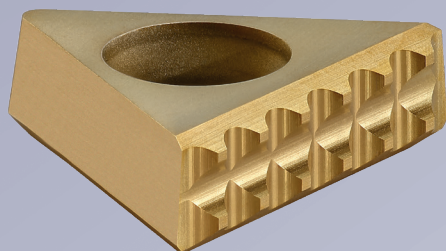
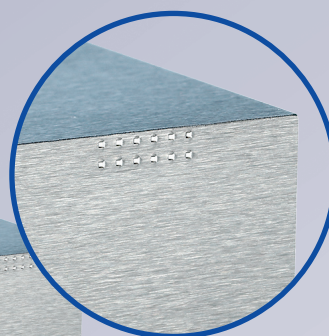
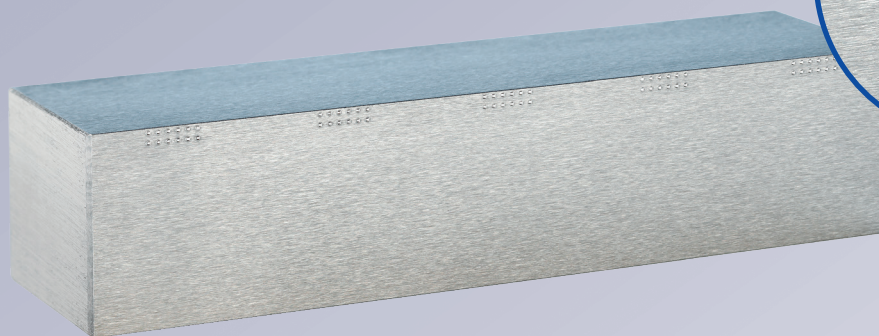


