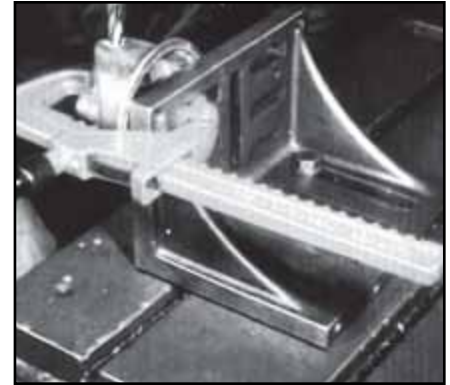


CARVER CLAMPS Applications

A single Carver Model T500-1 moving head, and two T500-2, fixed head Edge Grip clamps hold a part for milling.



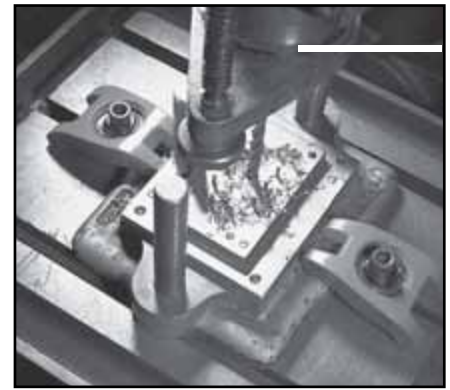
Carver Model T285-18 "C" style clamp used in a drilling operation.



Two low-profile T500 Carver Edge Grip clamps apply both horizontal and vertical clamping force to secure parts for a milling operation. This double action is beyond the capabilities of machine vises.



Two Carver Model T614-0 clamps secure a part fixture during a drilling application.



A circular part is held for a slot milling operation using Carver Model T550-2 heavy-duty Edge Grip clamps. The T550-2 clamps swivel a full 360° for infinite angular alignment.



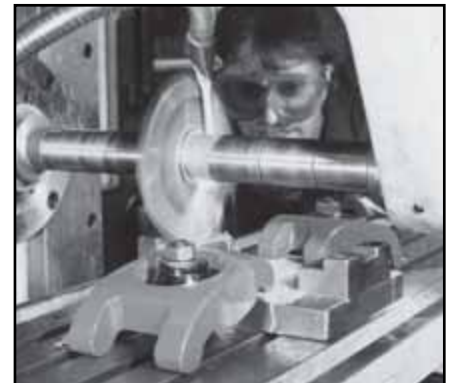
Two versatile Carver Bar Style clamps used in a welding application. The clamps are supplied with two reversible jaws for either clamping or spreading.




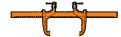



Carver heavy-duty Edge Grip Models T550-1 and T550-2 used in a milling application.








Two Carver Model T614-1 Butress Style clamps provide exceptional stability to the workpiece in this milling process.



Bar-Style

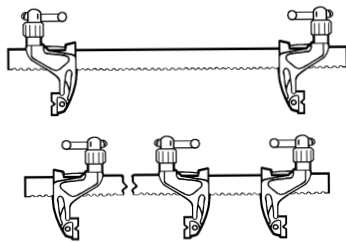
	Model	Holding Capacity max	Page
	T186-24 T186-36	[2500 lbf] 11300N	9.4-9.5
	T321-24 T321-36 T321-60	[1500 lbf] 5650N	
	T290-36 T290-60 T290-84	[4000 lbf] 18000N	
	T285-36 T285-60 T285-84	[2000 lbf] 9000N	
	T257-84	[6000 lbf] 27000N	

C-Style

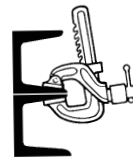
	Model	Holding Capacity max	Page
	T186-6 T186-12 T186-20	[2500 lbf] 11300N	9.6-9.7
	T321-10	[1270 lbf] 5650N	
	T290-9 T290-18 T290-40	[4000 lbf] 18000N	
	T285-9 T285-18	[2000 lbf] 9000N	
	T257-24 T257-36	[6000 lbf] 27000N	

Typical Applications

Bar Clamps



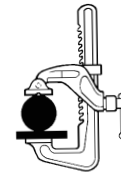
"C" Clamps



No obstruction from long screw. Ideal for structural steel fabrication.

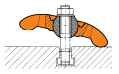
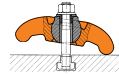
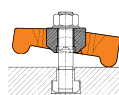


Unaffected by weld spatter. Screw is shielded and out of work area.


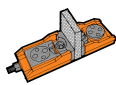


Holds rounds to flats. Limited movement of moveable jaw pad and grooved face ensure positive grip on round objects.

Buttress Style

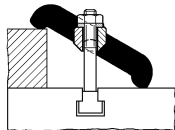
	Model	Holding Capacity max	Page
	T614-0	[2900 lbf] 13000N	9.8-9.9
	T614-1	[14000 lbf] 62500N	
	T614-2	[18000 lbf] 80000N	

Edge Grip Style

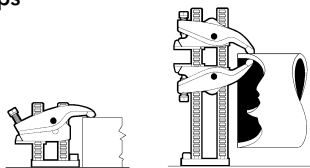
	Model	Holding Capacity max	Page
	T500	[5050 lbf] 22500N Horizontal	9.10-9.11
	T550	[10100 lbf] 45000N Horizontal [4045 lbf] 18000N Vertical	

Typical Applications

Buttress Clamps

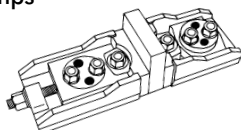


T-Slot Clamps



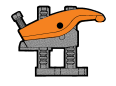
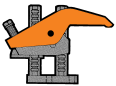


Ideal for use as manual die clamps. Eliminates the need for step blocks or riser blocks.

Edge Grip Clamps



T-Slot Style

	Model	Holding Capacity max	Page
	T400-4 T400-6 T400-8	[5100 lbf] 22700N	9.12-9.15
	T600-4 T600-6 T600-8	[3600 lbf] 16000N	
	T402-6 T402-12 T402-18 T402-24	[8160 lbf] 36300N	
	T602-6 T602-12 T602-18	[5620 lbf] 25000N	

Bar-Style Product Overview

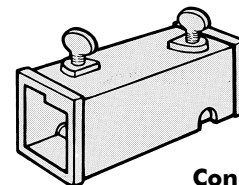
Features:

These rugged clamps, made from high-tensile, heat-treated steel, are designed for all types of applications requiring large holding capacities from 1270 lbf to 6000 lbf (5650N to 27000N). The clamps are highly versatile. For example, jaws can be reversed to provide spreading action, or several jaws can be used on a single bar both for fixturing and positive component location and clamping.

