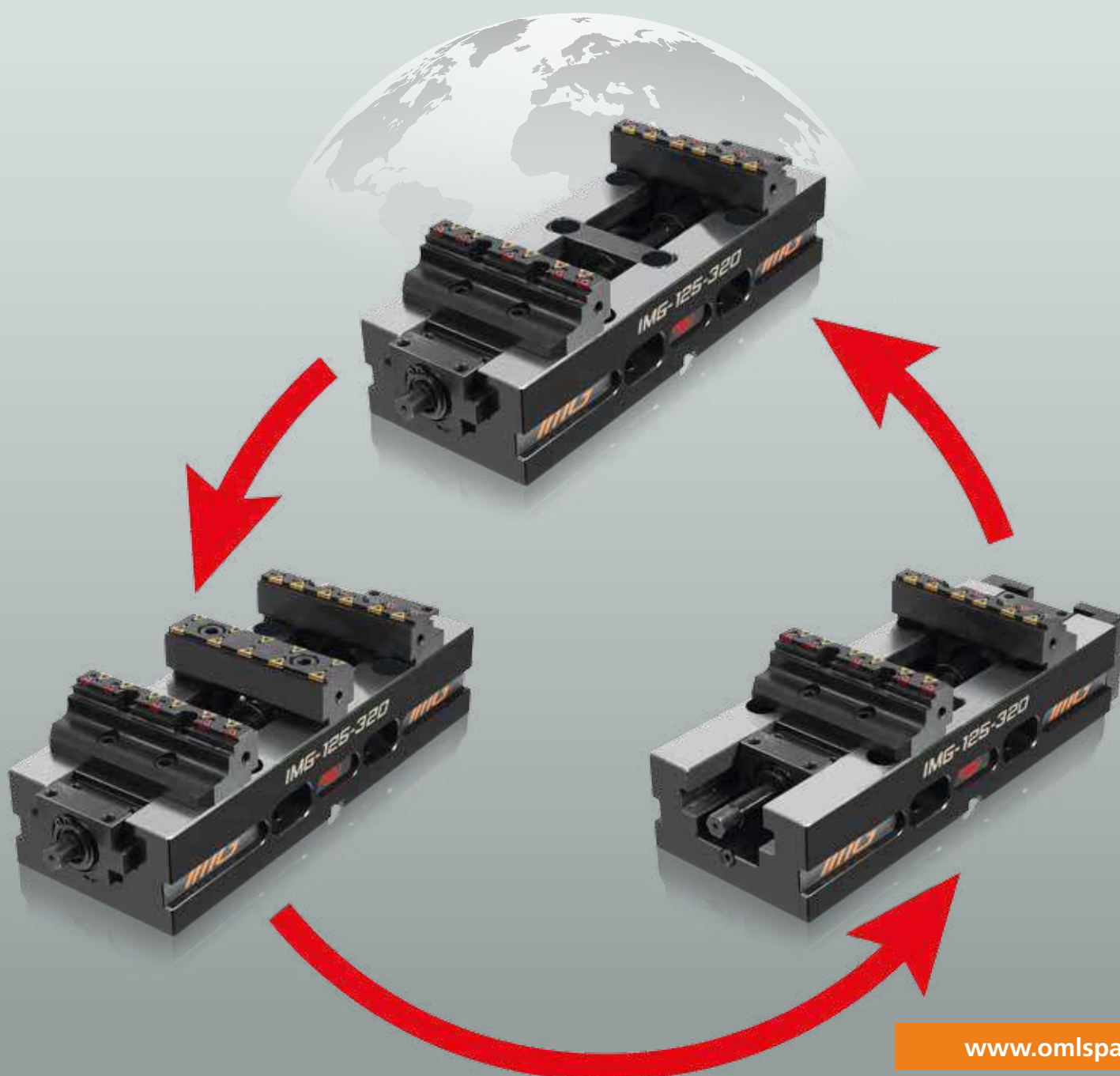




MODULAR CLAMPING SYSTEMS

IMG

IMAGINATION HAS NO LIMIT





Vice

Self-centering | Double Clamping | Fixed

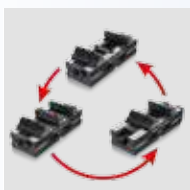


IMAGINATION HAS NO LIMIT



Vice

Self-centering | Double Clamping | Fixed



IMG

Vice

- Self-centering
- Double Clamping
- Fixed

Page

4



IMG

Accessories

Page

18



IMG

Self-centering | Double Clamping | Fixed

- IMG 125 - 220

Page

12



IMG

Accessories

- Riser
- Alu Pyramid
- Triangular tombstone
- Tombstone

Page

20



IMG

Self-centering | Double Clamping | Fixed

- IMG 125 - 320

Page

14



Clamping Pins

Accessories

- For APS 140 and APS 190

Page

26



IMG

Self-centering | Double Clamping | Fixed

- IMG 160 - 270

Page

16



CLAK System

Accessories

Page

28



IMG

Self-centering | Double Clamping | Fixed

- IMG 160 - 420

Page

18



IMG

- Spare parts

Page

30



Self-centering vice | Double

Wide clamping range
Maximum flexibility
For external and internal clamping

SinterGrip jaws:
Reversible jaws for minimum clamping
depth and without pre-machining



SinterGrip jaws



Mechanical clamping
Totally protected with patented telescopic system.
The large power transmission allows high
performance in the manufacturing process



Interface
For Zero Point clamping
systems and mounting
holes as standard



le Clamping | Fixed

- **Totally protected**
• With patented telescopic system

- **Through holes**
• For frontal clamping

- **Ideal**
• For automation and palletizing systems

- **Flexible mounting**
• on machine tool pallet using clamps (optional)

Double clamping jaw
(for double clamping)



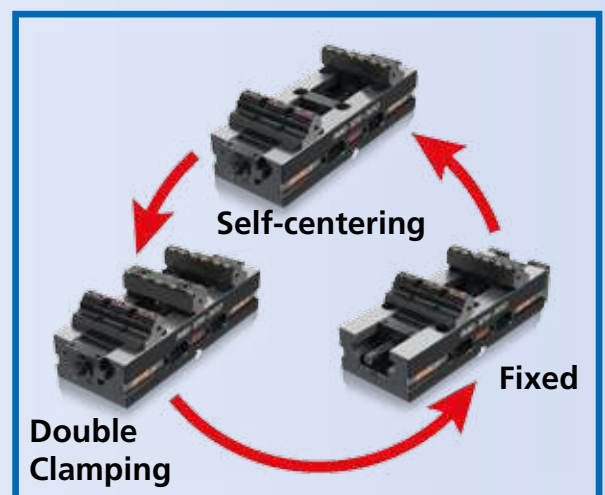
Retainer plate
(for fixed clamping)



- **Very large drainage slots**
• for coolant and chips

- **Treated and precision ground guides**
• for maximum accuracy and repeatability

- **Parallels**
• with quick change Clak System





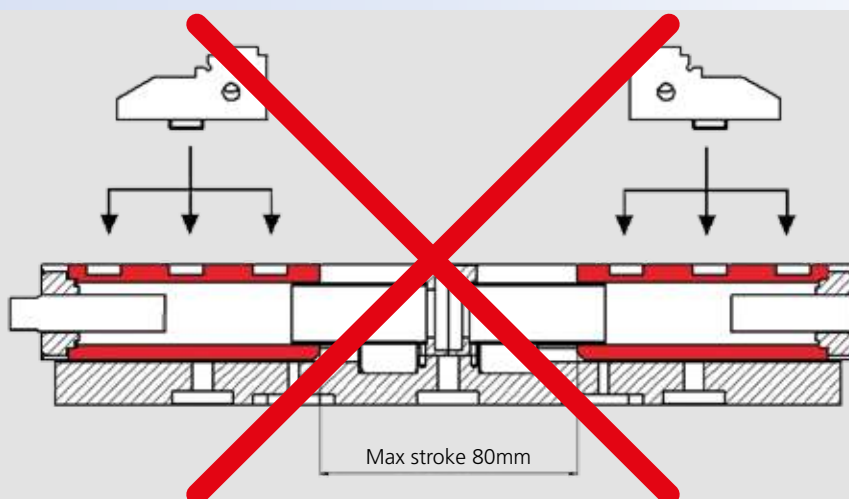
Vice
Self-centering | Double Clamping | Fixed

PATENTED PROTECTED SCREW



IMG vices have a fully protected operating screw with a patented telescopic system.

This innovation makes it possible to avoid having to remove the jaws in order to find the clamping position. In fact, normally, vices with protected screws use the slide-way as a protection.



This type of solution forces continuous displacement of the jaws in the appropriate seat.

IMG, on the contrary, while keeping the screw completely protected, allows the continuous movement of opening and closing of the vice.



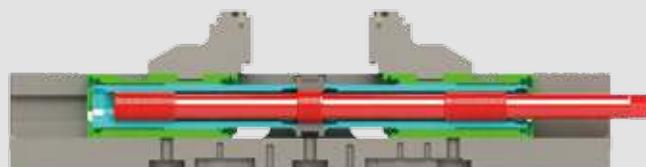
Patented protected screw



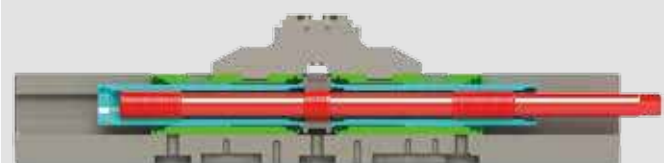
Open



Closing



Close



Opening





Vice
Self-centering | Double Clamping | Fixed

MODULAR

The IMG self-centering vices can be easily transformed into fixed vices or double clamping vices.

Self-centering



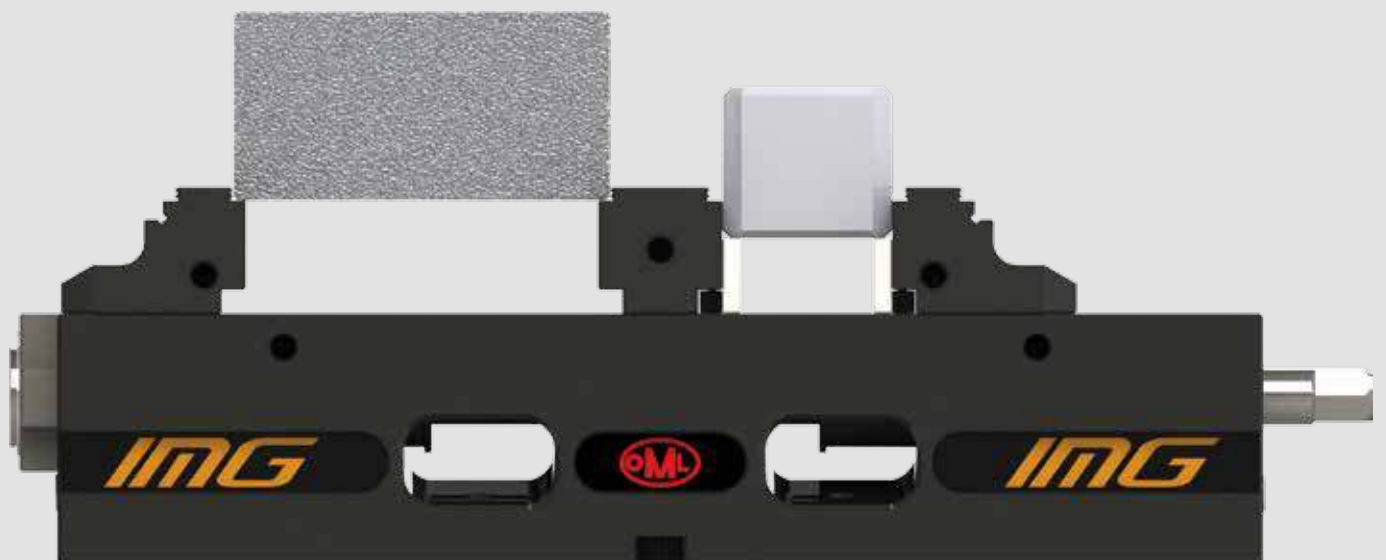
Double Clamping



Fixed

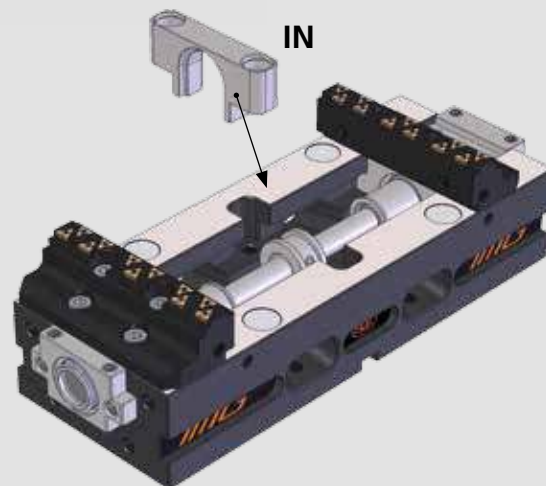


The double clamping vices have a completely compensating mechanism (until zero), therefore it is possible to clamp 2 pieces of different sizes.

