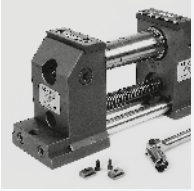




# GENIUS & SinterGrip

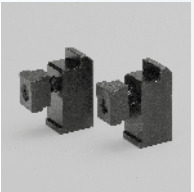
5.3

Precision vise for  
5 axis machine tools



## GENIUS & SinterGrip

Page 5.3.5



## GENIUS Accessories

Page 5.3.6



## GENIUS Spare parts

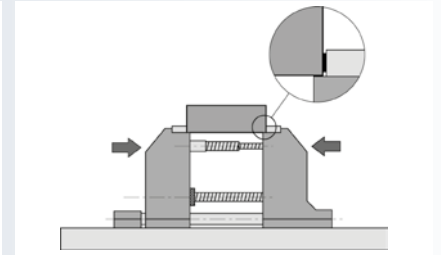
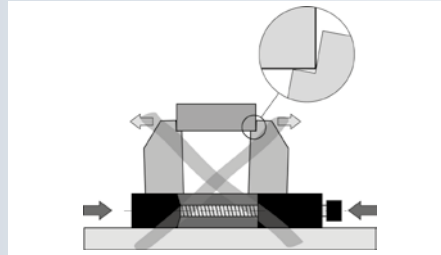
Page 5.3.10

# "GENIUS" & SinterGrip

## MAIN FEATURES

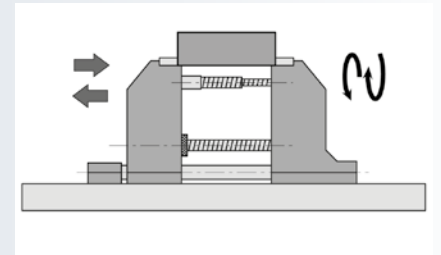
1

The clamping force (up to 40 kN) is generated right where it is needed: at the part.



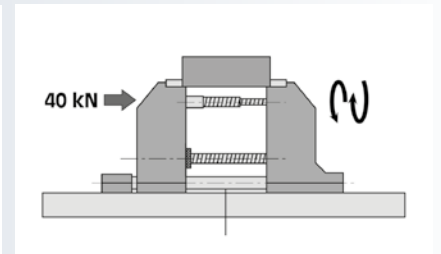
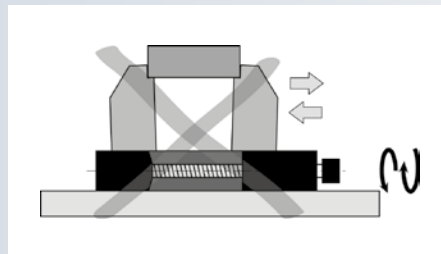
2

Thanks to its own expanding screw, GENIUS can clamp workpieces up to 200 mm with just one set-up.



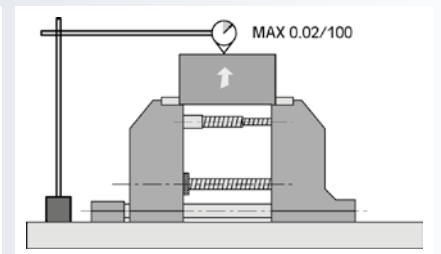
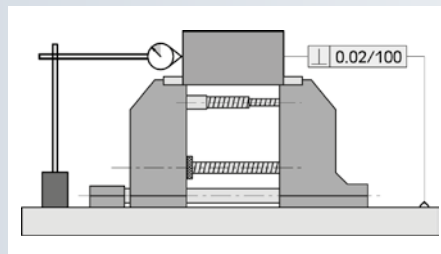
3

Unlike traditional vises, GENIUS clamps the workpieces by means of traction clamping.



