



STANDARD WELD STUDS

A DIVISION OF *TFP* CORPORATION 460 LAKE RD.
MEDINA, OHIO 44256

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(800) 321-5588



Since 1959 Tru-Weld has been an industry leader of weld stud sales and manufacturing. TRU-WELD manufactures weld stud fasteners for a vast variety of applications. From the small everyday handheld tools, yard machinery, etc. to automobiles, aircrafts, bridges, ocean liners, steel structure buildings and military vehicles; weld studs are all around us in our everyday lives.

Stud Welding

Simply stated, the process of "Stud Welding" is the fusing of a threaded or non-threaded metal shaft or stud to a workpiece with a high power electrical detonation - yielding a stronger bond than if it were forged or traditionally welded.

Full Service Manufacturing With our full in-house manufacturing facility, Heat Treating and Finishing departments, Tru-Weld will design and manufacture a weld stud to suit your specific needs and application.

Service, Quality and Competitive Pricing The three vital steps that make the business world go around. We believe that with uncompromised service, high quality manufacturing and competitive pricing, TRU-WELD will continue to retain our current and gain new customers around the world. Please contact us to see if we can add you as another satisfied customer.

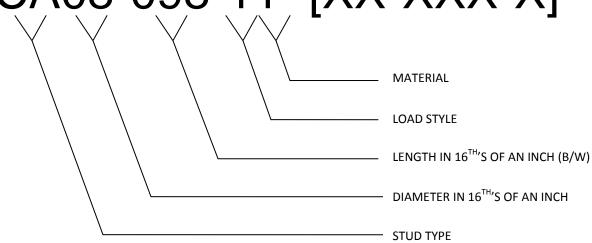
Experience Since 1928 TFP Corp. has been manufacturing Cold-Formed Fasteners. And now 54 years later - since 1959 Tru-Weld has maintained industry leadership in weld stud sales, manufacturing and equipment.

Our experienced Management and Staff is committed to provide the utmost in quality and service in every step of our production, while remaining competitive in the marketplace. It is our goal to meet our customer's needs more effectively than our competitors through a process of continuous quality improvement. Our long-standing relationship with our customers and suppliers is our key to continued success and growth. If we can be of any further assistance to you and your company, please do not hesitate to contact us.



TRU-WELD PART NUMBERS

CA08-098-11- [XX-XXX-X]



EXAMPLE (FROM ABOVE)
STUD TYPE – CONCRETE ANCHOR

DIAMETER – 1/2" (IN SIXTEENTH'S)

BEFORE WELD LENGTH - 6-1/8" (IN SIXTEENTH'S)

LOAD STYLE - BALL LOAD

MATERIAL - MILD STEEL (C1015)

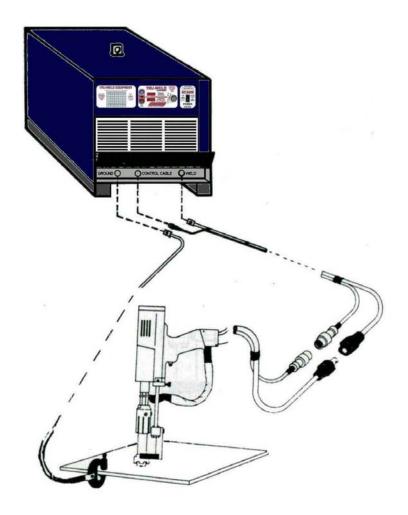
STUD TYPE		LOA	LOAD STYLE		MATERIAL
CODE	TYPE	CODE	TYPE	CODE	TYPE
CA	CONCRETE ANCHOR	0	NO LOAD	1	1010 thru 1020
CD	CAPACITOR DISCHARGE	1	BALL LOAD	2	302SS
cs	COLLAR STUD			3	ALUMINUM
DBA	DEFORMED BAR ANCHOR			4	304SS
DSC	DECKING SHEAR CONNECTOR			6	316SS
FER	FERRULE			8	1018
IT	INTERNAL TAP			9	430SS
NT	NO THREAD	PART NU	IMBER EXTENSION	s [xx-xxx-	X] ARE RESERVED FOR STUDS
PSR	PUNCHING SHEAR RESISTOR		VE THREADED EXT S, SHOULDER STUD		APPLIES TO COLLAR STUDS, ACK STUDS.
sc	SHEAR CONNECTOR	CD STUD	S HAVE A 3 DIGIT E	EXTENSION	I ON END (INSTEAD OF 2)
TP	PARTIAL THREAD		IG FLANGED/NON-		` ,
TR	THREADED – REDUCED WELD BASE		IARACTER ON END R SPECIAL PACKAG		ES SPECIAL MARKING ON I CANS).
TT	FULL THREAD	"C" OR "F" ON END OF THREADED STUDS DESIGNATES UNC (COURSE) OR UNF (FINE) THREAD.			



Transposition Chart

STUD DESCRIPTION	TRU-WELD TYPE	NELSON TYPE	ERICO/KSM TYPE	SWA TYPE
THREADED (PITCH DIAMETER, WELD BASE)	TP	CPL	PDB	PT
FULLY THREADED	TT	CFL	PD	FT
THREADED (REDUCED WELD BASE)	TR	CDL	RB	RB
NO THREAD	NT	NBL	SWP	NT
SHOULDER	S	SBL	SB	SB
COLLAR	CS	CKL	CL	СК
TAPPED	IT	TBL	FBP	TF
CONCRETE ANCHOR	CA	H-4L	HCA	НА
SHEAR CONNECTOR	SC	S-3L	SC	SC
CAPACITOR DISCHARGE	CD	ATA ATC ATS	CD	CD
DEFORMED BAR ANCHOR	DBA	D2L	DBA	DA
PSR STUDS	PSR	PSR		
THRU-DECK SHEAR CONNECTOR	DSC			

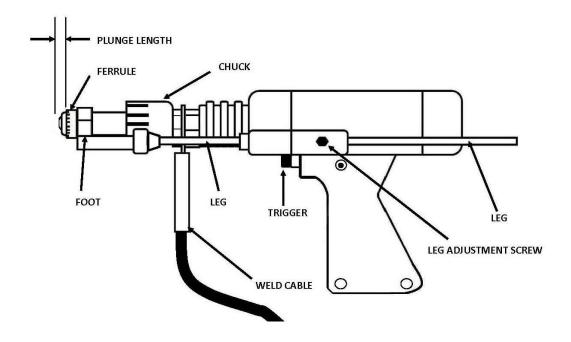
TRU-WELD Stud Welding



The typical power source for stud welding should have a constant current, open circuit voltage range of 70-100 VDC, rapid current rise time, and high current output for relatively short time periods. The control circuit of an arc stud welding system regulates arc duration throughout the welding cycle and provides adjustable controls for various stud diameters. The control circuit consists of a contactor, timing device, and current control. The weld time is a percentage of seconds or milliseconds, and the current is typically depicted as amperage. Weld time is determined by stud diameter.



