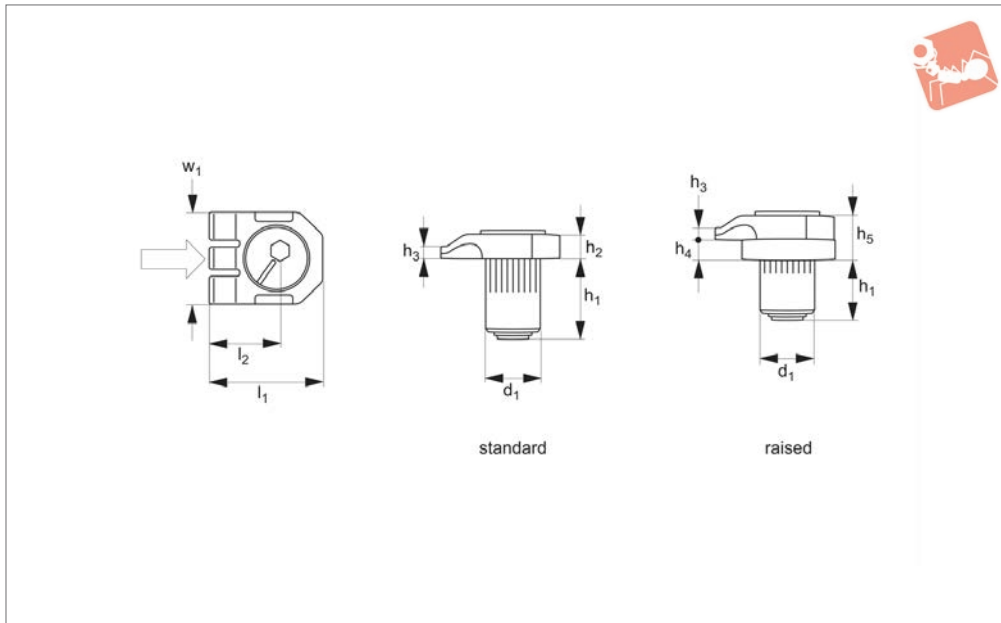




Mini Finger Clamps

up to 4000 N

Low Profile Side Clamping



10940

LOW PROFILE SIDE CLAMPING

Material

Spring steel.

Technical Notes

Simple, very heavy-duty, low profile clamping. A quarter turn of the clamping screw generates up to 4000 N clamping force.

They have a swivel facility to allow clamping in any direction.

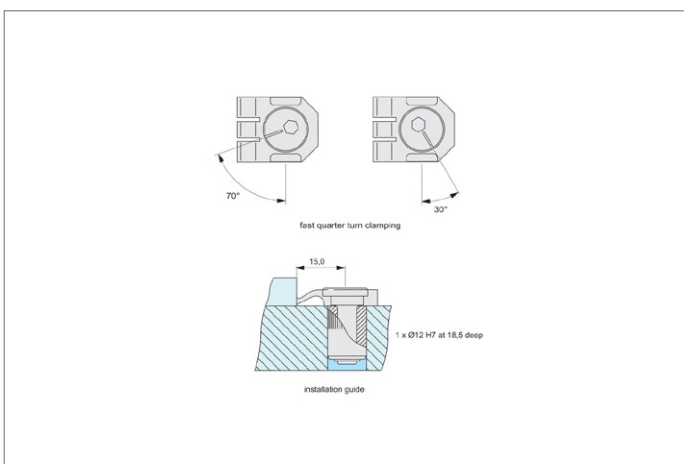
Tips

The clamps have unique „fingers“ that push the workpiece down before clamping - even on castings with a negative draft.

