

**HILMA
RÖMHELD**

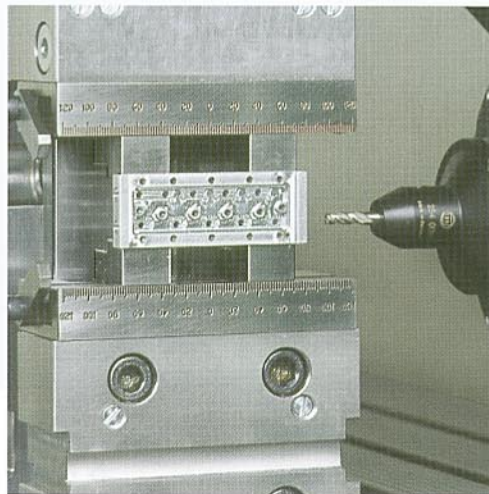
Clamping with system

Workholding
Workholding
Workholding
Workholding
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Workholding

Jaws

Workholding
Workholding
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Workholding

SlimFlex jaw system for 3-side machining



Workholding

Workholding

Workholding

Workholding

Workholding

SlimFlex

Workholding

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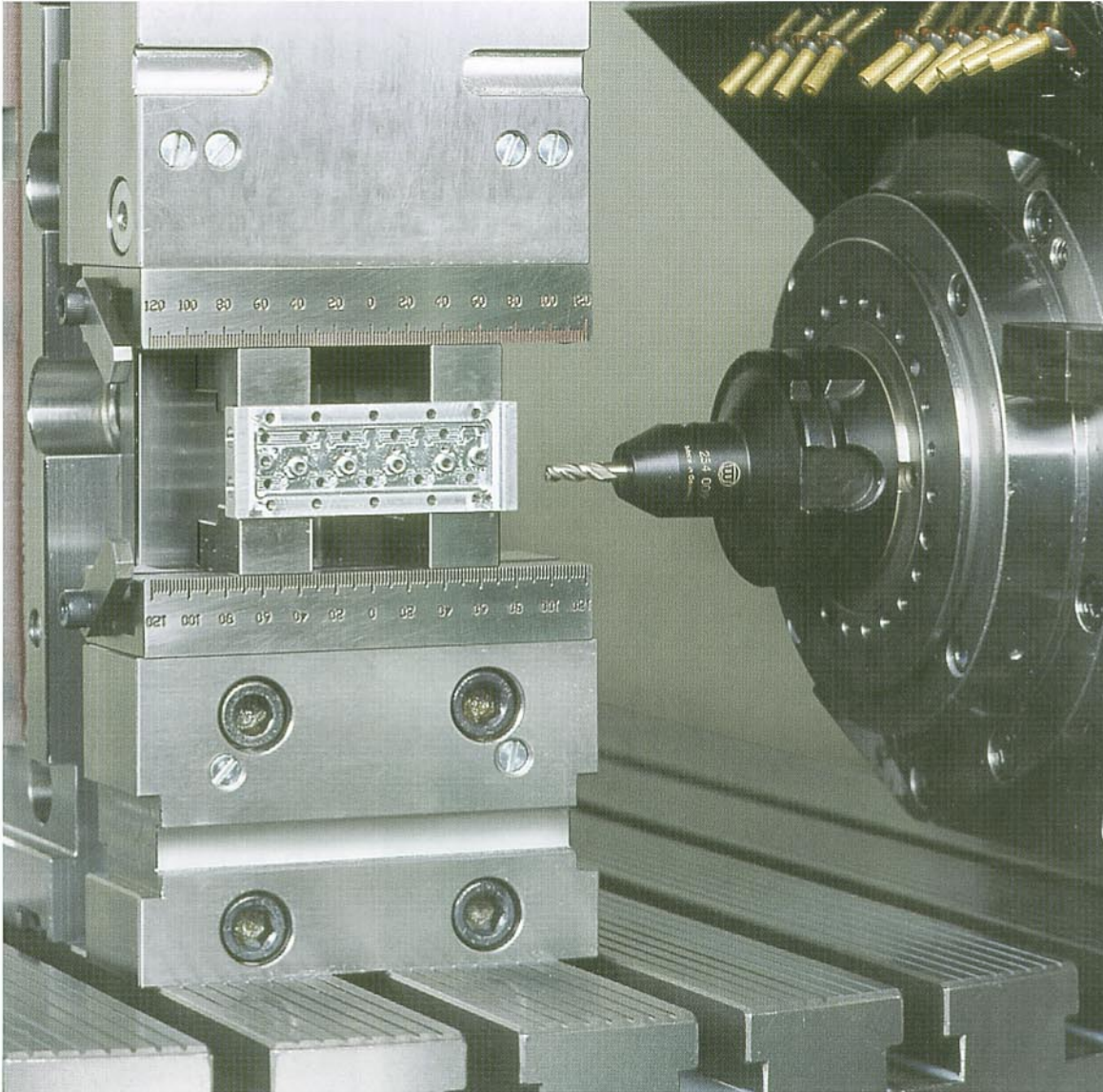
Workholding