TRU-WELD ARC Stud Gun



The weld stud gun consists of the body, trigger, and lift mechanism. Stud gun accessories consist of the chuck or fastener holder, and an adjustable support leg for the ferrule holder (grip). The chuck and ferrule holder are easily changed to accommodate the various diameters of studs and ferrules to be used. An adjustment for the lift of the fastener is provided on the stud gun.

The portable, pistol grip design weld gun is offered in 3 capacities;

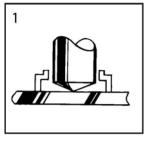
- 1) Light Duty (Stud diameters 1/8 to 3/8)
- 2) Standard Duty (Stud diameters 1/8 to 5/8)
- 3) Heavy Duty (Stud diameters 1/8 to 1-1/4)

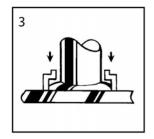


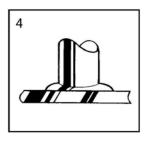
THE STUD WELDING PROCESS

Drawn Arc Stud Welding

Drawn Arc Stud Welding is generally used to weld large diameter fasteners to rougher and thicker base metals. Arc studs may be almost any shape and there are literally hundreds, however, they must have one end of the fastener designed for arc welding. Mild steel, stainless steel, and aluminum are applicable materials for arc stud welding.







Step 1

Step 2

Step 3

Step 4

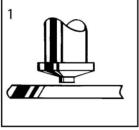
- 1) The weld gun is positioned over the base material and the main gun spring is partially compressed.
- 2) The trigger is pressed and the stud lifts off the base, drawing an arc. The arc melts the end of the weld stud and the base material below. The arc shield (ferrule) concentrates the heat below the weld stud and contains the molten metal within the weld zone.
- **3)** The main spring plunges the weld stud down into the molten pool of metal in the base material. The cycle is completed in less than a second and the resulting weld bond develops the full strength of the fastener in the weld zone.
- **4)** The weld gun is withdrawn from the weld stud leaving and the ferrule. The ferrule is broken away and discarded.

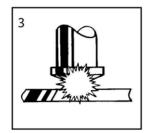


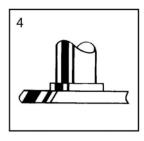
THE STUD WELDING PROCESS

Capacitor Discharge Stud Welding

Capacitor Discharge (CD) stud welding is generally used to weld smaller diameter fasteners to thin base metals. Since the entire weld cycle is completed in milliseconds, welds can be made without pronounced distortion, burn-through or reverse side discoloration. As long as one end of the fastener is designed for CD welding, CD studs can be manufactured in almost any shape.







Step 1

Step 2

Step 3

Step 4

- 1) The weld gun and stud is positioned against the work plate. No ferrule is needed.
- **2)** Stored energy discharged through special weld "timing" tip and the stud starts downward.
- 3) The stud is forced downward into the pool of molten metal.
- 4) Metal solidifies and weld is completed in a split second.



STUD WELDING GUIDELINES

- Keep weld studs and ferrules clean and dry.
- Set the time for the appropriate weld base diameter (see chart below).
- Set the amperage for the appropriate weld base diameter (see chart below).
- Make sure the negative polarity is to the weld stud gun and ensure a good, clean ground connection.
- Align accessories so they are centered and adjust legs so that 1/8" to 1/4" of the stud protrudes beyond the ferrule.
- Make sure work surface is relatively clean so impurities do not affect weld.
- Test the welds at the beginning of each shift or change in stud. Bend two studs 30 degrees after cooling (AWS Bend Test).
- Check burn off (1/8" 1/4"), color (silver blue and shiny), and weld fillet (360 degree).
- Visually inspect all welds.

STUD DIAMETER	TIME (Seconds)	CURRENT (Amps)	
1/4	.2025	350 – 450	
5/16	.2530	450 – 600	
3/8	.3340	525 – 700	
7/16	.4045	675 – 750	
1/2	.5055	750 – 925	
5/8	.6570	1100 – 1400	
3/4	.8590	1450 – 1750	
7/8 (+)	1.00 – 1.20	1700 – 1950	

STUD DIAMETER	STICK OUT
3/16 thru 1/2	1/8
5/8 thru 7/8	3/16
1" and over	3/16 – 1/4



