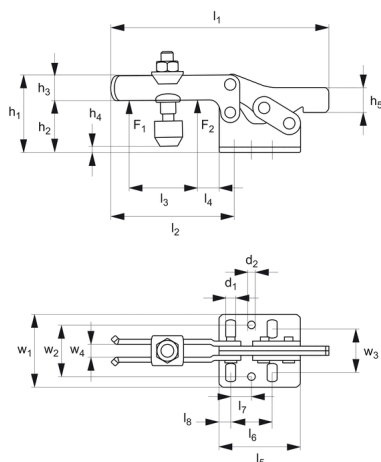




Horizontal Acting Toggle Clamps for removable handle



STEEL TOGGLE CLAMPS



41005.1

Material

Body: steel, zinc plated.
Rivets: stainless steel running in hardened bushes.
Pre-lubricated bearings (grease suitable for food industry use).
Supplied complete with clamping screw

(with rubber pad).

Technical Notes

Temperature range -10°C to +80°C.

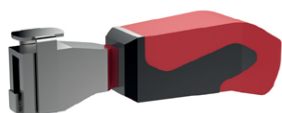
Tips

Order removable handle separately 41005.
W0102- .W0104.

To prevent interference during use the handle can be removed after opening or closing the clamp.

Order No.	Size	F ₁ kN	F ₂ kN	Clamping screw	h ₁	h ₂	h ₃	h ₄ min.	h ₄ max.	h ₅	Weight g
41005.W0002	2	1.0	1.2	M 6x35	45.0	24	13.2	-1.5	5	12	160
41005.W0003	3	1.8	2.5	M 8x45	48.5	32	15.0	-2.0	9	15	269
41005.W0004	4	2.0	3.0	M 8x65	75.0	45	20.0	-4.0	24	15	608

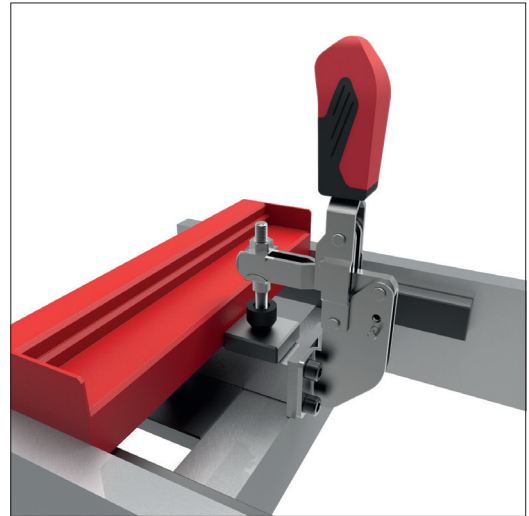
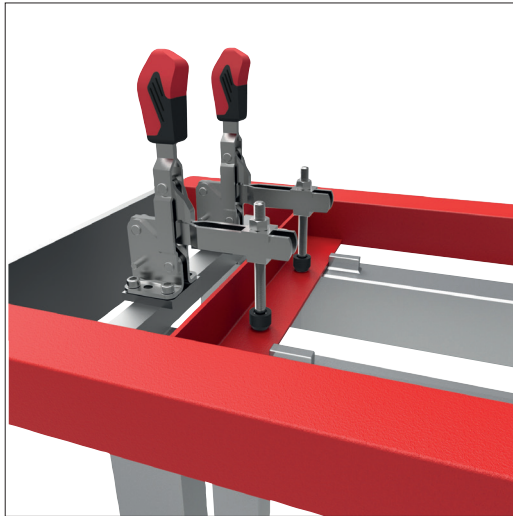
Order No.	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	l ₈	w ₁	w ₂	w ₃	w ₄	d ₁	d ₂	α
41005.W0002	113	64	32	16	38	26.0	12.7	6	42.0	19,5-29,5	6	28.5	5.6	5.6	90°
41005.W0003	134	73	38	14	50	25.7	13.0	7	45.5	22,0-31,8	8	31.6	6.5	5.1	90°
41005.W0004	191	113	63	27	57	41.5	20.5	8	58.0	29,0-43,0	10	43.0	8.5	8.5	90°