Workholding

Workholding

Workholding

SlimFlex jaw system for an optimum machining of workpieces on three sides

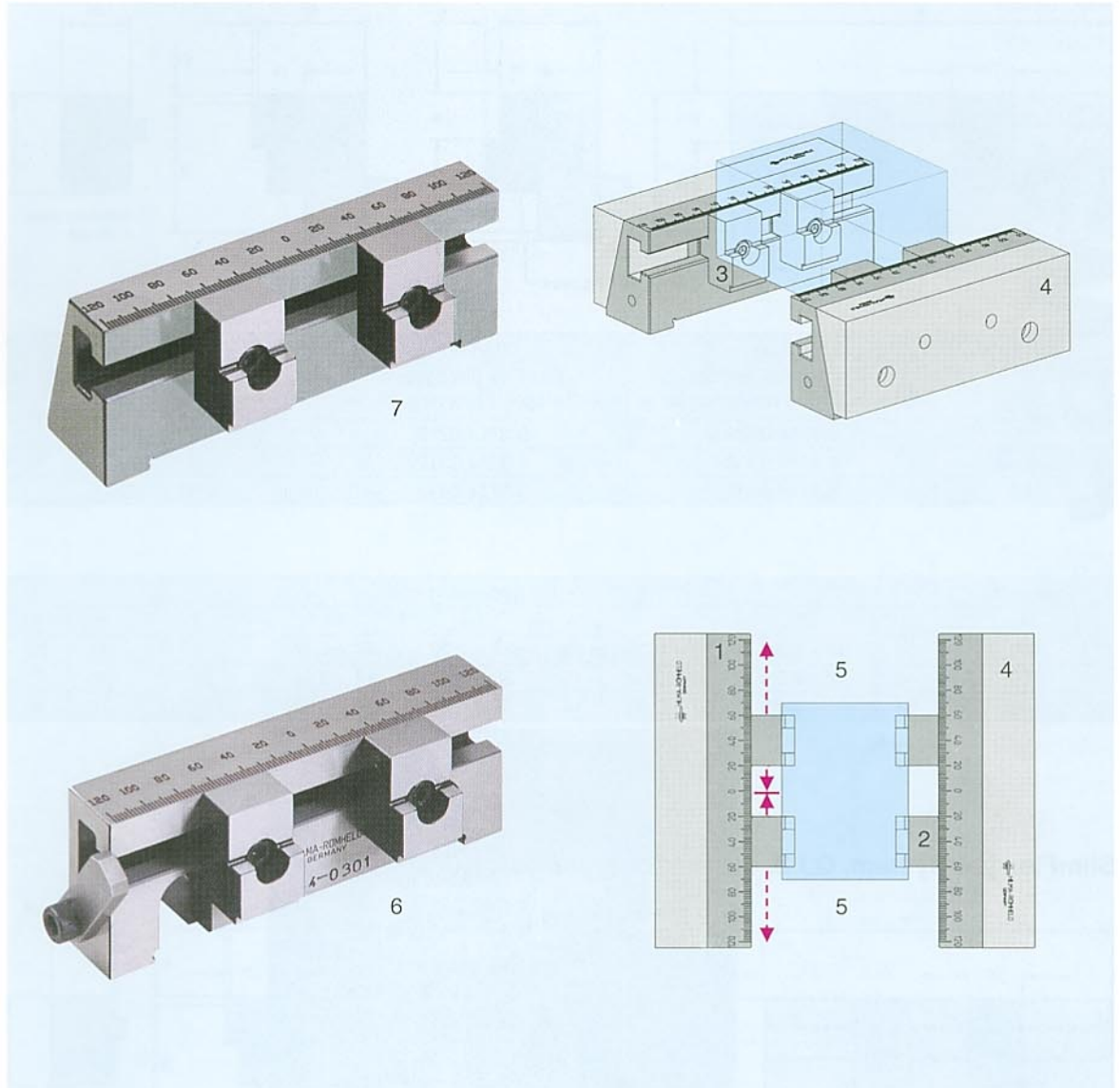
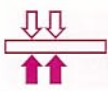