Important Notes

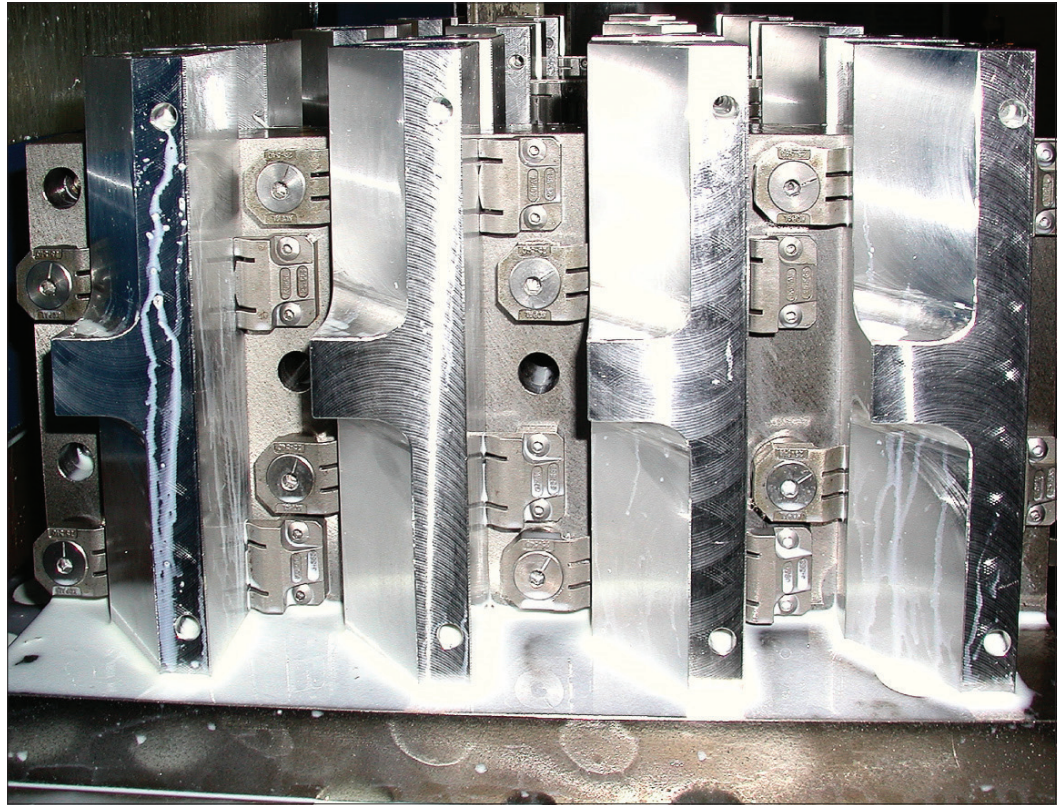
These clamps achieve a positive downforce on both faces of the workpiece when used in conjunction with fixed stop, part nos. 10900 or 10920.

Order No.	Type	Clamp height	Clamp stroke	h_1	h_2	h_3	h_4	h_5	l_1	l_2	w_1	d_1	Torque to Nm max.	Clamping force kN max.
10940.W0210	Standard	2.5	1.2	18	5	2.5	-	-	25	15	20	12	9	4
10940.W0215	Raised	7.5	1.2	18	-	2.5	5	10	25	15	20	12	9	4





Application



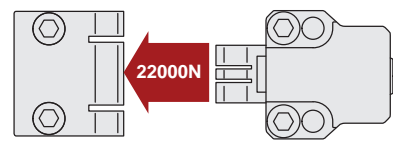
LOW PROFILE SIDE CLAMPING

Unique Horizontal Clamping Set-Ups

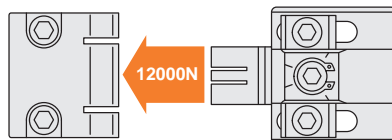
Part No. 10900, 10920, 10940
T-slot table and special machining set-ups



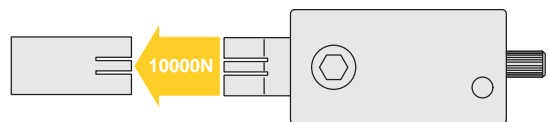
Part No. 11040, 11041, 11042, 11043
Supports and special machining set-ups



Part No. 11070, 11071
Supports and special machining set-ups



Part No. 11080, 11081, 11083
T-slot table, supports and special machining set-ups



