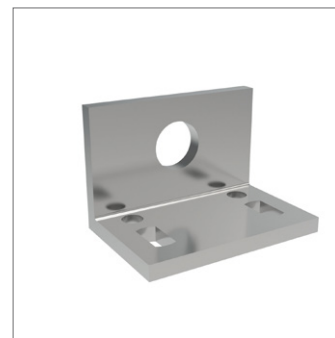
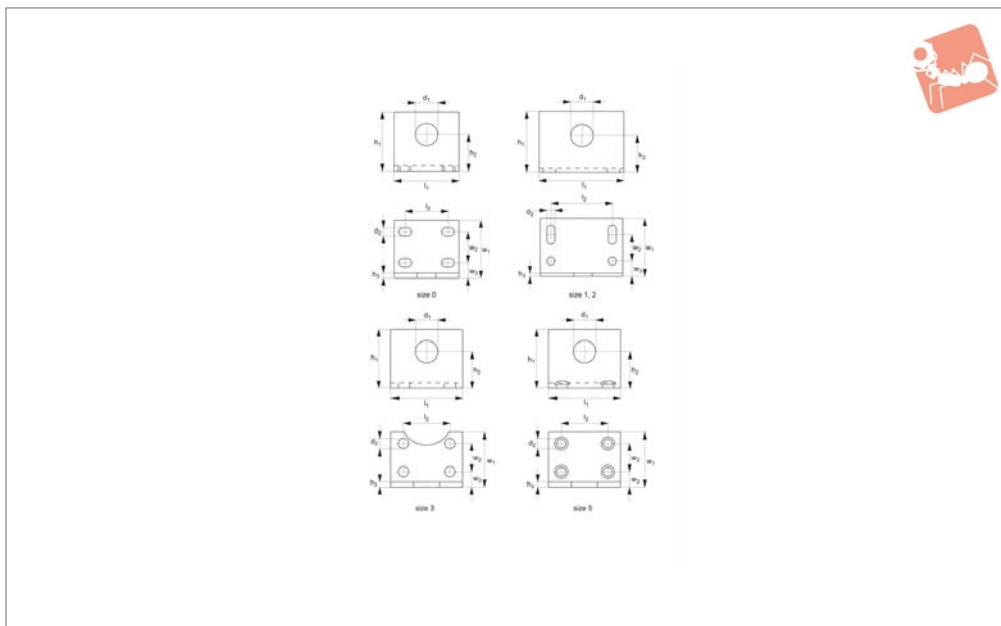




# Angle Plates

for no. 41840.W0002- .W0006.



**41880.1**

STEEL TOGGLE CLAMPS

**Material**

Steel, zinc plated.

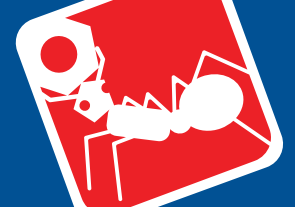
allows a wide range of applications. Fastening by means of four screws.

**Technical Notes**

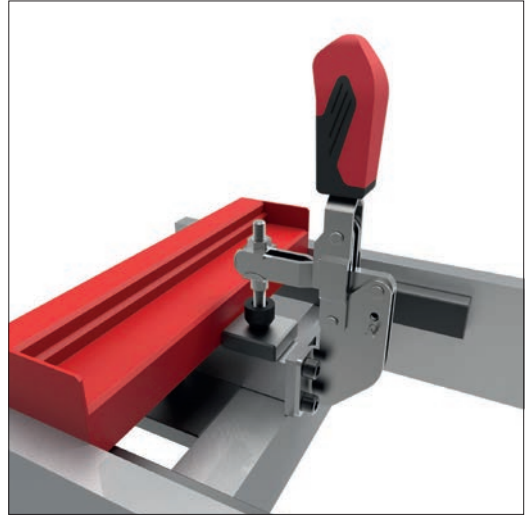
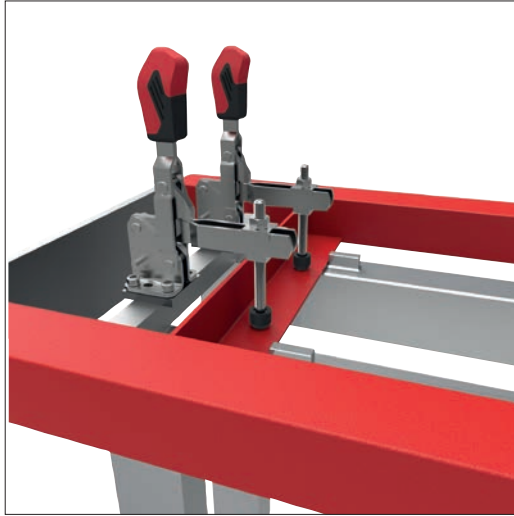
The increased height of the centre line

For stainless steel version see part 41880.W0300- .W0305.