SinterGrip Clamping inserts

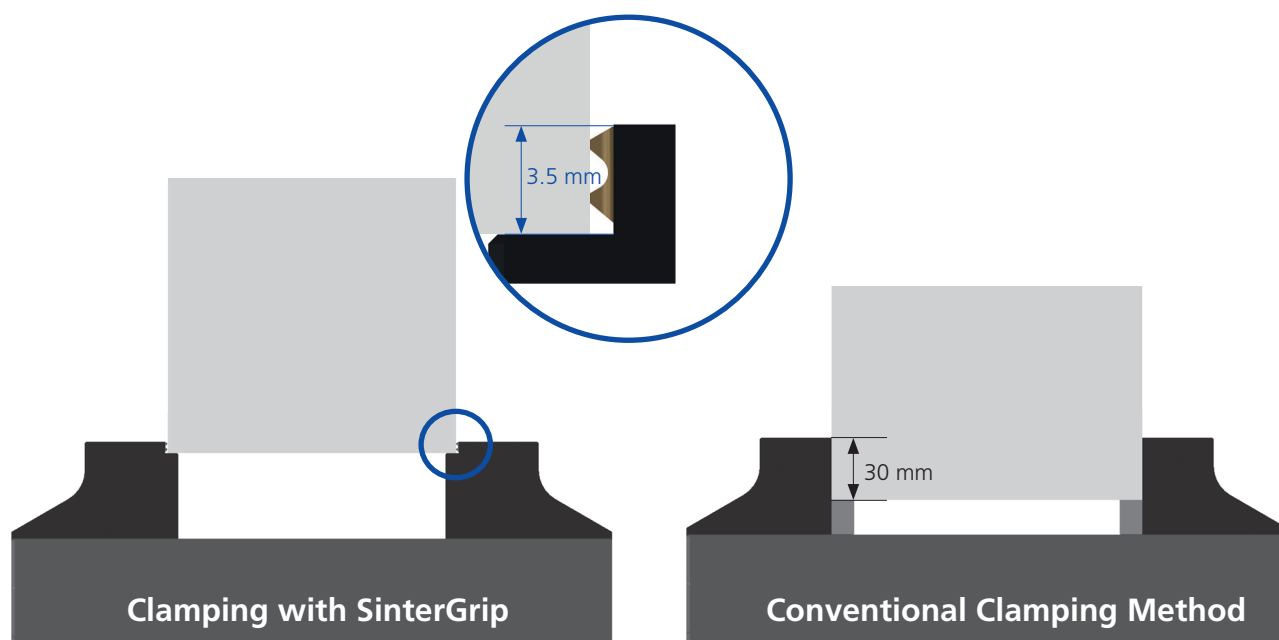


SinterGrip
clamping insert



Marks on
the workpiece

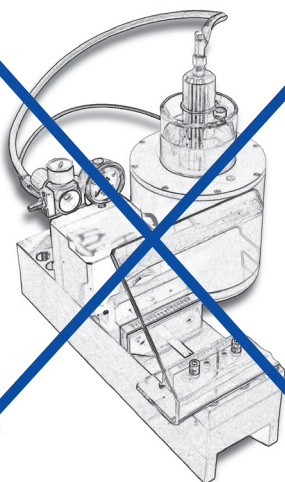
Comparison clamping depths



► Lowest clamping depth of workpieces – no pre-marking

Benefits

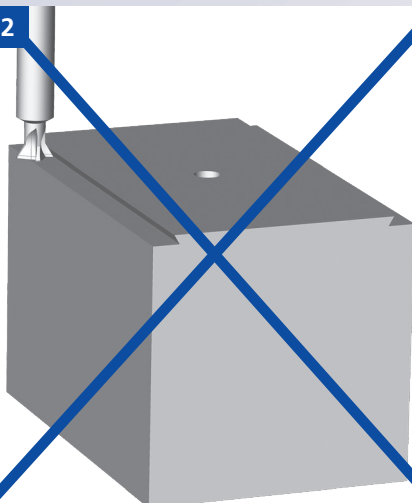
1



No pre-marking necessary

- Elimination of the costs for a pre-mark machine and set-up times

2



No pre-machining of the workpiece or clamping surfaces necessary

- Elimination of the costs for the pre-machining

3

3 different versions for all materials:



→ Steel



→ Hardened steel |
Titanium
(up to 54 HRC)



→ Aluminium |
Plastic

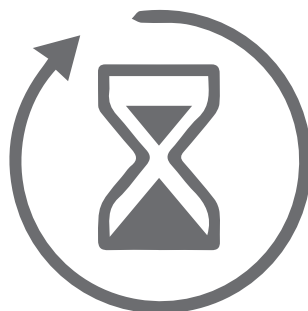
4



Best accessibility and highest holding forces

- Safe clamping of workpieces
- Ideal for 5-axis machining
- High material saving due to low clamping depth of only 3.5 mm

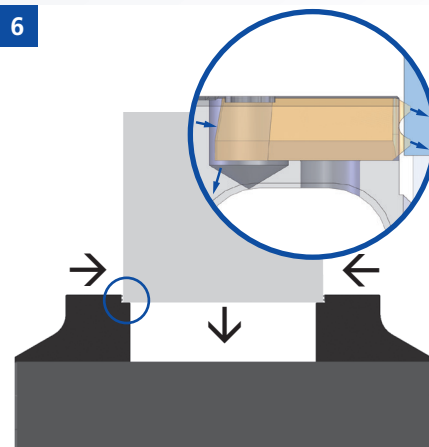
5



Maximum lifetime | No wear costs

- SinterGrip clamping inserts are made from coated carbide steel and have maximum lifetime
- The inserts are individually exchangeable

6



Pull-down effect | Active vibration absorption

- Even distribution of the clamping forces and active vibration absorption
- Form-fitting clamping by means of the SinterGrip inserts