TRU-WELD Stud Welding

Concrete Anchor - Shipping Weight Chart

			J J	- Brind	TO CIBIT	011011
Stud	Stud	Lbs.	Pieces	Pounds Per	Pieces Per	Pounds Per
Diameter	Length	Per 1000	Per Box	Вох	Pallet	Pallet
	1-1/8	22	2,000	48	54,000	1,296
1/4	2-11/16	43	1,000	45	27,000	1,215
1/4	3-1/8	50	1,000	51	27,000	1,377
	4-1/8	63	600	38	16,200	1,026
	1-1/4	65	1,000	67	27,000	1,809
	1-3/8	68	1,000	70	27,000	1,890
	1-5/8	77	1,000	79	27,000	2,133
	2-1/8	92	700	67	18,900	1,809
2/0	2-5/8	111	600	66	16,200	1,782
3/8	3-1/8	124	500	62	13,500	1,674
	4-1/8	154	350	55	9,450	1,485
	5-1/8	185	300	56	8,100	1,512
	6-1/8	212	200	44	5,400	1,188
	8-1/8	274	125	35	3,375	945
	1-1/8	112	600	68	16,200	1,836
	1-3/8	125	500	65	13,500	1,755
	1-1/2	132	500	68	13,500	1,836
	1-5/8	138	450	64	12,150	1,728
	2-1/8	166	400	70	10,800	1,890
	2-5/8	198	350	71	9,450	1,917
1/2	3-1/8	223	300	69	8,100	1,863
1/2	3-5/8	246	200	51	5,400	1,377
	4-1/8	277	200	56	5,400	1,512
	4-5/8	315	200	63	5400	1701
	5-1/8	326	150	50	4,050	1,350
	5-5/16	339	150	53	4,050	1,431
	6-1/8	388	125	50	3,375	1,350
	8-1/8	500	80	40	2,160	1,080
	1-7/16	208	400	85	10,800	2,295
	1-11/16	227	325	77	8,775	2,079
	1-15/16	248	300	78	8,100	2,106
	2-1/8	264	250	68	6,750	1,836
	2-3/16	270	250	71	6,750	1,917
	2-11/16	319	250	81	6,750	2,187
	3-3/16	363	200	75	5,400	2,025
5/8	3-11/16	398	150	62	4,050	1,674
- , -	4-3/16	444	150	69	4,050	1,863
	4-11/16	487	125	63	3,375	1,701
	5-3/16	528	100	55	2,700	1,485
	6-3/16	604	90	55	2,430	1,485
	6-9/16	646	80	52	2,160	1,404
	8-3/16	781	50	40	1,350	1,080
	10-3/16	949	100	98	900	882



TRU-WELD Stud Welding

Shear Connector - Shipping Weight Chart

	Silcai	Comme	•••• ••	bbip	AA CIBIIC	OG
Stud	Stud	Pounds Per	Pieces	Pounds	Pieces	Pounds
Diameter	Length	1000 Pieces	Per Box	Per Box	Per Pallet	Per Pallet
	2.20	355	200	71	5400	1,917
	2-11/16	414	150	63	7,200	3,024
	3-3/16	478	125	60	6,000	2,880
	3-11/16	548	100	55	4,800	2,640
	4-3/16	600	100	62	4,800	2,976
	4-11/16	672	75	51	3,600	2,448
2/4	5-3/16	735	60	44	2,880	2,112
3/4	5-11/16	797	60	48	2,880	2,304
	6-3/16	852	60	51	2,880	2,448
	6-11/16	905	70	64	1,890	1,728
	7-3/16	968	60	59	1,620	1,593
	8-3/16	1,105	50	56	1,350	1,512
	9-3/16	1,222	100	126	900	1,134
	10-3/16	1,339	100	137	900	1,233
	3-3/16	631	100	66	2,700	1,782
	3-11/16	709	100	74	2,700	1,998
	4-3/16	796	75	60	2,025	1,620
	4-11/16	878	80	72	2,160	1,944
	5-3/16	962	60	60	1,620	1,620
7/0	5-11/16	1,067	60	65	1,620	1,755
7/8	6-3/16	1,137	50	58	1,350	1,566
	6-11/16	1,236	50	63	1,350	1,701
	7-3/16	1,306	45	59	1,215	1,593
	8-3/16	1,496	40	59	1,080	1,593
	9-3/16	1,666	75	125	675	1,125
	10-3/16	1,836	75	139	675	1,251
	3-1/4	894	75	70	2,025	1,890
	4-1/4	1,079	50	57	1,350	1,539
	5-1/4	1,302	50	67	1,350	1,809
1	6-1/4	1,514	40	63	1,080	1,701
_	7-1/4	1,737	40	72	1,080	1,944
	8-1/4	1,978	85	171	765	1,539
	9-1/4	2,230	50	112	450	1,008
	3-3/8	500	125	63	6,000	3,024
ļ	3-7/8	567	100	58	4,800	2,784
2/2	4-3/8	625	100	62	4,800	2,976
3/4	4-7/8	683	75	52	3,600	2,496
Thru-Deck	5-3/8	754	60	45	2,880	2,160
ļ	5-7/8	810	60	49	2,880	2,352
	6-3/8	884	60	56	2,880	2,544



Estimated Weights for Threaded Studs In Pounds Per 1000 Pieces

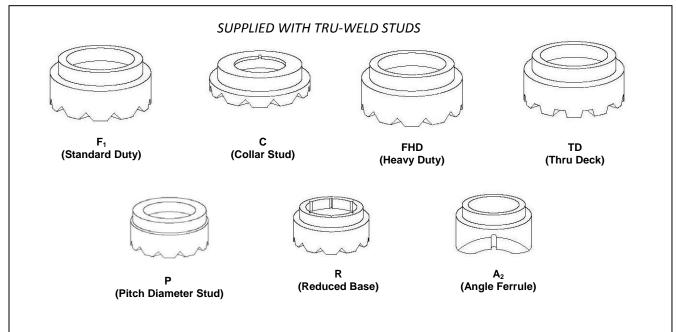
Length	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"	7/8"
3/4	8.3	12.8	18.8	25.5	34.5			
1	11.0	17.0	25.0	34.0	46.0	70.0		
1-1/4	13.8	21.3	31.3	42.5	57.5	87.5	133.8	
1-1/2	16.5	25.5	37.5	51.0	69.0	105.0	160.5	243.8
1-3/4	19.3	29.8	43.8	59.5	80.5	122.5	187.3	284.4
2	22.0	34.0	50.0	68.0	92.0	140.0	214.0	325.0
2-1/4	24.8	38.3	56.3	76.5	103.5	157.5	240.8	365.6
2-1/2	27.5	42.5	62.5	85.0	115.0	175.0	267.5	406.3
2-3/4	30.3	46.8	68.8	93.5	126.5	192.5	294.3	446.9
3	33.0	51.0	75.0	102.0	138.0	210.0	321.0	487.5
3-1/4	35.8	55.3	81.3	110.5	149.5	227.5	347.8	528.1
3-1/2	38.5	59.5	87.5	119.0	161.0	245.0	374.5	568.8
3-3/4	41.3	63.8	93.8	127.5	172.5	262.5	401.3	609.4
4	44.0	68.0	100.0	136.0	184.0	280.0	428.0	650.0
4-1/4	46.8	72.3	106.3	144.5	195.5	297.5	454.8	690.6
4-1/2	49.5	76.5	112.5	153.0	207.0	315.0	481.5	731.3
4-3/4	52.3	80.8	118.8	161.5	218.5	332.5	508.3	771.9
5	55.0	85.0	125.0	170.0	230.0	350.0	535.0	812.5

