

Multi-clamping system

Multi-clamping systems are mainly used for machining large workpiece batches.

The system can be optionally set up for one or more workpieces.

Depending on the workpiece size and clamping rail length, several workpieces can thus be clamped simultaneously.

Due to the large component selection of the multiple clamping system (clamping rails, fixed jaws, wedge clamps and accessories) workpieces of different quantities and dimensions can be machined without problems and with optimised set-up times.

The user can choose between single-sided or double-sided types of wedge clamps.

The teeth on the clamping rails are precision-ground and guarantee secure and precise fastening of the fixed stops. By mounting several clamping rails along and across the table, the working area and the number of workpieces can be effectively optimised.

An exploded view diagram of a multi-clamping system. The central component is a long, grey metal clamping rail with a black, toothed top surface and a scale marked from 0 to 18. Surrounding the rail are various components: three double-sided wedge clamps (top), three single-sided wedge clamps (right), three screws (top and right), and several small rectangular blocks and screws (bottom). The diagram illustrates how these components are assembled onto the clamping rail.

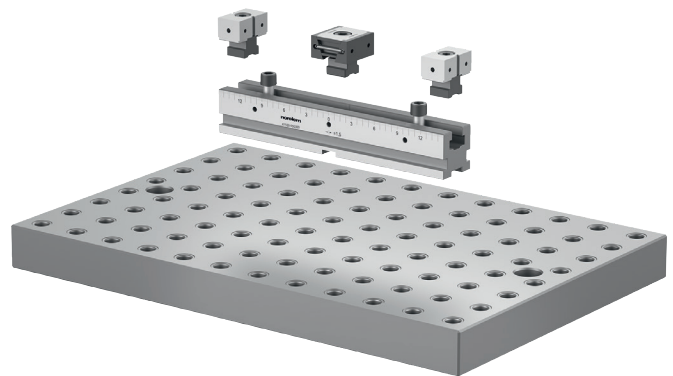
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Interfaces



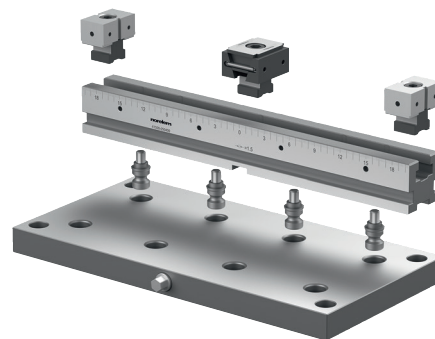
Mounting of the multi-clamping system along and across a T-slot machine table is possible.
Alignment with slot keys. Secured using screws or clamping claws.



Mounting the multi-clamping system on a grid system.
Positioned and fastened using shoulder screws.



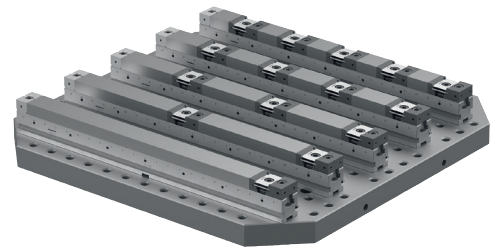
Adaptation of the multi-clamping system to a conventional zero-point clamping system.
Fits on 200 mm gauge size.
Ø25H6 locating hole and M12 fastening screw.



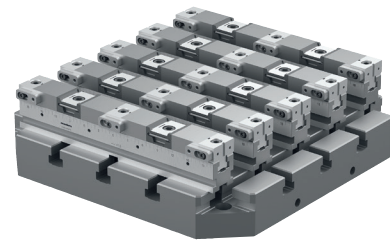
Adaptation of the multi-clamping system to a mechanical zero-point clamping system.
Fits on 96mm gauge size.
Ø16H6 locating hole and M10 fastening thread.

Example of a multi-clamping system

Application of the multi-clamping system with different workpieces.
Wedge clamps used here have the force coming from one side.
Depending on the workpiece size, several workpieces can be clamped using identical clamping rails.
The multi-clamping system can be modified flexibly and quickly.