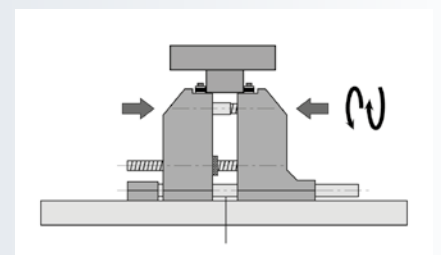
4

GENIUS is the first vise designed for 5 axis-machine tools that can be used for high precision milling operations.



5

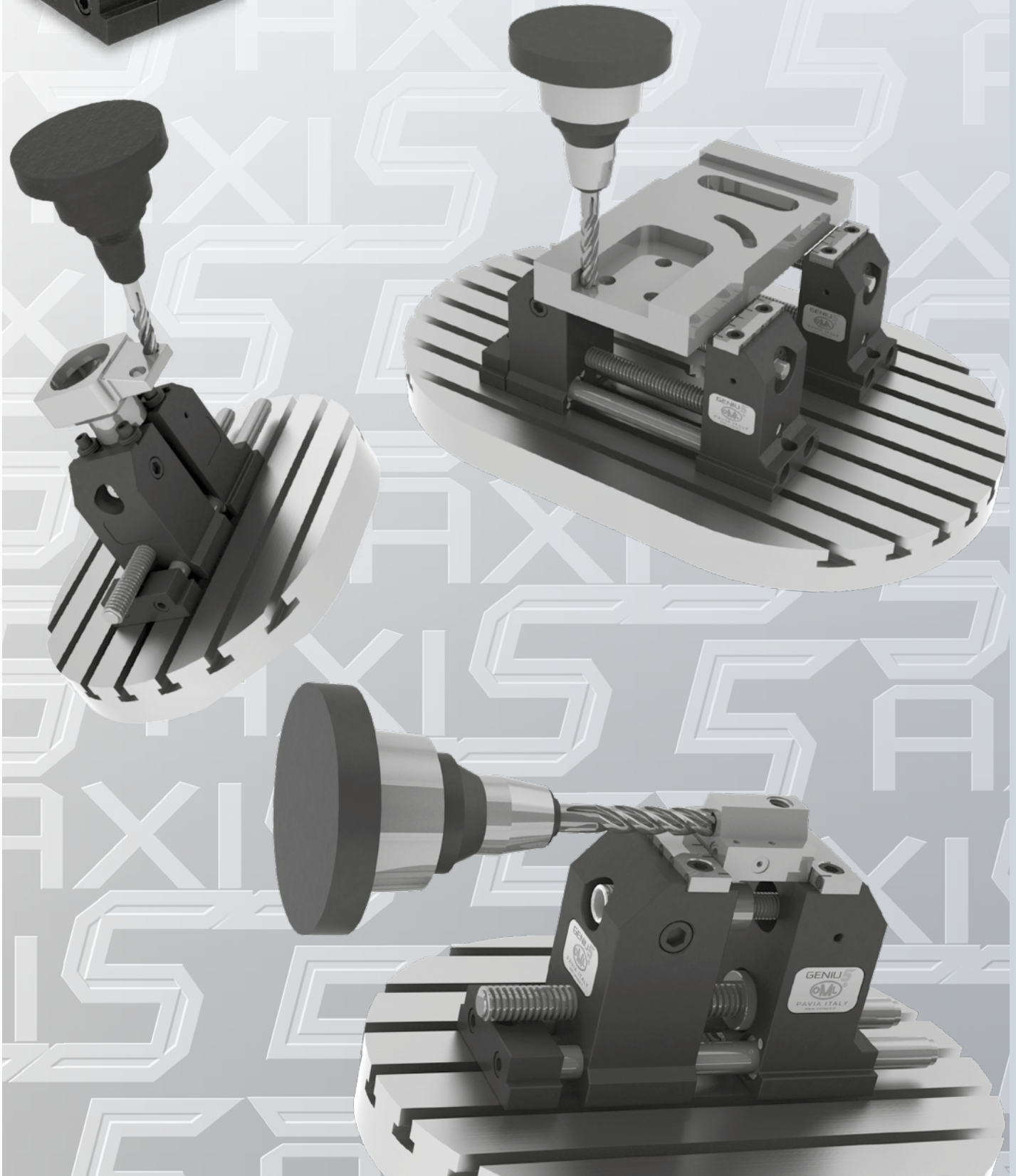
The movement of the jaws is not on a base, but on hardened and ground shafts. This allows for quicker and more accurate positioning of both the same axis with the centre of the machine tool pallet.



