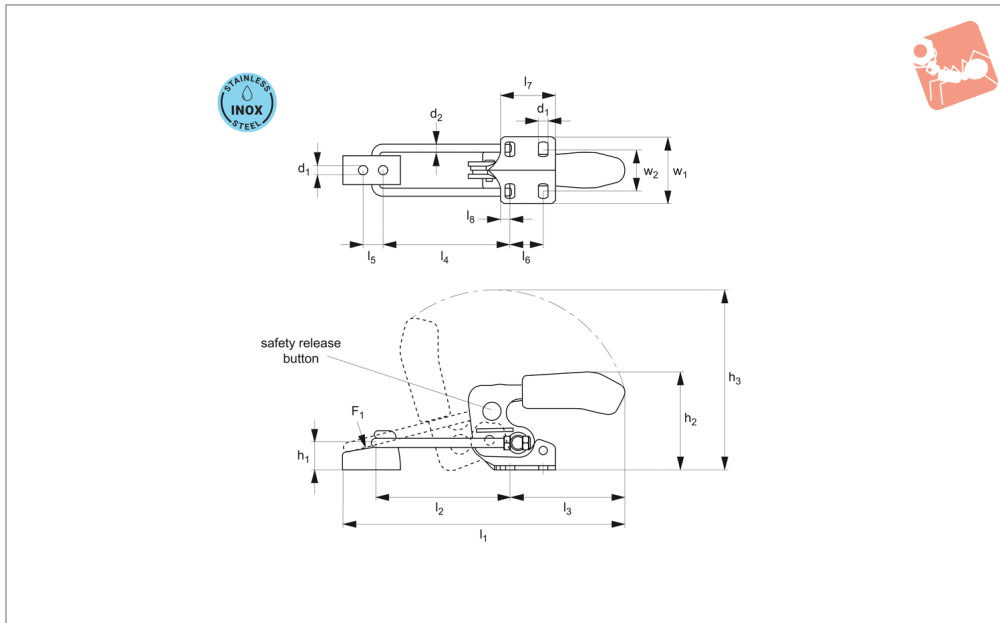




# Latch Type Toggle Clamps

stainless - horizontal acting - safety button

## Stainless Steel Toggle Clamps



41805.4

STAINLESS STEEL TOGGLE CLAMPS

### Material

Body: stainless steel (AISI 304, 1.4301), polished.  
Rivets: stainless steel running in hardened bushes. Pre-lubricated bearings.  
Ergonomic soft feel oil-resistant handle

with large grip area.  
Complete with counter strike.

### Technical Notes

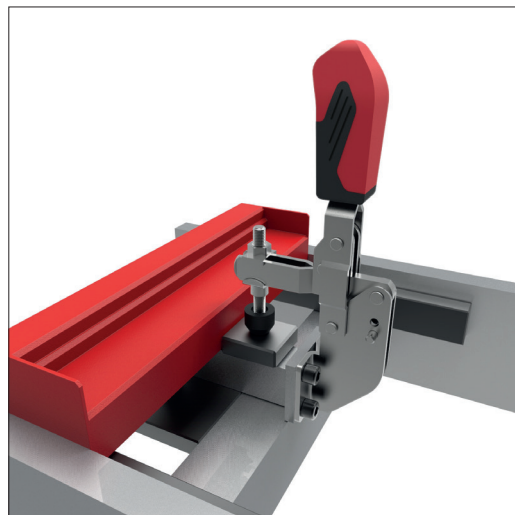
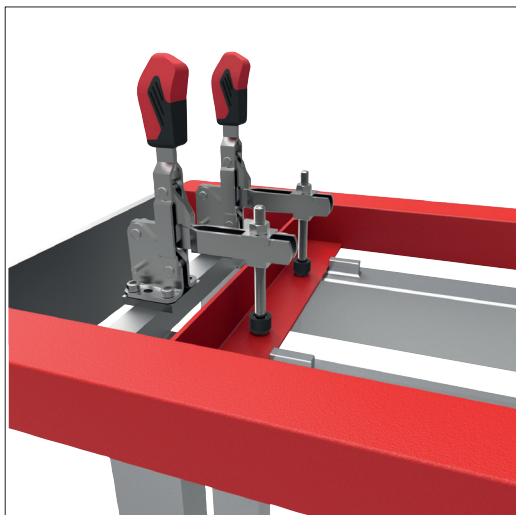
The safety latch holds the clamp in both the open and the closed position. This

prevents opening under vibration or inadvertent movement of the clamping arm when loading or unloading a fixture.  
Temperature range -10°C to +80°C.

