

centric clamp
mechanical, pneumatic, hydraulic

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mechanical



hydraulic

pneumatic



> introduction

Why do we need centric clamps?

- ✓ important basic clamping device for:
 - OG 3 ZPS
 - OG 6 Hydraulic
 - OG 16 Gripper
 - OG 17 Loading unit

- ✓ low space requirement – very high clamping forces
- ✓ suitable with the „Lean-Automation“ (e.g. with the gripper)
- ✓ AMF as a system supplier – „everything from a single source“



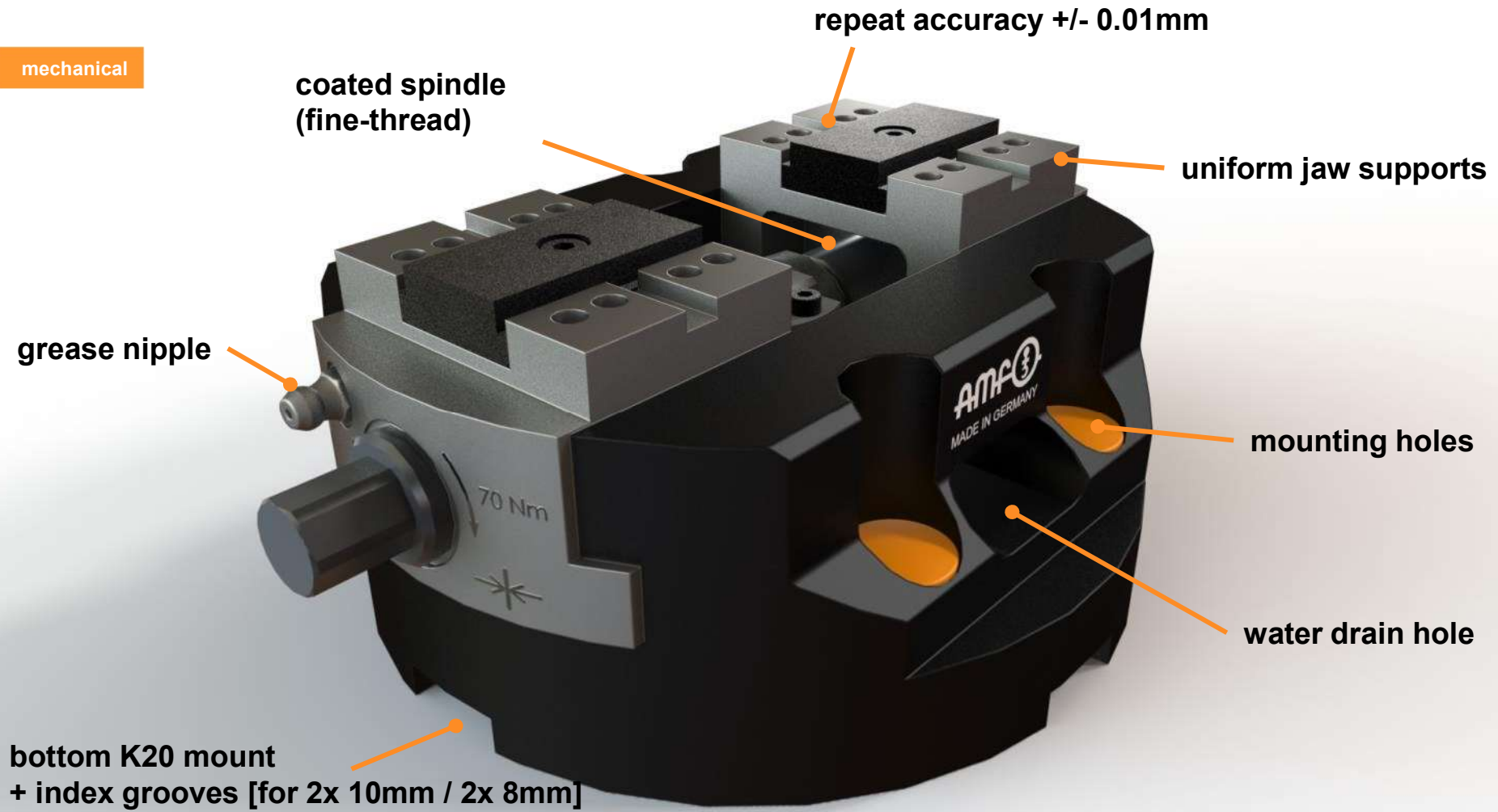


■ > „Lean-Automation“



 **YouTube** <https://www.youtube.com/watch?v=VxorwifbooQ>

mechanical





> mechanical centric clamp

- open & close centric
- functional parts & housing material: made of hardened steel
- very high clamping forces
- coated spindle (fine-thread)
- compatible with our zero point system
- uniform jaw mounting for all sizes
- operatable from both spindle sides
- grease nipple
- water drain holes