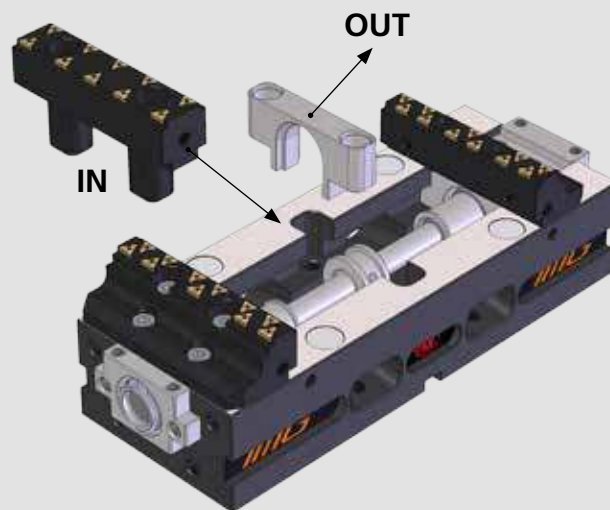




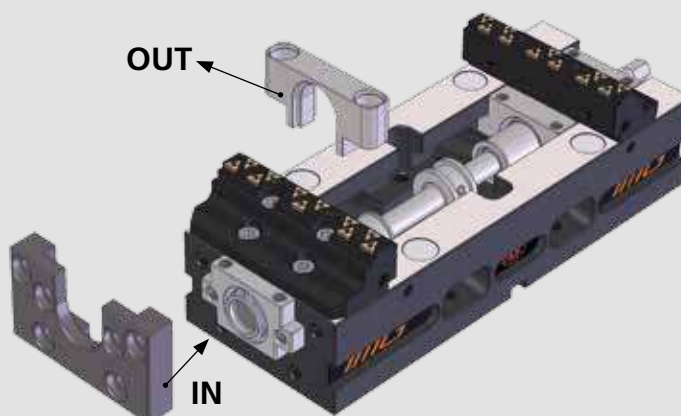
Modular



Self-centering



Double Clamping



Fixed



Vice
Self-centering | Double Clamping | Fixed

HIGH CLAMPING PERFORMANCE

IMG vices clamp up to 55 kN.
The clamping force combined with the patented SinterGrip system guarantees high performance.

1 OP.



2 OP.





SinterGrip

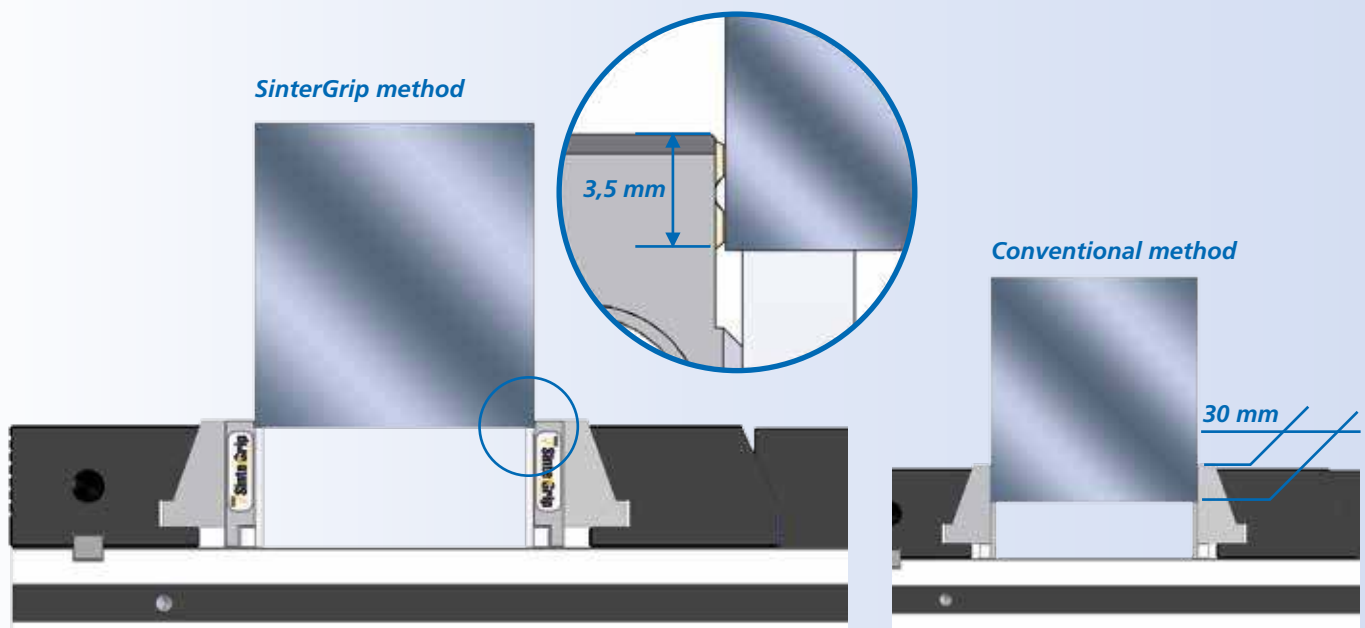
Our new patented product **SinterGrip** is born to satisfy the current need to clamp a workpiece for very few millimeters (with SinterGrip 3,5 mm clamping surface), and this for the following reasons:

- 1) In order to machine the workpiece completely in a single operation (especially for 5 axis machines);
- 2) In order to save money for the raw materials, especially when they have a big impact on the price (aluminum, titanium, etc.)

Indirectly to these reasons, and in order to improve the performance of the machine tool and the tools

**higher cutting speed +
higher feed rate =
bigger volume of metal removed =
less time to machine the workpiece**

the market requires safe clamping, which could at the same time possibly avoid the deformations of the piece itself.



Only 3,5 mm clamping surface, no need of pre-machining the workpiece, clamping stability, higher cutting rate: **SinterGrip** brings only advantages compared to the traditional systems.

On the contrary, traditional systems need, for the clamping of the workpiece, a bigger clamping surface, with the result of waste of raw materials and greater possibility of deformation of the workpiece.

■ Patented protected screw

Applications / Customer Benefits

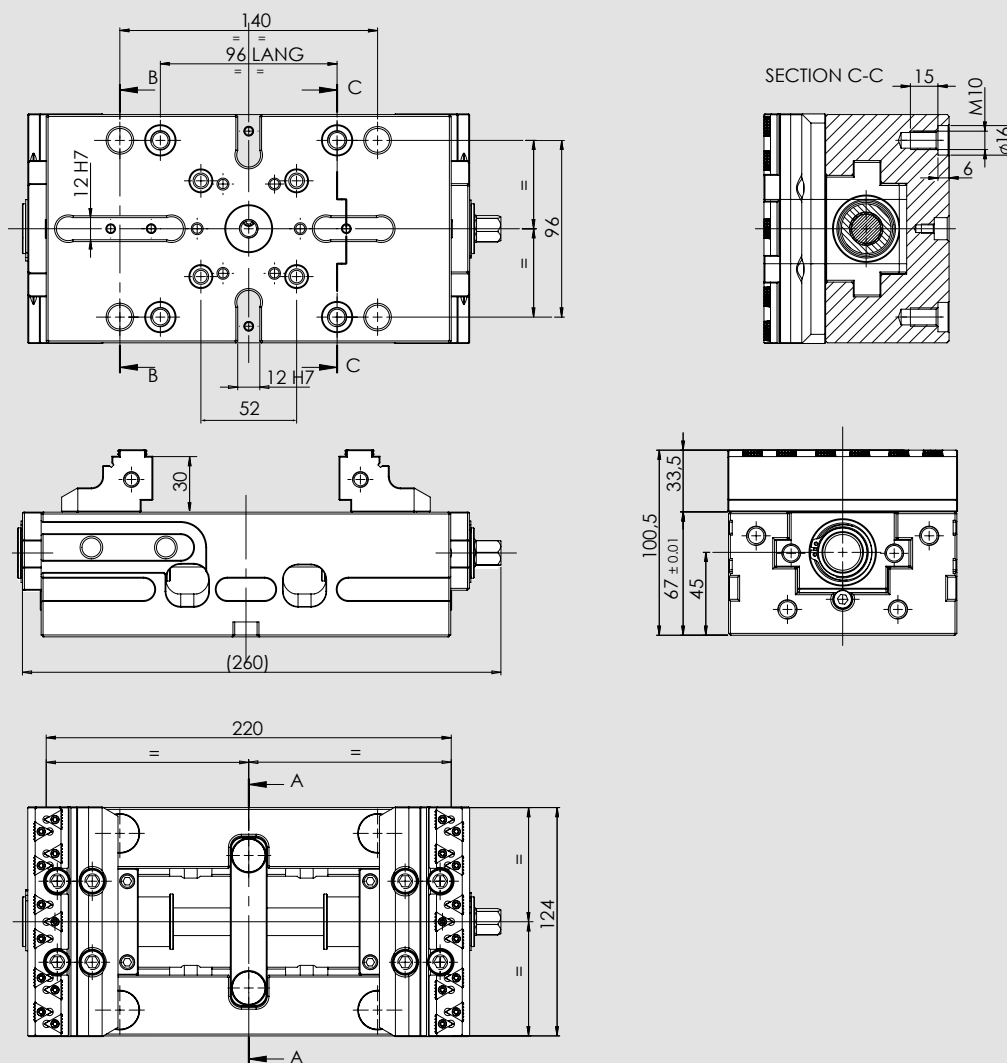
- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

- Self-centering clamping
- Clamping force up to 40 kN (80 Nm)
- Jaw width 125 mm
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

Standard equipment

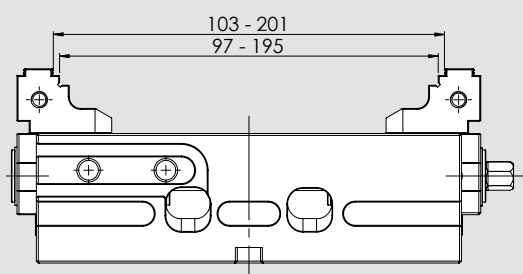
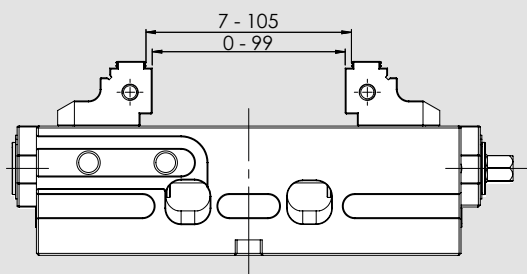
Wrench, jaws, Sintergrip inserts.



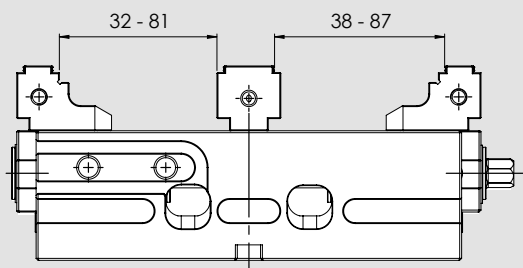
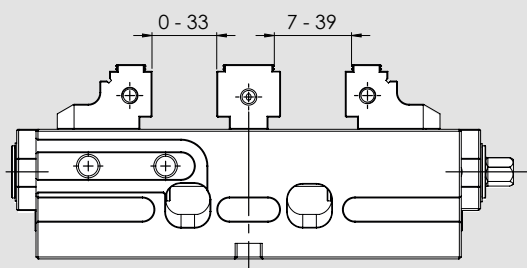
| Type | Id. No. | Weight |
|---|----------|--------|
| IMG 125 - 220 with SinterGrip jaws STD | 77583511 | 15 Kg |
| IMG 125 - 220 with SinterGrip jaws ALU | 77583512 | 15 Kg |
| IMG 125 - 220 with SinterGrip jaws HRC | 77583513 | 15 Kg |

■ Patented protected screw

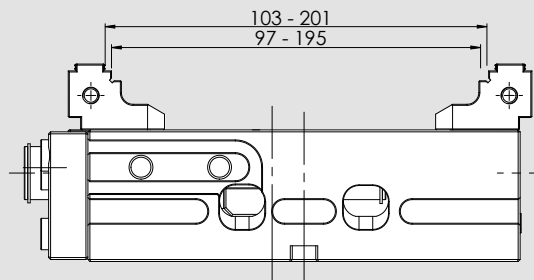
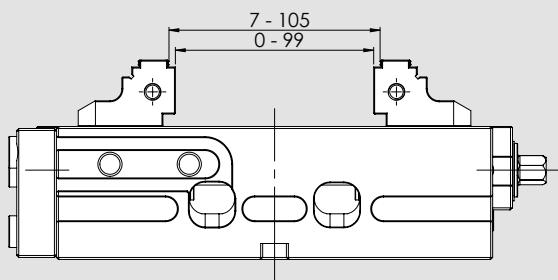
Self-centering