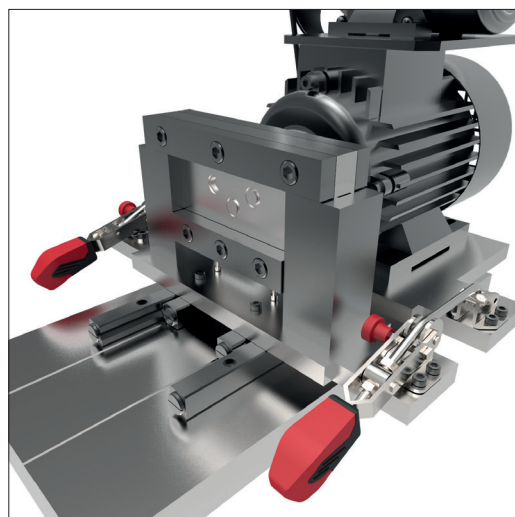
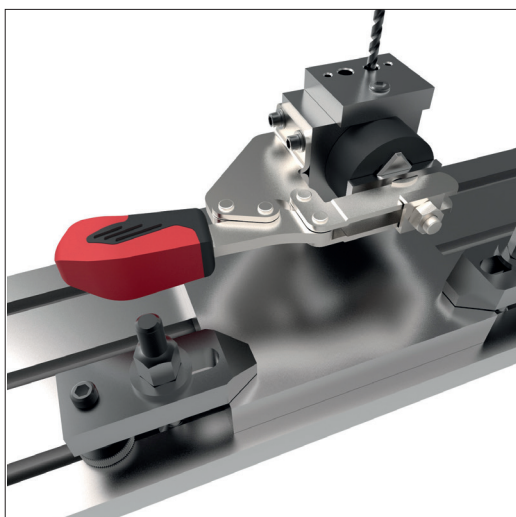
Order No.	Size	F <sub>1</sub> kN	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	l <sub>1</sub> min.	l <sub>1</sub> max.	l <sub>2</sub> min.	l <sub>2</sub> max.	Weight g	
41805.W0304	4	7.0	26	94	168	209	273	66	130	850	
Order No.	l <sub>3</sub>	l <sub>4</sub> min.	l <sub>4</sub> max.	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	l <sub>8</sub>	w <sub>1</sub>	w <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>
41805.W0304	111	59	123	19	32	53.5	9.5	64.5	35-46	8.5	8



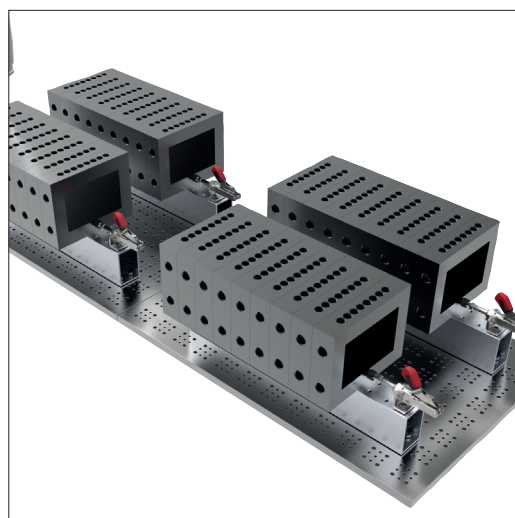
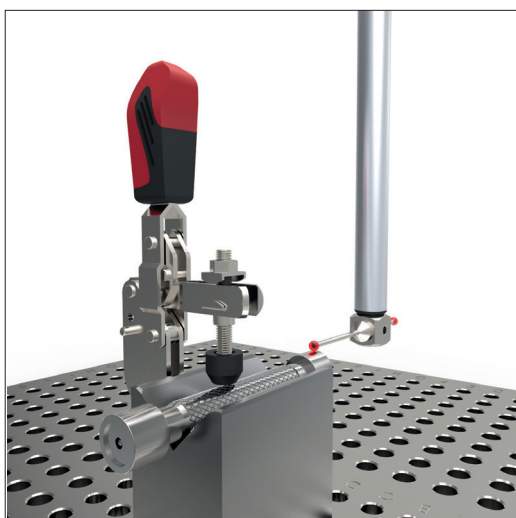
## Welding Fixtures