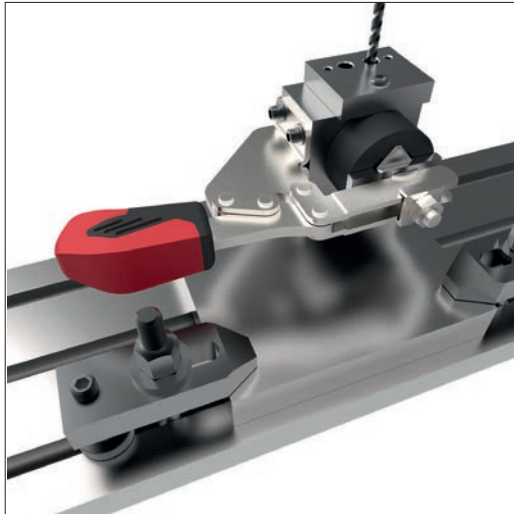
Order No.	Size	d <sub>1</sub>	d <sub>2</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	w <sub>1</sub>	w <sub>2</sub>	w <sub>3</sub>	Weight g
<b>41880.W0500</b>	0	10.2	4.5	23	13	3	30	15,5-20,5	30	16	9.0	35
<b>41880.W0501</b>	1	12.2	6.7	40	24	4	60	40.0	40	18	11.0	135
<b>41880.W0502</b>	2	16.2	6.7	40	24	5	60	40.0	40	18	11.0	160
<b>41880.W0503</b>	3	20.2	6.7	50	33	6	65	41.0	44	19	14.5	235
<b>41880.W0505</b>	5	24.0	9.0	60	37	8	70	45.0	60	32	17.0	450
<b>41880.W0506</b>	5-M27	27.0	9.0	60	37	8	70	45.0	60	32	17.0	440



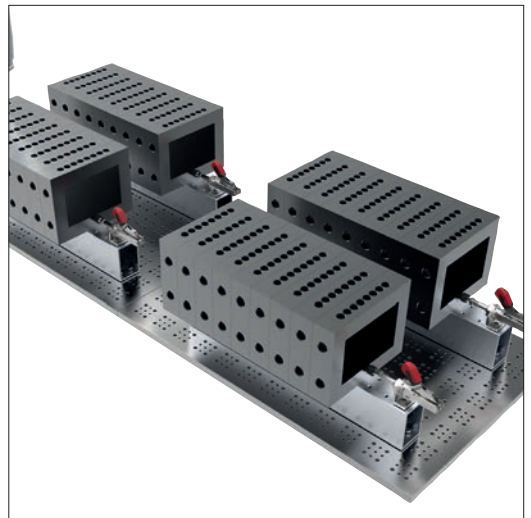
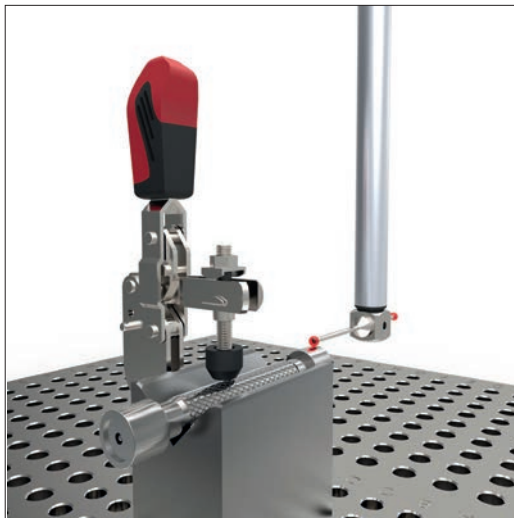
## Welding Fixtures