Double Clamping



Fixed



■ Patented protected screw

Applications / Customer Benefits

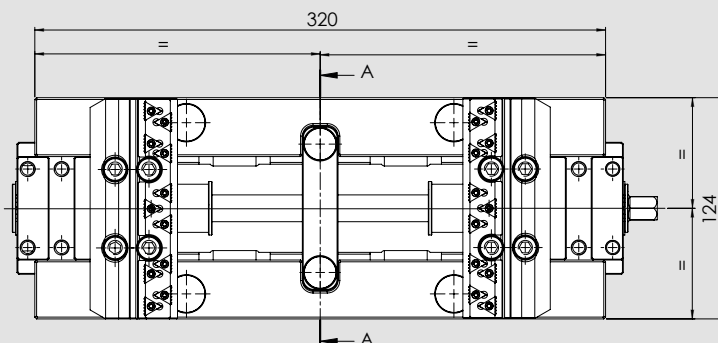
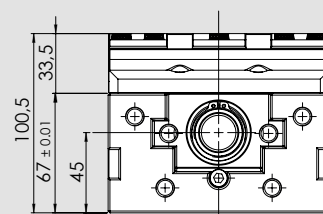
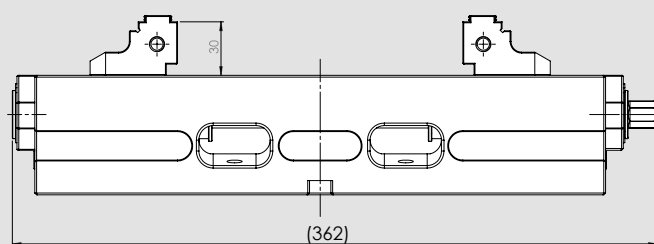
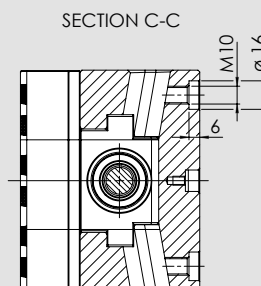
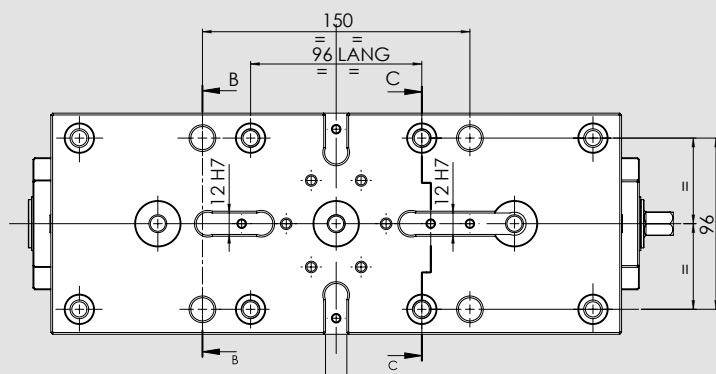
- Highly precise self-centering clamping with maximum repeatability
- Totally protected
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- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

- Self-centering clamping
- Clamping force up to 40 kN (80 Nm)
- Jaw width 125 mm
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

Standard equipment

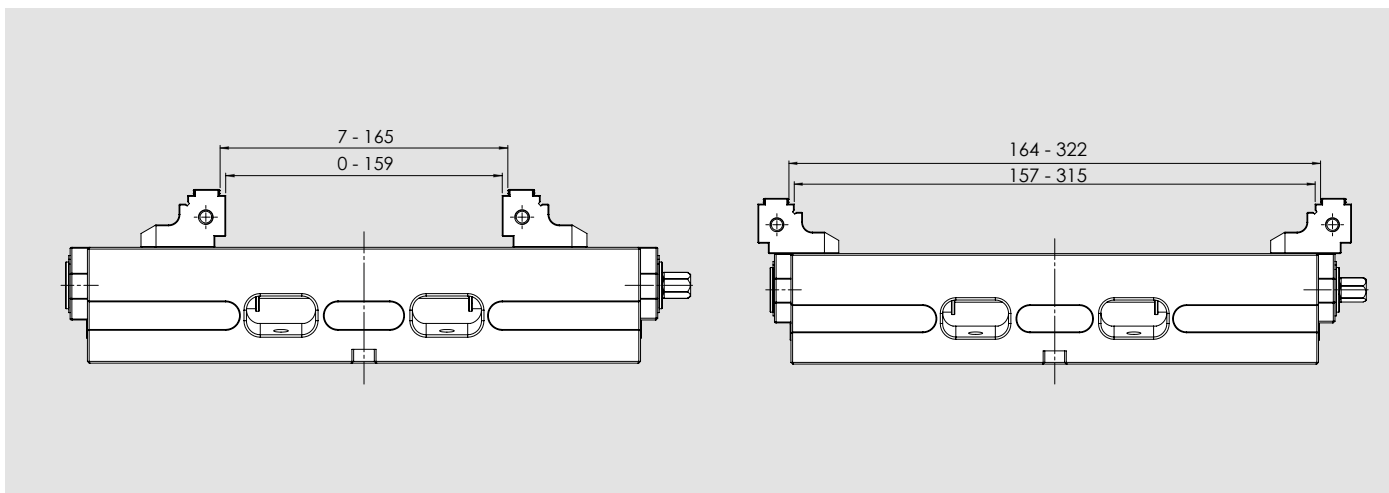
Wrench, jaws, Sintergrip inserts.



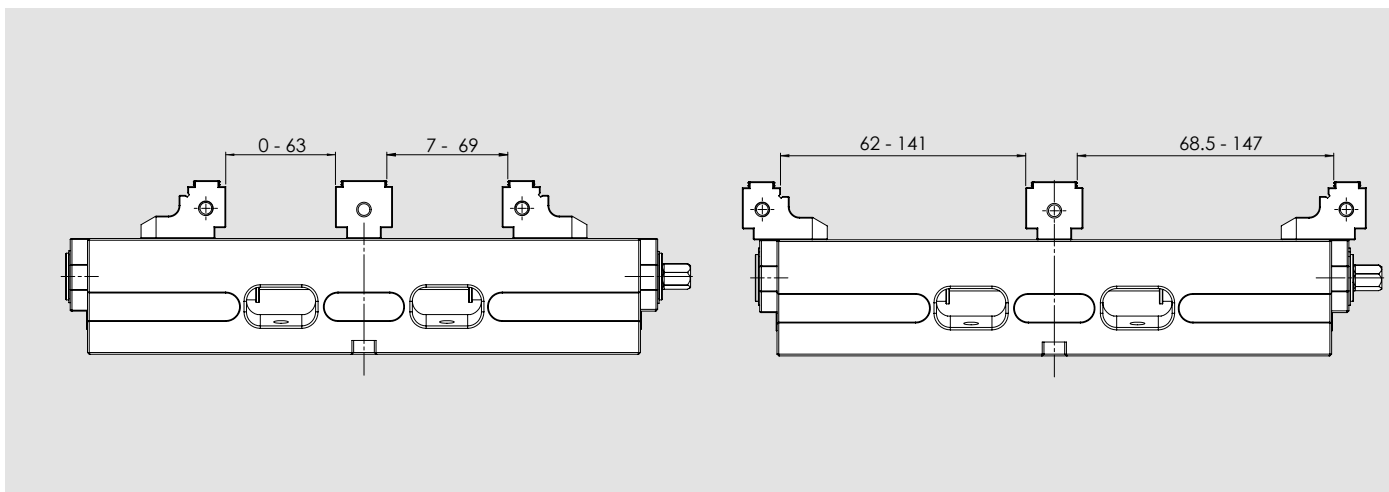
| Type | Id. No. | Weight |
|---|----------|--------|
| IMG 125 - 320 with SinterGrip jaws STD | 77583521 | 20 Kg |
| IMG 125 - 320 with SinterGrip jaws ALU | 77583522 | 20 Kg |
| IMG 125 - 320 with SinterGrip jaws HRC | 77583523 | 20 Kg |

■ Patented protected screw

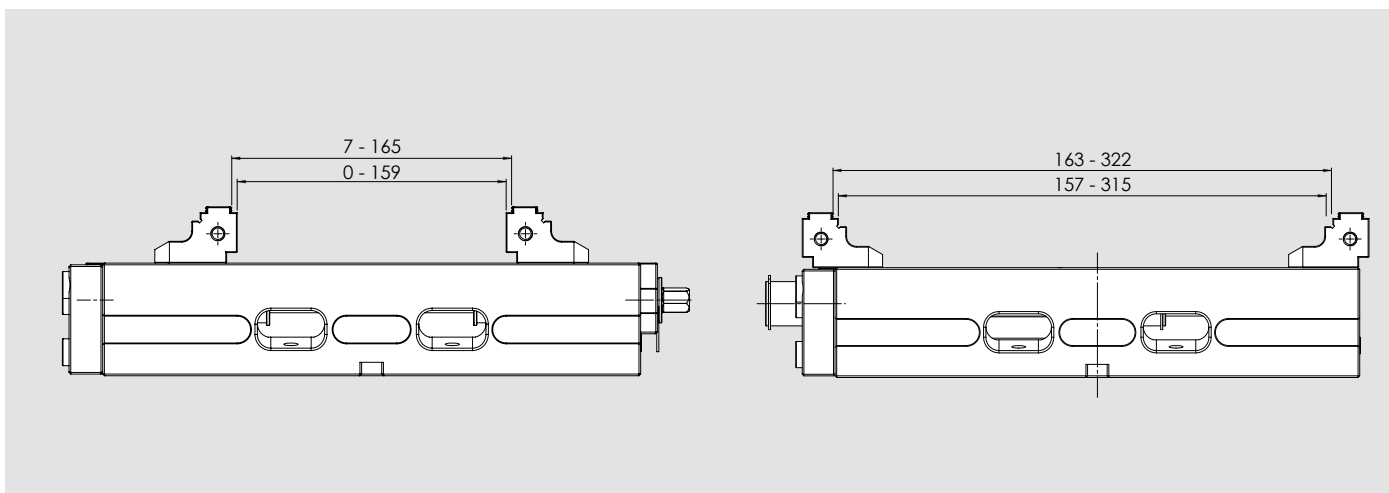
Self-centering



Double Clamping



Fixed



■ Patented protected screw

Applications / Customer Benefits

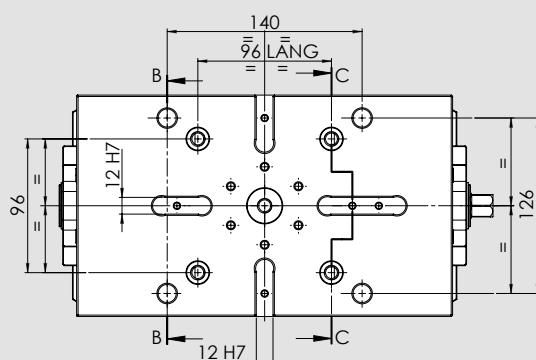
- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

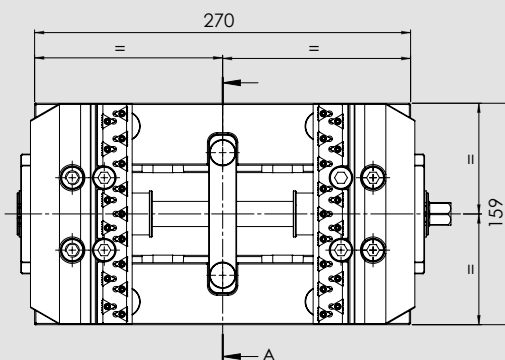
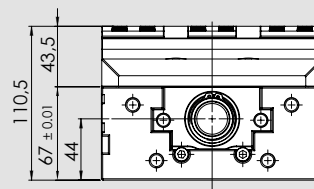
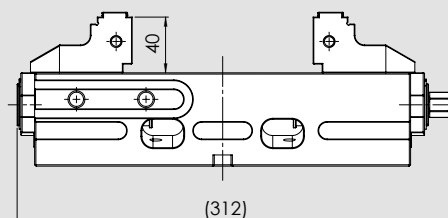
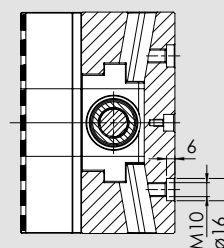
- Self-centering clamping
- Clamping force up to 55 kN (120 Nm)
- Jaw width 160 mm
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

Standard equipment

Wrench, jaws, Sintergrip inserts.