Available models include T321 Standard-Duty Deep Throat, T285 Medium-Duty Deep Throat, T186 Standard-Duty, T290 Medium-Duty and T257 Heavy-Duty. In addition, standard and medium-duty connectors are available to couple like bars together for increased clamping reaches.

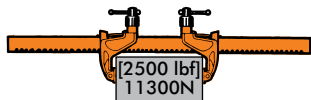
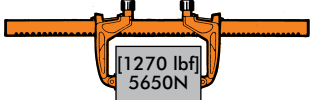
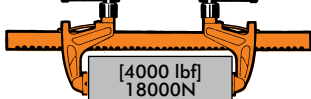
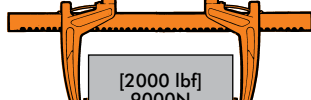
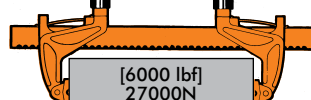


Model	For Bar Clamps Model	Weight [lbs.] kg
T186-13	T186-... and T321-...	[1.54] 0,7
T290-13	T285-... and T290-...	[2.87] 1,3



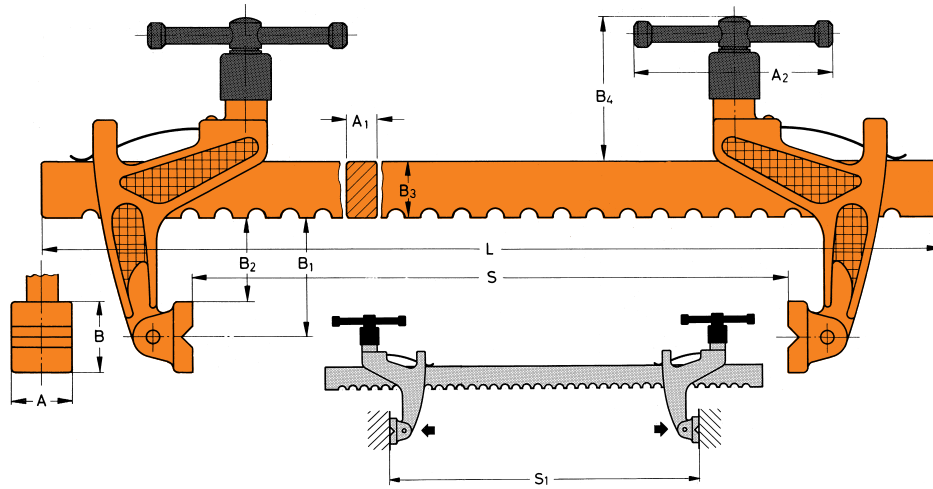
Connector

Bar-Style Technical Information, Holding Capacities

Holding Capacity	Throat Depth B1	Width Opening S		Width Opening S1		Model	Clamping Screw Ø	Weight [lbs.] kg	Consisting of:	
		min	max	min	max				1x	2x
 [2500 lbf] 11300N	[2.38] 60	[8.50] 215	[24] 600	[2.95] 75	[26.8] 680	T186-24	M12	[7.50] 3,4	186-24-1	186-2
			[36] 900		[39] 990	T186-36		[9.50] 4,4	186-36-1	
 [1270 lbf] 5650N	[4.7] 120	[5.50] 140	[24] 600	[3.15] 80	[27.2] 690	T321-24	M12	[7.70] 3,5	186-24-1	321-2
			[36] 900		[39.4] 1000	T321-36		[9.00] 4,5	186-36-1	
			[60] 1500		[63] 1600	T321-60		[13.00] 5,9	186-60-1	
 [4000 lbf] 18000N	[3.5] 90	[10.00] 250	[36] 900	[4.72] 120	[36.9] 1005	T290-36	M16	[20.50] 10,5	290-36-1	290-2
			[48] 1200		[63.8] 1620	ⓘ T290-60		[28.50] 14,0	290-60-1	
			[60] 1500		[87.4] 2220	ⓘ T290-84		[36.50] 18,0	290-84-1	
 [2000 lbf] 9000N	[8.0] 200	[6.00] 150	[36] 900	[4.72] 120	[42.7] 1085	T285-36	M16	[24.50] 10,5	290-36-1	285-2
			[48] 1200		[66.93] 700	ⓘ T285-60		[32.50] 15,0	290-60-1	
			[60] 1500		[90.6] 2300	ⓘ T285-84		[40.50] 19,0	290-84-1	
 [6000 lbf] 27000N	[4.5] 115	[12.00] 305	[84] 2100	[5.90] 150	[86.6] 2200	ⓘ T257-84	M20	[61.00] 27,2	257-84-1	257-2

ⓘ Available upon request

Bar-Style Technical Information, Holding Capacities, Standard Clamp Dimensions



Model	[inch] mm							
	A	A1	A2	B	B2	B3	B4	L
T186-24								[28] 710
T186-36	[0.98] 25	[0.47] 12	[2.99] 76	[1.26] 32	[1.73] 44	[1.18] 30	[2.99] 76	[40.2] 1020
T321-24								[28] 710
T321-36	[0.98] 25	[0.47] 12	[2.99] 76	[1.26] 32	[4.09] 104	[1.18] 30	[2.99] 76	[40.2] 1020
T321-60								[64] 1625
T290-36								[42.1] 1070
① T290-60	[1.50] 38	[0.79] 20	[5.51] 140	[2.00] 51	[2.56] 65	[1.57] 40	[4.13] 105	[66.5] 1690
① T290-84								[90.2] 2290
T285-36								[42.1] 1070
① T285-60	[1.50] 38	[0.79] 20	[5.51] 140	[2.00] 51	[7.09] 180	[1.57] 40	[4.13] 105	[66.5] 1690
① T285-84								[90.2] 2290
① T257-84	[2.00] 51	[0.87] 22	[7.36] 187	[2.50] 63,5	[3.27] 83	[2.05] 52	[5.00] 127	[91.9] 2335

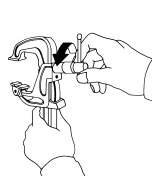
① Available upon request

C-Style Product Overview

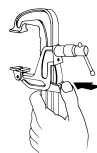
Features:

Operation is very simple. The operator slides the spring loaded moveable jaw toward the workpiece to the nearest notch where it locks into the detent. Hand tightening the screw advances the clamp jaw. The jaw advances the tilting pad directly into contact with the workpiece – there is no rotating to twist the work or the clamp out of position.