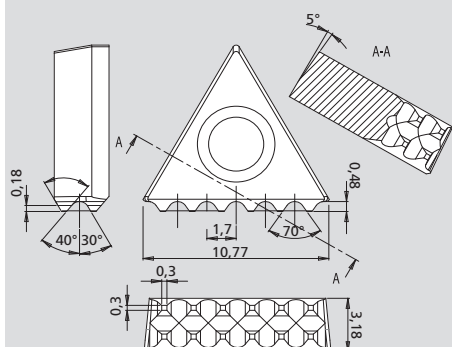
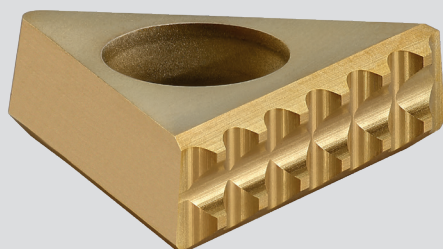
- Low clamping depth
- High stability and active vibration absorption

Application/customer benefits

- Very low clamping depth (only 3.5 mm) ensures safe clamping of the workpieces: Highest efficiency and productivity resulting in lower material costs and less machining costs
- No pre-marking necessary: Eliminates costs for a pre-mark machine and set-up times
- Highest stability and active vibration absorption
- Pull-down effect due to the special row of the teeth
- Increases cutting speeds compared to other systems
- Simple manufacturing of jaws for SinterGrip inserts by the customer
- Maximum lifetime

Technical features

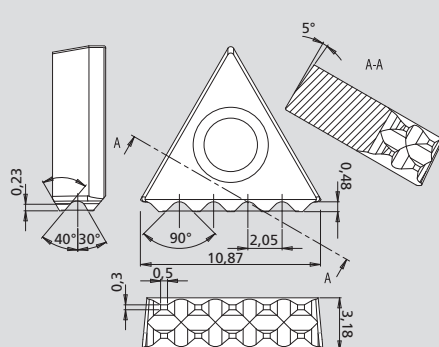
- Clamping depth only 3.5 mm
- 3 different versions for steel, hardened steel / titanium (up to 54 HRC) and aluminium / plastic
- Made from coated carbide steel



SinterGrip STD

Clamping insert
for steel

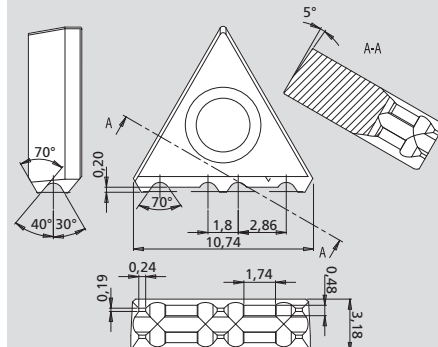
Id. No. 58450119



SinterGrip HRC

Clamping insert
for hardened steel
and titanium until 54 HRC

Id. No. 58450129

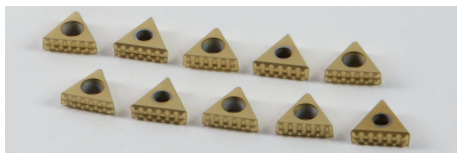


SinterGrip ALU

Clamping insert
for aluminium
and plastic

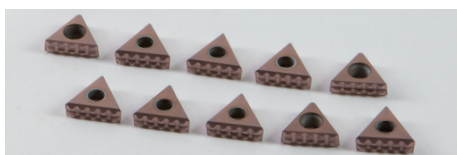
Id. No. 58450139

Order review



| Type | Id. No. |
|----------------|----------|
| SinterGrip STD | 58450119 |

Consisting of 10 pcs. clamping inserts
(without bolts; Order no. SinterGrip bolt-set 58450219)



| Type | Id. No. |
|----------------|----------|
| SinterGrip HRC | 58450129 |

Consisting of 10 pcs. clamping inserts
(without bolts; Order no. SinterGrip bolt-set 58450219)



| Type | Id. No. |
|----------------|----------|
| SinterGrip ALU | 58450139 |

Consisting of 10 pcs. clamping inserts
(without bolts; Order no. SinterGrip bolt-set 58450219)