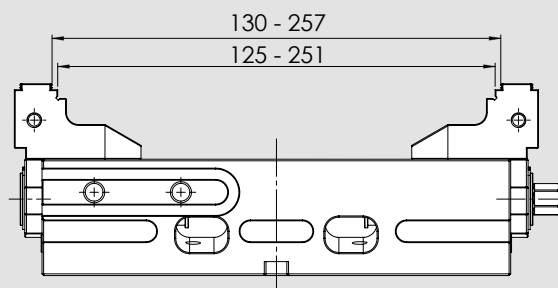
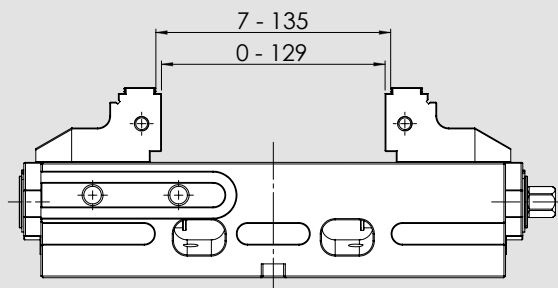
SECTION C-C



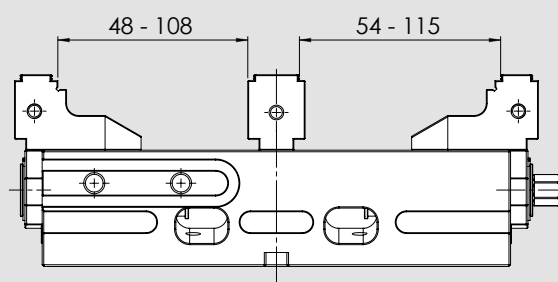
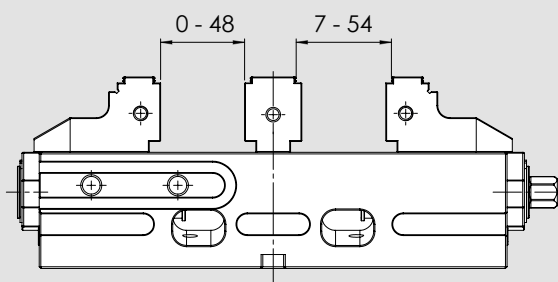
| Type | Id. No. | Weight |
|---|----------|--------|
| IMG 160 - 270 with SinterGrip jaws STD | 77583611 | 22 Kg |
| IMG 160 - 270 with SinterGrip jaws ALU | 77583612 | 22 Kg |
| IMG 160 - 270 with SinterGrip jaws HRC | 77583613 | 22 Kg |

■ Patented protected screw

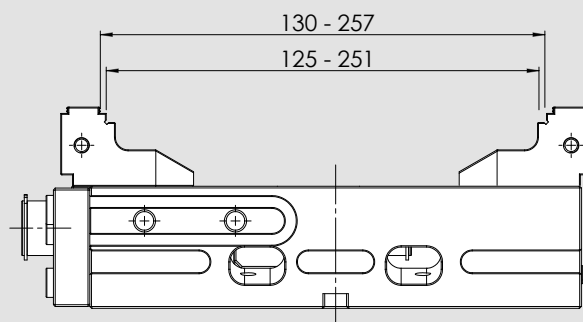
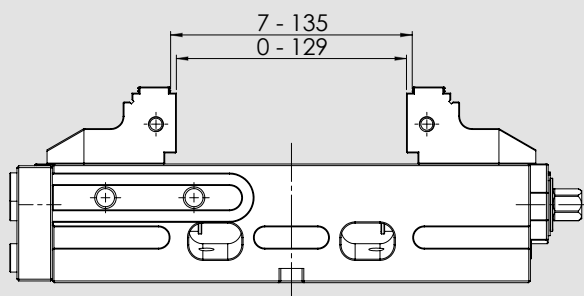
Self-centering



Double Clamping



Fixed



■ Patented protected screw



Applications / Customer Benefits

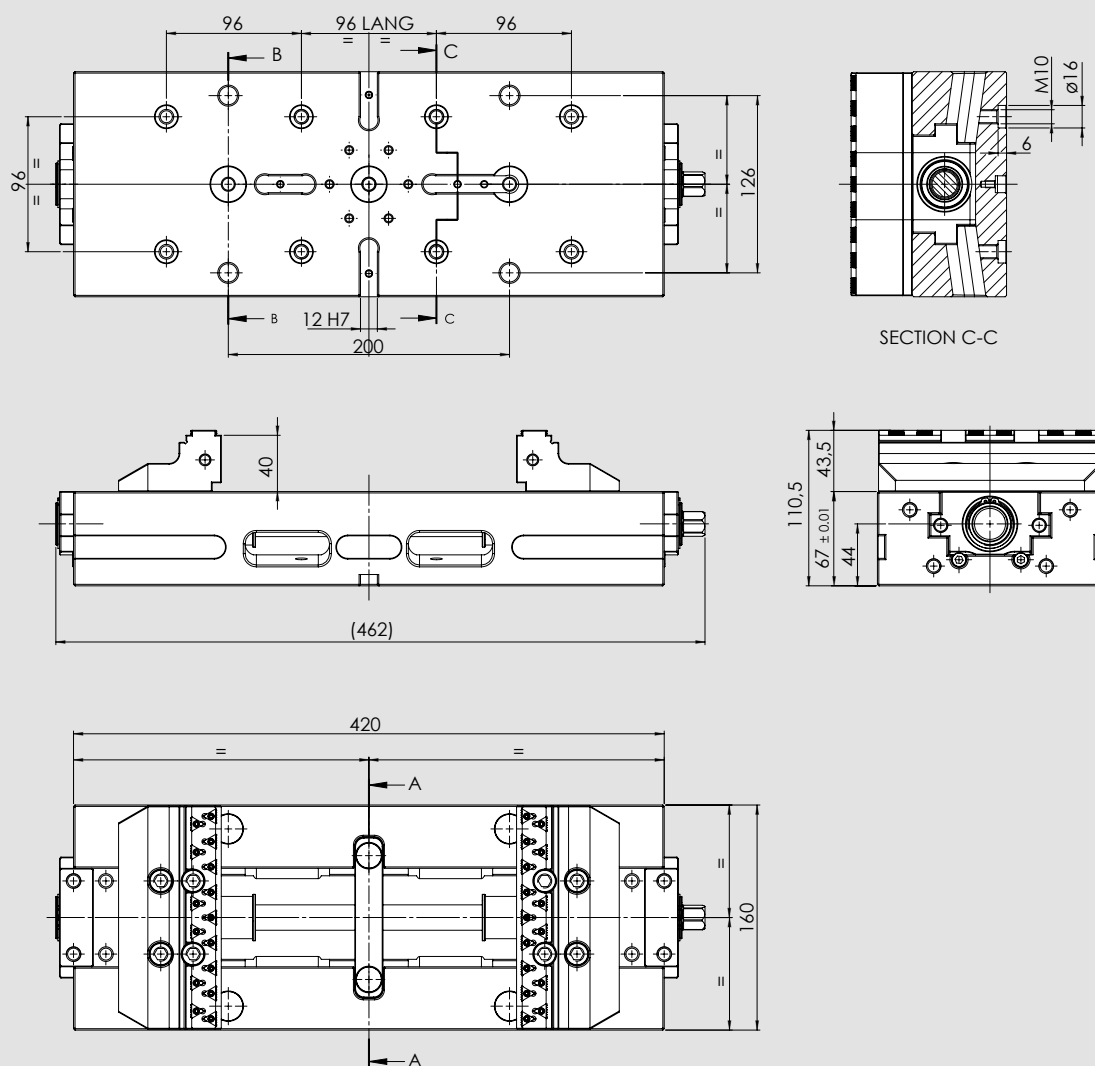
- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

Technical features

- Self-centering clamping
- Clamping force up to 55 kN (120 Nm)
- Jaw width 160 mm
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

Standard equipment

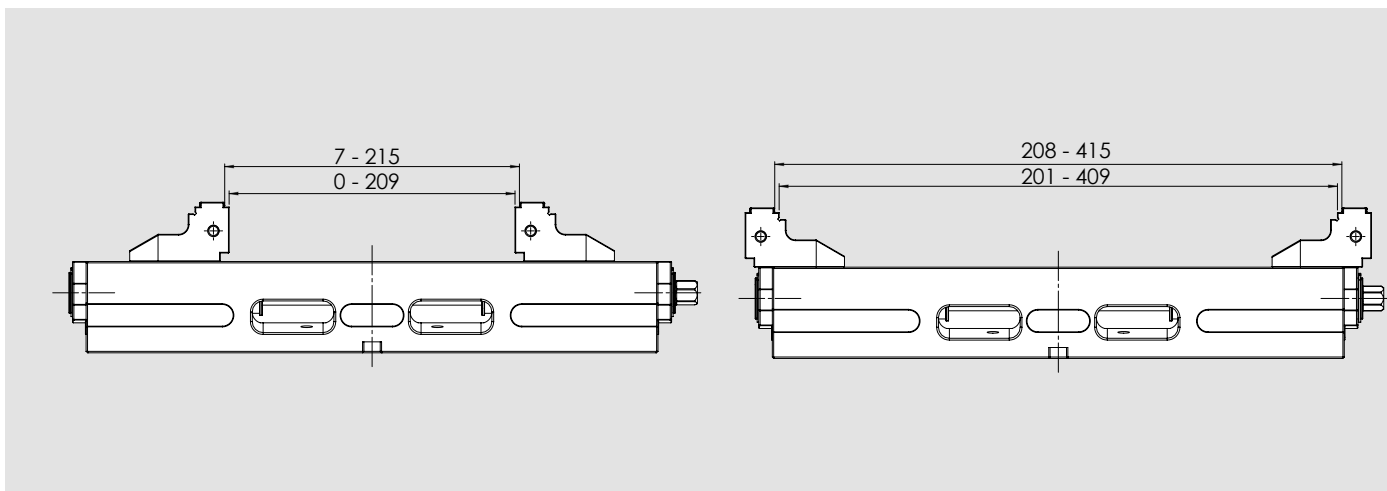
Wrench, jaws, Sintergrip inserts.



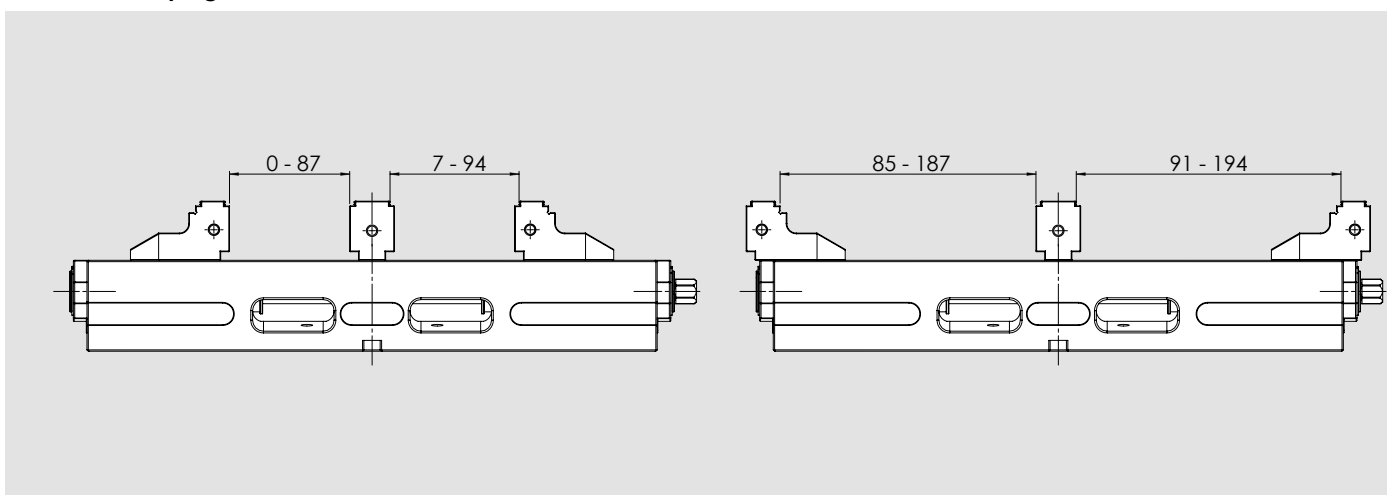
| Type | Id. No. | Weight |
|---|----------|--------|
| IMG 160 - 420 with SinterGrip jaws STD | 77583621 | 32 Kg |
| IMG 160 - 420 with SinterGrip jaws ALU | 77583622 | 32 Kg |
| IMG 160 - 420 with SinterGrip jaws HRC | 77583623 | 32 Kg |

■ Patented protected screw

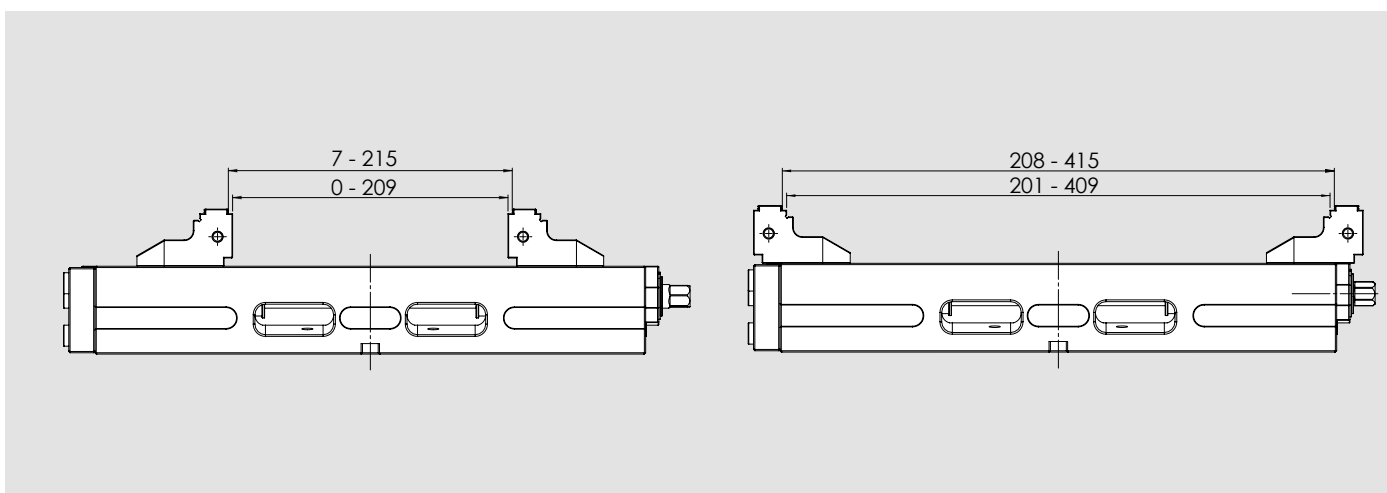
Self-centering



Double Clamping



Fixed



Double clamping jaw - SinterGrip not included, to be specified at the moment of the order