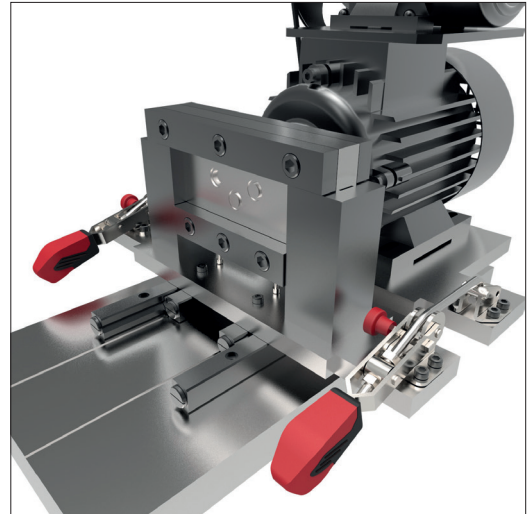
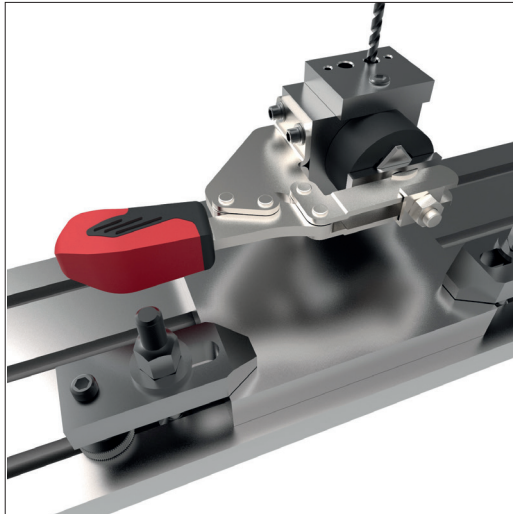
part no. 41005.W0102- .W0104
to reduce length during use the handle can be removed after opening or closing the clamp



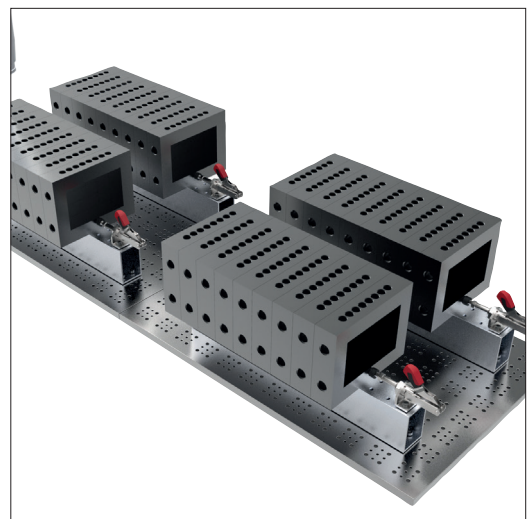
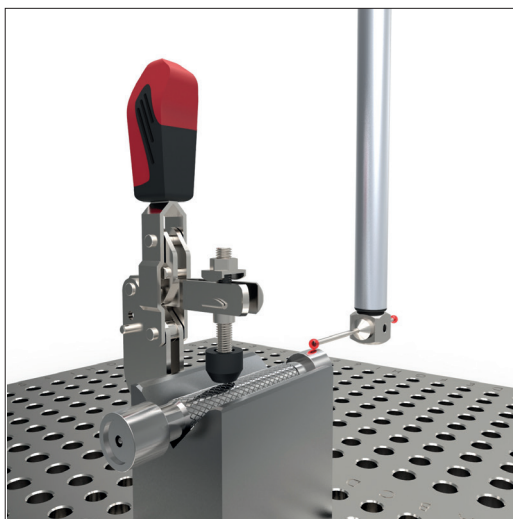
Welding Fixtures