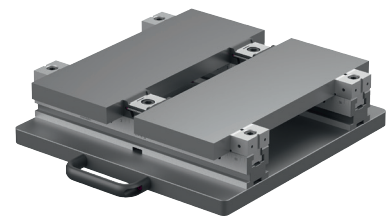
Multi-clamping system aligned and secured on pallet with T-slots.
Multi-clamping system set up for 20 identical workpieces.
Space-saving fixed jaws with one mounting screw.
Wedge clamps constructed as double-sided clamping element.



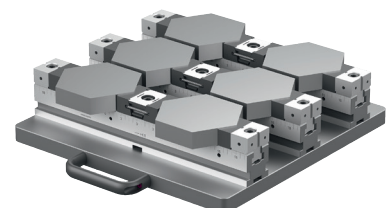
Flexible application of the multi-clamping system on an octagonal workholding tower.
With this clamping arrangement, many workpieces can be clamped simultaneously to extend the machine running time.



Multi-clamping system mounted on an interchangeable pallet.
The workpieces can be reloaded externally to the machine to extend the machine running time.
With the double-sided arrangement of the wedge clamps, both plates can be clamped simultaneously.

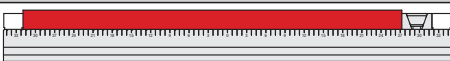
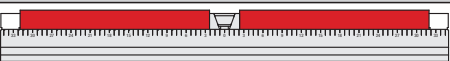


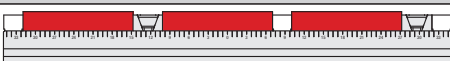
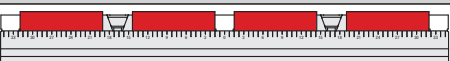
Multi-clamping system mounted on an interchangeable pallet.
Attachment jaws with prisms are screwed onto the fixed stops of the multi-clamping system.
Wedge clamps with machining allowance are used as clamping elements. The workpiece contour is machined into the jaw face.

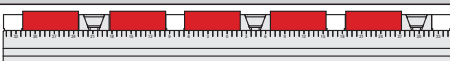


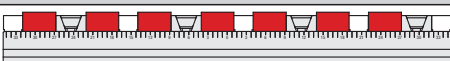
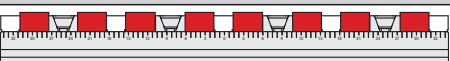
Maximum workpiece size

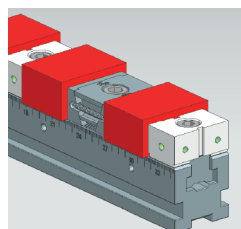
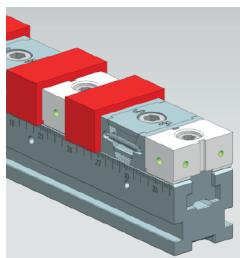
Maximum workpiece size for types double-sided wedge clamps and fixed jaw ES

Clamping rails	1 pcs.			2 pcs.		
						
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	193	-	-	96	-	-
L=400	292	257	241	146	128	121
L=500	394	357	341	197	178	171
L=600	493	457	441	246	228	221
L=700	592	557	541	296	278	271

Clamping rails	3 pcs.			4 pcs.		
						
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	39	-	-	29	-	-
L=400	72	51	41	54	38	31
L=500	106	72	74	79	63	56
L=600	139	118	107	104	88	81
L=700	172	151	141	129	113	106

Clamping rails	5 pcs.			6 pcs.		
						
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	8	-	-	6	-	-
L=400	27	10	-	23	8	-
L=500	48	30	21	40	25	17
L=600	68	50	51	56	42	34
L=700	87	70	61	73	58	51

Clamping rails	7 pcs.			8 pcs.		
						