Estimated Weights of No Thread Studs in Pounds Per 1000 Pieces

Length	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"	7/8"
3/4	6.0	10.5	16.4	23.5	31.9	41.7			
1	8.0	14.0	21.8	31.3	42.5	55.6	86.6		
1-1/4	10.0	17.5	27.3	39.1	53.1	69.5	108.3	156.0	
1-1/2	12.0	21.0	32.7	47.0	63.8	83.4	129.9	187.2	254.0
1-3/4	14.0	24.5	38.2	54.8	74.4	97.3	151.6	218.4	297.5
2	16.0	28.0	43.6	62.6	85.0	111.2	173.2	249.6	340.0
2-1/4	18.0	31.5	49.1	70.4	95.6	125.1	194.9	280.8	382.5
2-1/2	20.0	35.0	54.5	78.3	106.3	139.0	216.5	312.0	425.0
2-3/4	22.0	38.5	60.0	86.1	116.9	152.9	238.2	343.2	467.5
3	24.0	42.0	65.4	93.9	127.5	166.8	259.8	374.4	510.0
3-1/4	26.0	45.5	70.9	101.7	138.1	180.7	281.5	405.6	552.5
3-1/2	28.0	49.0	76.3	117.4	148.8	194.7	303.1	436.8	595.0
3-3/4	30.0	52.5	81.8	125.2	159.4	208.5	324.8	468.0	637.5
4	32.0	56.0	87.2	128.6	170.0	222.4	346.4	499.2	680.0
4-1/4	34.0	59.5	92.7	133.0	180.6	236.3	368.1	530.4	722.5
4-1/2	36.0	63.0	98.1	140.9	191.3	250.2	389.7	561.6	765.0
4-3/4	38.0	66.5	103.6	148.7	201.9	264.1	411.4	592.8	807.5
5	40.0	70.0	109.0	156.5	212.5	278.0	433.0	624.0	850.0



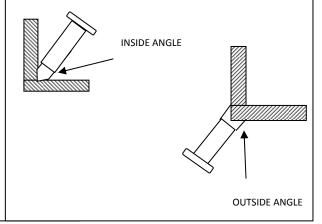
STANDARD FERRULES



THE TRU-WELD FERRULE (ARC SHIELD) IS SPECIALLY DESIGNED TO WITHSTAND HEAT SHOCK AS WELL AS REASONABLY HIGH TEMPERATURES WITHOUT MELTING OR BREAKING. THE TRU-WELD FERRULE COMPLIMENTS THE UNIFORM FLUX LOAD TO AFFECT A TOP QUALITY WELD.

SPECIAL FERRULES ARE ALSO AVAILABLE UPON REQUEST.

- 1) THE "F" FERRULE IS ALSO AVAILABLE IN THE LOW PROFILE VERSIONS.
- 2) THE "A" FERRULE PICTURED ABOVE IS THE COMBINATION INSIDE-OUTSIDE ANGLE FERRULE. THE INSIDE-ONLY AND OUTSIDE-ONLY FERRULES ARE ALSO STANDARD STOCK ITEMS.





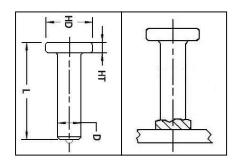
TRU-WELD Stud Welding

STANDARD FERRULES

TYPE	NOMINAL SIZE	TRU-WELD PART NUMBER	D	Н	G	E	
	3/16	FER03-F	.390	.390 or .250	.281	.156	
	1/4	FER04-F	.455	.390 or .250	.380	.156	
	5/16	FER05-F	.578	.390	.445	.156	- G - H
	3/8	FER06-F	.640	.390	.505	.156	
	7/16	FER07-F	.703	.422	.585	.188	
F	1/2	FER08-F	.795	.438	.650	.188	
	5/8	FER10-F	1.030	.516	.785	.188	- D
	3/4	FER12-F	1.218	.656	1.030	.188	, , Н
	7/8	FER14-F	1.406	.732	1.210	.188	<u> </u>
	1	FER16-F	1.610	.820	1.406	.188	
	1/4	FER04-FHD	.645	.390	.515	.150	
FHD	3/8	FER06-FHD	.800	.400	.645	.150	E - D -
ГПО	1/2	FER08-FHD	.875	.455	.785	.185	250
	5/8	FER10-FHD	1.230	.520	1.035	.185]
	1/4	FER04-C	.875	.250	.785	.125	
C	5/16	FER05-C	.875	.250	.785	.125	
C	3/8	FER06-C	.875	.250	.785	.125	
	1/2	FER08-C	1.203	.281	1.045	.156	E
	1/4	FER04-P	.455	.250	.380	.125	T T
	5/16	FER05-P	.535	.250	.445	.125	_ G → H
	3/8	FER06-P	.595	.265	.505	.125	1 + 1
_	7/16	FER07-P	.675	.329	.585	.156	
P	1/2	FER08-P	.740	.362	.650	.156	
	5/8	FER10-P	.905	.433	.785	.156	
	3/4	FER12-P	1.150	.526	1.030	.187	E D
	7/8	FER14-P	1.330	.593	1.203	.187	. Н
	1	FER16-P	1.526	.661	1.406	.187	- G -
	3/8	FER06-R	.595	.250	.505	.125	
	7/16	FER07-R	.675	.250	.585	.125	Humanan H
R	1/2	FER08-R	.740	.281	.650	.156	E - D - I
	5/8	FER10-R	.875	.281	.785	.156	C H
	3/4	FER12-R	1.030	.375	.921	.187	- G - "
	1/2	FER08-TD	.800	.450	.645	.185	
TD	5/8	FER10-TD	1.015	.525	.775	.185	
	3/4	FER12-TD	1.335	.600	1.210	.185	E - D -
	7/8	FER14-TD	1.528	.666	1.406	.200	Н
	1/4	FER04-A	.455	.500	.380	.156	G -
	3/8	FER06-A	.640	.480	.505	.156	
Α	1/2	FER08-A	.795	.688	.650	.188	
	5/8	FER10-A	1.030	.875	.785	.188	E Tur-
	3/4	FER12-A	1.218	.875	1.030	.188	- D -







Head Diameter (HD) – 1/2" for all 1/4" Headed Concrete Anchors. Head Height (HT) – 3/16" for all 1/4" Headed Concrete Anchors.

