Commissioning // Instruction manual

ALLIGATOR

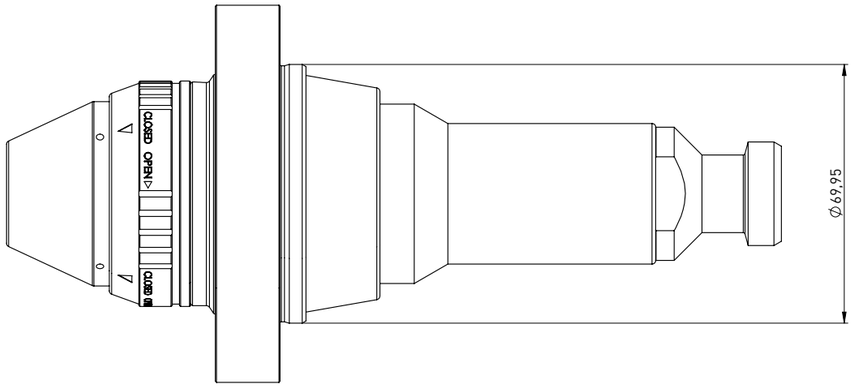
Fully automatic hydraulic expansion
precision clamping system

grinding deserves SOLUTIONS

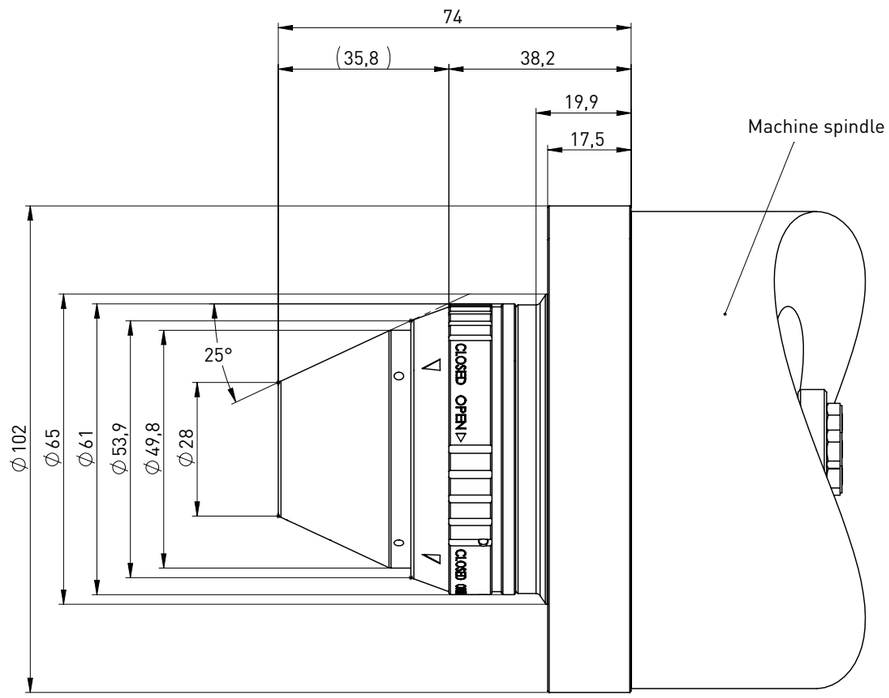
GDS®
Made in Germany

GDS ALLIGATOR interference contour

ALLIGATOR - the fully automatic hydraulic expansion precision clamping system for a clamping range of 3-20 mm.



For information on intermediate bushings, see page 8.