- Fixing SinterGrip clamping inserts
- Conversion of existing bench vises in SinterGrip

SinterGrip Bolt set, consisting of 10 pieces



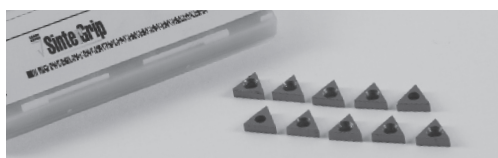
| Type | Id. No. |
|------------|----------|
| SinterGrip | 58450219 |

Key T9



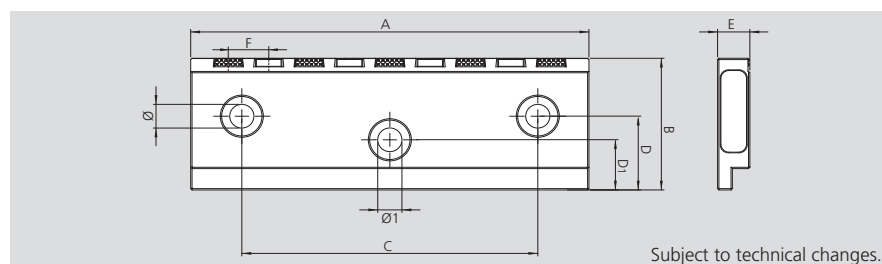
| Type | Id. No. |
|------------|----------|
| SinterGrip | 58450320 |

Protection cover aluminium set, consisting of 10 pieces



| Type | Id. No. |
|------------|----------|
| SinterGrip | 58450519 |

Pair of jaws, set (incl. 1 pair parallels, wrench torx T9, screws)



| Type | Id. No. | | A | B | C | D | D1 | E | Ø1 | Ø1 | H parall. | F |
|----------------------|-----------|-----------|-------|------|------|------|----|------|----|----|-----------|--------|
| | Version 1 | Version 2 | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| ALLMATIC-T-REX/TITAN | 58451119 | 58452119 | 124.4 | 39.5 | 88 | 12.3 | 18 | 12 | 7 | 11 | 36.5 | 14 |
| GRESSEL/WNT/SCHUNK | 58451129 | 58452129 | 125 | 40 | 80 | 15 | - | 12 | 9 | - | 36.5 | 14 |
| HILMA | 58451149 | 58452149 | 125 | 45 | 80 | 14 | - | 12 | 9 | - | 42 | 14 |
| KURT 6" | 58451229 | 58452229 | 152 | 44.1 | 98.4 | 23.6 | - | 18.4 | 11 | - | 41 | 15.875 |
| ALLMATIC-T-REX/TITAN | 58451319 | 58452319 | 160 | 49.8 | 88 | 12.3 | 20 | 12 | 7 | 11 | 47 | 14 |
| GRESSEL/WNT/SCHUNK | 58451329 | 58452329 | 160 | 50 | 100 | 20 | - | 12 | 11 | - | 47 | 14 |
| HILMA | 58451349 | 58452349 | 160 | 54 | 100 | 17 | - | 12 | 11 | - | 51 | 14 |

Version 1: without wolfram-carbide coating

Version 2: with wolfram-carbide coating
for a better grip in the 2nd operation (picture)



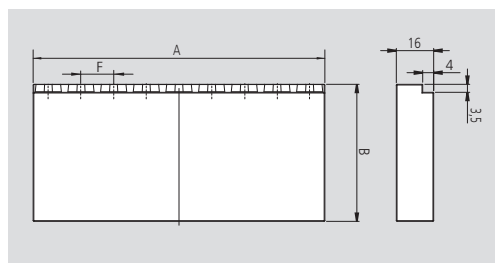
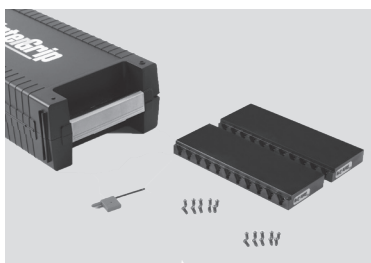
Wolfram-Carbid-Coating