# "GENIUS" & SinterGrip

5.3

Precision vise for 5 axis machine tools



# SinterGrip

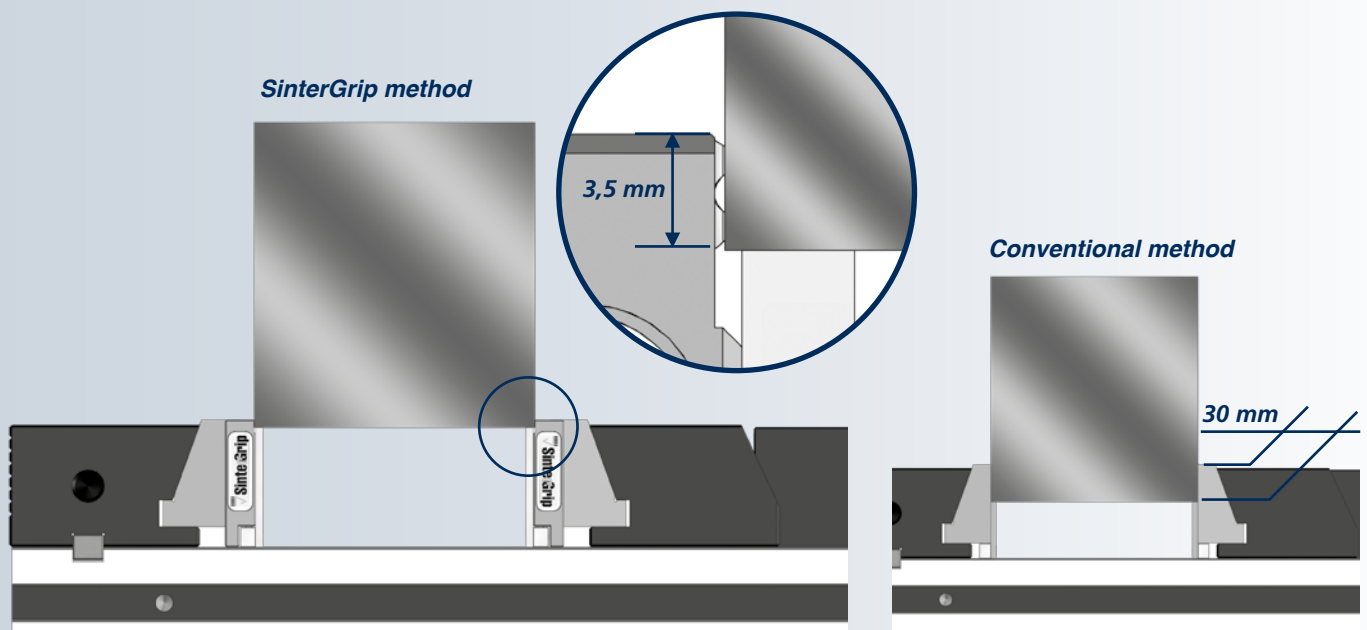
Our new patented product **SinterGrip** is born to satisfy the current need to clamp a workpiece for very few millimeters (with SinterGrip 3,5 mm clamping surface), and this for the following reasons:

- 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.