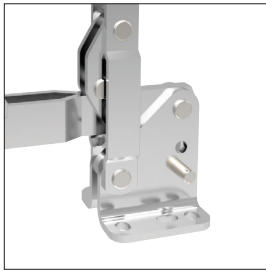


## Machining and Jig Assemblies

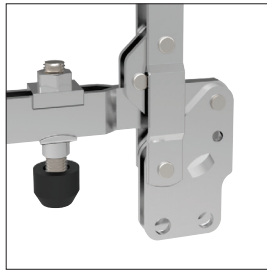


## Cmm's

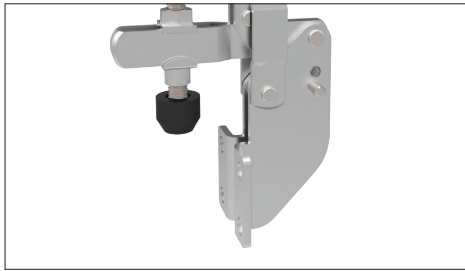




Horizontal base



Vertical base



Angled base

### Mounting Base Variations



Vertical acting

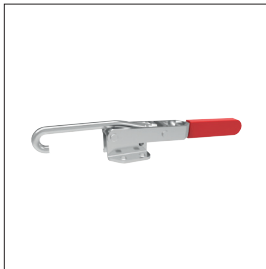


Horizontal acting



Push-pull

### Clamping Variations



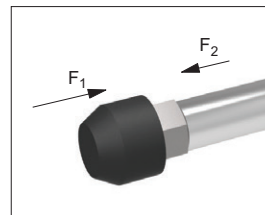
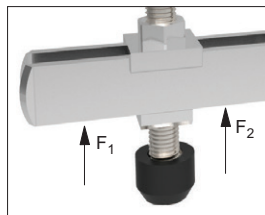
Hook type



Latch type

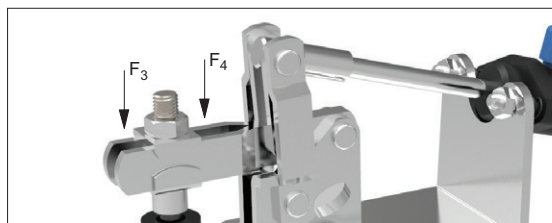
## Explanation of forces

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).



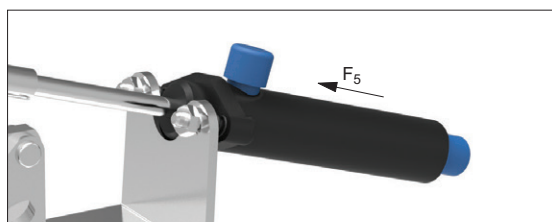
### Holding Forces $F_1$ or $F_2$

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.



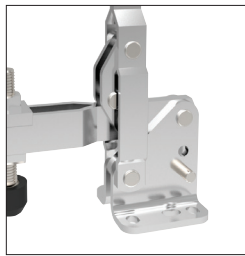
### Piston Forces $F_5$



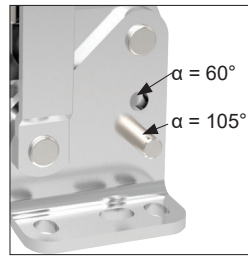
### Quality Features



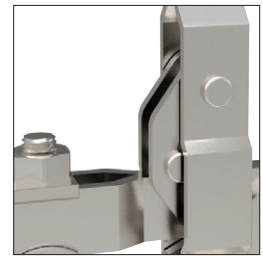
Ergonomic soft grip  
2-component handle



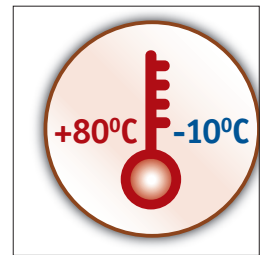
Stainless rivets and  
hardened bushings



Moveable stop for  
variable opening angle



Operator  
finger protection



Temperature resistant

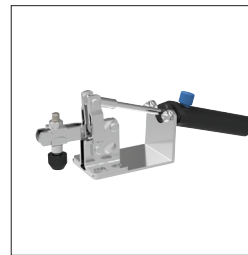
### Unique Features



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.