The SlimFlex jaw system allows 3-side machining of centrally clamped workpieces with dimensions less than the jaw width of the clamping device.

Retaining pieces keep the workpiece off the base jaw which provides optimum access from all sides for the work spindle.

Soft retaining pieces suitable for machining extend the range of applications.

- ◆ even small workpieces can be centrally clamped for 3-side machining
- ◆ rapid, infinitely variable positioning of the retaining pieces with the help of the scale, quick and simple clamping
- ◆ elastic pressure pads prevent dirt accumulation between the retaining pieces and the base jaws
- ◆ the number of time-consuming clamping operations can be considerably reduced, the system will repay for itself in a very short time
- ◆ determination of the lateral workpiece position in the first clamping operation, no need for a workpiece stop
- ◆ available for all HILMA clamping systems with jaw widths 100, 125 and 160 mm.

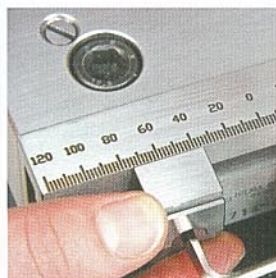


- 1. Scale for rough adjustment
- 2. Adjustable retaining pieces
- 3. The retaining pieces are reversible
- 4. Base jaw in Q.I.S. design
- 5. Space for the work spindle
- 6. SlimFlex jaw system, standard design
- 7. SlimFlex jaw system, Q.I.S. design

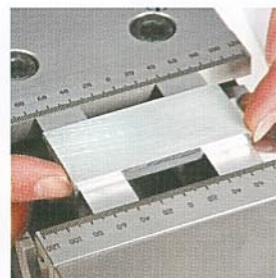
Perfect positioning and adjusting in a few steps:



Install the base jaw.
The blank is approx. 2 mm larger than the finished workpiece.



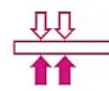
Adjust the jaws with the help of the scale.



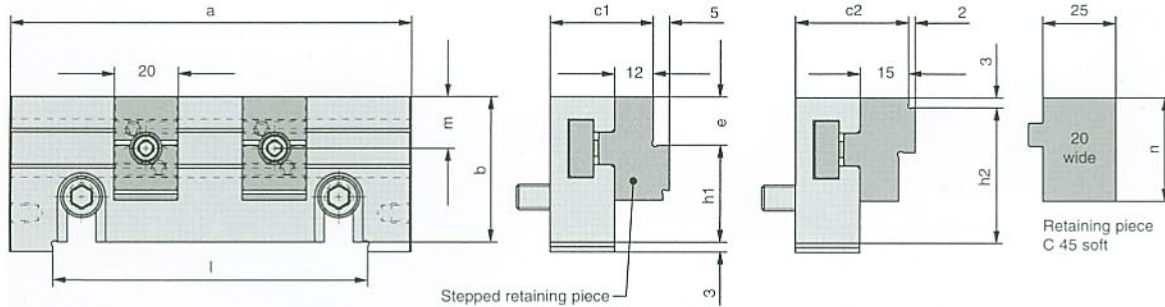
Position the workpiece by eye.