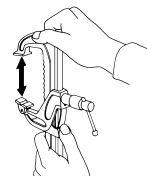
An unusual and very useful feature of these clamps is the ability to use the clamp for spreading or locating as well as squeezing..



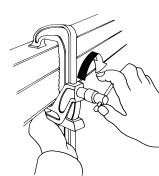
1. Loosen Screw



2. Push In Jaw Base



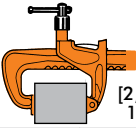
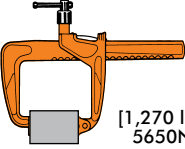
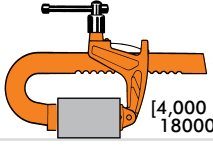
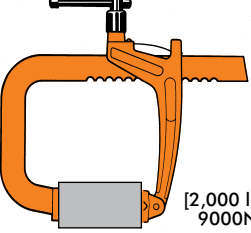
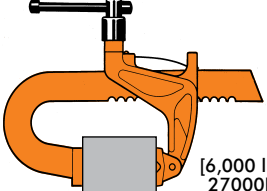


3. Slide Jaw Up or Down

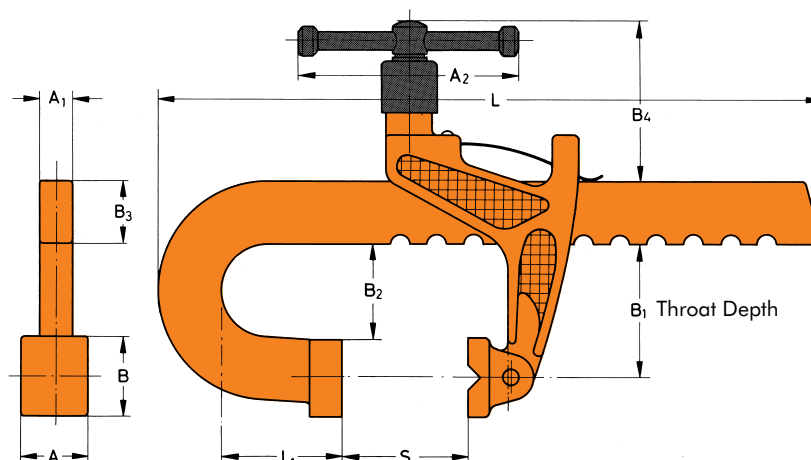


4. Tighten Screw

C-Style Technical Information, Holding Capacities

Holding Capacity	Throat Depth B1 [in] mm	Width Opening S [in] mm	Model	Clamping Screw Ø	Weight [lbs.] kg	Consisting of:	
						1 x 	1 x 
 [2,500 lbf] 11300N	[2.38] 60	[0-6] 150 [0-12] 300 [0-20] 500	T186-6 T186-12 ① T186-20	M12	[2.75] 1,4 [3.75] 1,8 [5.51] 2,5	186-6-1 186-12-1 186-20-1	186-2 186-2 186-2
 [1,270 lbf] 5650N	[4.7] 120	[0-10] 250	T321-10	M12	[4.4] 2,0	321-10-1	321-2
 [4,000 lbf] 18000N	[3.5] 90	[0-9] 225 [0-18] 450 [0-40] 1000	T290-9 T290-18 ① T290-40	M16	[10.00] 5,5 [13.50] 7,0 [23.15] 10,5	290-9-1 290-18-1 290-40-1	290-2 290-2 290-2
 [2,000 lbf] 9000N	[8.0] 200	[0-9] 225 [0-18] 450	T285-9 T285-18	M16	[12.00] 7,1 [13.50] 8,5	285-9-1 285-18-1	285-2 285-2
 [6,000 lbf] 27000N	[4.5] 115	0-24 0-36	T257-24 T257-36	M20	[27.50] 13,1 [32.50] 15,8	257-24-1 257-36-1	257-2 257-2

① Available upon request

C-Style Technical Information, Holding Capacities, Standard Clamp Dimensions


Model	[inch] mm								
	A	A1	A2	B	B2	B3	B4	L	L1
T186-6				[1.26] 32		[1.30] 33		[9.65] 245	[.79] 20
T186-12	[0.98] 25	[0.51] 13	[3.00] 76	[1.26] 38	[1.69] 43	[1.30] 33	[3.00] 76	[15.55] 395	[.79] 20
① T186-20				[1.38] 35		[1.18] 30		[24.61] 625	[1.18] 30
T321-10	[0.98] 25	[0.51] 13	[3.00] 76	[1.38] 35	[4.02] 102	[1.32] 33,5	[3.00] 76	[14.2] 360	[1.00] 25
T290-9								[16.53] 420	
T290-18	[1.57] 40	[0.79] 20	[5.51] 140	[2.36] 60	[2.56] 65	[1.57] 40	[4.13] 105	[25.78] 655	[2.56] 65
① T290-40								[47.44] 1205	
T285-9								[16.53] 420	
T285-18	[1.57] 40	[0.79] 20	[5.51] 140	[2.36] 60	[7.09] 180	[1.57] 40	[4.13] 105	[25.78] 655	[2.56] 65
T257-24								[33.46] 850	
T257-36	[2.00] 51	[0.87] 22	[7.36] 187	[2.36] 60	[3.35] 85	[2.00] 51	[5.00] 127	[45.87] 1165	[3.94] 100