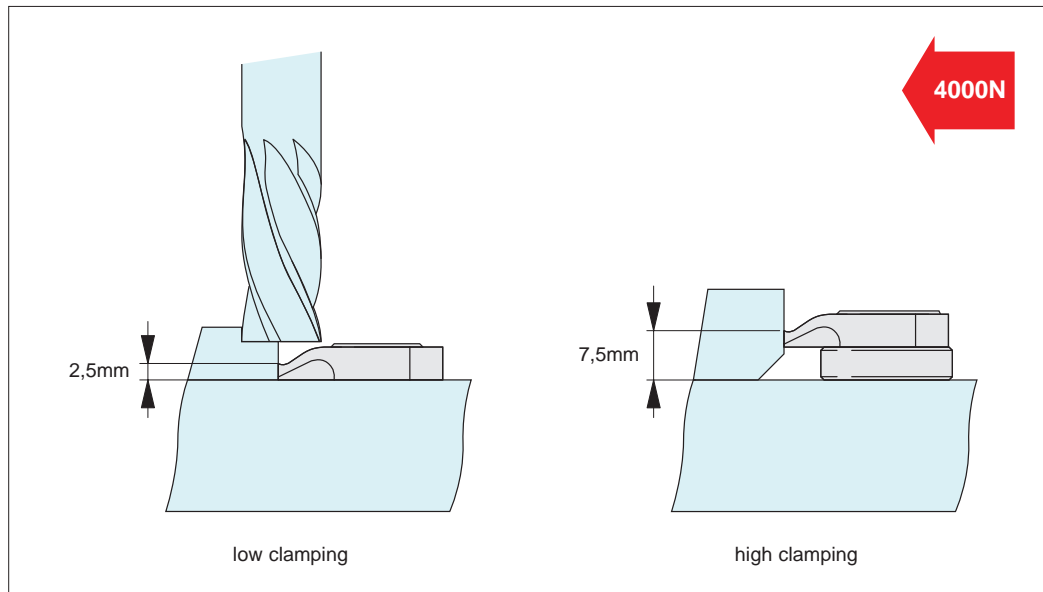


Mini Finger Clamps

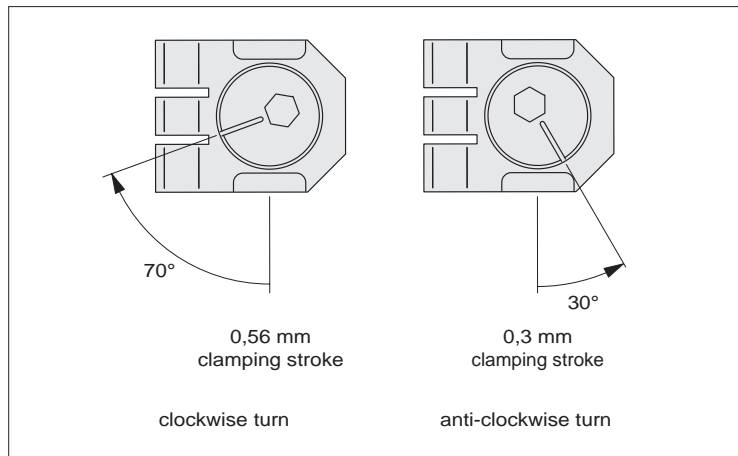
one of the most powerful clamps for its size

10900 - 10940
Clamping & Height Setting

Mini finger clamps operate using our unique “three finger” clamping action – providing unmatched levels of pull down force and side clamping, for maximum component stability during machining.

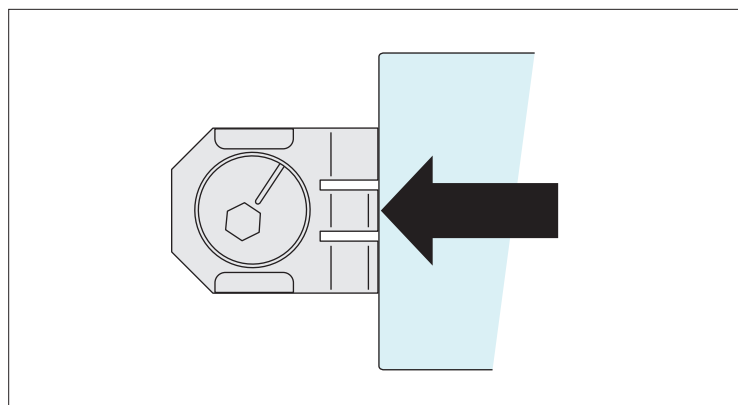


With a height of less than 6mm and a length of just 20mm mini finger clamps are ideal for multi-component clamping, while maximising access of the tooling. The clamp body is made from spring steel and the eccentric and screw from heat-treated steel. For quick, precise and high clamping forces up to 4000 Newtons.



The finger clamps pivot around an eccentric axis, with clamping via either a right (30°) or left (70°) actuation of the eccentric screw.

Actuation



Mini finger clamps can position as well as clamp the workpiece – putting pressure against the stops and pulling the workpiece onto the reference surface in one motion.

Often just a single mini clamp can achieve workpiece positioning and clamping against its stops.

Clamping

LOW PROFILE SIDE CLAMPING



Unique Action - "three finger" Clamping

Pull down AND clamp with the highest of clamping forces – from 0,4 tons to 2,2 tons!