SlimFlex jaw system: optimum 3-side machining.



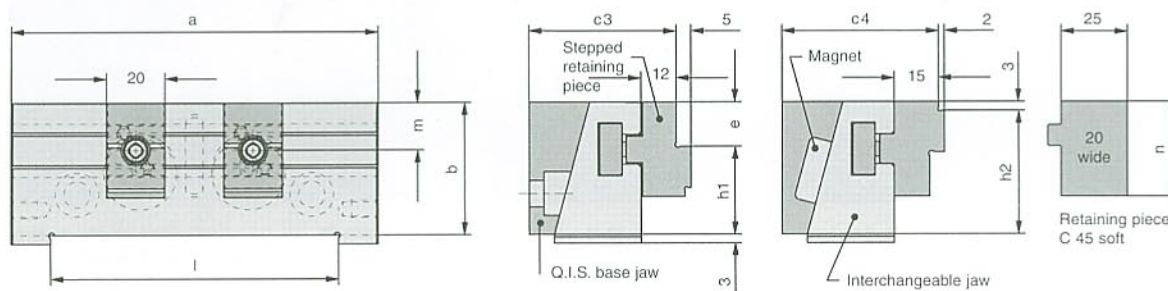
SlimFlex jaw system, standard design for types SM, NC, UNC, DF and Flex



| Jaw width a (mm) | Part no. SlimFlex jaw system without stepped retaining pieces | Part no. SlimFlex jaw system with stepped retaining pieces | Part no. Retaining piece C 45 soft |
|------------------------|---|--|---------------------------------------|
| 100 | 9.3714.0202 | 9.3714.0212 | 5.5050.0123 |
| 125 | 9.3714.0302 | 9.3714.0312 | 5.5050.0099 |
| 160 | 9.3714.0402 | 9.3714.0412 | 5.5050.0099 |

| Jaw width | Dimensions in mm | | | | | | | | |
|-----------|------------------|-----------|-----------|----|-----------|-----------|--------|----|----|
| a | b | c1 | c2 | e | h1 | h2 | l | m | n |
| 100 | 34 | 30 ± 0,02 | 33 ± 0,02 | 10 | 24 ± 0,02 | 31 ± 0,02 | 78 H7 | 11 | 30 |
| 125 | 45 | 32 ± 0,02 | 35 ± 0,02 | 15 | 30 ± 0,02 | 42 ± 0,02 | 98 H7 | 16 | 40 |
| 160 | 54 | 34 ± 0,02 | 37 ± 0,02 | 15 | 39 ± 0,02 | 51 ± 0,02 | 125 H7 | 16 | 40 |

SlimFlex jaw system, Q.I.S. design for types SM, NC, UNC, DF and Flex



| Jaw width a (mm) | Part no. Interchangeable jaw without stepped retaining pieces | Part no. Interchangeable jaw with stepped retaining pieces | Part no. Retaining piece C 45 soft | Part no. Q.I.S. base jaw |
|------------------------|---|--|--|-----------------------------|
| 100 | 9.3771.9201 | 9.3771.9211 | 5.5050.0123 | 9.3771.0201 |
| 125 | 9.3771.9301 | 9.3771.9311 | 5.5050.0099 | 9.3771.0301 |
| 160 | 9.3771.9401 | 9.3771.9411 | 5.5050.0099 | 9.3771.0401 |

| Jaw width | Dimensions in mm | | | | | | | | |
|-----------|------------------|-----------|-----------|----|-----------|-----------|--------|----|----|
| a | b | c3 | c4 | e | h1 | h2 | l | m | n |
| 100 | 34 | 45 ± 0,02 | 48 ± 0,02 | 10 | 24 ± 0,02 | 31 ± 0,02 | 78 H7 | 11 | 30 |
| 125 | 45 | 50 ± 0,02 | 53 ± 0,02 | 15 | 30 ± 0,02 | 42 ± 0,02 | 98 H7 | 16 | 40 |
| 160 | 54 | 55 ± 0,02 | 58 ± 0,02 | 15 | 39 ± 0,02 | 51 ± 0,02 | 125 H7 | 16 | 40 |