① Available upon request

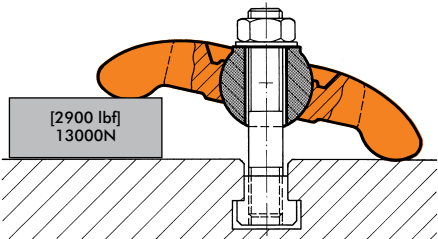
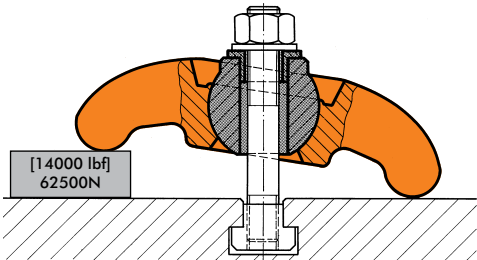
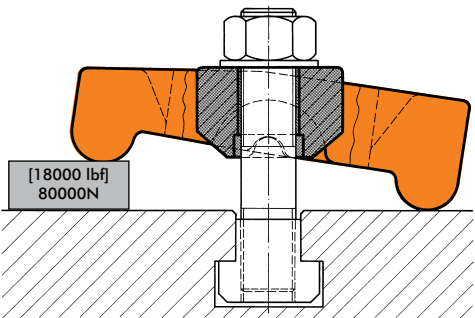
Buttress Style Product Overview

Features:

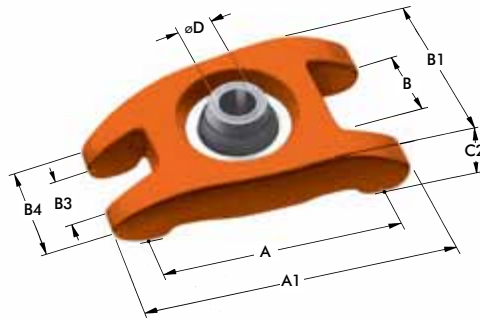
These workholding clamps are designed for use on thin or low-profile workpieces replacing ordinary strap clamps. They feature a self-aligning swiveling pivot which allows the tightening bolt to always remain vertical, preventing any side forces. The two-point contact offered by Models T614-0 and T614-1 also provides greater stability to the workpiece. Ideally suited for manual die clamping. Eliminates the need for step blocks or riser blocks.



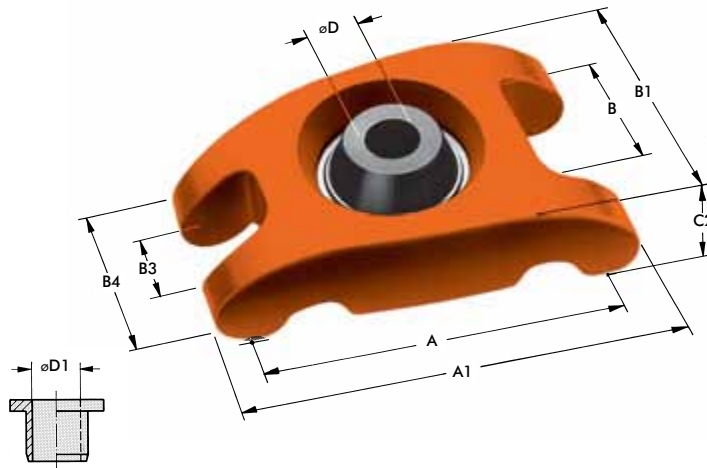
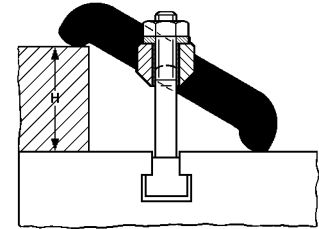
Buttress Style Technical Information, Holding Capacities

Holding Capacity	Working Height Range	For screw diameter	Model	Weight [lbs.] kg
 <p>[2900 lbf] 13000N</p>	<p>[0-1.75"] 0-45</p>	<p>[1/2"] M12</p>	<p>T614-0</p>	<p>[1.5] 0,6</p>
 <p>[14000 lbf] 62500N</p>	<p>[0-2.25"] 0-57</p>	<p>[5/8"] M16 or [3/4"] M20</p>	<p>T614-1</p>	<p>[5.8] 2,7</p>
 <p>[18000 lbf] 80000N</p>	<p>[0-3.00"] 0-75</p>	<p>[1"] M24</p>	<p>T614-2</p>	<p>[9.5] 4,3</p>

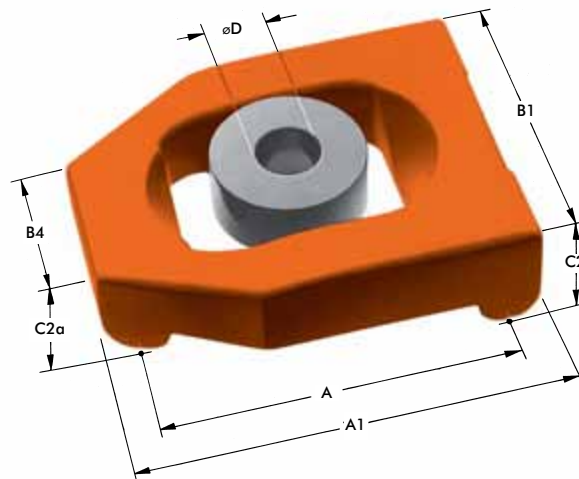
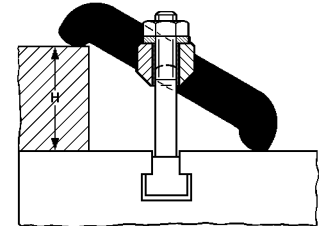
Buttress Style Standard Clamp Dimensions



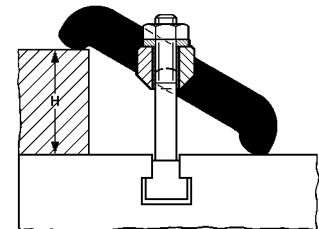
Holding capacity [2900 lbf] 13kN
Clamping height [1.75] 45mm max.
Model T614-0



Holding capacity [14000 lbf] 62.5kN
Clamping height [2.25] 57mm max.
Model T614-1
Delivery includes reducing bush with inner diameter 17 [0.67].
Reducer bushing is standard equipment



Holding capacity [18000 lbf] 80kN
Clamping height 75 [3.00] max.
Model T614-2



Model	[inch] mm									
	A	A1	B	B1	B3	B4	C2	C2a	ØD	ØD1
T614-0	[3.54] 90	[4.34] 110	[1.41] 36	[2.59] 66	[0.78] 40	[1.56] 40	[1.02] 26	–	[0.51] 13	–
T614-1	[5.28] 134	[6.31] 160	[2.09] 53	[3.94] 100	[1.14] 29	[2.56] 65	[1.81] 46	–	[0.83] 83	[0.67] 17
T614-2	[5.83] 148	[6.69] 170	–	[5.13] 130	–	[2.56] 65	[1.97] 50	[1.57] 40	[1.02] 26	–