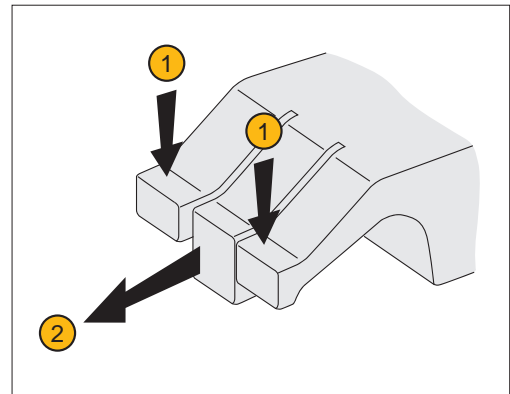
Used in our clamping series:

- 10900, 10940, 10880,
- 10920, 11040, 11041,
- 11042, 11043, 11070,
- 11071, 11080, 11081,
- 11082, 11083

Our horizontal clamps have a unique "three finger" arrangement ensuring components are both pulled down and clamped in the same motion. The face of the clamp is made of three parts or "fingers":

- Two outer flexible fingers (1); for pulling down the component to the work table.
- One solid central finger (2), to provide direct clamping action.

Available in two styles – smooth and serrated face. They can also cater for workpieces with an adverse angle on the clamping face – for example flame cut steel blanks.

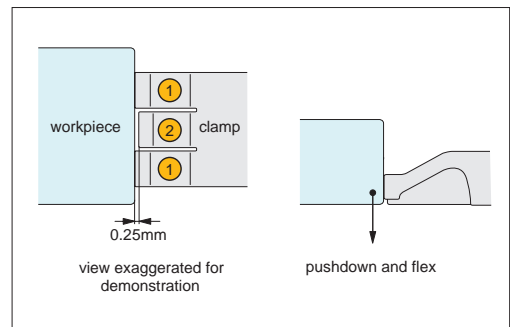


Clamping Action

Contact

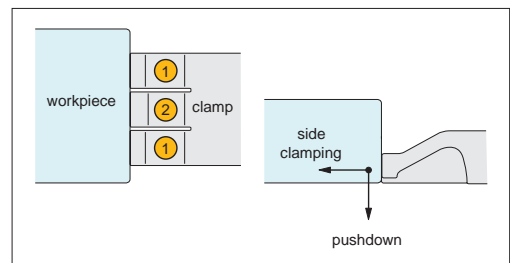
The clamps outer flexible fingers (1) are approx. 0,25mm longer than the solid central finger/clamping stop (2), this slight difference in length means it is the flexible fingers which first come into contact with the workpiece.

As initial contact is made with the work-piece the flexible fingers (1) apply downward pressure forcing the workpiece down against the work table, the flexible fingers are compressed until they are the same length as the solid central finger/clamping stop (2).



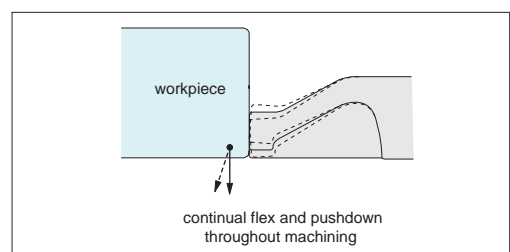
Clamping

As the solid central finger/clamping stop (2) comes into contact with the work-piece it applies high side clamping pressure to achieve clamping forces up to 2,2 tons (dependent upon clamping model selected).



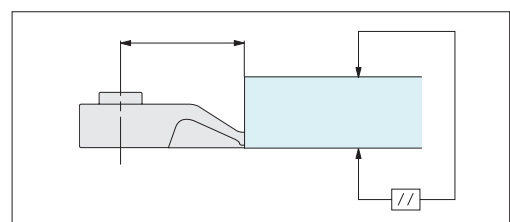
Machining

During machining the uniquely designed flexible fingers (1) continue to flex and twist applying downward pressure to keep the workpiece flat to the work table throughout.



Precision Positioning

The unique clamping action achieves precision positioning of workpieces – ensuring the workpiece remains parallel to the reference surface.





Horizontal Clamping

up to 2.2 tons



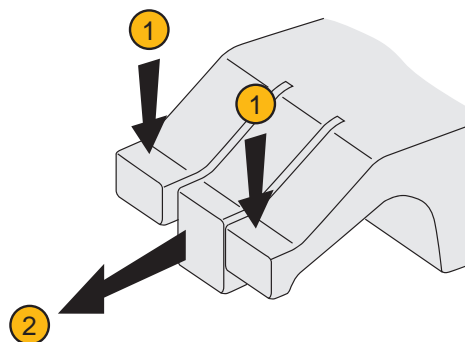
Clamping & Height Setting

Unique Action - "three finger" Clamping

Our horizontal clamps have a unique "three finger" arrangement ensuring components are both pulled down and clamped in the same motion. The face of the clamp is made of three parts or "fingers":

- Two outer flexible fingers ①; for pulling down the component to the work table.
- One solid central finger ②, to provide direct clamping action.

