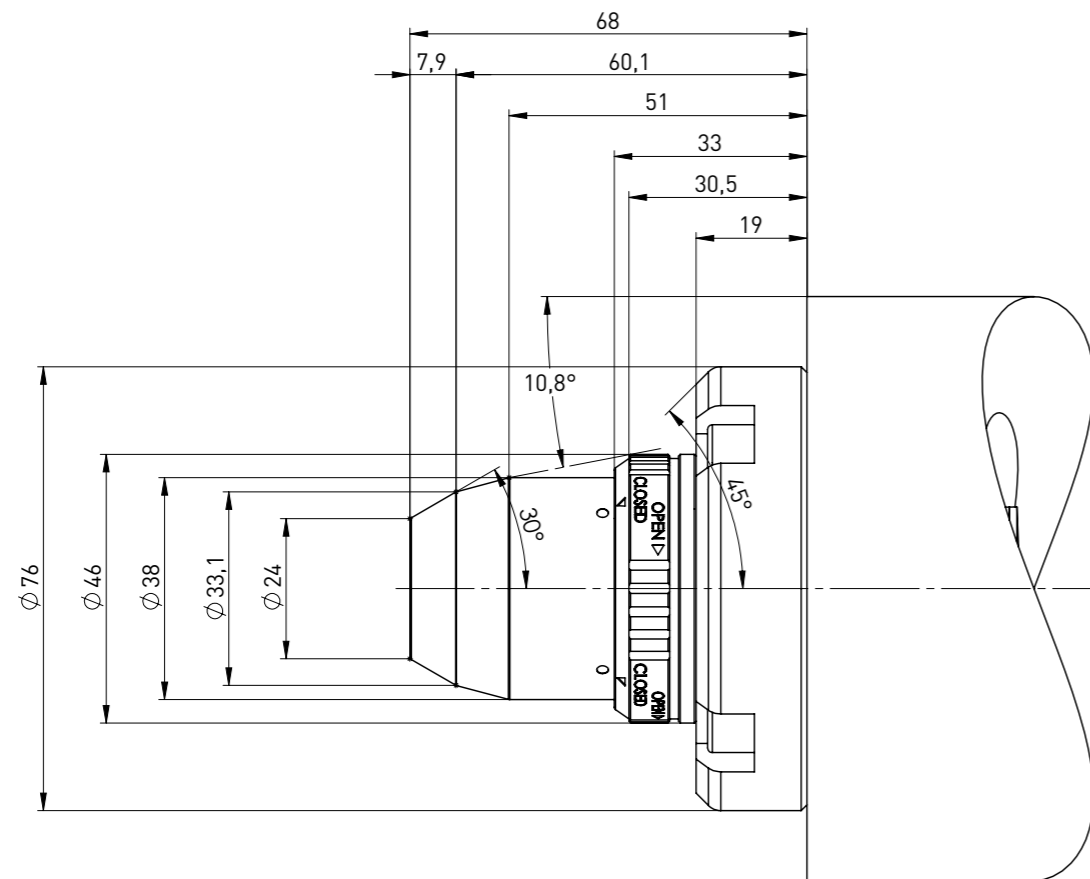
grinding deserves SOLUTIONS

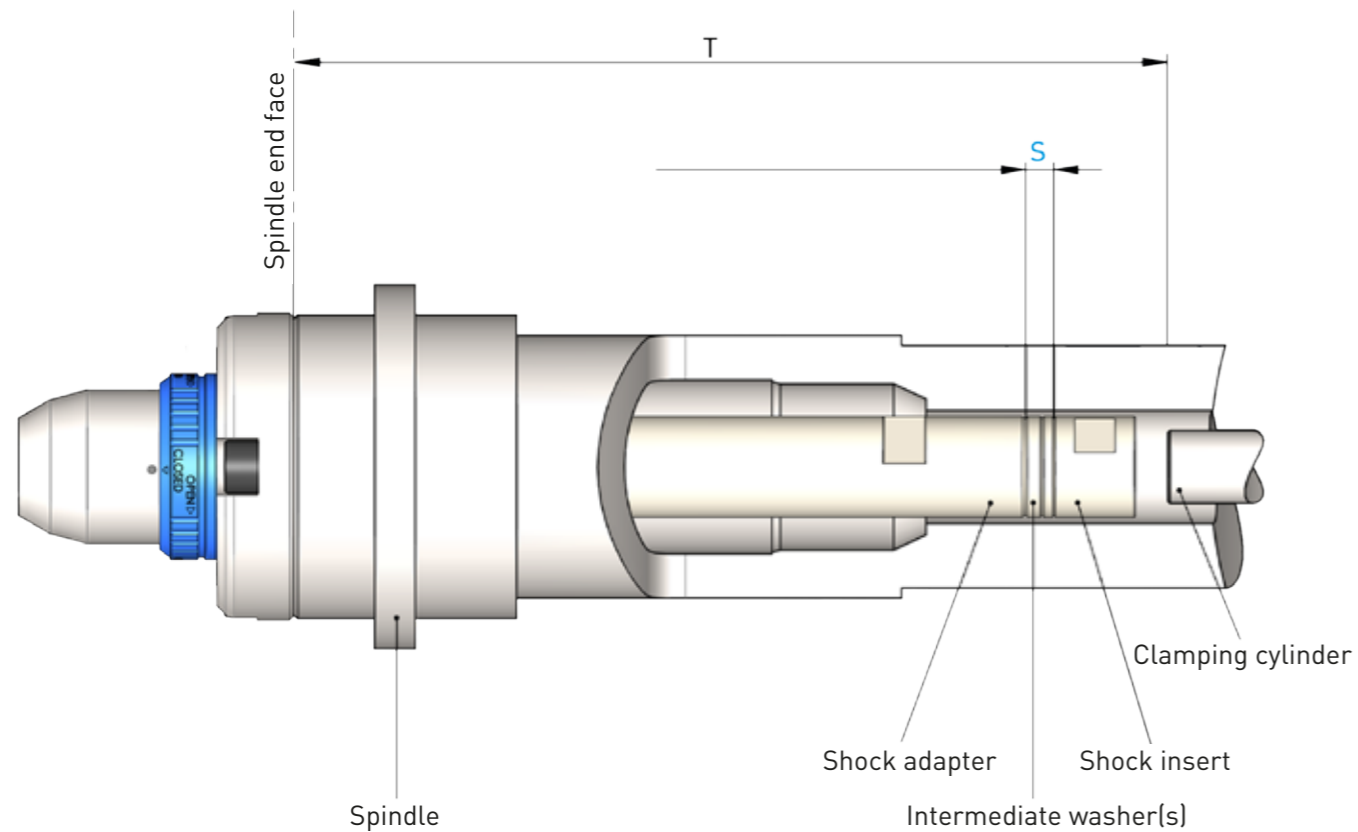
**GDS**<sup>®</sup>  
Made in Germany

VIPER S Nann 3148E Mini/G200 **NANN** Collet - maximum bore  $\varnothing 16$



 For the dimensions of the collets, please refer to the manufacturer's information.





## Mounting

1. Move the clamping cylinder with the machine control to the rear.
2. **T** = Determine depth dimension (spindle face to push rod machine)
3. **S** = Thickness of the required intermediate washer(s). Is calculated with the following formula  $T - 204,5 = S$
4. Then select the intermediate washer(s) so that the deviation from the calculated thickness **S** is minimal. **The following applies: Do not exceed a deviation of 0.5 mm.**