WELD	WELD STUD SPECIFICATIONS			STUD PACK	AGING	WELD STUD WEIGHTS		
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
1/4	1-1/8	CA04-018-11	2,000	27	54,000	48 lbs.	1,296 lbs.	22 lbs.
1/4	2-11/16	CA04-043-11	1,000	27	27,000	45 lbs.	1,215 lbs.	43 lbs.
1/4	3-1/8	CA04-050-11	1,000	27	27,000	51 lbs.	1,377 lbs.	50 lbs.
1/4	4-1/8	CA04-066-11	600	27	16,200	38 lbs.	1,026 lbs.	63 lbs.

<u>Concrete Anchors</u> are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1/4" will be approx. 1/8" shorter after welding.

TRU-WELD concrete anchors can be made in any length above the standard minimum.

<u>Material</u>: Low carbon steel, ASTM A29 / A108, 1010-1020. CA Studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

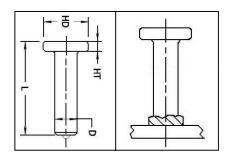
CHUCK PART #	FOOT PART#	GRIP PART #	FERRULE FOOT PLAT (DUAL LEG)
	B-1C	GC-025 (Standard Duty)	QN-025 (Standard Duty)
CN-050	B-1C	GC-037 (Heavy Duty)	QN-037 (Heavy Duty)

Mechanical Property Requirements								
	Туре А	Туре В						
Tensile Strength	61,000 psi min.	65,000 psi min.						
Yield Strength	49,000 psi min.	51,000 psi min.						
Elongation (% in 2 in.)	17% min.	20% min.						
Elongation (% in 5x dia.)	14% min.	15% min.						
Reduction of Area	50% min.	50% min.						

Type A Studs are general purpose studs.







Diameter (HD) – 3/4" for all 3/8" Headed Concrete Anchors. Head Height (HT) – 9/32" for all 3/8" Headed Concrete Anchors.

WELD STUD SPECIFICATIONS		WELD S	STUD PACK	AGING	WELD STUD WEIGHTS			
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
3/8	1-3/8	CA06-022-11	1,000	27	27,000	70 lbs.	1,890 lbs.	68 lbs.
3/8	1-5/8	CA06-026-11	1,000	27	27,000	79 lbs.	2,133 lbs.	77 lbs.
3/8	2-1/8	CA06-034-11	700	27	18,900	67 lbs.	1,809 lbs.	92 lbs.
3/8	2-5/8	CA06-042-11	600	27	16,200	66 lbs.	1,782 lbs.	111 lbs.
3/8	3-1/8	CA06-050-11	500	27	13,500	62 lbs.	1,674 lbs.	124 lbs.
3/8	4-1/8	CA06-066-11	350	27	9,450	55 lbs.	1,485 lbs.	154 lbs.
3/8	5-1/8	CA06-082-11	300	27	8,100	56 lbs.	1,512 lbs.	185 lbs.
3/8	6-1/8	CA06-098-11	200	27	5,400	44 lbs.	1,188 lbs.	212 lbs.
3/8	8-1/8	CA06-130-11	125	27	3,375	35 lbs.	945 lbs.	280 lbs.

<u>Concrete Anchors</u> are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 3/8" will be approx. 1/8" shorter after welding. TRU-WELD concrete anchors can be made in any length above the standard minimum.

<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. CA Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

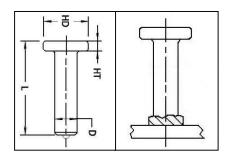
CHUCK PART #	FOOT PART#	GRIP PART#	FERRULE FOOT PLATE (DUAL LEG)
	B-1C	GC-037 (Standard Duty)	QN-037 (Standard Duty)
CH-037	B-1C	GC-050 (Heavy Duty)	QN-050 (Heavy Duty)

Mechanical Property Requirements					
	Type A	Type B			
Tensile Strength	61,000 psi min.	65,000 psi min.			
Yield Strength	49,000 psi min.	51,000 psi min.			
Elongation (% in 2 in.)	17% min.	20% min.			
Elongation (% in 5x dia.)	14% min.	15% min.			
Reduction of Area	50% min.	50% min.			

Type A Studs are general purpose studs.







Head Diameter (HD) -1" for all 1/2" Headed Concrete Anchors. Head Height (HT) -5/16" for all 1/2" Headed Concrete Anchors.

WELD STUD SPECIFICATIONS		WELD S	STUD PACK	AGING	WELD STUD WEIGHTS			
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
1/2	1-1/8	CA08-018-11	600	27	16,200	68 lbs.	1,836 lbs.	112 lbs.
1/2	1-1/2	CA08-024-11	500	27	13,500	68 lbs.	1,836 lbs.	132 lbs.
1/2	1-5/8	CA08-026-11	450	27	12,150	64 lbs.	1,728 lbs.	138 lbs.
1/2	2-1/8	CA08-034-11	400	27	10,800	70 lbs.	1,890 lbs.	166 lbs.
1/2	2-5/8	CA08-042-11	350	27	9,450	71 lbs.	1,917 lbs.	198 lbs.
1/2	3-1/8	CA08-050-11	300	27	8,100	69 lbs.	1,863 lbs.	223 lbs.
1/2	4-1/8	CA08-066-11	200	27	5,400	56 lbs.	1,512 lbs.	277 lbs.
1/2	5-5/16	CA08-085-11	150	27	4,050	53 lbs.	1,431 lbs.	339 lbs.
1/2	6-1/8	CA08-098-11	125	27	3,375	50 lbs.	1,350 lbs.	388 lbs.
1/2	8-1/8	CA08-130-11	80	27	2,160	40 lbs.	1,080 lbs.	495 lbs.
1/2	10-1/8	CA08-162-11	150	9	1,350	91 lbs.	819 lbs.	606 lbs.
1/2	12-1/8	CA08-194-11	1,500	1	1,500	1,059 lbs.	1,059 lbs.	706 lbs.