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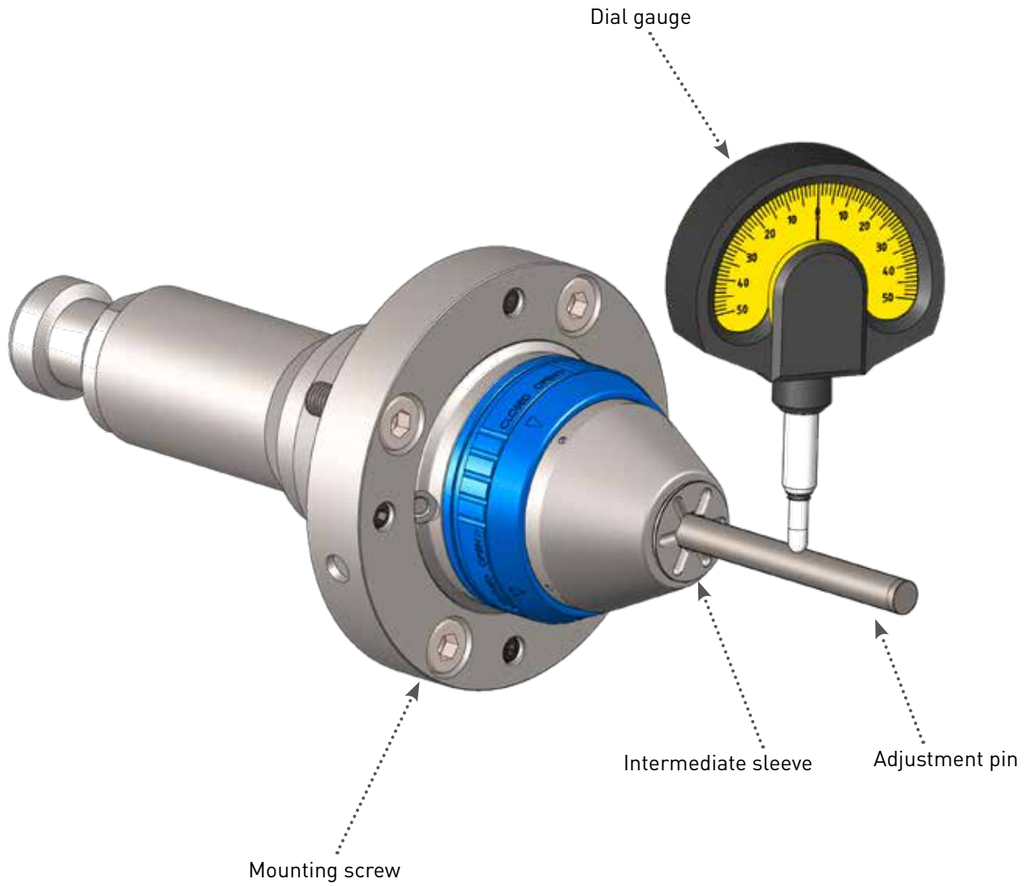

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Step 1: Preparation

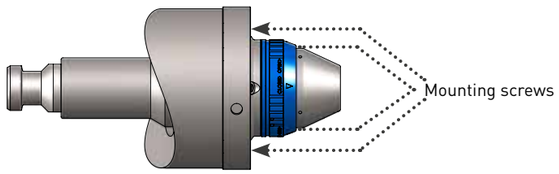
1. Clean all contact surfaces of the chuck.
2. Make sure that the face of the machine interface is level and clean.
3. The ALLIGATOR chuck should be at ambient temperature.

Step 2: Screw in clamping claw

1. Move the machine control to the front.
2. Screw the clamping claw into the machine spindle as far as it will go, then unscrew it by approx. 11/2 turns.
3. Check whether the face contact of the chuck rests on the face contact of the machine interface; if this is not the case, screw in the clamping claw further and repeat the check.

Step 3: Mount chuck

1. 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 4: Preparation for intermediate sleeve

1. Turn the blue ring to OPEN (Fig. 1).

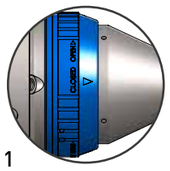


Fig. 1
View blue ring open

Intermediate sleeve must **NEVER** be clamped empty.

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Step 5: Insert intermediate sleeve with radial locking

1. Insert the intermediate sleeve into the clamping system in line with the radial bore of the intermediate sleeve and the marking on the chuck.
2. Now turn the blue ring to CLOSE (Fig. 2). If the blue ring cannot be turned to CLOSE, turn the intermediate sleeve slightly until the radial locking hole is in the correct position so that the blue ring can be closed.
3. The intermediate sleeve should now no longer be able to be pulled out or twisted.
4. Insert the setting pin into the intermediate sleeve and then move the clamping claw backwards with the machine control. The adjusting pin is now clamped.