The thickness of the individual intermediate pane can be found in its labeling.

5. Mount the selected intermediate washer(s) between the impact adapter and the impact insert.

Examples for the selection of the supplied intermediate washers:

**S= 6,4mm** Intermediate washer dimension 6mm (rings: 3+3mm)  
 ✓ Deviation 0,4mm

**S= 6,4mm** Intermediate washer dimension 7mm (rings: 4+3mm)  
 ✗ Deviation 0,6mm

**S= 4,7mm** Intermediate washer dimension 5mm (rings: 5mm)  
 ✓ Deviation 0,3mm

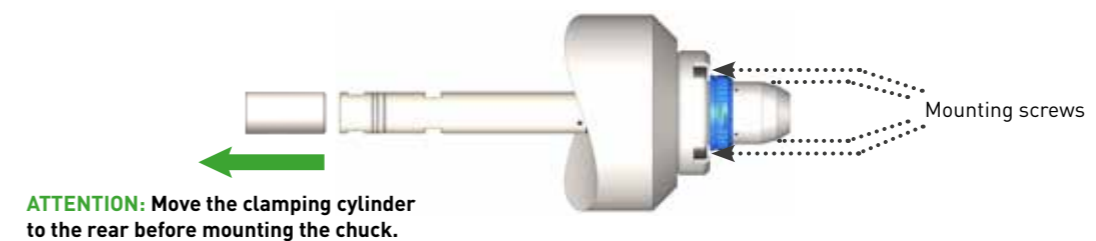
**S= 4,7mm** Intermediate washer dimension 4mm (rings: 4mm)  
 ✗ Deviation 0,7mm

## Step 1: Preparation

1. Clean all contact surfaces of the chuck.
2. Make sure that the face of the machine interface is flat and clean.
3. The VIPER chuck should be at ambient temperature.

