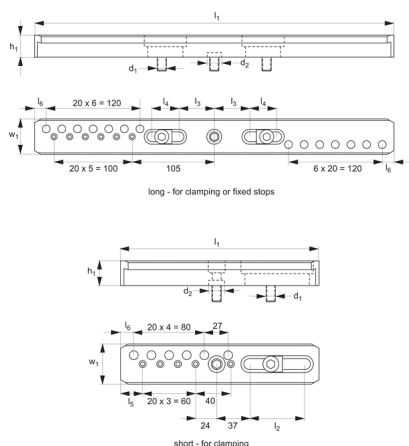




# Support Bars for 1 ton finger clamps

## Heavy-Duty Side Clamping



11086

HEAVY-DUTY SIDE CLAMPING

### Material

Steel, hardened, with ground faces.

for locator  $d_2$  tap M12 counterbore 18,00  
H7 + 5mm deep.

### Technical Notes

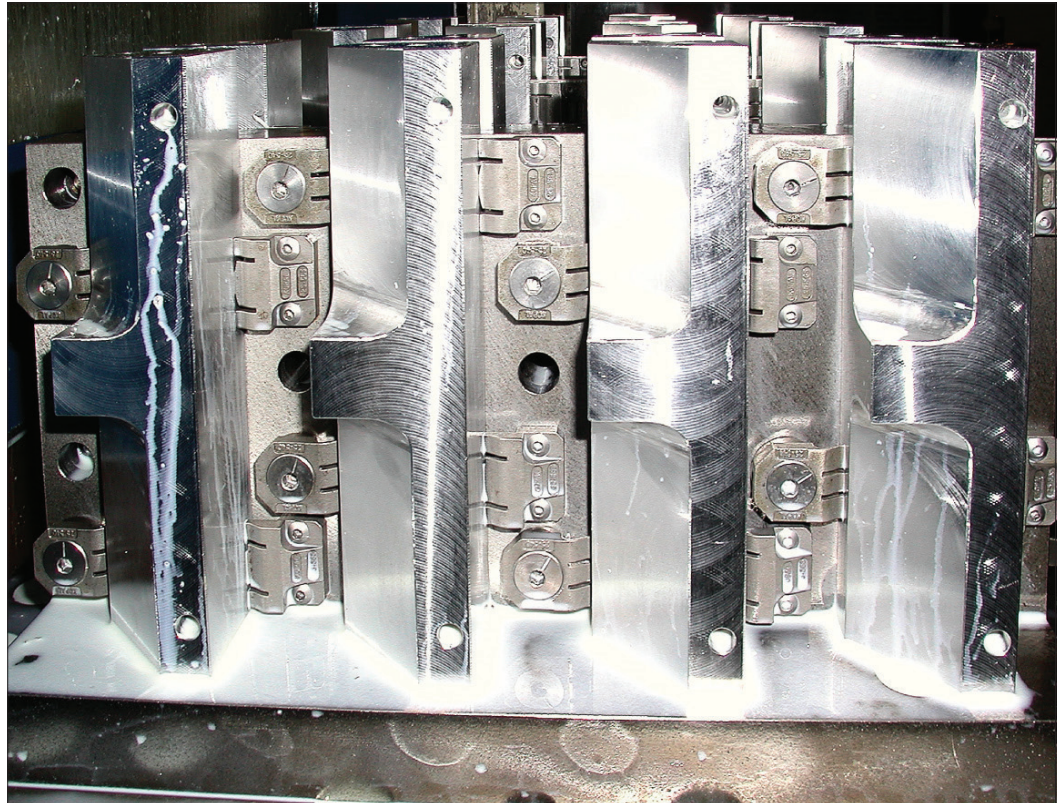
Fitting instructions:

For use with finger clamps 11080-11083.

Order No.	Type	$w_1$	$d_1$	$d_2$	$h_1$	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$	$l_6$
11086.W0040	Long	45.5	M12	18	28	460	-	45	35	-	15
11086.W0045	Short	45.5	M12	18	28	225	63	-	-	25	15



### Application

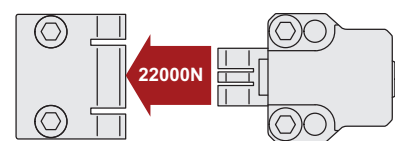


### Unique Horizontal Clamping Set-Ups

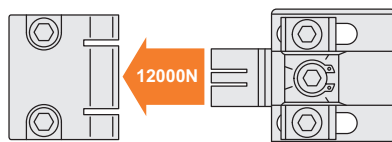
**Part No. 10900, 10920, 10940**  
T-slot table and special machining set-ups



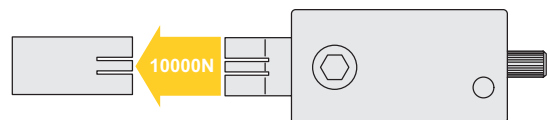
**Part No. 11040, 11041, 11042, 11043**  
Supports and special machining set-ups