Edge Grip Style Product Overview

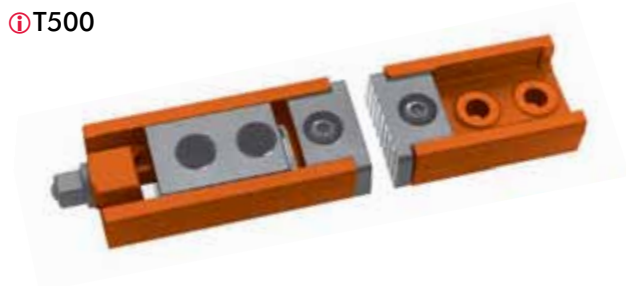
Features:

These low-profile clamps apply both horizontal and vertical clamping force against the workpiece to pull it down onto the work table as well as clamp it in position. They are designed to be used with T-Slot tables (or bolted to a plate) and allow maximum cutter access to the workpiece's surface. Edge Grip clamps are excellent for milling, planing, grinding and general surfacing operations which are beyond the capabilities of machine vises.

Because the Edge Grip clamp set consists of two separate pieces – both locked to the T-Slot table – any length part (within the dimensions of the table) can be clamped.

The heavy-duty model also gives the additional advantage of swiveling through a full 360° for infinite angular alignment and gives a choice of two mounting hole sizes.

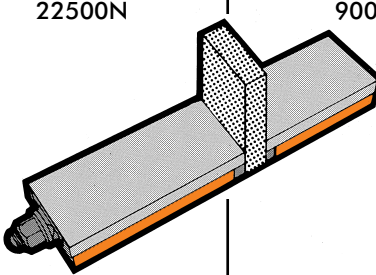
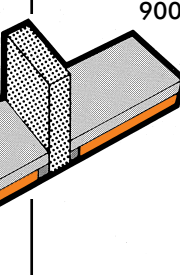
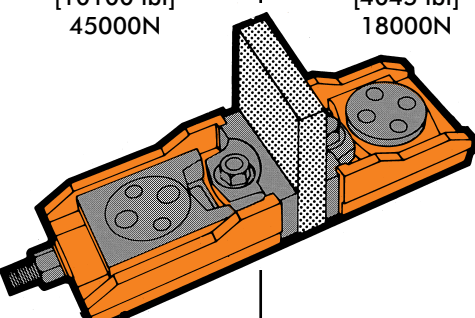
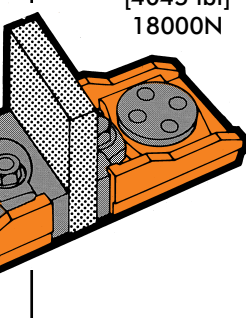
① T500



① T550

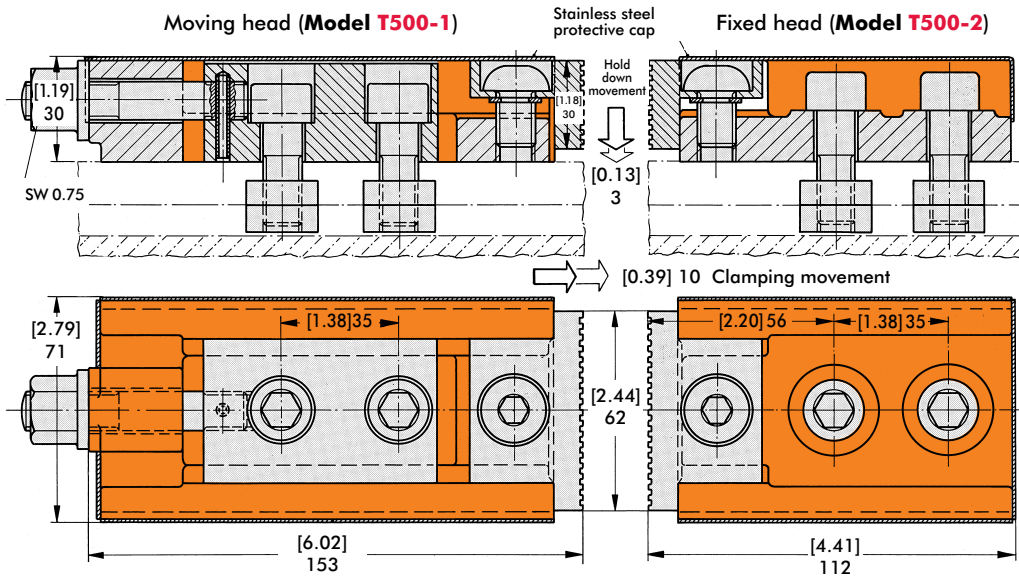


Edge Grip Style Technical Information, Clamping Force

Clamping force		The total set consists	For screw diameter	Model	Weight [lbs.] Kg.
Horizontal	Vertical				
[5050 lbf] 22500N 	[2020 lbf] 9000N 	1 moving head with swarf cover (T500-1) (T500-2) 1 fixed head with swarf cover 4 T-slot nuts 14 (M12) 4 button head socket screws (M12 x 35) 2 hex keys	[1/2"] M12	① T500	[8.38] 3,8
[10100 lbf] 45000N 	[4045 lbf] 18000N 	1 Moving head (T550-1) 1 Fixed head (T550-1)	[5/8"] M16 or [3/4"] M20	① T550	[52.91] 24