Machining and Jig Assemblies

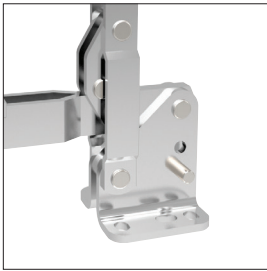


Cmm's

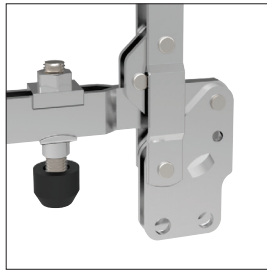




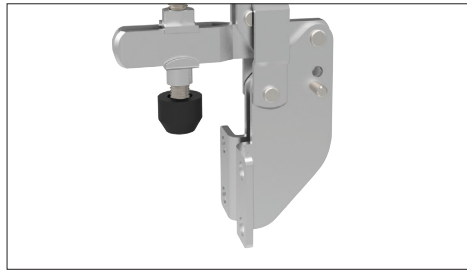
Mounting Base Variations



Horizontal base



Vertical base



Angled base

Clamping Variations



Vertical acting



Horizontal acting



Push-pull



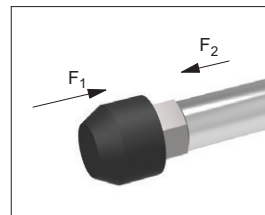
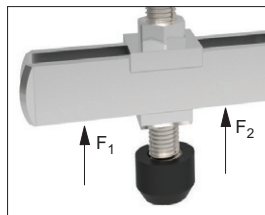
Hook type



Latch type

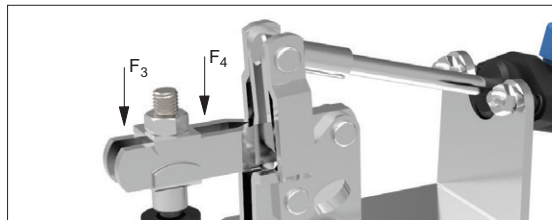
Explanation of forces

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).



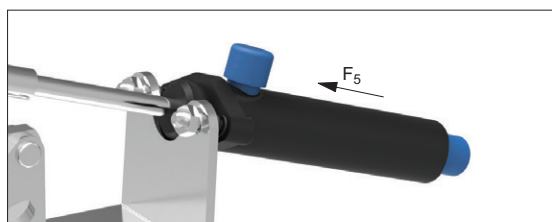
Holding Forces F_1 or F_2

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

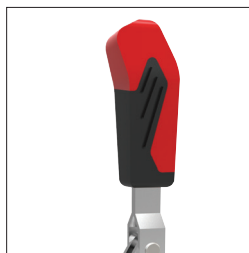
For pneumatically controlled toggle clamps only, F_5 is the piston force required (at 6 bar to) achieve the stated clamping force.



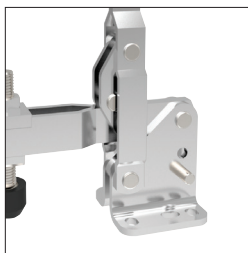
Piston Forces F_5



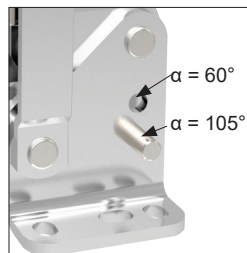
Quality Features



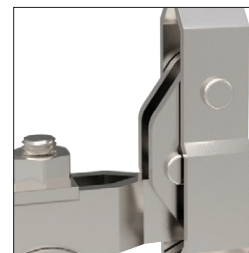
Ergonomic soft grip
2-component handle



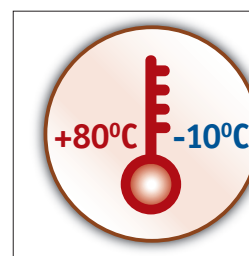
Stainless rivets and
hardened bushings



Moveable stop for
variable opening angle



Operator
finger protection



Temperature resistant

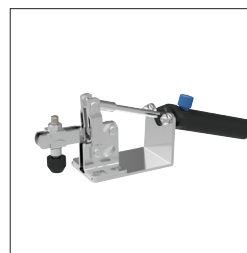
Unique Features



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.