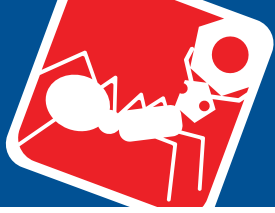


**Part No. 11070, 11071**  
Supports and special machining set-ups



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



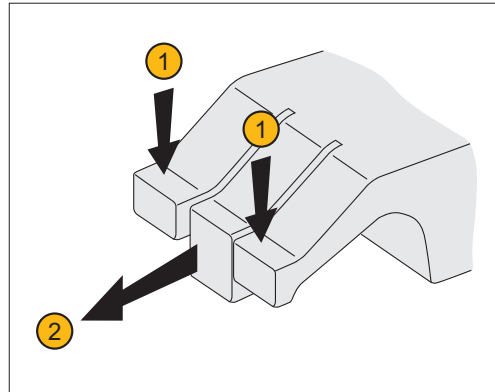


## Unique Action - "three finger" Clamping

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.



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

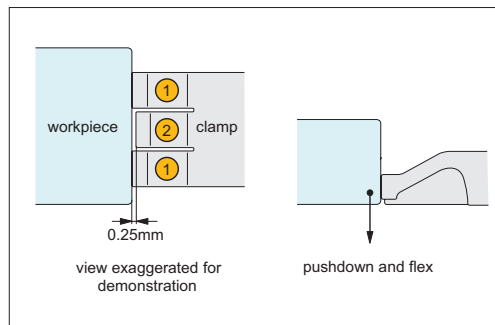
Used in our clamping series:

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

## Clamping Action

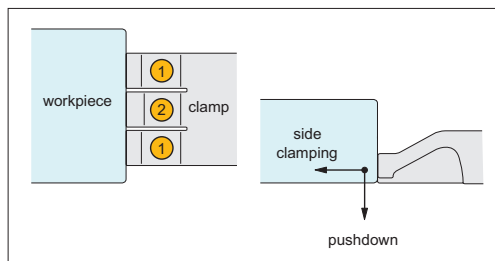
The clamps outer flexible fingers ① are approx. 0,25mm longer than the solid central finger/clamping stop ②, this slight difference in length means it is the flexible fingers which first come into contact with the workpiece.

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.



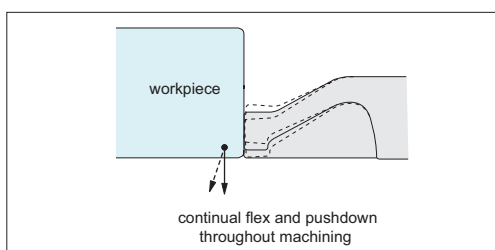
### Contact

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).



### Clamping

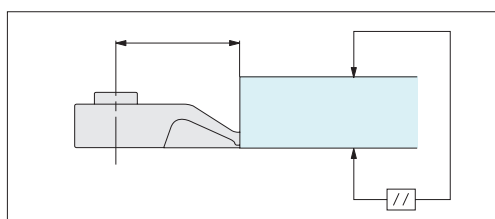
During machining the uniquely designed flexible fingers ① continue to flex and twist applying downward pressure to keep the workpiece flat to the work table throughout.



### Machining

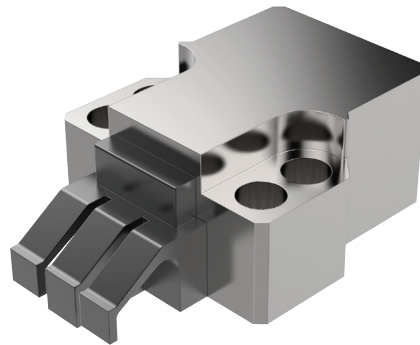
## Precision Positioning

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



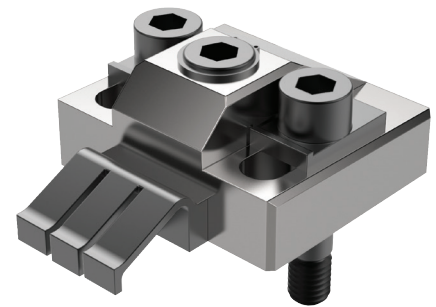


### Clamping Torque



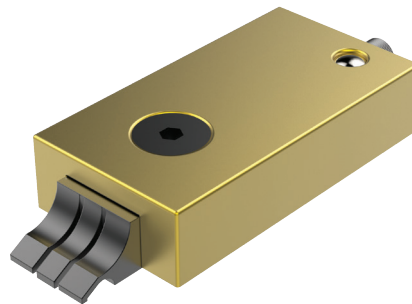
11040/CL2040

Clamping Torque	Clamping Force
N/m	N
50	23000
40	18000
30	12500
25	11500
20	9500



11070/CL2070

Clamping Torque	Clamping Force
N/m	N
60	16500
50	15000
40	12000
30	10000
25	8000
20	7000



11081/CL2081

Clamping Torque	Clamping Force
N/m	N
5	6600
4.5	5500
4	4900



10940/CL0030

Clamping Torque	Clamping Force
N/m	N
8.5	4000
8	3800
7	3400
6	3000
5	2500
4	2000