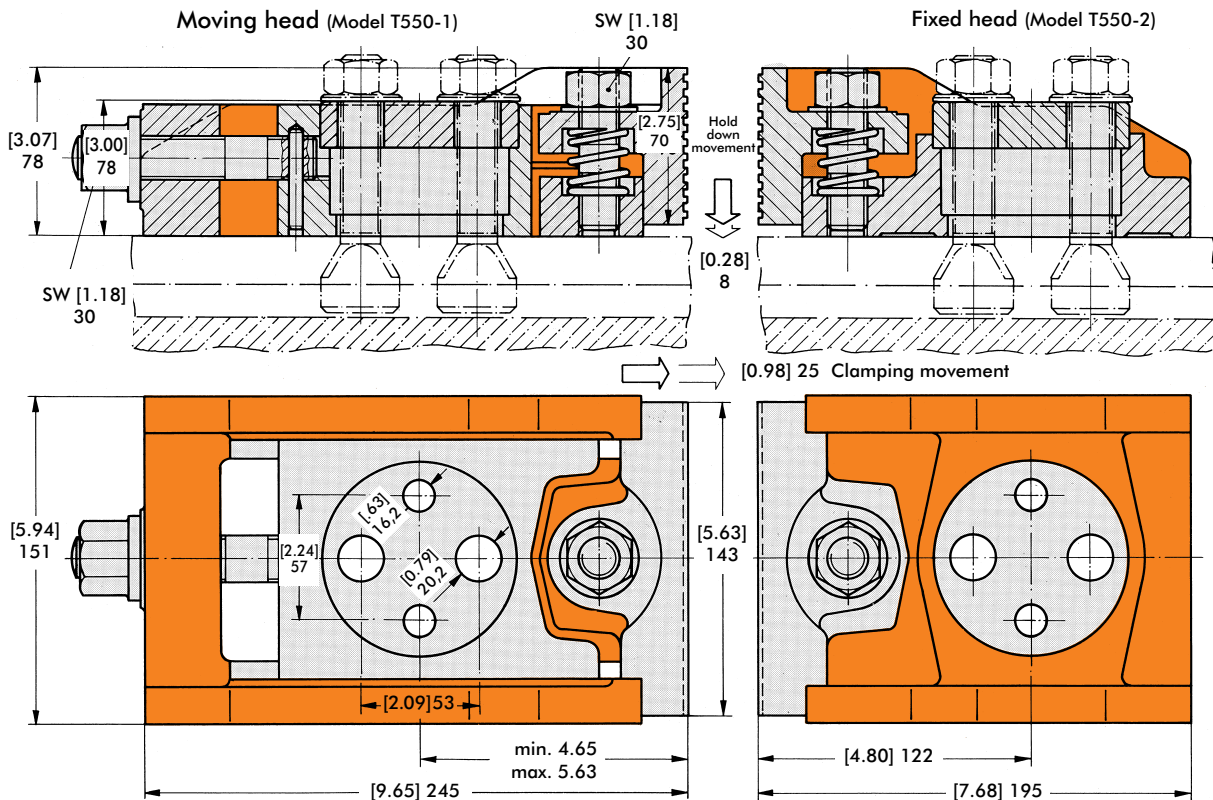
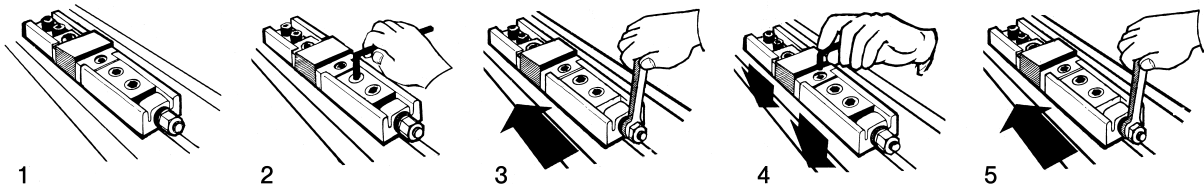
① Available upon request

Edge Grip Style Standard Clamp Dimensions



Operating instruction

1. Place clamps against workpiece and tighten cap screws on fixed head
2. Tighten anchor cap screws on moving head
3. Apply pressure with rear-nut slightly
4. Tighten down jaw screws on fixed and moving heads
5. Apply pressure with rear-nut



T-Slot Style Product Overview

Features:

These clamps provide rapid height adjustment and positive holding. They are designed with a single-unit clamp head and base. The DE-STA-CO Carver T-Slot Clamp is one single assembly – there are no loose parts. When setting up, the safety lock on the back is released and the clamp lifted on the base to the desired height. When the clamp screw is turned, 100% of the force is transmitted to the work-piece. Backing off the clamp adjusting screw and releasing the safety lock and lifting the clamp head makes for rapid job changeover.

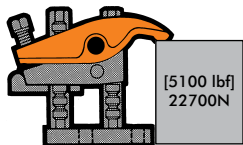
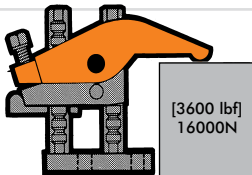
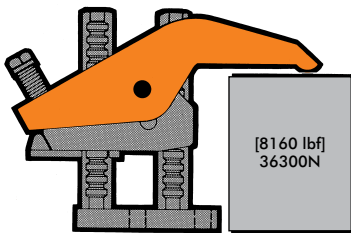
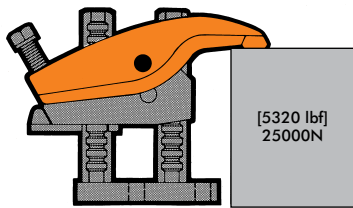


If the clamping height is more than [29.5in] 750mm the connector shown below will be delivered as standard equipment.

MODEL T81340



T-Slot Style Technical Information, Holding Capacities

Holding Capacity	Throat Depth		Working Height C		Model	Max. Torque	Accessories standard equipment	Weight [lbs.] kg
	a	b	min.	max.				
 [5100 lbf] 22700N	[0.55] 14	[1.30] 33	[1.00] 25	[4.00] 100	T400-4	36 ft. lbs. 49Nm		[5.1] 2,3
			[1.00] 25	[6.00] 150	T400-6			[5.5] 2,5
			[2.50] 62	[8.00] 200	T400-8			[5.7] 2,6
 [3600 lbf] 16000N	[2.24] 57	[2.87] 73	[0.50] 12	[4.00] 100	T600-4	[30 ft. lbs.] 40Nm	2 T-slot nuts with matching 14 mm bolt	[5.9] 2,7
			[0.50] 12	[6.00] 150	T600-6			[6.4] 2,9
			[2.00] 50	[8.00] 200	T600-8			[6.6] 3,0
 [8160 lbf] 36300N	[1.73] 44	[2.68] 68	0	[6.00] 150	T402-6	[85 ft. lbs.] 115Nm		[14.00] 6.4
			0	[12.00] 300	T402-12			[17.70] 8.0
			[6.00] 150	[18.00] 450	T402-18			[19.40] 8.8
			[12.00] 300	[24.00] 600	T402-24			[20.00] 9.0
 [5320 lbf] 25000N	[3.90] 99	[4.84] 123	0	[6.00] 150	T602-6	[70 ft. lbs.] 95Nm	2 T-slot nuts with matching 18 mm bolt	[16.00] 7.3
			0	[12.00] 300				[19.80] 9.0
			[6.00] 150	[18.00] 450				[21.60] 9.8
			[12.00] 300	[24.00] 600	T602-12			[24.30] 11.0
			[18.00] 450	[30.00] 762	T602-18			[28.00] 12.7