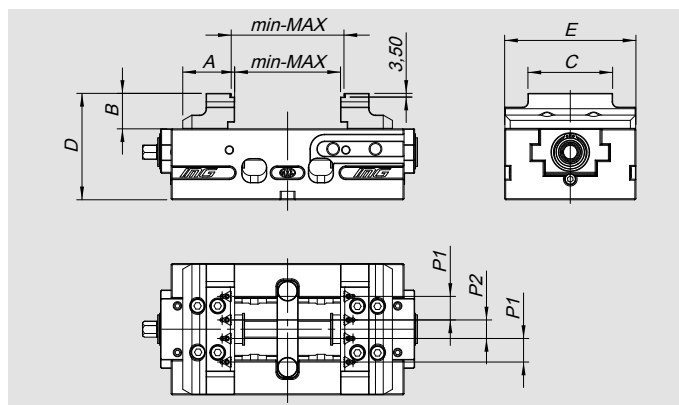
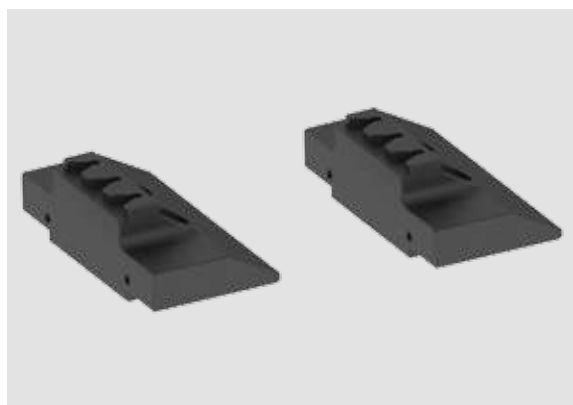
| Type | Id. No. |
|---------|----------|
| IMG 125 | 58351719 |
| IMG 160 | 58361719 |

Retainer plate



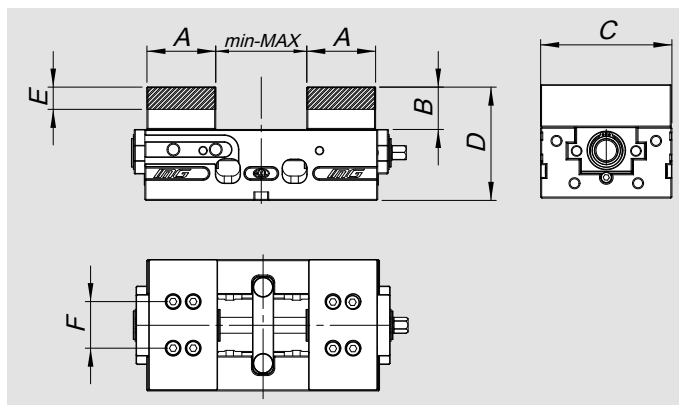
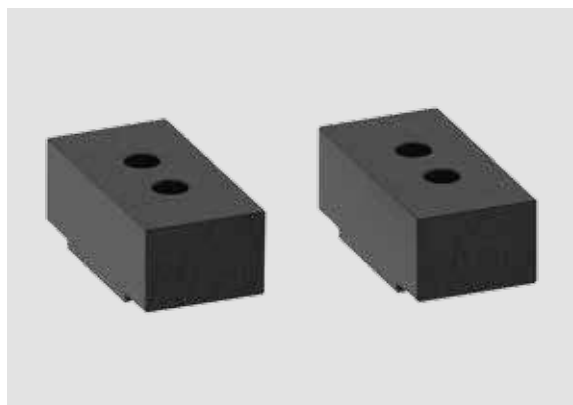
| Type | Id. No. |
|---------|----------|
| IMG 125 | 58351019 |
| IMG 160 | 58361019 |

Pair of reduced jaws - SinterGrip not included, to be specified at the moment of the order



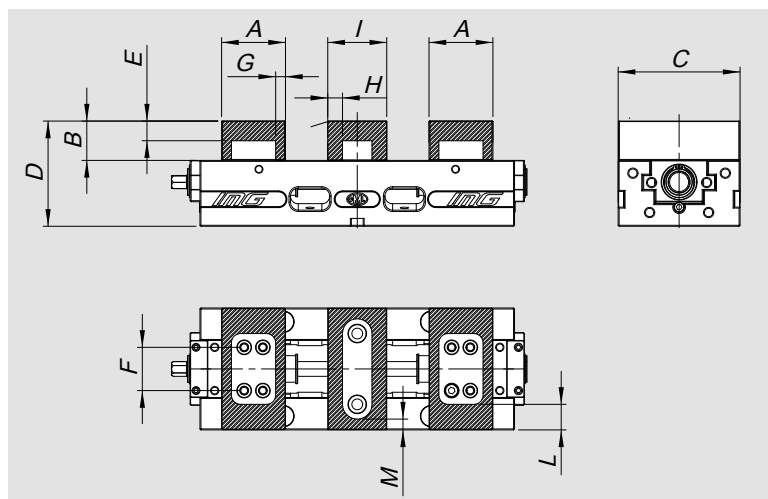
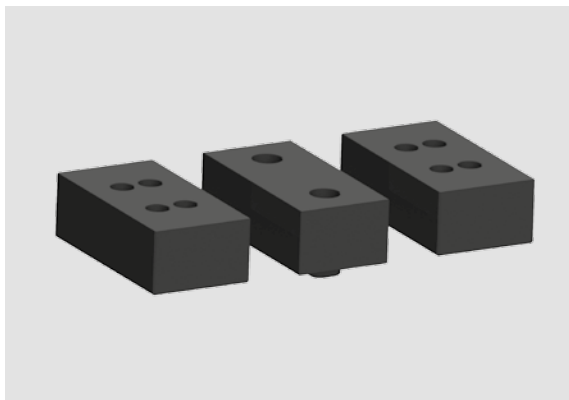
| Type | Id. No. | A | B | C | E | D | p1 | p2 | min. | max. |
|-------------|----------|----|------|----|-------|-------|-------|------|------|---------|
| IMG 125x220 | 58351519 | 49 | 33.5 | 80 | 100.5 | 123.5 | 22.25 | 17.5 | 0-7 | 99-105 |
| IMG 125x320 | | 49 | 33.5 | 80 | 100.5 | 123.5 | 22.25 | 17.5 | 0-7 | 159-165 |
| IMG 160x270 | 58361519 | 73 | 43.5 | 90 | 110.5 | 158.5 | 18 | 18 | 0-7 | 129-135 |
| IMG 160x420 | | 73 | 43.5 | 90 | 110.5 | 158.5 | 18 | 18 | 0-7 | 209-215 |

Pair of soft jaws (soft steel – ALU)



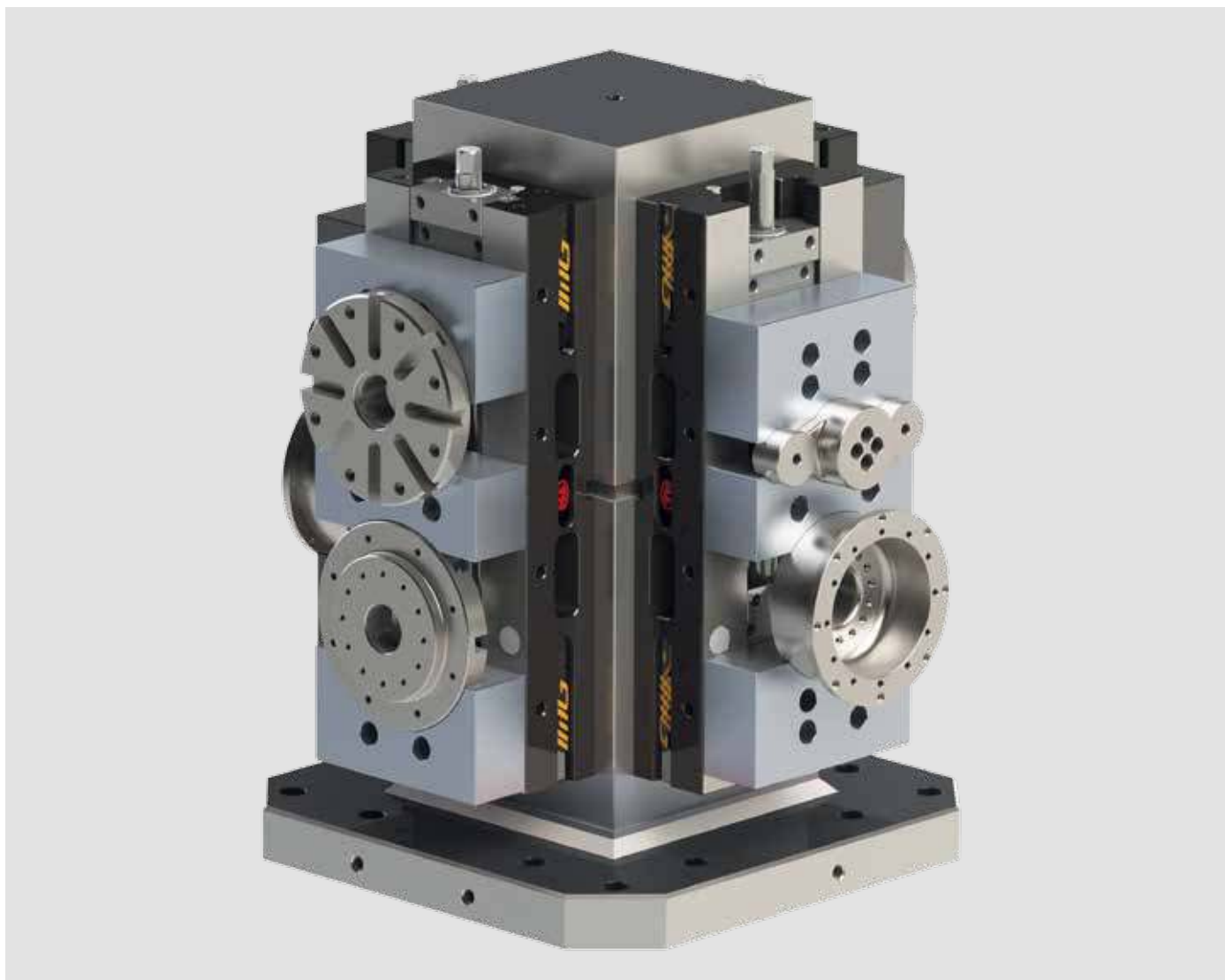
| Type | | Id. No. | A | B | C | D | E | F | min. | max. |
|---------|-----|----------|----|----|-------|-----|----|----|------|---------------------------------------|
| IMG 125 | ALU | 58351619 | 65 | 40 | 123,5 | 107 | 20 | 44 | 0 | 86 (125x220) / 186 (125x320) |
| IMG 125 | Fe | 58351629 | 65 | 40 | 123,5 | 107 | 20 | 44 | 0 | 86 (125x220) / 186 (125x320) |
| IMG 160 | ALU | 58361619 | 85 | 50 | 158.5 | 117 | 25 | 52 | 0 | 141-147 (160x270) / 221-227 (160x420) |
| IMG 160 | Fe | 58361629 | 85 | 50 | 158.5 | 117 | 25 | 52 | 0 | 141-147 (160x270) / 221-227 (160x420) |

Set of soft jaws for double clamping



| Type | | Id. No. | A | B | C | D | E | F | G | H | I | L | M |
|---------|-----|----------|----|----|-------|-----|----|----|------|----|----|----|----|
| IMG 125 | ALU | 58359519 | 65 | 40 | 123,5 | 107 | 20 | 44 | 10 | 15 | 60 | 25 | 11 |
| IMG 125 | Fe | 58359619 | 65 | 40 | 123,5 | 107 | 20 | 44 | 10 | 15 | 60 | 25 | 11 |
| IMG 160 | ALU | 58369519 | 85 | 50 | 158.5 | 117 | 25 | 52 | 16.5 | 15 | 60 | 35 | 28 |
| IMG 160 | Fe | 58369619 | 85 | 50 | 158.5 | 117 | 25 | 52 | 16.5 | 15 | 60 | 35 | 28 |

Application example





Applications / Customer Benefits

- Ideal for 5 axis machines
- Compact design
- Possibility to be mounted directly on machine tools with T slots
- Possibility to be mounted directly on single plate or DUO APS (pitch 200)