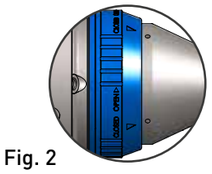
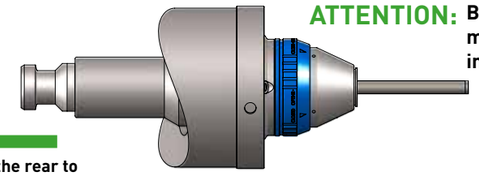


Fig. 2
View blue ring closed



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

ATTENTION: **Move the tensioning claw to the rear to tension the setting pin.**

Step 5.1: Insert intermediate sleeve with bayonet lock

1. Screw in the bayonet insert (Order No.: 250001638) tightly counterclockwise using the assembly key (Order No.: 250001590).
2. Now push the intermediate sleeve into the chuck until you feel a stop.
3. Now turn the intermediate sleeve clockwise until the groove of the intermediate sleeve engages in the bayonet insert.
4. Then turn the intermediate sleeve counterclockwise to the stop. It should now no longer be possible to pull the intermediate sleeve out to the front.
5. Insert the setting pin into the intermediate sleeve and then move the clamping claw backwards with the machine control. The adjusting pin is now clamped.

Note:
Bayonet insert and mounting key are not included in the scope of delivery (see Accessories p.8).

The **blue ring** must **NOT** be closed.

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.

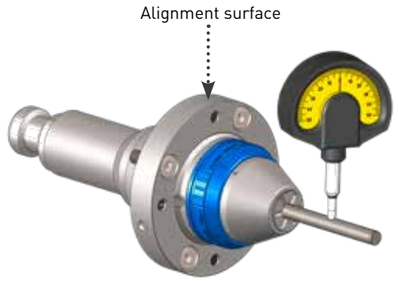
TIPP

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

ATTENTION: Do not knock on the blue locking ring. To ensure proper function, disassemble and clean the chuck once a month.

Step 1: Set

1. Richten Sie das Spannfutter mit einem Ausrichthammer (aus Kunststoff oder Kupfer) durch leichtes Klopfen auf die Ausrichtfläche aus.
2. Nach Erreichen des gewünschten Rundlaufes die Montageschrauben über Kreuz mit 12 Nm anziehen.
3. Geschafft, nun können Sie mit dem Schleifen beginnen.



Change intermediate sleeve

Step 1:

- Move the clamping claw forward to open the chuck. Remove the blank.

Step 2:

- Turn the blue locking ring from CLOSE to OPEN and turn out the intermediate bushing.

Step 3:

- Screw the new intermediate bushing into the chuck as described on page 5.

Step 4:

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

Remove chuck

Step 1:

- Move the clamping claw forward to open the chuck. Remove the blank.

Step 2:

- Turn the blue locking ring from CLOSE to OPEN and turn out the intermediate bushing.

Step 3:

- Loosen the four mounting screws.
- Remove the chuck from the machine and pack it in the original bag.
  Pay attention to corrosion protection.

Note: When you remove the chuck with intermediate bushing, the blank must be in the intermediate bushing.

GDS ALLIGATOR safety instructions

To note:

- The ALLIGATOR 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 ALLIGATOR series (chucks and intermediate sleeves) 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 this manual.
- Faultless function and warranty claims can only be guaranteed with original GDS accessories.

GDS ALLIGATOR 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
- Chuck requires room temperature
- Open everything again, clean and start again step by step

GDS ALLIGATOR Machine availability and accessories

ALLIGATOR can be used in the following tool grinding machines:

SK50	 ALLIGATOR ANCA	 ALLIGATOR ISOG	 ALLIGATOR Reinecker	 ALLIGATOR Saacke with union nut	 ALLIGATOR Saacke with flat contact face	 ALLIGATOR Walter
ANCA	400002002	✗	✗	✗	✗	✗
ISOG	✗	400002005	✗	✗	✗	✗
Reinecker	✗	✗	400002006	✗	✗	✗
Saacke	✗	✗	✗	400002003	400002004	✗
Walter	✗	✗	✗	✗	✗	400002001

Accessories for ALLIGATOR:
Intermediate sleeves with radial locking

Item No.	Name	d
350111903	Intermediate sleeve RS ø20	3
350111904	Intermediate sleeve RS ø20	4
350111905	Intermediate sleeve RS ø20	5
350111906	Intermediate sleeve RS ø20	6
350111907	Intermediate sleeve RS ø20	7
350111908	Intermediate sleeve RS ø20	8
350111909	Intermediate sleeve RS ø20	9
350111910	Intermediate sleeve RS ø20	10
350111911	Intermediate sleeve RS ø20	11
350111912	Intermediate sleeve RS ø20	12
350111913	Intermediate sleeve RS ø20	13
350111914	Intermediate sleeve RS ø20	14
350111915	Intermediate sleeve RS ø20	15
350111916	Intermediate sleeve RS ø20	16