Number of the needed SinterGrip clamping inserts:

Id. No. 58451119 to 58452229: 9 pcs. SinterGrip clamping inserts

Id. No. 58451319 to 58452349: 11 pcs. SinterGrip clamping inserts

Starter Kit (for the preparation by the customer, tutorial see next page)



| Type | Id. No. | A | B | F | Inserts |
|-------------|----------|-----|----|----|---------|
| | | mm | mm | mm | |
| Starter Kit | 58453119 | 125 | 59 | 14 | 9 |
| Starter Kit | 58453319 | 160 | 59 | 14 | 11 |
| Starter Kit | 58453419 | 200 | 70 | 15 | 13 |

Consisting of:

1 pair of jaws,
1 wrench TORX T9 and 1 kit of 10 screws

- Milling cutter for SinterGrip clamping inserts
- Manual

SinterGrip milling cutting tool

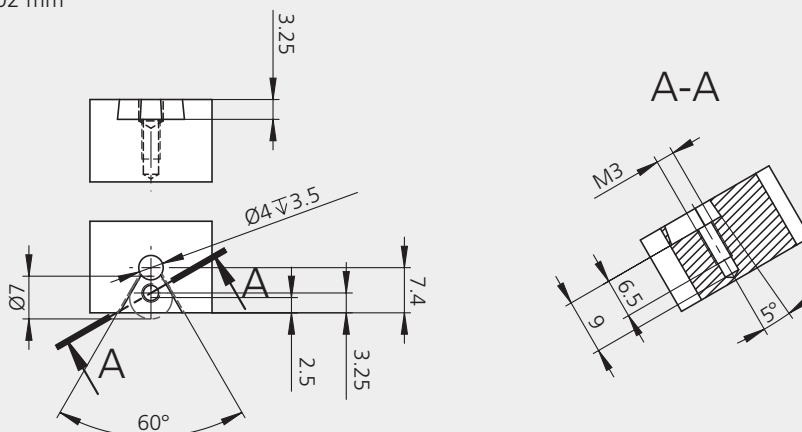


| Type | Id. No. |
|---------------------------|----------|
| SinterGrip milling cutter | 58450410 |

Solid carbide end milling cutting tool, Ø 4 mm, 3 cutting edges, Ø 3x5°, V = 40-60 m/min, Fz = 0.01-0.04 mm/tooth.

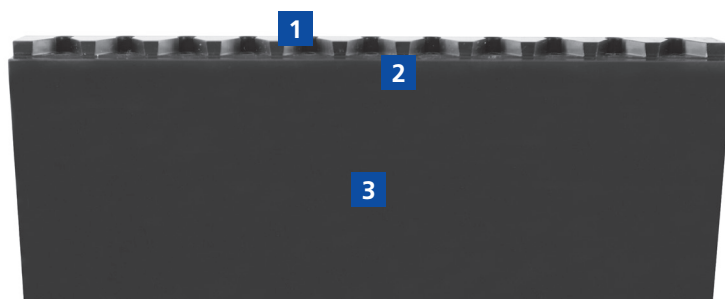
Drawing for the pocket to include SinterGrip clamping inserts:

Recommended cutting parameters:
Cutting speed V = 80-120 m/min
Feed force per tooth Fz = 0.02 mm

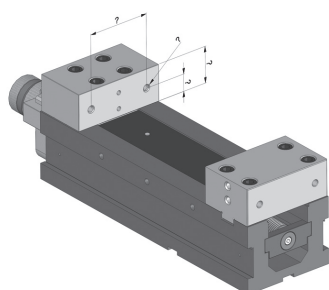


Subject to technical changes.