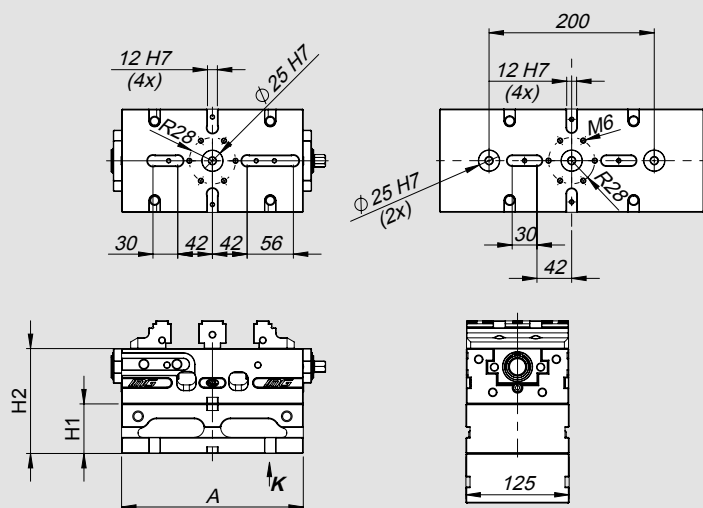
Technical features

- Material: steel

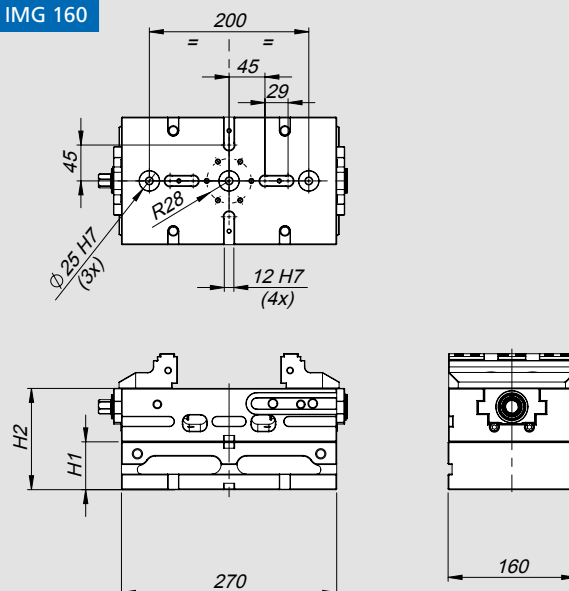
Standard equipment

On request: Positioning keys for IMG / APS pins / Positioning keys for machine tool

For IMG 125



For IMG 160



| Type | Id. No. | H1 | H2 | A | Weight |
|-------------|----------|-----|-----|-----|--------|
| For IMG 125 | 58352018 | 60 | 127 | 220 | 10 Kg |
| For IMG 125 | 58352028 | 100 | 147 | 220 | 15 Kg |
| For IMG 125 | 58352019 | 60 | 127 | 320 | 15 Kg |
| For IMG 125 | 58352029 | 100 | 147 | 320 | 21 Kg |
| For IMG 160 | 58362018 | 60 | 127 | - | 17 Kg |
| For IMG 160 | 58362028 | 100 | 167 | - | 25 Kg |

Application example





Applications / Customer Benefits

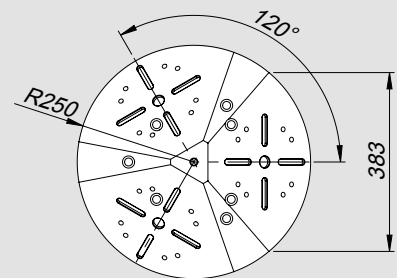
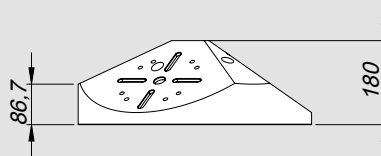
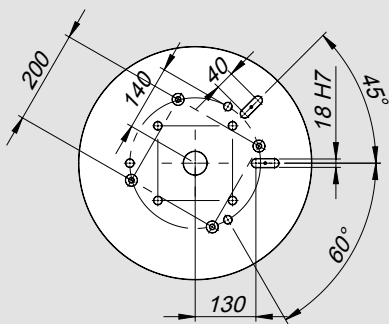
- Ideal for 5 axis machines
- Compact design
- Possibility to be mounted directly on machine tools with radial slots at 45 / 60 degrees
- Possibility to be mounted directly on single plate or DUO APS (pitch 200)

Technical features

- Material: ALU

Standard equipment

On request: Positioning keys for IMG / APS pins / Positioning keys for machine tool



| Type | Id. No. | Weight |
|-----------------------------|----------|--------|
| Alu Pyramid for IMG 125-220 | 58353210 | 55 Kg |

Application example





Applications / Customer Benefits

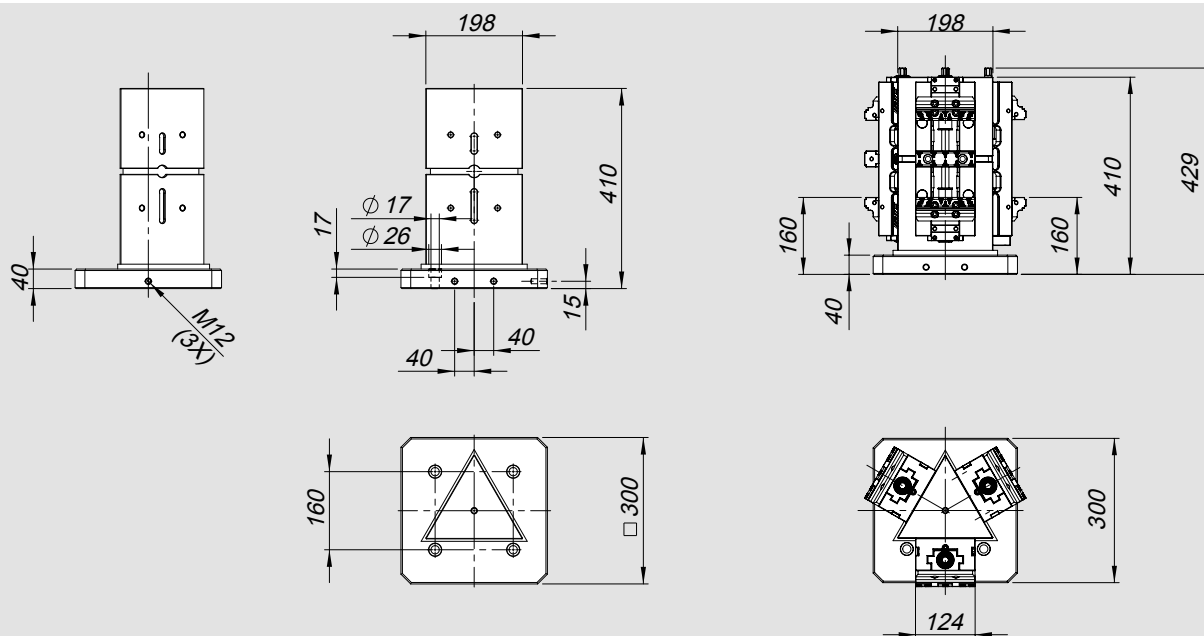
- Ideal for 5 axis machines
- Ideal for horizontal machines
- Compact design
- Wide clamping range

Technical features

- Material: steel

Standard equipment

Steel tombstone



| Type | Id. No. | Weight |
|--------------------------------------|----------|--------|
| Triangular tombstone for IMG 125-320 | 58353010 | 74 Kg |

Application example





Applications / Customer Benefits

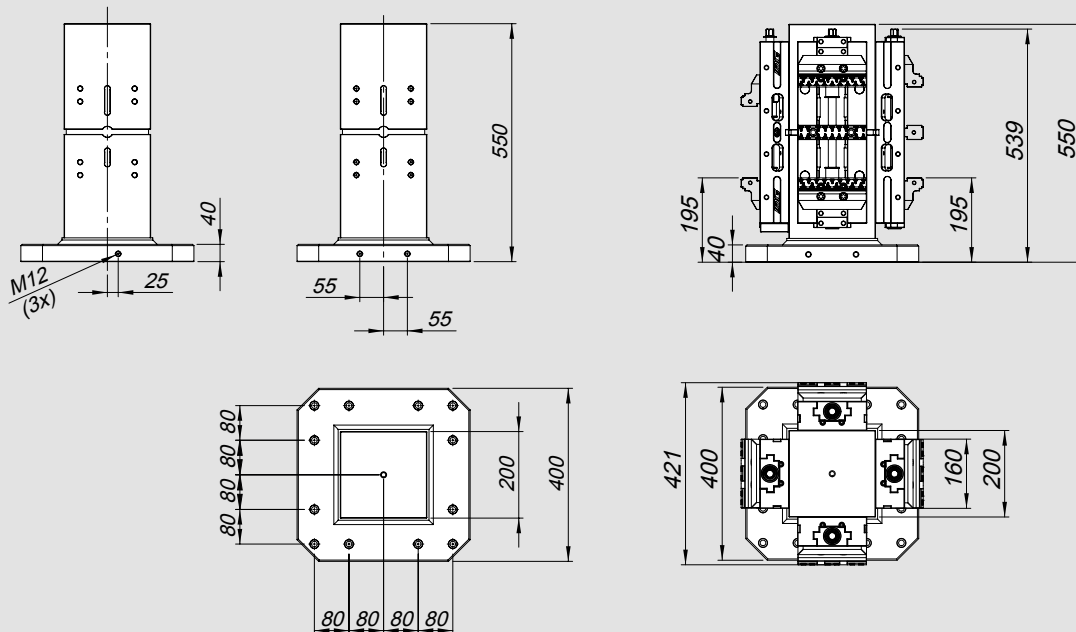
- Ideal for horizontal machines
- Compact design
- Wide clamping range

Technical features

- Material: steel

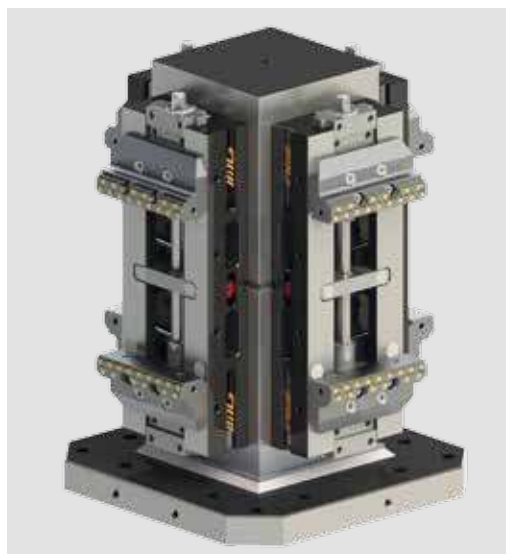
Standard equipment

Steel tombstone



| Type | Id. No. | Weight |
|---------------------------|----------|--------|
| Tombstone for IMG 160-420 | 58363120 | 140 Kg |

Application example



Clamping pins APS 140



Typo A
centering pin



Typo B
reference pin

Application/customer benefits

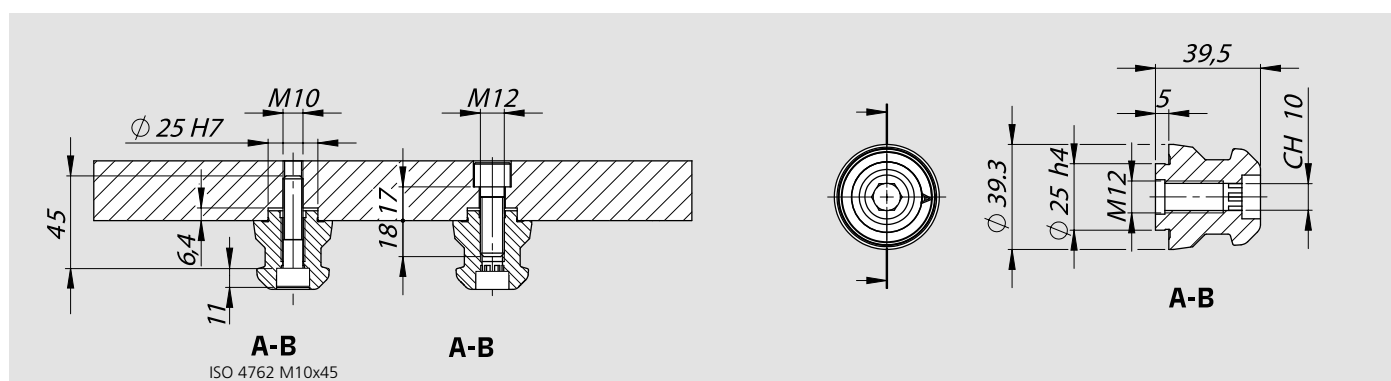
- Fixation and positioning on the clamping systems APS 140
- Wear-resistant due to an extra hard protective coating
- Large entry radii of the clamping pins for easy and safe loading

Technical features

- Centering pin Type A (Standard)
- Sword pin Type B (Positioning pin)

Standard equipment

Clamping pin with mounting screw M10x45



| | Thread | Type A | Type B | Weight |
|-----------------------|--------|----------|----------|--------|
| Clamping pins APS 140 | M12 | 46162355 | 46162356 | 0.3 Kg |