## Step 2: Mount chuck

1. Move the clamping cylinder with the machine control to the rear.
2. Screw the chuck onto the facing unit using the screws supplied. When doing so, please tighten the mounting screws only slightly. (The mounting screws will be tightened later during run-out adjustment).



## Step 3: Preparation for collet

1. Move the clamping cylinder forward with the machine control. The chuck opens automatically.
2. Turn the blue ring to OPEN (Fig. 1).

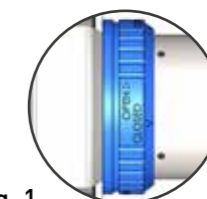
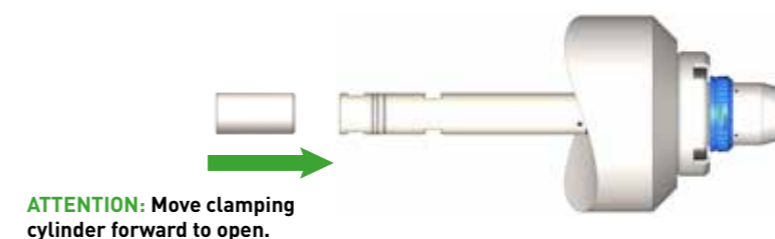


Fig. 1  
View: Blue ring open



## Step 4: Screw in collet with adjusting pin

Screw in the collet chuck as follows:

1. Slowly turn the collet clockwise until the clamping pin engages in the groove of the collet.
2. Slide a suitable adjustment pin into the collet, turn the collet with the cofix clockwise until you feel resistance and the adjustment pin is tight.
3. Turn the cofix over and rotate the collet two notches counterclockwise. **One detent ± one detent noise.**
4. Turn the blue ring to CLOSE (Fig. 2).
5. Move the push rod backward with the machine control. This operation clamps the adjustment pin. Use the machine control to make sure that the chuck properly clamps and releases the setting pin.

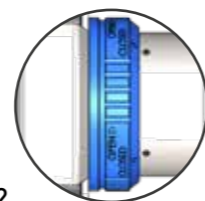
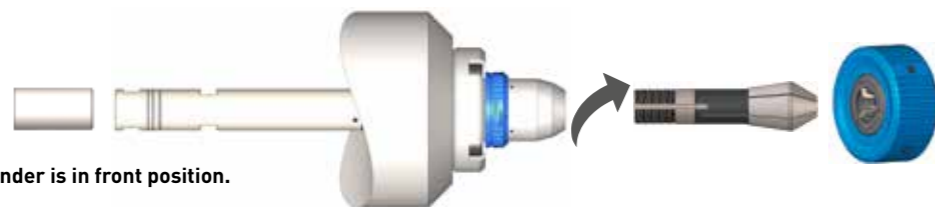


Fig. 2  
View: Blue ring closed



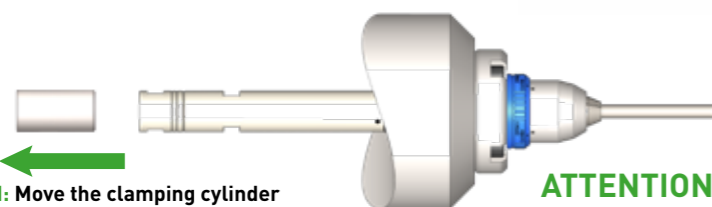
Clamping cylinder is in front position.



**Collet must NEVER be clamped empty.**



To avoid injury, rotate the collet in and out with our CoFix screw-in aid.



**ATTENTION:** Move the clamping cylinder to the rear to clamp the setting pin.

**ATTENTION:** Before each shutdown of the machine, make sure that a tool remains in the chuck.

## Setting concentricity and repeatability

Please take the time to adjust the concentricity. The more accurately the chuck is set, the more accurately it will behave.