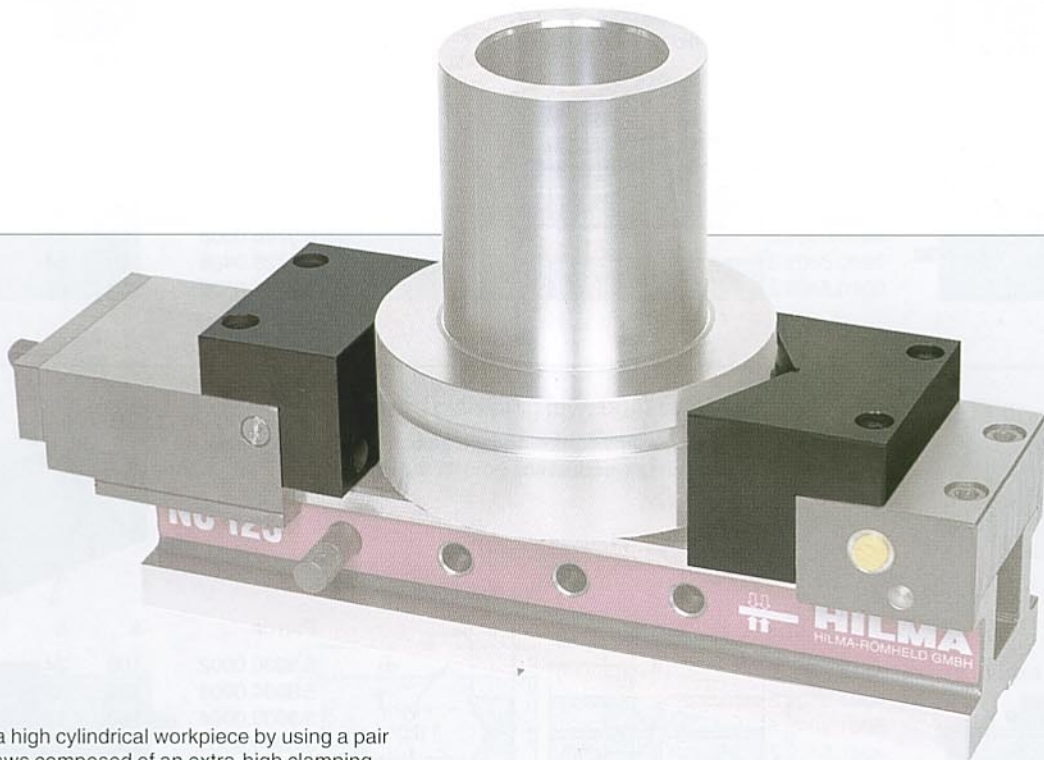
Subject to change without notice. Printed in Germany

A great number of premachined workpieces can be clamped by using the standard jaws of machine vices.

Easily interchangeable jaws with different functions extend the range of application and allow efficient positioning and clamping of simple and complicated workpieces.

In many cases, costly fixtures dedicated to single workpieces can be avoided.

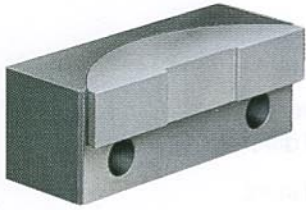
- ◆ Extended range of application by interchangeable jaws
- ◆ Many different jaw types for an exact positioning and clamping of a great number of different workpieces
- ◆ Easy and rapid changeover of jaws
- ◆ Considerable reduction of the costs for clamping devices



Clamping of a high cylindrical workpiece by using a pair of standard jaws composed of an extra-high clamping jaw and a co-ordinate V-jaw.

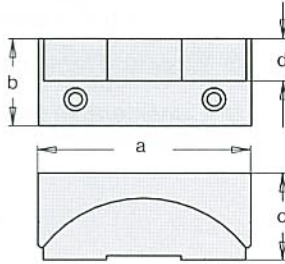
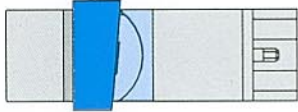


For the clamping of form parts, we offer soft basic jaws and workpiece-specific special jaws.