<u>Concrete Anchors</u> are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1/2" will be approx. 1/8" shorter after welding. TRU-WELD concrete anchors can be made in any length above the standard minimum.

<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. CA Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

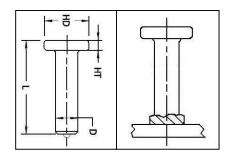
CHUCK PART #	FOOT PART #	GRIP PART#	FERRULE FOOT PLATE (DUAL LEG)
	B-1C	GC-050 (Standard Duty)	QN-050 (Standard Duty)
CH-050	B-2C	GC-062 (Heavy Duty)	QN-062 (Heavy Duty)

Mechanical Property Requirements					
	Type A	Туре В			
Tensile Strength	61,000 psi min.	65,000 psi min.			
Yield Strength	49,000 psi min.	51,000 psi min.			
Elongation (% in 2 in.)	17% min.	20% min.			
Elongation (% in 5x dia.)	14% min.	15% min.			
Reduction of Area	50% min.	50% min.			

Type A Studs are general purpose studs.



HEADED CONCRETE ANCHOR – FULL WELD BASE



TYPE **CA** STUD TYPE F FERRULE SUPPLIED

Head Diameter (HD) – 1-1/4" for all 5/8" Headed Concrete Anchors. Head Height (HT) – 5/16" for all 5/8" Headed Concrete Anchors.

WELD STUD SPECIFICATIONS		WELD S	WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
5/8	1-7/16	CA10-023-11	400	27	10,800	85 lbs.	2,295 lbs.	208 lbs.
5/8	1-11/16	CA10-027-11	325	27	8,775	77 lbs.	2,079 lbs.	227 lbs.
5/8	1-15/16	CA10-031-11	300	27	8,100	78 lbs.	2,106 lbs.	248 lbs.
5/8	2-1/8	CA10-034-11	250	27	6,750	68 lbs.	1,836 lbs.	264 lbs.
5/8	2-3/16	CA10-035-11	250	27	6,750	71 lbs.	1,917 lbs.	270 lbs.
5/8	2-11/16	CA10-043-11	250	27	6,750	81 lbs.	2,187 lbs.	319 lbs.
5/8	3-3/16	CA10-051-11	200	27	5,400	75 lbs.	2,025 lbs.	363 lbs.
5/8	3-11/16	CA10-059-11	150	27	4,050	75 lbs.	1,674 lbs.	398 lbs.
5/8	4-3/16	CA10-067-11	150	27	4,050	69 lbs.	1,863 lbs.	444 lbs.
5/8	4-11/16	CA10-075-11	125	27	3,375	63 lbs.	1,701 lbs.	487 lbs.

<u>Concrete Anchors</u> are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length</u>: Length is listed before weld. Stud diameters 5/8" will be approx. 3/16" shorter after welding. TRU-WELD concrete anchors can be made in any length above the standard minimum.

<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. CA Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

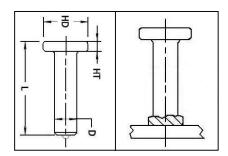
CHUCK PART #	FOOT PART #	GRIP PART#	FERRULE FOOT PLATE (DUAL LEG)
	B-2C	GC-062 (Standard Duty)	QN-062 (Standard Duty)
CH-075	B-2C	GC-075 (Heavy Duty)	QN-075 (Heavy Duty)

Mechanical Property Requirements					
	Type A	Type B			
Tensile Strength	61,000 psi min.	65,000 psi min.			
Yield Strength	49,000 psi min.	51,000 psi min.			
Elongation (% in 2 in.)	17% min.	20% min.			
Elongation (% in 5x dia.)	14% min.	15% min.			
Reduction of Area	50% min.	50% min.			

Type A Studs are general purpose studs.







Head Diameter (HD) - 1-1/4" for all 5/8" Headed Concrete Anchors. Head Height (HT) - 5/16" for all 5/8" Headed Concrete Anchors.

WELD STUD SPECIFICATIONS		WELD S	STUD PACK	AGING	WELD STUD WEIGHTS			
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
5/8	5-3/16	CA10-083-11	100	27	2,700	55 lbs.	1,485 lbs.	530 lbs.
5/8	6-9/16	CA10-105-11	80	27	2,160	52 lbs.	1,404 lbs.	650 lbs.
5/8	8-3/16	CA10-131-11	50	27	1350	40 lbs.	1080 lbs.	800 lbs.
5/8	9-3/16	CA10-147-11	125	9	1125	109 lbs.	981 lbs.	872 lbs.
5/8	10-3/16	CA10-16311	100	9	900	98 lbs.	882 lbs.	949 lbs.
5/8	12-3/16	CA10-19511	1500	1	1500	1694 lbs.	1694 lbs.	1108 lbs.

<u>Concrete Anchors</u> are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length</u>: Length is listed before weld. Stud diameters 5/8" will be approx. 3/16" shorter after welding. TRU-WELD concrete anchors can be made in any length above the standard minimum.

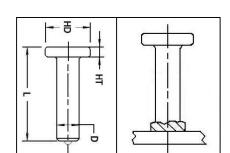
<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. CA Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

CHUCK PART #	FOOT PART#	GRIP PART#	FERRULE FOOT PLATE (DUAL LEG)
	B-2C	GC-062 (Standard Duty)	QN-062 (Standard Duty)
CH-075	B-2C	GC-075 (Heavy Duty)	QN-075 (Heavy Duty)

Mechanical Property Requirements					
	Type A	Type B			
Tensile Strength	61,000 psi min.	65,000 psi min.			
Yield Strength	49,000 psi min.	51,000 psi min.			
Elongation (% in 2 in.)	17% min.	20% min.			
Elongation (% in 5x dia.)	14% min.	15% min.			
Reduction of Area	50% min.	50% min.			

Type A Studs are general purpose studs.