Available in two styles – smooth and serrated face. They can also cater for workpieces with an adverse angle on the clamping face – for example flame cut steel blanks.



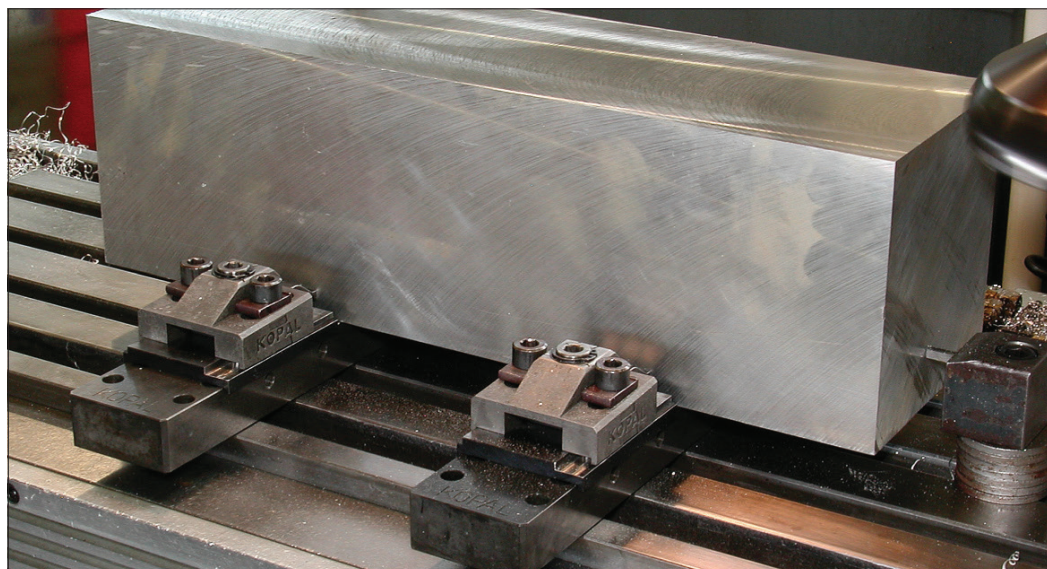
11040/41/42/43

22000N

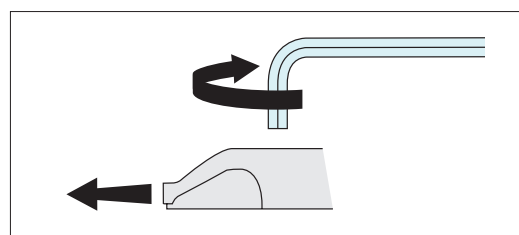
11070/71

12000N

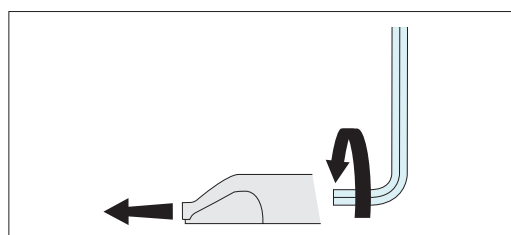
LOW PROFILE SIDE CLAMPING



Options

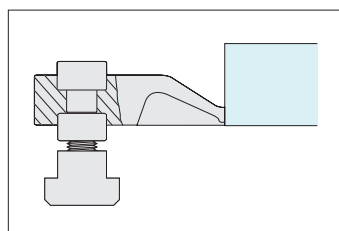


Quick 1/4 turn eccentric clamping – on models offering 4000 and 12000 Newtons clamping force.

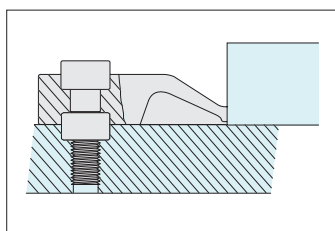


Rear screw clamping – on models offering 6500, 10000 and 22000 Newtons clamping force.

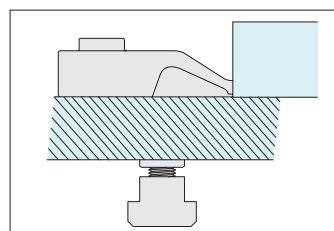
Actuation



T-Slotted tables



Dedicated fixturing



Modular fixturing

Mounting