## Machining and Jig Assemblies

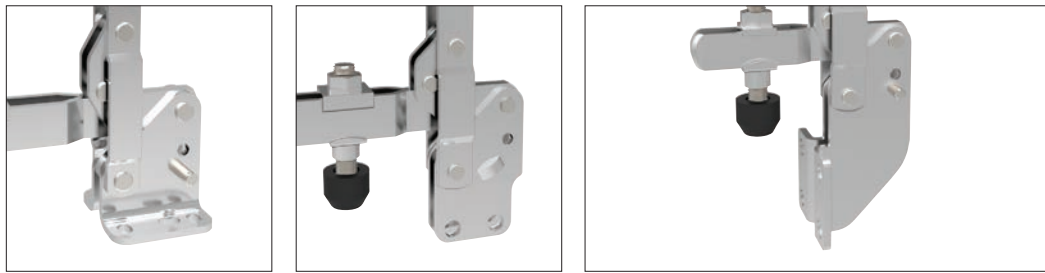


## Cmm's





STEEL TOGGLE CLAMPS

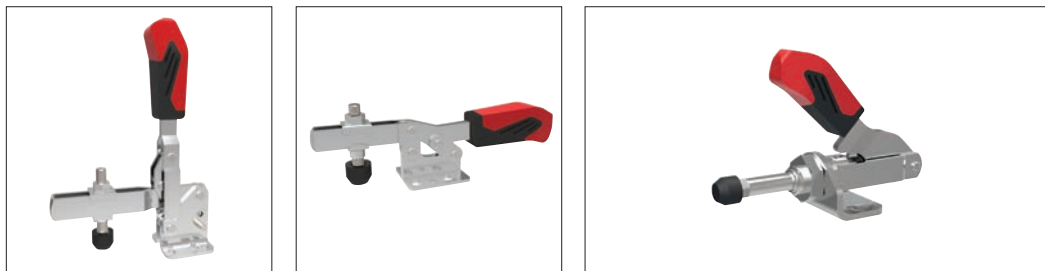


Horizontal base

Vertical base

Angled base

### Mounting Base Variations

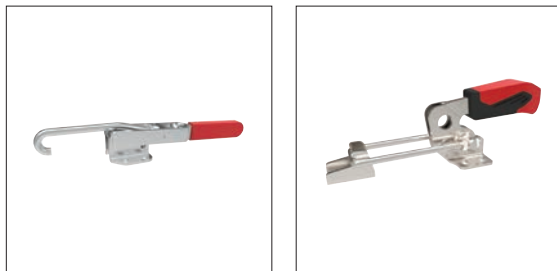


Vertical acting

Horizontal acting

Push-pull

### Clamping Variations

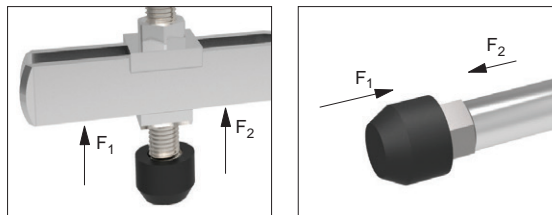


Hook type

Latch type

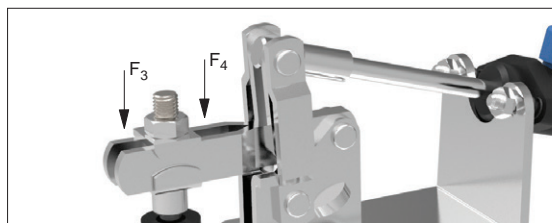
### Explanation of forces

The force transmitted to the workpiece by the toggle clamp's closed arm, without itself being deformed when machine forces are applied. The holding force value is dependent upon the proximity of the measuring load point to the toggle clamp's pivot point (therefore two values,  $F_1$  and  $F_2$  are provided).



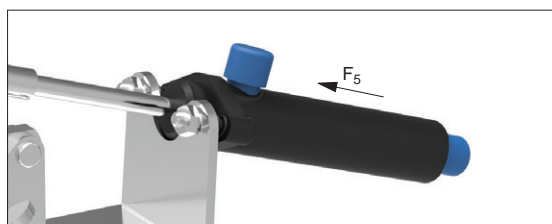
### Holding Forces $F_1$ or $F_2$

The force applied to the workpiece when the toggle clamp's arm is closed. These clamping forces can only be stated for pneumatic toggle clamps, clamping forces of manual clamps cannot be easily measured as they are dependent upon the operator.



### Clamping Forces $F_3$ or $F_4$

For pneumatically controlled toggle clamps only,  $F_5$  is the piston force required (at 6 bar to) achieve the stated clamping force.



### Piston Forces $F_5$

ov-W40000.1-A-T-W42070-A-T-b-rmh- Updated -27-10-2022



### Quality Features



Ergonomic soft grip  
2-component handle



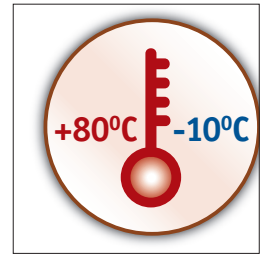
Stainless rivets and  
hardened bushings



Moveable stop for  
variable opening angle



Operator  
finger protection



Temperature resistant

### Unique Features



Safety catches



Heavy duty versions



Pneumatic versions



Matt black surface for  
optical measurement

### Materials



Steel, zinc plated  
and passivated



Stainless steel (304)



Steel, matt black  
vario-spektron coated



Protective cap and  
handle made of an  
electrostatic conductive  
(dissipative) material.