Clamping pins APS 190



Application/customer benefits

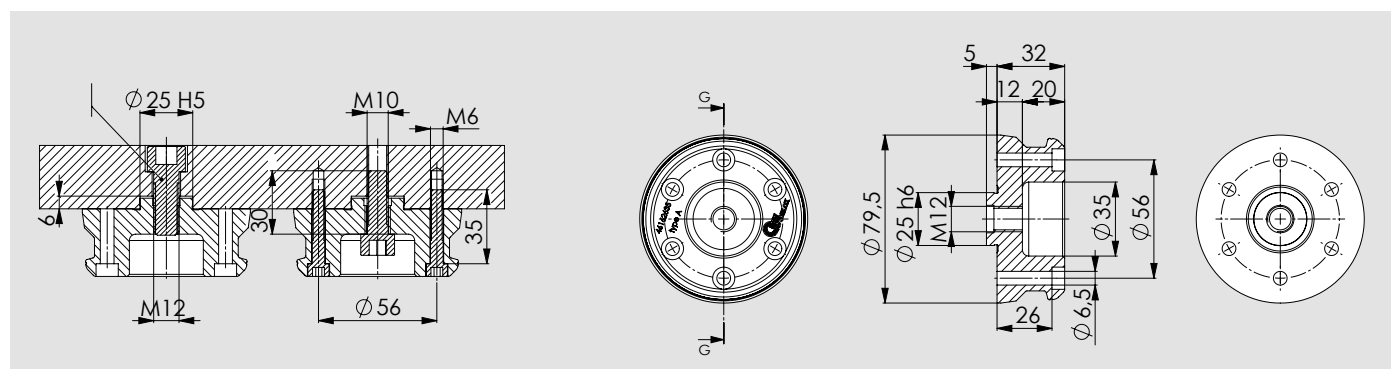
- Fixation and positioning on the clamping systems APS 190
- Large entry radii of the clamping pins for easy and safe loading

Technical features

- Centering pin Type A (Standard)

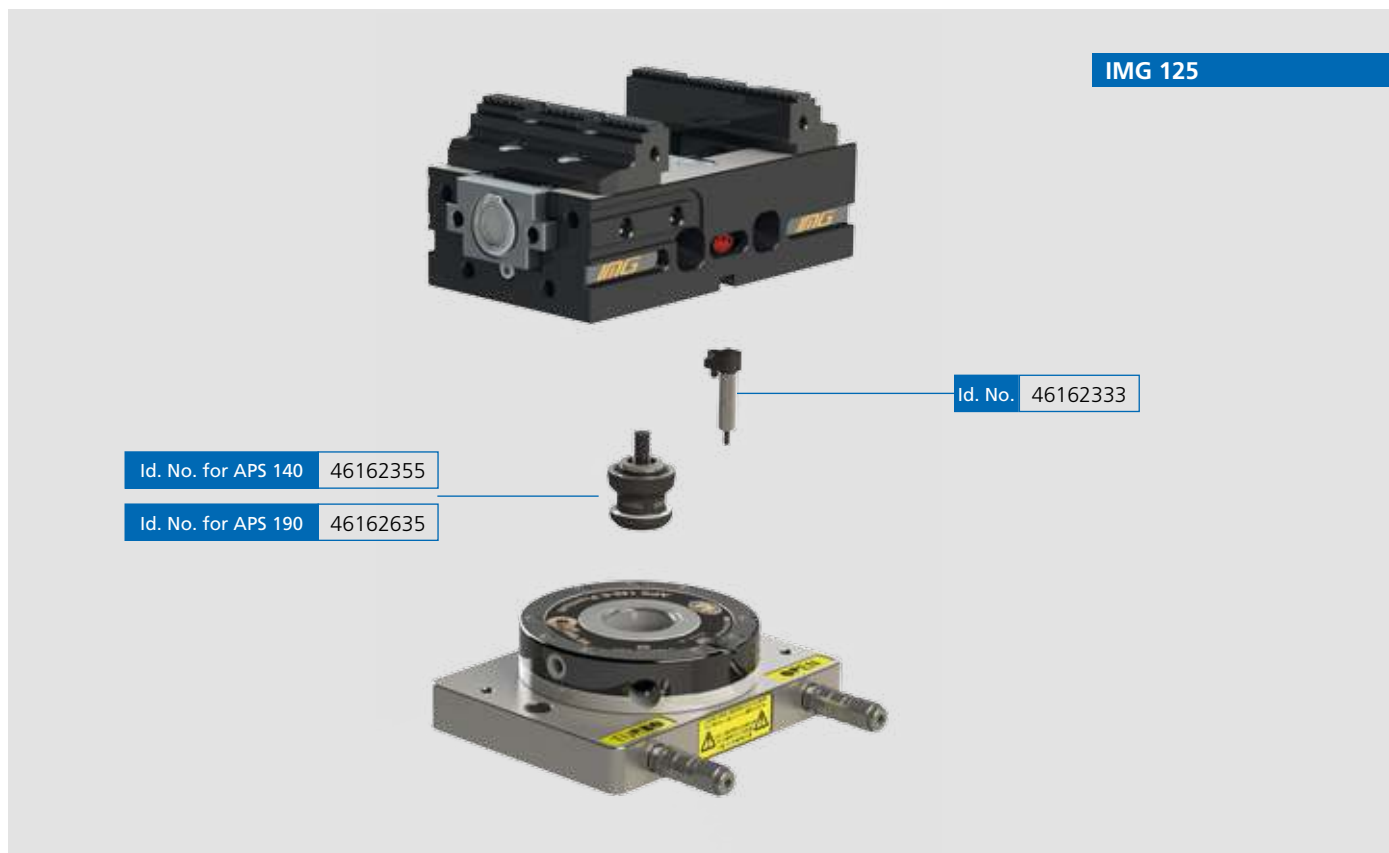
Standard equipment

Clamping pin with mounting screw M8x40 (6 pieces)

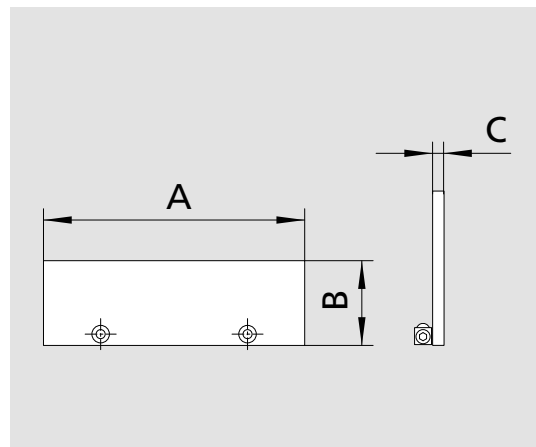
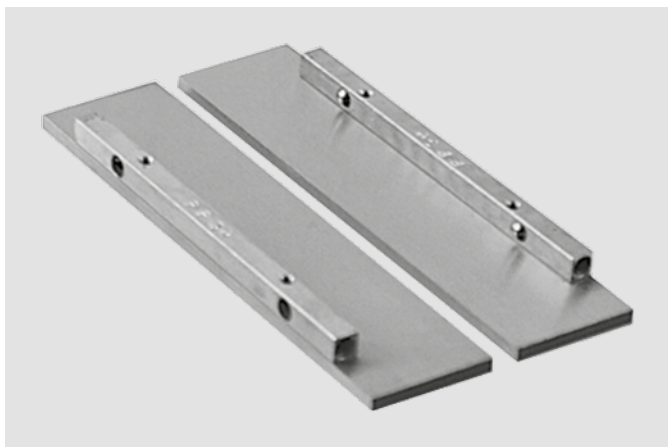


| Id. No. | Type | Weight |
|-------------|--|--------|
| 46 16 26 35 | A $\phi 25 = \text{at pin APS-140 M12}$ | 0,85Kg |

Application examples

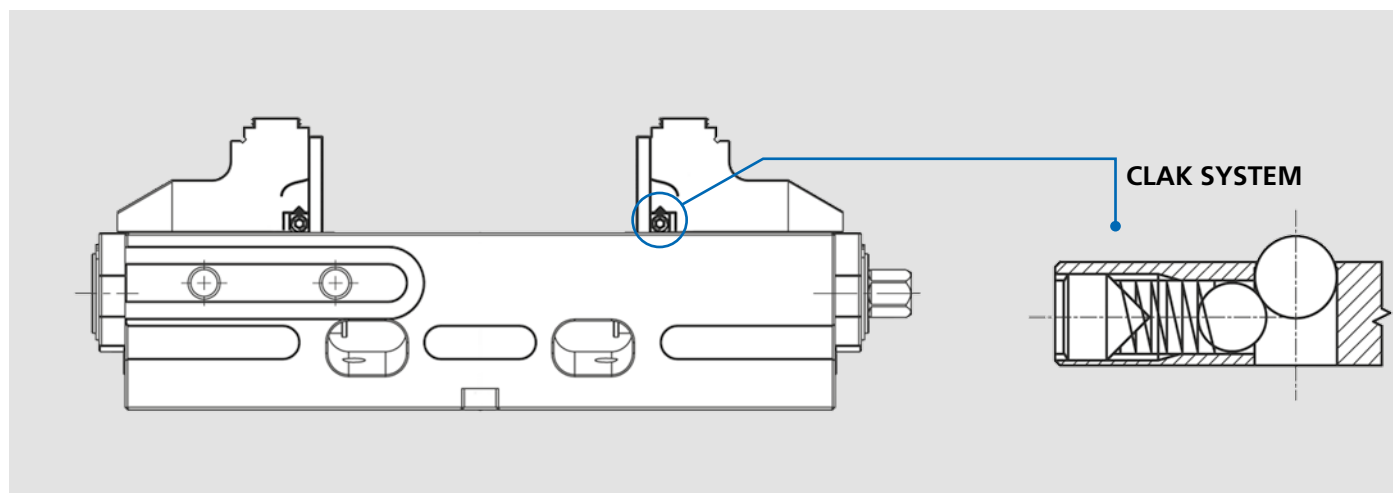


Quick change modular parallels



| Type | Id. No. | B | A | C |
|-------------|----------|----|-----|---|
| For IMG 125 | 58455115 | 15 | 124 | 4 |
| For IMG 125 | 58455120 | 20 | 124 | 4 |
| For IMG 125 | 58455125 | 25 | 124 | 4 |
| For IMG 160 | 58455315 | 15 | 159 | 4 |
| For IMG 160 | 58455325 | 25 | 159 | 4 |
| For IMG 160 | 58455335 | 35 | 159 | 4 |

Application example

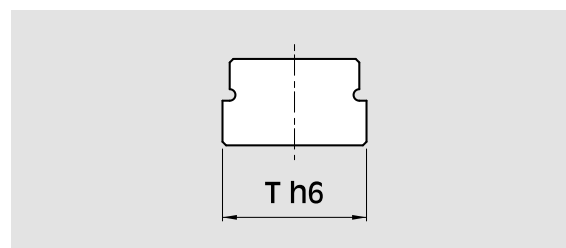
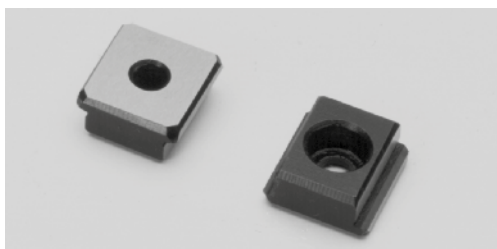


Key for APS for single use



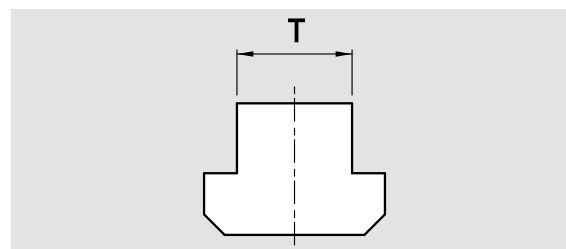
| Type | Id. No. |
|---------------|----------|
| APS 140 / 190 | 46162333 |

Pair of positioning keys for T Slot



| | mm 12 - h6 | mm 14 - h6 | mm 16 - h6 | mm 18 - h6 | mm 20 - h6 | mm 22 - h6 |
|---------|------------|------------|------------|------------|------------|------------|
| Id. No. | 58351392 | 58351393 | 58351394 | 58351395 | 58351396 | 58351397 |

Pair of Clamps



| | mm 12 | mm 14 | mm 16 | mm 18 | mm 20 | mm 22 |
|---------|----------|----------|----------|----------|----------|----------|
| Id. No. | 58022792 | 58022793 | 58022794 | 58022795 | 58022796 | 58022797 |

Torque Wrench



| Type | Id. No. |
|---------|----------|
| IMG 125 | 51501021 |
| IMG 160 | 51501022 |

Workstop



| Type | Id. No. |
|--------|----------|
| Codice | 58315020 |

SinterGrip

| | Id. No. | Description |
|--|-------------|--|
| | 58 45 01 19 | Set of 10 SinterGrip inserts STD for steel |
| | 58 45 01 29 | set of 10 SinterGrip inserts HRC for hardened steel / titanium until 50-54 HRC |
| | 58 45 01 39 | Set of 10 SinterGrip inserts for ALU |
| | 58 45 02 19 | Kit 10VTX30 for inserts SINTERGRIP |
| | 58 45 05 19 | Kit 10 protection inserts in aluminum |