SHEAR CONNECTOR – FULL WELD BASE

(3/4" THRU DECK SHEAR CONNECTORS ON NEXT PAGE)

TYPE **SC** STUD

TYPE F FERRULE SUPPLIED

Head Diameter (HD) -1-1/4" for all 3/4 headed Shear Connectors. Head Height (HT) -3/8" for all 3/4 headed Shear Connectors.

D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
3/4	3-3/16	SC12-051-11	125	48	6,000	60 lbs.	2,880 lbs.	478 lbs.
3/4	3-11/16	SC12-059-11	100	48	4,800	55 lbs.	2,640 lbs.	548 lbs.
3/4	4-3/16	SC12-067-11	100	48	4,800	62 lbs.	2,976 lbs.	600 lbs.
3/4	4-11/16	SC12-075-11	75	48	3,600	51 lbs.	2,448 lbs.	672 lbs.
3/4	5-3/16	SC12-083-11	60	48	2,880	44 lbs.	2,112 lbs.	735 lbs.
3/4	5-11/16	SC12-091-11	60	48	2,880	48 lbs.	2.304 lbs.	797 lbs.
3/4	6-3/16	SC12-099-11	60	48	2,880	51 lbs.	2,448 lbs.	852 lbs.
3/4	6-11/16	SC12-107-11	70	27	1,890	64 lbs.	1,728 lbs.	905 lbs.
3/4	7-3/16	SC12-115-11	60	27	1,620	59 lbs.	1,593 lbs.	968 lbs.
3/4	8-3/16	SC12-131-11	50	27	1,350	56 lbs.	1,512 lbs.	1,105 lbs.
3/4	9-3/16	SC12-147-11	100	9	900	126 lbs.	1,134 lbs.	1,222 lbs.
3/4	10-3/16	SC12-163-11	100	9	900	137 lbs.	1,233 lbs.	1,339 lbs.
3/4	12-3/16	SC12-195-11	1,000	1	1,000	1,590 lbs.	1,590 lbs.	1,590 lbs.
3/4	16-3/16	SC12-259-11	700	1	700	1,457 lbs.	1,457 lbs.	2,081 lbs.

Shear Connectors are used in all types of concrete

connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length</u>: Length is listed before weld. Stud diameters 3/4" will be approx. 3/16" shorter after weld.

TRU-WELD shear connectors can be made in any length above the standard minimum.

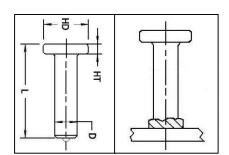
<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. SC Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

CHU PAR		FOOT PART #	GRIP PART #	FERRULE FOOT PLATE (DUAL LEG)
CH-C)75	B-2C	GC-075	QN-075

Mechanical Property Requirements						
	Type A	Type B				
Tensile Strength	61,000 psi min.	65,000 psi min.				
Yield Strength	49,000 psi min.	51,000 psi min.				
Elongation (% in 2 in.)	17% min.	20% min.				
Elongation (% in 5x dia.)	14% min.	15% min.				
Reduction of Area	50% min.	50% min.				

Type A Studs are general purpose studs.





THRU-DECK SHEAR CONNECTOR

TYPE **DSC** STUD

TYPE F FERRULE SUPPLIED

Head Diameter (HD) -1-1/4" for all 3/4" Thru-Deck Shear Connectors. Head Height (HT) -3/8" for all 3/4" Thru-Deck Shear Connectors.

WELD STUD SPECIFICATIONS			WELD S	STUD PACK	AGING	WELD STUD WEIGHTS		
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
3/4	3-3/8	DSC12-054-11	125	48	6,000	63 lbs.	3,024 lbs.	500 lbs.
3/4	3-7/8	DSC12-062-11	100	48	4,800	58 lbs.	2,784 lbs.	567 lbs.
3/4	4-3/8	DSC12-070-11	100	48	4,800	62 lbs.	2,976 lbs.	625 lbs.
3/4	4-7/8	DSC12-078-11	75	48	3,600	52 lbs.	2,496 lbs.	683 lbs.
3/4	5-3/8	DSC12-086-11	60	48	2,880	45 lbs.	2,160 lbs.	754 lbs.
3/4	5-7/8	DSC12-094-11	60	48	2,880	49 lbs.	2,352 lbs.	810 lbs.
3/4	6-3/8	DSC12-102-11	60	48	2,880	56 lbs.	2,544 lbs.	884 lbs.

<u>Thru-Deck Shear Connectors</u> are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 3/4" will be approx. 3/8" shorter after weld.

TRU-WELD thru-deck shear connectors can be made in any length above the standard minimum.

<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. DSC Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

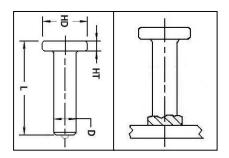
CHUCK PART #	THRU-DECK FOOT ASSEMBLY	THRU-DECK FERRULE GRIP
CU 07F	B-0021-1A	B 0060 1
CH-075	B-0021-1P	B-0060-1

Mechanical Property Requirements						
	Type A	Type B				
Tensile Strength	61,000 psi min.	65,000 psi min.				
Yield Strength	49,000 psi min.	51,000 psi min.				
Elongation (% in 2 in.)	17% min.	20% min.				
Elongation (% in 5x dia.)	14% min.	15% min.				
Reduction of Area	50% min.	50% min.				

Type A Studs are general purpose studs.







Head Diameter (HD) -1-3/8" for all 7/8" Shear Connectors. Head Height (HT) -3/8" for all 7/8" Shear Connectors.

WELD STUD SPECIFICATIONS		WELD S	STUD PACK	AGING	GING WELD STUD WEIGHTS			
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
7/8	3-3/16	SC14-051-11	100	27	2,700	66 lbs.	1,782 lbs.	631 lbs.
7/8	3-11/16	SC14-059-11	100	27	2,700	74 lbs.	1,998 lbs.	709 lbs.
7/8	4-3/16	SC14-067-11	100	27	2,700	82 lbs.	2,214 lbs.	796 lbs.
7/8	5-3/16	SC14-083-11	60	27	1,620	60 lbs.	1,620 lbs.	962 lbs.
7/8	6-3/16	SC14-099-11	50	27	1,350	58 lbs.	1,566 lbs.	1,137 lbs.
7/8	7-3/16	SC14-115-11	45	27	1,215	59 lbs.	1,593 lbs.	1,306 lbs.
7/8	8-3/16	SC14-131-11	40	27	1,080	59 lbs.	1,593 lbs.	1,496 lbs.
7/8	9-3/16	SC14-147-11	75	9	675	125 lbs.	1,125 lbs.	1,666 lbs.
7/8	10-3/16	SC14-163-11	75	9	675	135 lbs.	1,215 lbs.	1,836 lbs.
7/8	12-3/16	SC14-195-11	750	1	750	1,594 lbs.	1,594 lbs.	2,173 lbs.