① Available upon request

T-Slot Style Product Overview

These clamps provide rapid height adjustment and positive holding. They are designed with a single-unit clamp head and base, providing up to [8000 lbf] 35.6kn. of positive holding capacity for workpieces up to 60" high. The design applies 100% of the screw

force directly onto the workpiece far more than any strap clamp arrangement. Additionally, there is no searching for the correct riser block height. The DE-STA-CO Carver T-Slot Clamp is one single assembly – there are no loose parts.

When setting up, the safety lock on the back is released and the clamp lifted on the base to the desired height. When the clamp screw is turned, 100% of the force is transmitted to the workpiece. Backing off the clamp adjusting screw and releasing the safety lock and lifting the clamp head makes for rapid job changeover.

Safety – No loose parts. Clamp and base are one unit.

Higher clamping force holds parts more securely and safely.

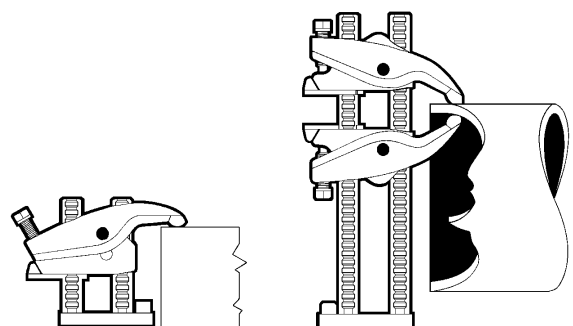
Speed – The clamp head adjusts much faster than an operator can select proper size spacers and bolts. Benefits include:

- Cuts set-up time by as much as 80%
- Reduces machine downtime
- Offers more rapid loading and unloading

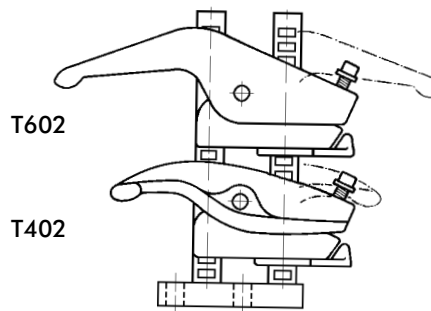
Economy – Tool tip technology and digital control have reduced machining time. Why lose these advantages on long set-up times? T-Slot clamps can reduce set-up time by as much as 80%. Benefit: Money saved.

Ease of Operation – Loosen adjusting screw and release safety catch to adjust height instantly.

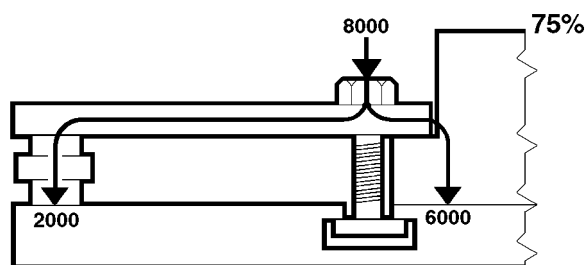
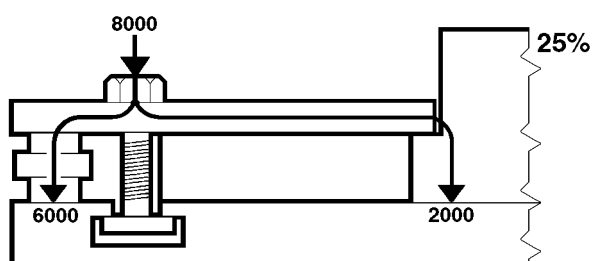
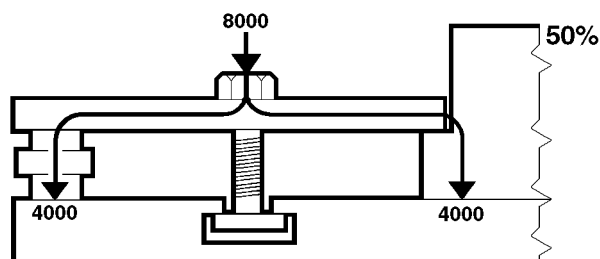
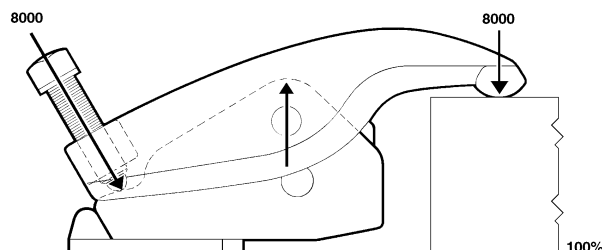
Versatility – Selection of bases gives clamping heights from 0" to 60". Two or more heads can be used on one base to position and hold down as well as support – ideal for fine height adjustment during set-up. Also eliminates riser blocks.

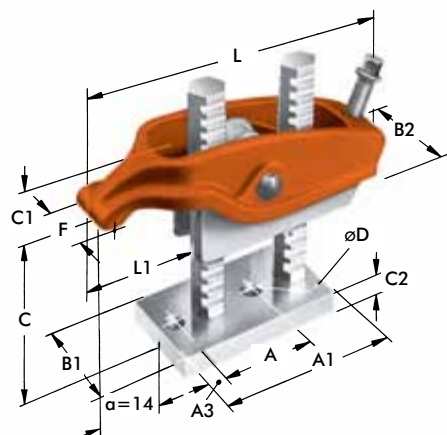
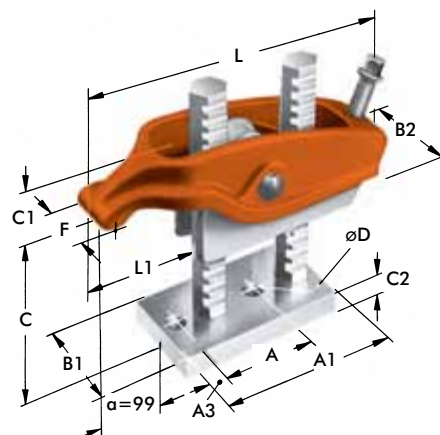
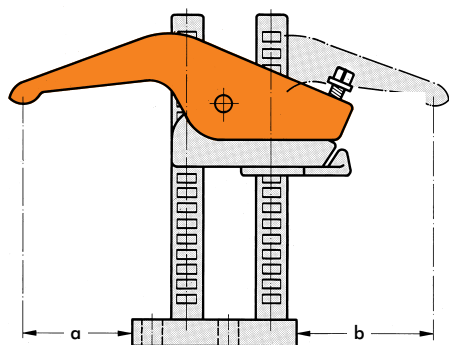


Ideal for use as manual die clamps. Eliminates the need for step blocks or riser blocks.