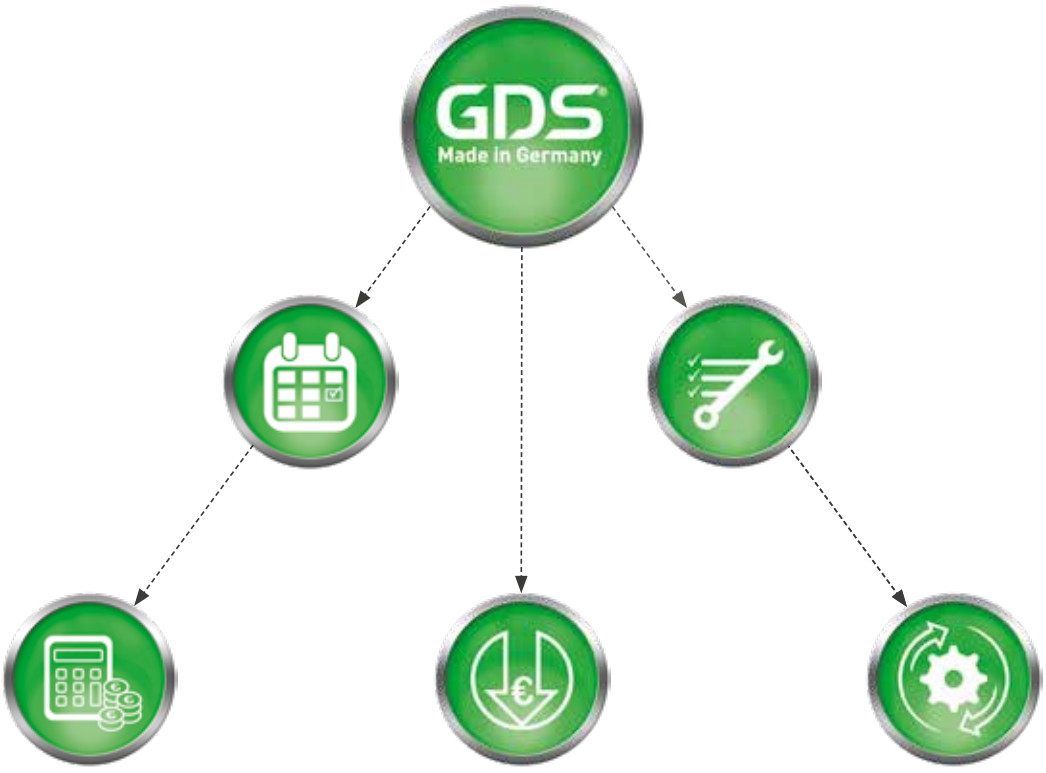
Intermediate sleeves with bayonet locking for automatic bushing exchange

Item No.	Name	d
350112403	Intermediate sleeve BJ ø20 x 64	3
350112404	Intermediate sleeve BJ ø20 x 64	4
350112405	Intermediate sleeve BJ ø20 x 64	5
350112406	Intermediate sleeve BJ ø20 x 64	6
350112407	Intermediate sleeve BJ ø20 x 64	7
350112408	Intermediate sleeve BJ ø20 x 64	8
350112409	Intermediate sleeve BJ ø20 x 64	9
350112410	Intermediate sleeve BJ ø20 x 64	10
350112411	Intermediate sleeve BJ ø20 x 64	11
350112412	Intermediate sleeve BJ ø20 x 64	12
350112413	Intermediate sleeve BJ ø20 x 64	13
350112414	Intermediate sleeve BJ ø20 x 64	14
350112415	Intermediate sleeve BJ ø20 x 64	15
350112416	Intermediate sleeve BJ ø20 x 64	16
350112416	Intermediate sleeve BJ ø20 x 64	17

Accessories for intermediate sleeves with bayonet locking:

Item No.	Name	
250001590	Mounting wrench D20	
250001638	Bayonet insert	

REVOLUTION IN TOOLGRINDING



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