Pair of SINTERGRIP jaws



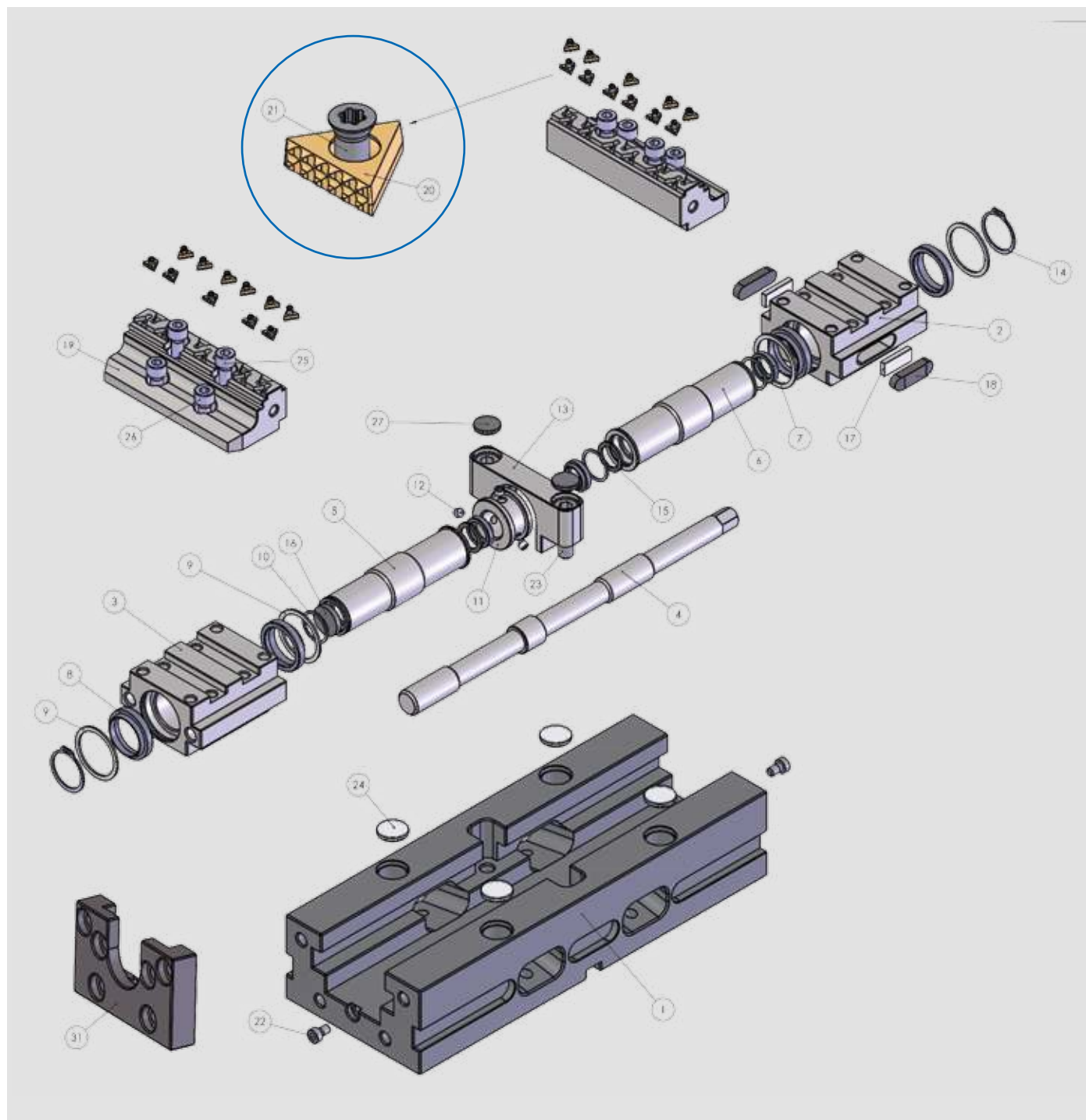
| Type | Id. No. |
|---------|----------|
| IMG 125 | 58351219 |
| IMG 160 | 58361219 |

Wrench



| Type | Id. No. |
|---------|----------|
| IMG 125 | 58351910 |
| IMG 160 | 58361910 |

Exploded



| | Description |
|----|----------------------|
| 31 | Retainer plate |
| 30 | Double clamping jaw |
| 27 | ALU plug for support |
| 26 | Screw TCEI |
| 25 | Screw TCEI |
| 24 | ALU plug for base |
| 23 | Screw TCEI |
| 22 | Screw TCEIBAS |
| 21 | SINTERGRIP screw |
| 20 | SINTERGRIP insert |

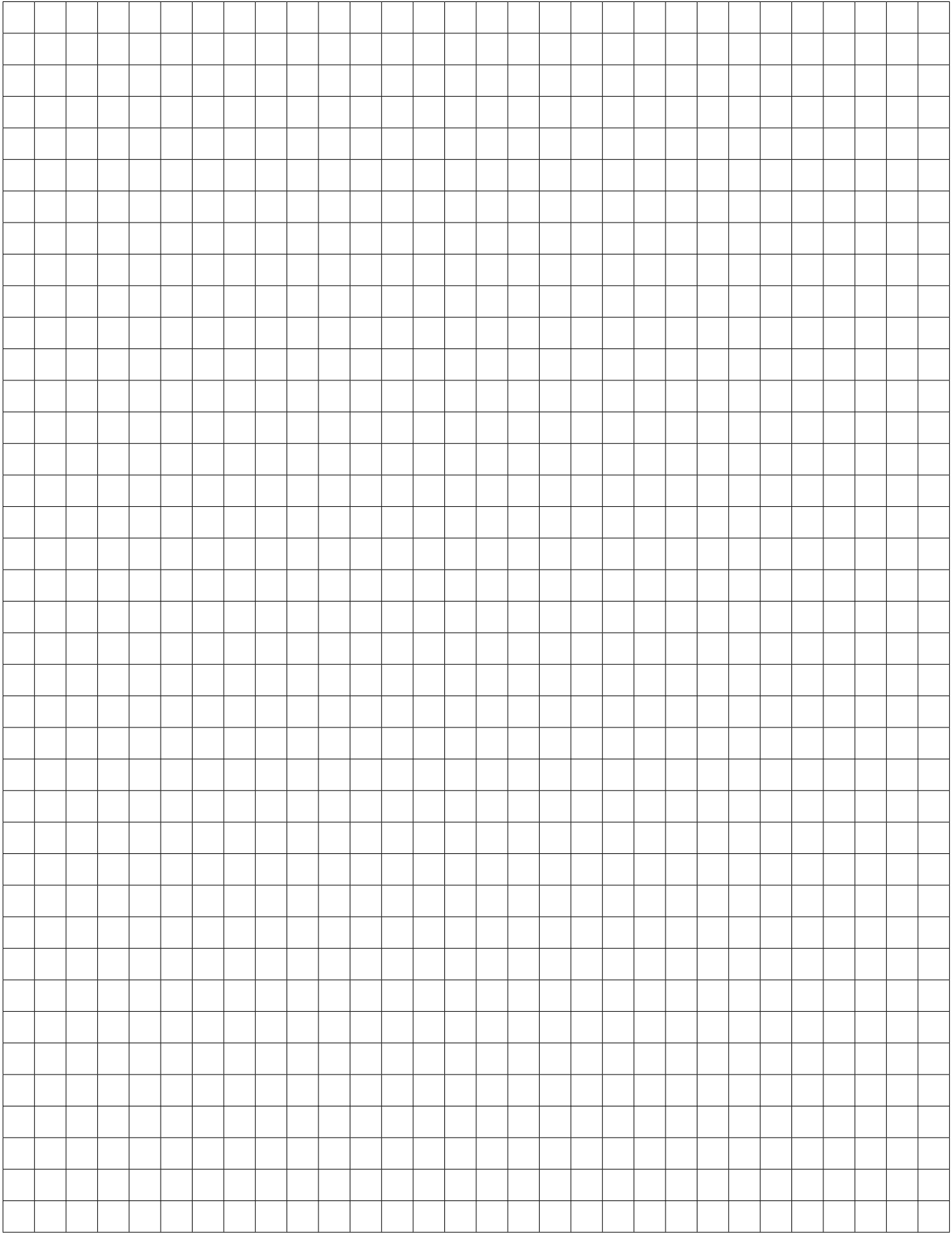
| | Description |
|----|----------------|
| 19 | SINTERGRIP jaw |
| 18 | Key |
| 17 | Rubber |
| 16 | Plug |
| 15 | Stop ring |
| 14 | Seeger ring |
| 13 | Upper support |
| 12 | Screw STEI |
| 11 | Screw stop |
| 10 | Snap ring |

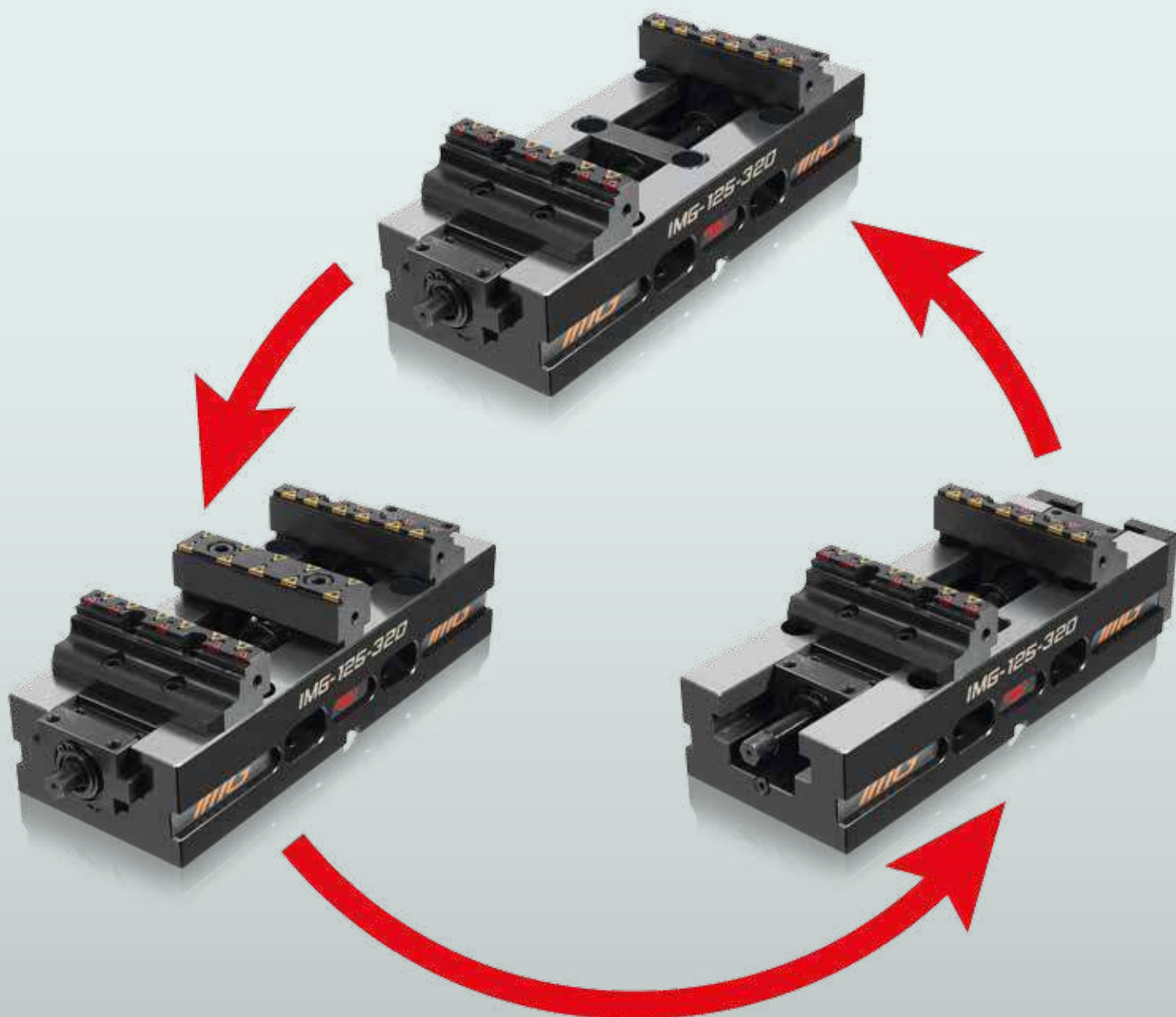
| | Description |
|---|-----------------|
| 9 | Snap ring |
| 8 | o-ring |
| 7 | o-ring |
| 6 | Right bushing |
| 5 | Left bushing |
| 4 | Operating screw |
| 3 | Right slide way |
| 2 | Left slide way |
| 1 | IMG base |

NOTES

This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin black lines. There are 20 columns and 20 rows of squares, creating a total of 400 square units. The grid covers the entire area of the page, leaving no margins or additional markings.

NOTES





Technical characteristics and dimensions are not obliged. OML S.r.l. may give in every time some modifications



MODULAR CLAMPING SYSTEMS



SINTERGRIP



APS



FMS



TC



MC



LC



CLAK SYSTEM



GENIUS



CIVI 2000



CAM SYSTEM



HOLDING CLAMPS



VARI CLAMP



DUO - LOCK



JAWS



SC



ST5-2G



FAST CLAMPS



TWIN VISE



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