The T402 and T602 can be reversed on their bases to give added reach.



T-Slot Style Standard Clamp Dimensions

Model T400-..

Model T402-..


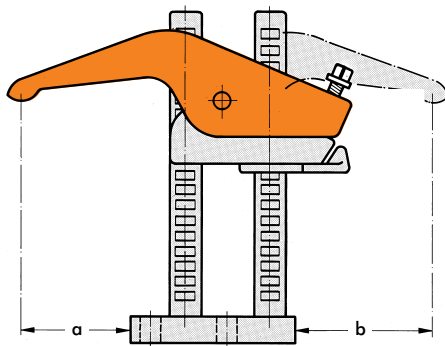
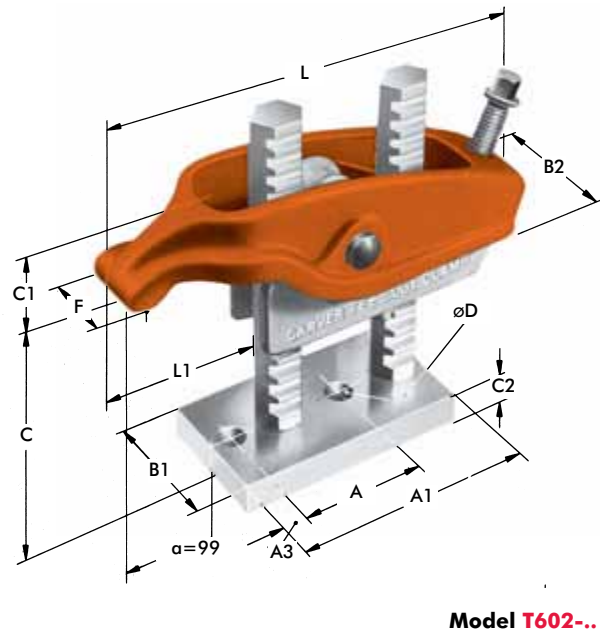
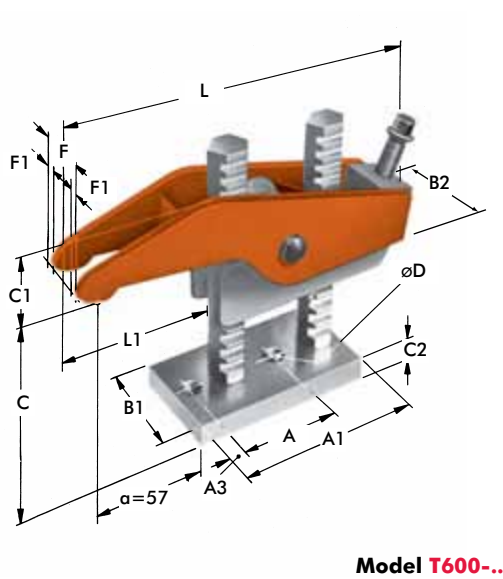
If the T402 is reversed on its base, the measurement of the throat depth will change.

	T400-..	T402-..
a	[0.55] 14	[1.73] 44
b	[1.30] 33	[2.68] 68

Model	A	A1	A3	B1	B2	C min	C max	C1	C2	ØD	F	L	Consisting of 1x	1x	Clamping Srew Size Ø
T400-4						[1.00] 25	[4.00] 100							400-4-1	12mm
T400-6	[2.12] 54	[3.78] 96,2	[0.41] 10,5	[2.00] 51	[2.00] 51	[1.00] 25	[6.00] 150	[1.09] 28	[0.63] 16	[0.53] 13,5	[1.02] 26	[6.30] 160	400-2	400-6-1	
T400-8						[2.50] 62	[8.00] 200							400-8-1	
T402-6						0	[6.00] 150							402-6-1	20mm
T402-12						0	[1200] 300							402-12-1	
T402-18	[2.81] 71	[5.51] 140	[0.59] 15	[3.00] 76	[3.11] 79	[6.00] 150	[18.00] 450	[1.77] 45	[0.75] 19	[0.66] 16,3	[1.50] 38	[9.65] 245	402-2	402-18-1	
① T402-24						[12.00] 300	[24.00] 600							402-24-1	

① Available upon request

T-Slot Style Standard Clamp Dimensions



If the T602 is reversed on its base, the measurement of the throat depth will change.

	T600-..	T602-..
a	[2.24] 57	[3.90] 99
b	[2.87] 73	[4.84] 123

Model						C		C1	C2	ØD	F	F1	L	L1	Consisting of		Clamping Screw Size Ø
	A	A1	A3	B1	B2	min	max								1x	1x	
T600-4						[0.47] 12	[4.00] 100										600-4-1
T600-6	[2.12] 54	[3.78] 96,2	[0.41] 10,5	[2.00] 51	[1.97] 50	[0.47] 12	[6.00] 150	[1.50] 38	[0.63] 16	[0.53] 13,5	[1.97] 50	[0.41] 10,5	[7.88] 200	[3.35] 85	600-2		600-6-1
T600-8						[1.97] 50	[8.00] 200										600-8-1
T602-6						0	[6.00] 150										402-6-1
T602-12	[2.81] 71	[5.51] 140	[0.59] 15	[3.11] 79	[3.11] 79	0	[1200] 300	[3.19] 81	[0.75] 19	[0.66] 16,3	[1.50] 38	-	[12.40] 315	[5.31] 135	602-2		402-12-1
① T602-18						[6.00] 150	[18.00] 450										402-18-1

① Available upon request