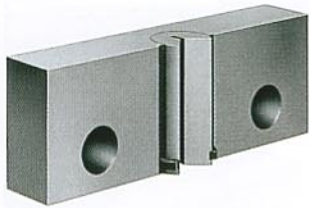


Pendulum jaw

for the safe clamping of one workpiece with nonparallel clamping surfaces or two workpieces with different tolerances. Supplied including fastening screws.
Application: all product lines

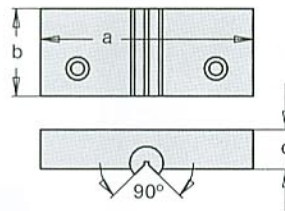
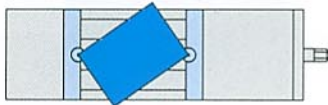


| Part no. | a | b | c | d |
|-------------|-----|----|----|----|
| 8.3711.0208 | 100 | 34 | 35 | 16 |
| 8.3711.0308 | 125 | 45 | 50 | 22 |
| 8.3711.0408 | 160 | 54 | 55 | 26 |
| 8.3711.0508 | 200 | 67 | 70 | 33 |

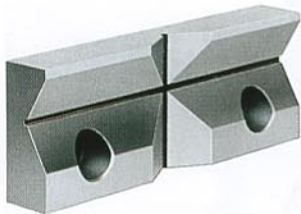


Diagonal clamping jaws

Rectangular workpieces are automatically aligned vertically to the guideways. No intricate positioning, e.g. by means of a stop angle. Used in pairs only.
Application: all product lines



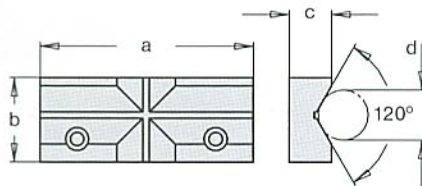
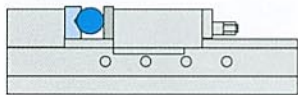
| Part no. | a | b | c |
|-------------|-----|----|----|
| 8.3726.0208 | 100 | 34 | 16 |
| 8.3726.0308 | 125 | 45 | 23 |
| 8.3726.0408 | 160 | 54 | 23 |
| 8.3726.0508 | 200 | 67 | 31 |



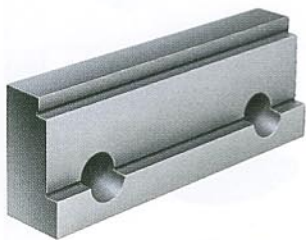
Vee jaw

for horizontal and vertical clamping of cylindrical workpieces. Application: all product lines

Vee tolerance ± 0.01 mm.

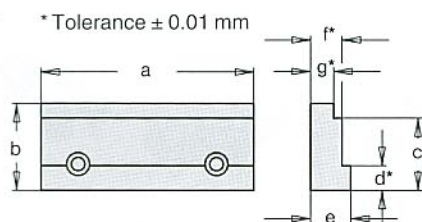
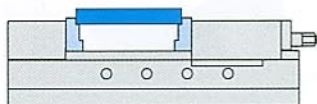


| Part no. | a | b | c | d |
|-------------|-----|----|----|-------|
| 5.3030.0002 | 100 | 34 | 17 | 8–35 |
| 5.3030.0003 | 125 | 45 | 19 | 10–50 |
| 5.3030.0004 | 160 | 54 | 21 | 12–60 |
| 5.3030.0005 | 200 | 67 | 25 | 20–75 |

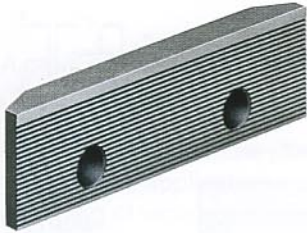


Precision step jaws

for clamping rectangular workpieces without parallel pads. These jaws allow holes to be drilled near the edge. Used in pairs only.
Application: all product lines