Version	UPC 115	UPC 140	UPC 180	UPC 250
max. torque [N]	120	120	120	120
stroke per jaw [mm]	15	25	40	50
claming force [kN]	48	52	60	100
Ø x H [mm]	Ø115x63	Ø140x63	Ø180x63	Ø250x82
repeat accuracy	+/- 0,01 mm	+/- 0,01 mm	+/- 0,01 mm	+/- 0,01 mm
clamping range [mm]	0-100	0-120	0-160	0-250

hydraulic

pneumatic

repeat accuracy +/- 0.01mm

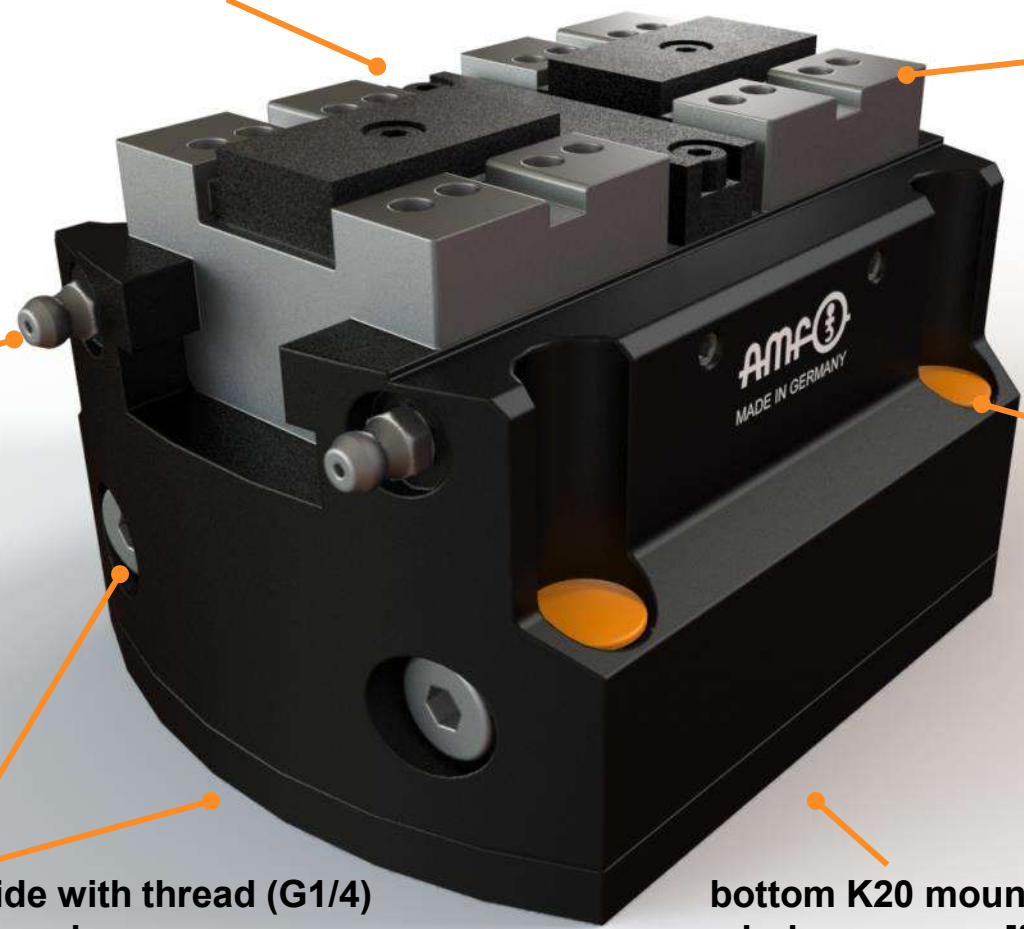
uniform jaw supports

grease nipple

mounting holes

connection on the side with thread (G1/4)
or at the bottom with o-rings

bottom K20 mount (Adapterplate)
+ index grooves [for 2x 10mm / 2x 8mm]





> pneumatic centric clamp

- functional parts & housing material: made of hardened steel
- very high clamping forces
- additional reinforcement by spring package for „external clamping“
- compatible with our zero point system
- connection on the side with thread (G1/4) or at the bottom with o-rings
- low interfering contours for great flexibility on multi-axis machining centres
- uniform jaw mounting for all sizes
- maintenance-optimised design
- double-acting cylinder drive
- additional size „160“ in development



Version	USP 100-Z-PN (centric)	USP 100-Z-PN (centric)	USP 100-F-PN (one fix jaw)
pressure [bar]	12	12	12
stroke per jaw [mm]	2,5	6	2,5
claming force [kN]	15	10	14
L x W x H [mm]	98x98x79	98x98x79	98x98x79
repeat accuracy	+/- 0,01 mm	+/- 0,01 mm	+/- 0,01 mm