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	-	-	-	-	-	-
L=400	9	-	-	8	-	-
L=500	23	7	-	20	6	-
L=600	37	21	12	33	18	11
L=700	51	35	51	45	31	23

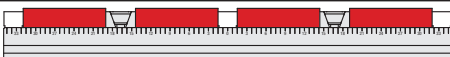


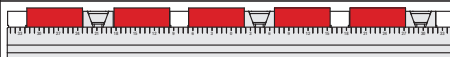
Combination of clamping rails for multi-clamping system 41500.
Wedge clamp 41501 and
Fixed jaw ES for multi-clamping system 41502.

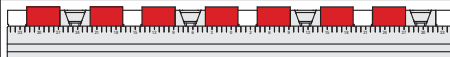
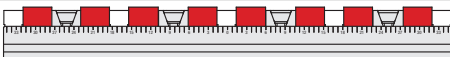
Maximum workpiece size

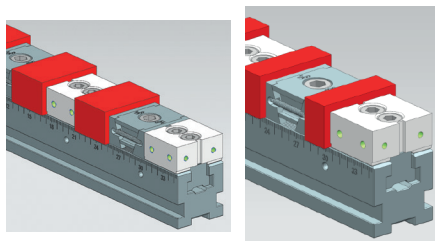
Maximum workpiece sizes for the types double-sided wedge clamp and fixed jaw DS

Clamping rails	1 pcs.			2 pcs.		
						
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	164	-	-	82	-	-
L=400	263	208	190	131	104	95
L=500	365	308	290	182	154	145
L=600	464	408	390	232	204	195
L=700	563	508	490	281	254	245

Clamping rails	3 pcs.			4 pcs.		
						
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	24	-	-	18	-	-
L=400	57	26	15	43	20	17
L=500	91	60	48	68	45	36
L=600	124	93	82	93	70	61
L=700	157	126	115	118	95	86

Clamping rails	5 pcs.			6 pcs.		
						
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	-	-	-	-	-	-
L=400	16	-	-	13	-	-
L=500	36	10	-	30	9	-
L=600	56	30	20	47	25	17
L=700	76	50	40	63	42	33

Clamping rails	7 pcs.			8 pcs.		
						
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	-	-	-	-	-	-
L=400	-	-	-	-	-	-
L=500	13	-	-	11	-	-
L=600	27	-	-	24	-	-
L=700	41	18	18	36	15	7



Combination of clamping rails for multi-clamping system 41500.
Wedge clamp 41501 and
Fixed jaw DS for multi-clamping system 41502-05.

Maximum workpiece size

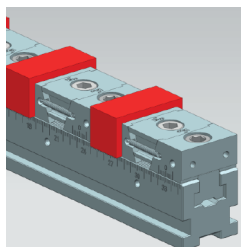
Maximum workpiece sizes for the types wedge clamp with fixed jaw

Clamping rails	1 pcs.			2 pcs.		
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	203	-	-	68	-	-
L=400	302	273	253	118	92	74
L=500	404	373	353	169	142	124
L=600	503	473	453	218	192	174
L=700	602	573	553	268	242	224

Clamping rails	3 pcs.			4 pcs.		
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	23	-	-	-	-	-
L=400	56	32	14	26	-	-
L=500	90	65	48	51	27	9
L=600	123	99	81	76	52	34
L=700	156	132	114	101	77	59

Clamping rails	5 pcs.			6 pcs.		
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	-	-	-	-	-	-
L=400	7	-	-	-	-	-
L=500	27	-	-	12	-	-
L=600	47	24	6	28	5	-
L=700	67	44	26	45	22	-

Clamping rails	7 pcs.			8 pcs.		
	B=50	B=72	B=100	B=50	B=72	B=100
L=300	-	-	-	-	-	-
L=400	-	-	-	-	-	-
L=500	-	-	-	-	-	-
L=600	15	-	-	5	-	-
L=700	29	6	-	17	7	-



Combination of clamping rails for multi-clamping system 41500.
Wedge clamp with fixed jaw for multi-clamping system 41501-05 and 1x fixed jaw ES for multi-clamping system 41502.