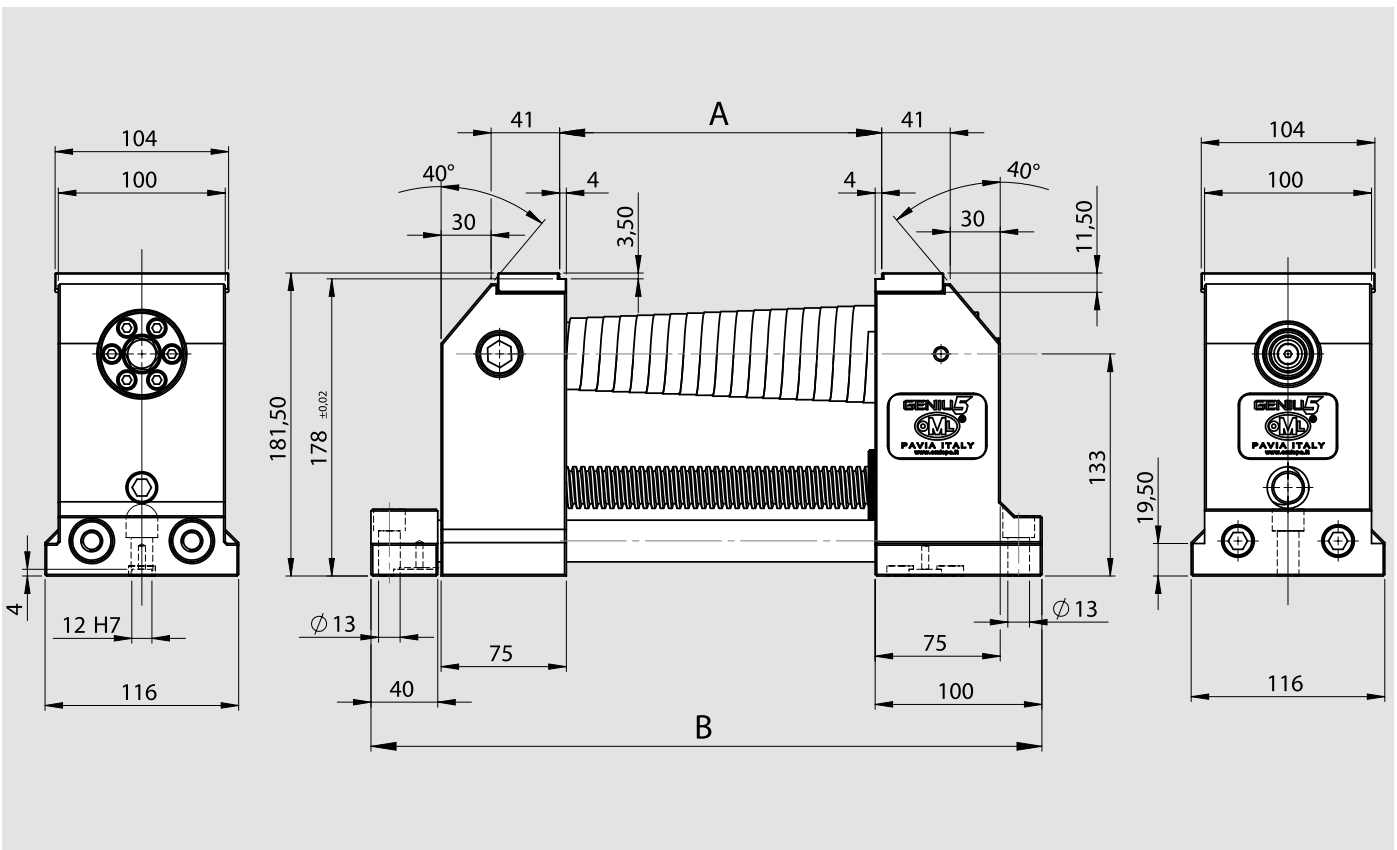


**GENIUS vise**

supplied with:

- Wrench
- Pair of positioning keys
- SinterGrip inserts for steel\*
- Work stop

\* on request SinterGrip inserts HRC or ALU



type	Id. No.	A*	B	Weight
GENIUS 100	77585011	100	321	23 Kg
GENIUS 200	77585012	200	412	25 Kg