> hydraulic centric clamp

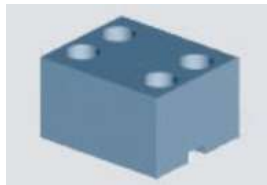
- functional parts & housing material: made of hardened steel
- very high clamping forces
- compatible with our zero point system
- uniform jaw mounting for all sizes
- connection on the side with thread (G1/4) or at the bottom with o-rings
- low interfering contours for great flexibility on multi-axis machining centres
- maintenance-optimised design
- double-acting cylinder drive
- additional size „160“ in development



Version	USP 100-Z-ID (centric)	USP 100-Z-ID (centric)	USP 100-F-ID (one fix jaw)
pressure [bar]	40	40	40
stroke per jaw [mm]	2,5	6	2,5
claming force [kN]	16	12	16
L x W x H [mm]	98x98x79	98x98x79	98x98x79
repeat accuracy	+/- 0,01 mm	+/- 0,01 mm	+/- 0,01 mm

> Accessories: clamping jaws

- „soft“ base jaws
- step jaws with 2 mm gripping insert
- step jaws (reversible) with diamond coating
- hardened pins for cast parts



*example pictures



> Summary

- Market launch: March 2021
- Product group: 11
- Versions: mechanical, pneumatic, hydraulic
- Features: very precise clamping device, small size – high clamping forces
- Target group: metalworking industry, (small) series components
- Workpiece size: small ~100mm / mechanical version up to max 250mm
- Manufacture: Made in Germany
- Sales prices: not yet published, as changes are currently being made

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> Herzlichen Dank

Danke für Ihre Aufmerksamkeit.

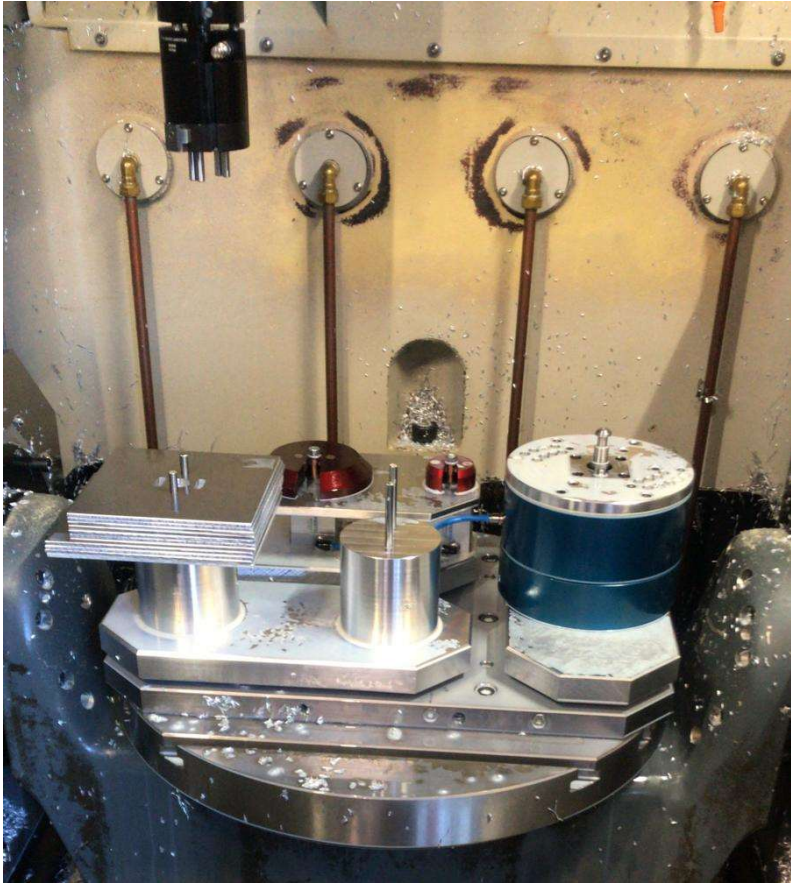
Tack. *Merci beaucoup.* *Thank you.* *¡muchas gracias!*

Grazie. *Dziękujemy.* *Спасибо.* *Tak.* *Bedankt.*

**Für Fragen und Anregungen stehe ich
natürlich gerne zur Verfügung ...**



> the AMF-Gripper



An orange square icon followed by the text '> Q & A' in a bold, orange, sans-serif font.

- Wich Productgroup?
Productgroup 11
- When is the documentation and the product available?
The Product will launch in March 2021.
- What can we say about the jaw lift?
Because of the grinded cross cut at the jaw support we are not talking about the jaw lift instead the jaw support can „lift“ a little bit (because of the manufacturing tolerances). Approx +/- 0,01mm. But be aware: the higher the jaws are the more tolerances you will get!.
- Can we give a recommendation about the max. width and height of the jaws?
We will put that information into the catalogue.
- Is there a „wiper“ element in the mechanical version?
No there isn't. The spindle is coated and we got the water draining holes where the chips will be flushed out. A wiper element is used if the customer has chips as small as dust. It can be done but is very expensive to produce.