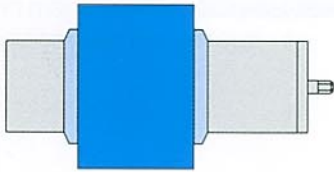


| Part no. | a | b | c | d | e | f | g |
|-------------|-----|----|----|----|----|----|----|
| 5.2082.0001 | 100 | 34 | 29 | 10 | 19 | 15 | 11 |
| 5.2082.0002 | 125 | 45 | 39 | 13 | 25 | 20 | 16 |
| 5.2082.0003 | 160 | 54 | 45 | 15 | 25 | 20 | 16 |
| 5.2082.0004 | 200 | 67 | 55 | 20 | 25 | 20 | 16 |

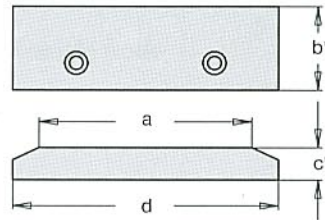


Clamping jaw, extra large

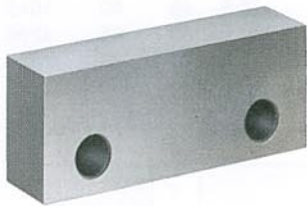
for safe clamping of workpieces exceeding the standard jaw width.
Used in pairs only.
Application: all product lines



*Tolerance ± 0.01 mm

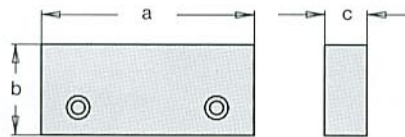
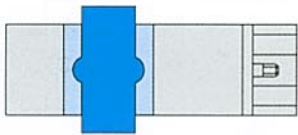


| Part no. | a | b | c | d |
|-------------|-----|----|----|-----|
| 5.2058.1025 | 100 | 34 | 13 | 125 |
| 5.2058.1026 | 125 | 45 | 15 | 160 |
| 5.2058.1027 | 160 | 54 | 20 | 200 |
| 5.2058.1028 | 200 | 67 | 25 | 250 |



Basic jaw soft, 16 MnCr5, supplied oversize

for preparation of special jaws by the customer.
Application: all product lines

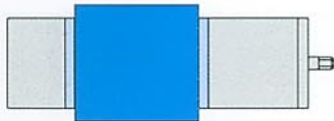


| Part no. | a | b | c |
|-------------|-----|----|----|
| 5.2055.0097 | 100 | 36 | 20 |
| 5.2055.0098 | 125 | 47 | 25 |
| 5.2055.0099 | 160 | 56 | 30 |
| 5.2055.0100 | 200 | 69 | 35 |

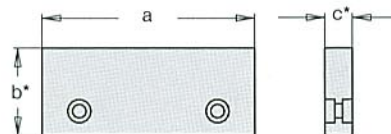


Standard clamping jaw, both sides useable

one side serrated, one side plain.
Application: all product lines



*Tolerance ± 0.01 mm



| Part no. | a | b | c |
|-------------|-----|----|----|
| 5.2058.1003 | 100 | 34 | 13 |
| 5.2058.1004 | 125 | 45 | 15 |
| 5.2058.1005 | 160 | 54 | 18 |
| 5.2058.1006 | 200 | 67 | 18 |

Interchangeable Jaws

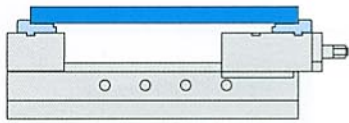
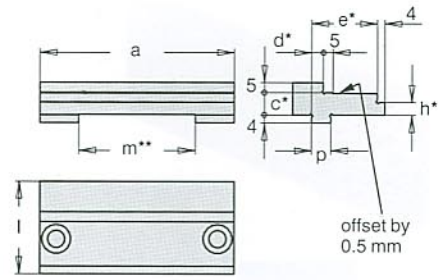
Jaw width 100–160 mm



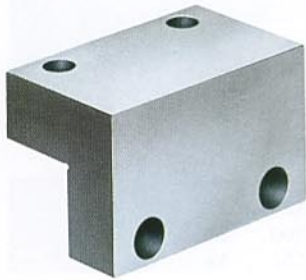
Step jaw insert

for large capacity,
incl. fastening screws.
Application:
product lines 3120, 3130, 3320, 3420.