Use precision dial gauges when adjusting. Pay attention to the quality of the setting pin.



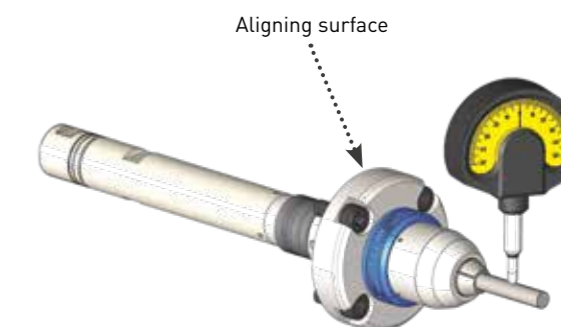
To ensure proper function, disassemble and clean the chuck once a month.



**ATTENTION:** Do not knock on the blue locking ring.

## Step 1: Set

1. Align the chuck with an alignment hammer (made of plastic or copper) by tapping lightly on the alignment surface.
2. After achieving the desired concentricity, tighten the mounting screws crosswise with 12Nm.
3. Done, now you can start grinding.



## Change collet

### Step 1:

- Advance the clamping cylinder to open the chuck. Remove the blank.

### Step 2:

- Turn the blue locking ring from CLOSE to OPEN and turn out the collet with the Cofix.

### Step 3:

- Turn the new collet into the chuck and secure it as described on page 6.

### Step 4:

- Clamp a new adjustment pin and check the runout error with the dial gauge.

## Remove chuck

### Step 1:

- Advance the clamping cylinder to open the chuck. Remove the blank.

### Step 2:

- Turn the blue locking ring from CLOSE to OPEN and turn out the collet with the Cofix.

### Step 3:

- Move the clamping cylinder to the rear.
- Loosen the four mounting screws.
- Remove the chuck from the machine and pack it in the original bag. **Make sure that it is protected against corrosion.**



**Note:** When you remove the chuck with collet, the blank must be in the collet.

## GDS VIPER safety instructions



### To note:

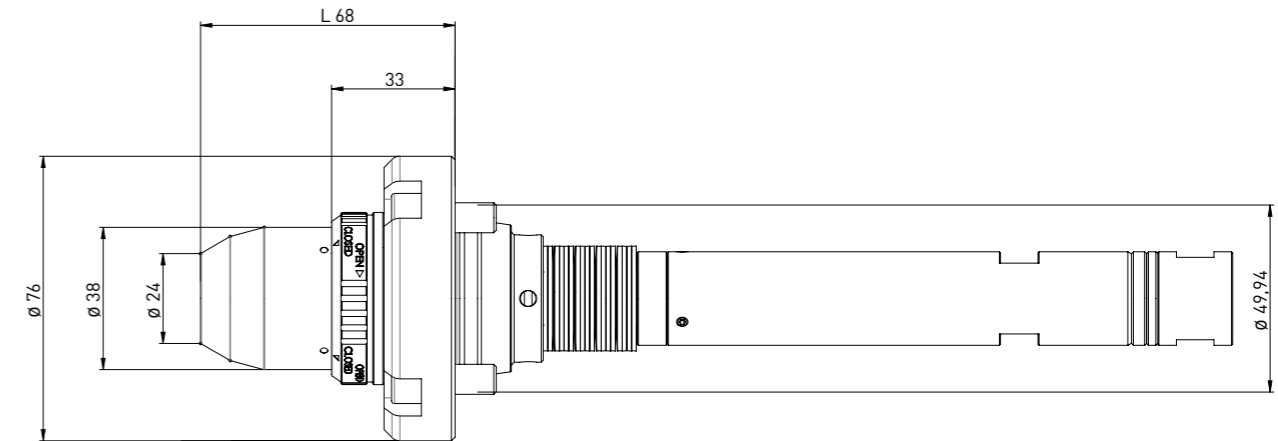
- The VIPER series (chuck) was designed for loading and changing rotationally symmetrical blanks and tools with shank tolerance h6 or more accurate.
- For shank tools, all shanks according to DIN 1835 Form A, B, E or DIN 6535 Form HA, HB, HE can be clamped.
- The VIPER series (chucks and collets) may only be used within the scope of their technical data.
- This product is intended for industrial use.
- Intended use includes compliance with all the information in these instructions.
- Faultless function and warranty claims can only be guaranteed with original GDS accessories.