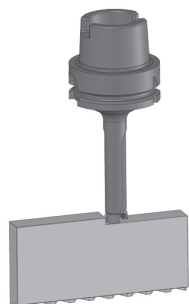
Tutorial for the preparation of jaws for SinterGrip inserts by the customer



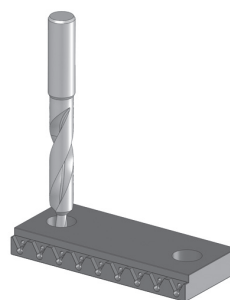
- 1 Shape of the SinterGrip pocket manufactured with SinterGrip milling cutting tool (Id. No. 58450410)
- 2 Clamping step 3.5 x 4 mm
- 3 Jaw made from nitrided steel with a tensile strength of $\approx 980\text{N/mm}^2$



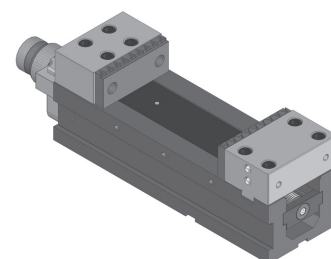
Measurement of the dimensions of the vise



Milling of the jaw to the required height



Drilling of the jaw with the correct distance of the holes



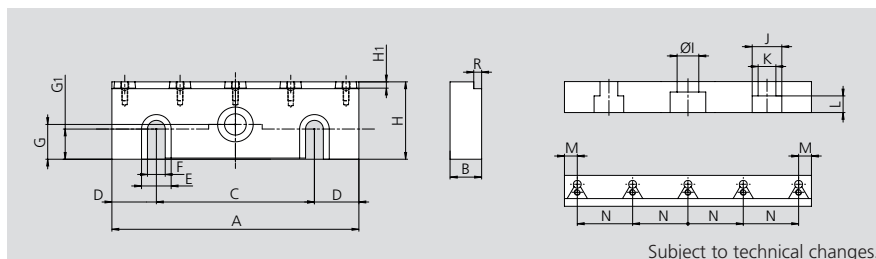
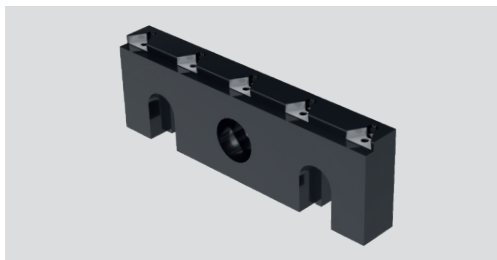
Mounting of the jaw on the vise

Jaws

- Multi jaw for the use of SinterGrip clamping inserts on machine vises
- Form-fitting clamping of components without pre-processing

SinterGrip

Multi jaw SinterGrip



| SMW-AUTOBLOK Type | | Multi jaw SinterGrip 467112 |
|-------------------|----|-----------------------------|
| A | mm | 125 |
| B | mm | 18 |
| C | mm | 80 |
| D | mm | 22.5 |
| E | mm | 15 |
| F | mm | 9 |
| G | mm | 18 |
| G1 | mm | 15.6 |
| H | mm | 40 |
| H1 | mm | 3.25 |
| I | mm | 11 |
| J | mm | 15 |
| K | mm | 9 |
| L | mm | 8.6 |
| M | mm | 6.5 |
| N | mm | 28 |

Multi jaw compatible with SMW-AUTOBLOK TTI-2G 125, SMW-AUTOBLOK GT5-2G, Gressel gripes 125, WNT NCG 125, Schunk KSC 125, Allmatic NC8 125, TC/LC 125, Hoffmann HiPo Clamp 125, Garant NC high pressure vise version LC, KESEL NCA 125, CNC125, Röhm RKE 125

Consisting of: Multi jaw SinterGrip, without SinterGrip clamping inserts, without SinterGrip bolts