- * Tolerance ± 0.01 mm
- ** Step jaw insert for slide only



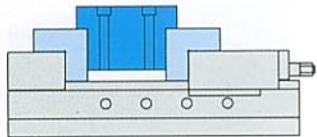
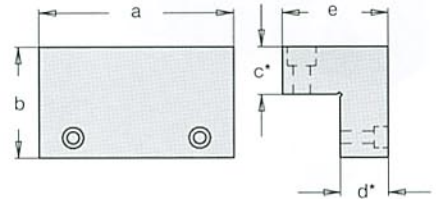
| for fixed jaw Part no. | for slide Part no. | a | c | d | e | h | l | m | p |
|---------------------------|-----------------------|-----|------|---|----|-----|----|----|------|
| 9.3284.0201 | 9.3284.1201 | 100 | 11.5 | 6 | 34 | 6.5 | 48 | 60 | 10h6 |
| 9.3284.0301 | 9.3284.1301 | 125 | 14 | 6 | 40 | 9 | 58 | 65 | 12h6 |
| 9.3284.0401 | 9.3284.1401 | 160 | 17 | 8 | 43 | 12 | 64 | 88 | 18h6 |



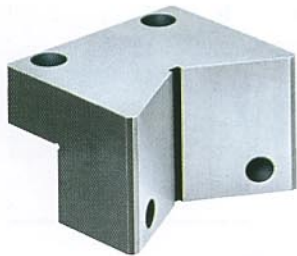
Clamping jaw extra-high

for the safe clamping of high workpieces,
incl. fastening screws.
Used as single jaw or as pair.
Application:
product lines 3070, 3080, 3090, 3120, 3130 and
3320.

- * Tolerance ± 0.01 mm



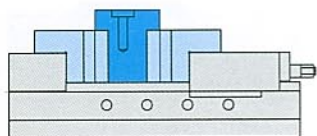
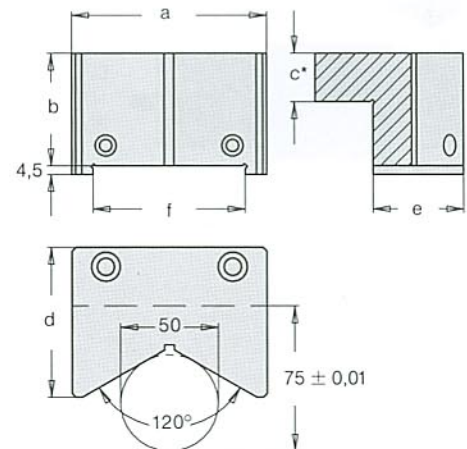
| Part no. | a | b | c | d | e |
|-------------|-----|------|----|----|-----|
| 9.3283.0201 | 100 | 58 | 25 | 25 | 60 |
| 9.3283.0301 | 125 | 75,5 | 32 | 32 | 74 |
| 9.3283.0401 | 160 | 92,5 | 40 | 40 | 100 |



Co-ordinate Vee jaw

for precise clamping of high cylindrical pieces.
Incl. fastening screws.
Used as single jaw or as pair.
Application:
product lines 3070, 3080, 3090, 3120, 3130,
3320.

- * Tolerance ± 0.01 mm



| Part no. | Clamping range | a | b | c | d | e | f |
|-------------|----------------|-----|------|----|-----|----|-------|
| 9.3282.5202 | Ø25–135 | 100 | 58 | 25 | 82 | 47 | 78H7 |
| 9.3282.5302 | Ø30–190 | 125 | 75.5 | 32 | 95 | 53 | 98H7 |
| 9.3282.5402 | Ø40–260 | 160 | 92.5 | 40 | 123 | 63 | 125H7 |