\* Special opening "A" upon request

Special applications upon request



### WORK STOP

**Id. No.**

58505000



### PAIR OF SMOOTH/GROOVED JAWS

**Id. No.**

58504119

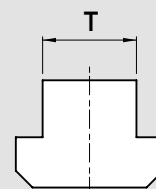


### PAIR OF CLAMPS

complete with screw and T-nuts

**Id. No.**

mm 12	mm 14	mm 16	mm 18	mm 20	mm 22
58022792	58022793	58022794	58022795	58022796	58022797

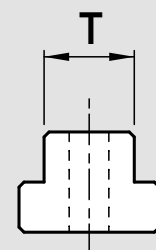


### PAIR OF NUTS

complete with screws M12

**Id. No.**

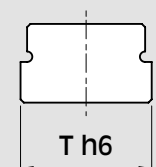
T mm 14	T mm 16	T mm 18	T mm 20	T mm 22
58502593	58502594	58502595	58502596	58502597



### PAIR OF POSITIONING KEY

**Id. No.**

mm 12 h6	mm 14 h6	mm 16 h6	mm 18 h6	mm 20 h6	mm 22 h6
58011592	58011593	58011594	58011595	58011596	58011597



### TORQUE WRENCH

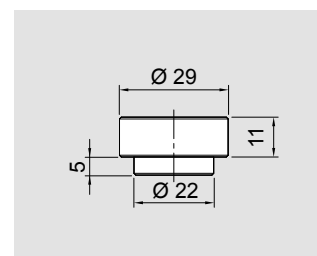
**Id. No.**

51501006



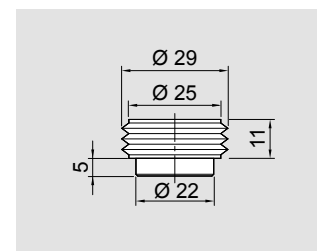
SET OF 4 "GRIPPERS" H11 SMOOTH

**Id. No.**  
58906114



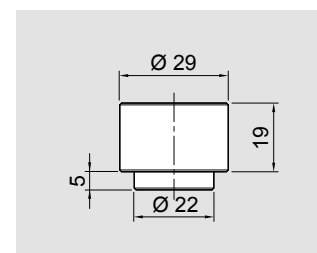
SET OF 4 "GRIPPERS" H11 SERRATED

**Id. No.**  
58906124



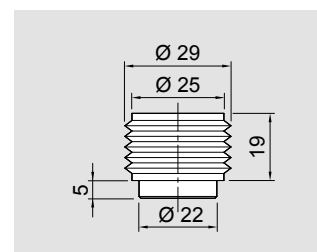
SET OF 4 "GRIPPERS" H19 SMOOTH

**Id. No.**  
58906214



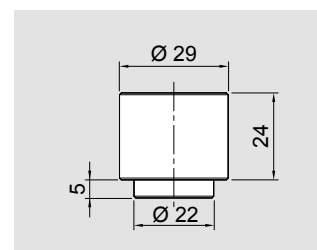
SET OF 4 "GRIPPERS" H19 SERRATED

**Id. No.**  
58906224



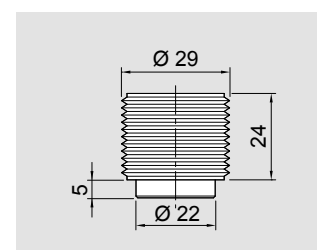
SET OF 4 "GRIPPERS" H24 SMOOTH

**Id. No.**  
58906314



SET OF 4 "GRIPPERS" H24 SERRATED

**Id. No.**  
58906324



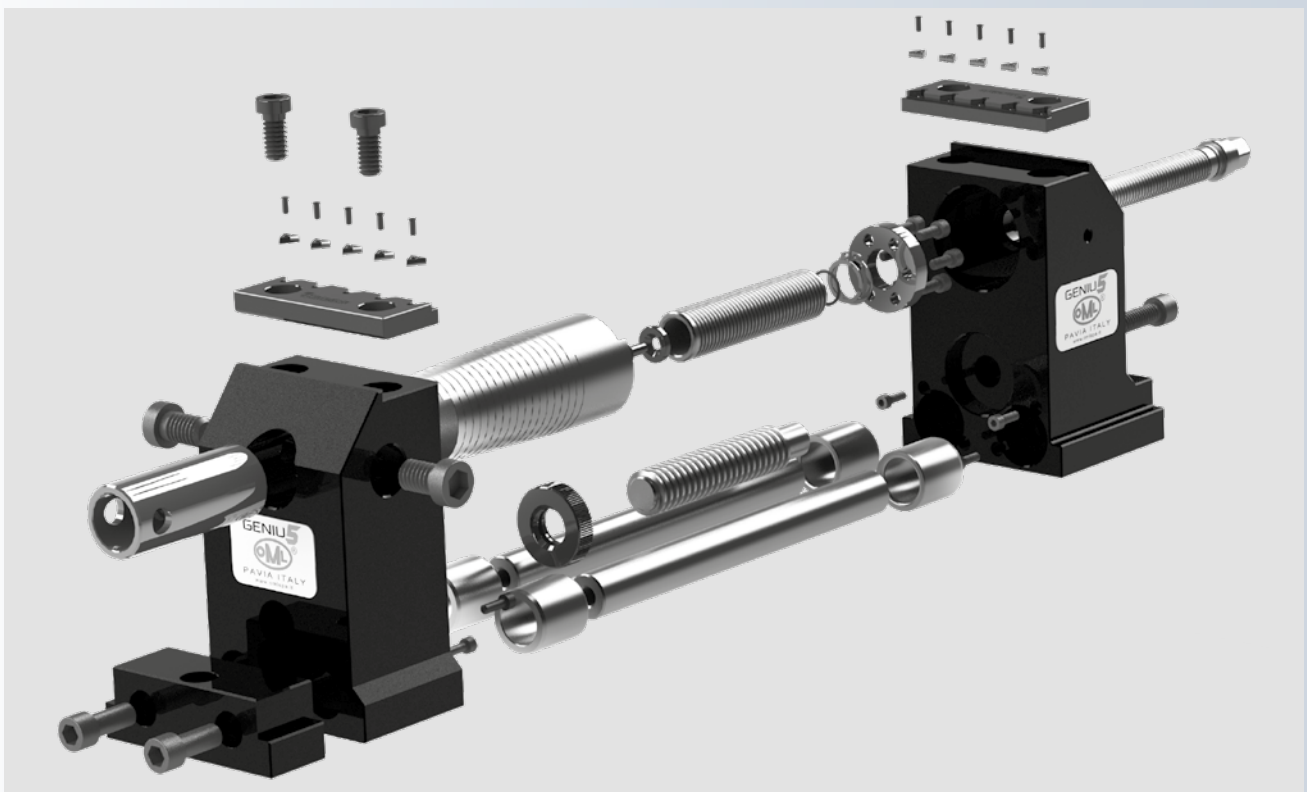