## GDS VIPER error causes and solutions

### Check the following points:

- Check clamping pressure
- Check blank
- Contamination
- Locking mechanism (blue ring) correctly closed
- All mounting screws correctly tightened
- Butt adapter, intermediate washers and butt insert correctly mounted
- Chuck requires room temperature
- Open everything again, clean and start from the beginning step by step

VIPER S Nann 3148E Mini/G200 **NANN** for SK40 tool grinding machines  
Collet - maximum bore  $\varnothing 10$

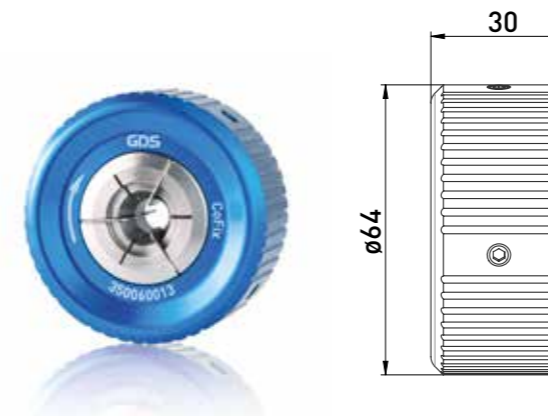


**Delivery includes:**  
Shock adapter, intermediate washer, shock insert

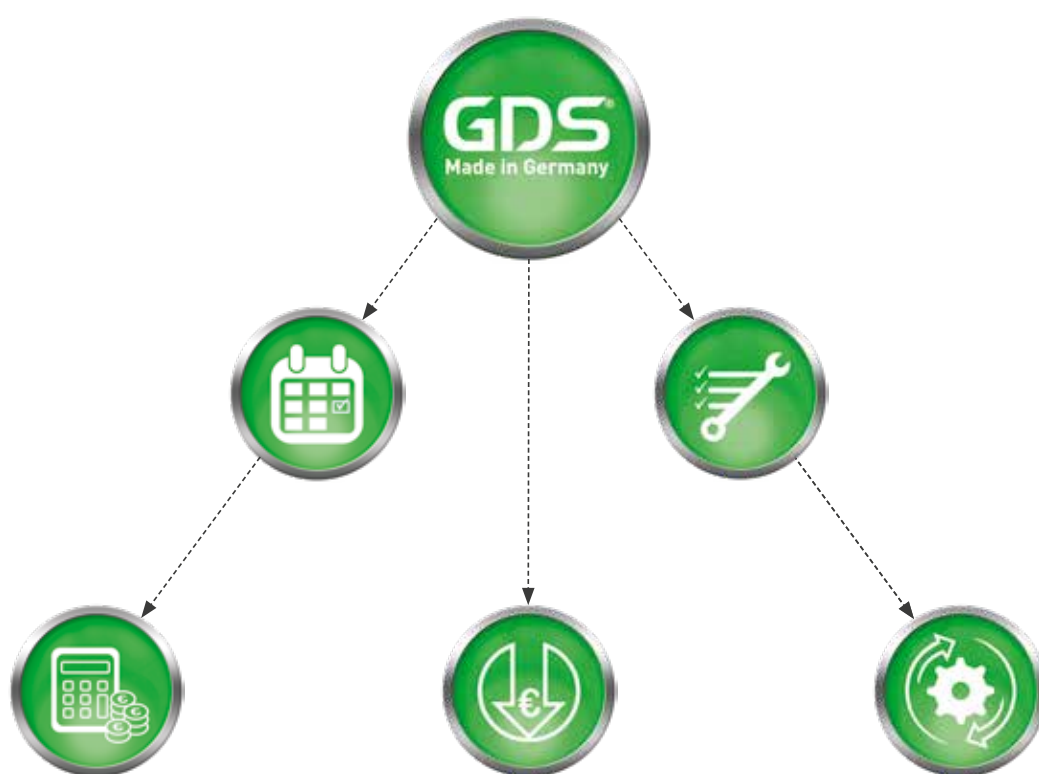
Item no.	Name	D	L
400004018	VIPER S Nann 3148E Mini/G200	49,95	68

### Accessories:

Item no.	Name
350060013	Cofix 12 (for W15 and Nann 3148E) Screw-in tool for collets



# REVOLUTION IN TOOLGRINDING



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