## WORKING EXAMPLE WITH GRIPPERS



## WORKING EXAMPLE WITH SINTERGRIP









### PAIR OF JAWS FOR SINTERGRIP (SinterGrip inserts: see page S.17)

**Id. No.**

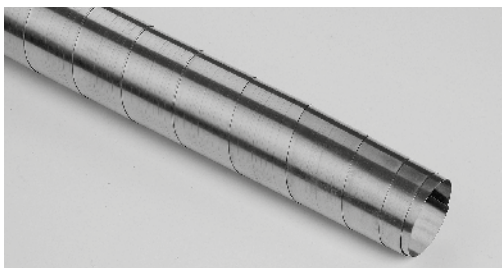
58451519



### CLAMPING KEY

**Id. No.**

51502910



### TELESCOPIC STAINLESS STEEL CARTER

**Id. No.**

71290218

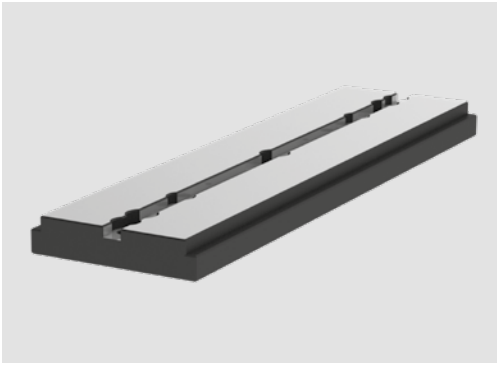


### SPINDLE GROUP

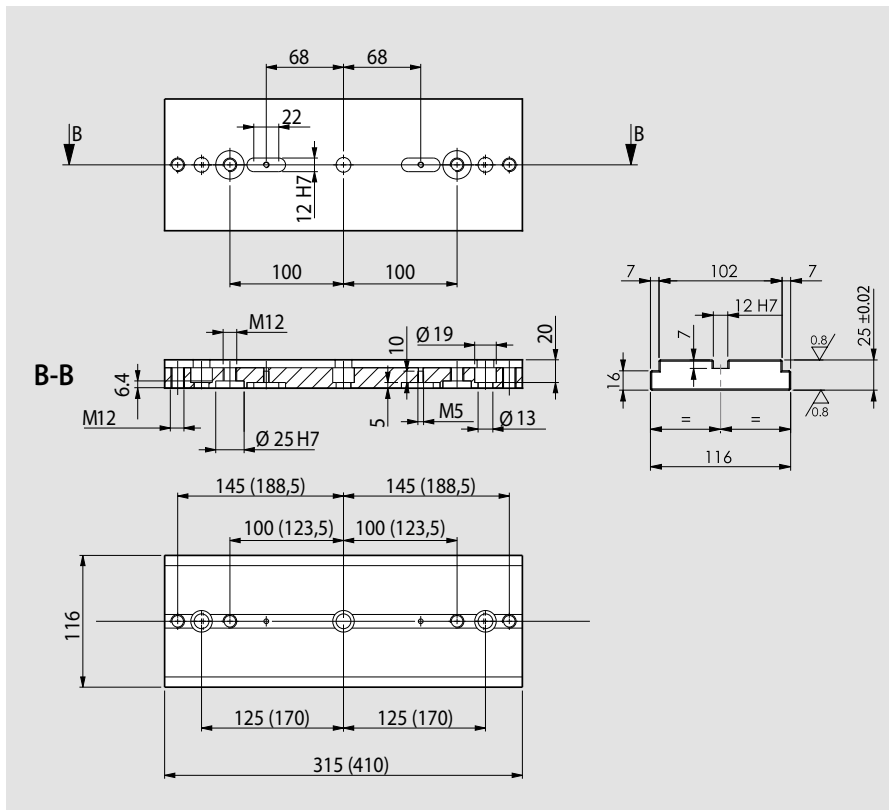
**Id. No.**

77585010

## PLATE FOR VISE GENIUS



Type	Id. No.	Weight (Kg)
GENIUS 100	58502010	7
GENIUS 200	(58502020)	9



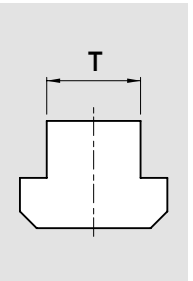
## WORKING EXAMPLE



## PAIR OF CLAMPS



Id. No.					
mm 12	mm 14	mm 16	mm 18	mm 20	mm 22
58012792	58012793	58012794	58012795	58012796	58012797



## WORKING EXAMPLES