Shear Connectors are used in all types of concrete

connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length</u>: Length is listed before weld. Stud diameters 7/8" will be approx. 3/16" shorter after weld.

TRU-WELD shear connectors can be made in any length above the standard minimum.

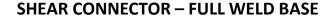
<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. SC Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

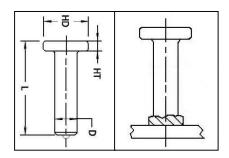
CHUCK	FOOT	GRIP	FERRULE FOOT
PART #	PART#	PART #	PLATE (DUAL LEG)
CH-087	B-3C	GC-087	

Mechanical Property Requirements						
	Type A	Туре В				
Tensile Strength	61,000 psi min.	65,000 psi min.				
Yield Strength	49,000 psi min.	51,000 psi min.				
Elongation (% in 2 in.)	17% min.	20% min.				
Elongation (% in 5x dia.)	14% min.	15% min.				
Reduction of Area	50% min.	50% min.				

Type A Studs are general purpose studs.







Head Diameter (HD) -1-5/8" for all 1" Shear Connectors. Head Height (HT) -1/2" for all 1" Shear Connectors.

WELD STUD SPECIFICATIONS			WELD S	STUD PACK	AGING	WELD STUD WEIGHTS		
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
1"	3-1/4	SC16-052-11	75	27	2,025	70 lbs.	1,890 lbs.	894 lbs.
1"	4-1/4	SC16-068-11	50	27	1,350	57 lbs.	1,539 lbs.	1,079 lbs.
1"	5-1/4	SC16-084-11	50	27	1,350	67 lbs.	1,809 lbs.	1,302 lbs.
1"	6-1/4	SC16-100-11	40	27	1,080	63 lbs.	1,701lbs.	1,514 lbs.
1"	7-1/4	SC16-116-11	40	27	1,080	72 lbs.	1,944 lbs.	1,800 lbs.
1"	8-1/4	SC16-132-11	85	9	765	171 lbs.	1,539 lbs.	1,978 lbs.
1"	9-1/4	SC16-148-11	50	9	450	112 lbs.	1,008 lbs.	2,230 lbs.

<u>Shear Connectors</u> are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1" will be approx. 1/4" shorter after weld.

TRU-WELD shear connectors can be made in any length above the standard minimum.

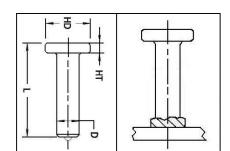
<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. SC Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

CHUCK PART #			FERRULE FOOT PLATE (DUAL LEG)	
CH-100	B-3C	GC-100	QN-100	

Mechanical Property Requirements						
	Type A	Туре В				
Tensile Strength	61,000 psi min.	65,000 psi min.				
Yield Strength	49,000 psi min.	51,000 psi min.				
Elongation (% in 2 in.)	17% min.	20% min.				
Elongation (% in 5x dia.)	14% min.	15% min.				
Reduction of Area	50% min.	50% min.				

Type A Studs are general purpose studs.





SHEAR CONNECTOR – FULL WELD BASE

TYPE **SC** STUD

TYPE F FERRULE SUPPLIED

Head Diameter (HD) – 1-5/8" for all 1" Shear Connectors. Head Height (HT) – 1/2" for all 1" Shear Connectors.

WELD	STUD SP	TUD SPECIFICATIONS WELD STUE			AGING	WELI	LD STUD WEIGHTS	
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
1"	10-1/4	SC16-164-11	50	9	450	124 lbs.	1116 lbs.	2442 lbs.
1"	12-1/4	SC16-196-11	700	1	700	2011 lbs.	2011 lbs.	2876 lbs.
1"	14-1/4	SC16-228-11	700	1	700	2328 lbs.	2328 lbs.	3324 lbs.
1"	16-1/4	SC16-260-11	500	1	500	1903 lbs.	1903 lbs.	3806 lbs.
1"	18-1/4	SC16-292-11	500	1	500	2092 lbs.	2092 lbs.	4184 lbs.

<u>Shear Connectors</u> are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1" will be approx. 1/4" shorter after weld.

TRU-WELD shear connectors can be made in any length above the standard minimum.

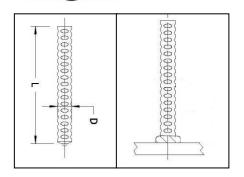
<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. SC Studs are also available in weldable stainless steel. Type 302 is the most commonly used.

CHUCK	FOOT	GRIP	FERRULE FOOT
PART #	PART#	PART #	PLATE (DUAL LEG)
CH-100	B-3C	GC-100	

Mechanical Property Requirements					
	Type A	Type B			
Tensile Strength	61,000 psi min.	65,000 psi min.			
Yield Strength	49,000 psi min.	51,000 psi min.			
Elongation (% in 2 in.)	17% min.	20% min.			
Elongation (% in 5x dia.)	14% min.	15% min.			
Reduction of Area	50% min.	50% min.			

Type A Studs are general purpose studs.





TYPE **DBA** STUD

NO THREAD – FULL WELD BASE

TYPE **F** FERRULE SUPPLIED

WELD	STUD SP	ECIFICATIONS	WELD STUD PACKAGING			WELD STUD WEIGHTS			
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight	
3/8	10-1/8	DBA06-162-18	150	18	2,700	46 lbs.	828 lbs.	288 lbs.	
3/8	12-1/8	DBA06-194-18	150	18	2,700	55 lbs.	990 lbs.	345 lbs.	
3/8	18-1/8	DBA06-290-18	150	12	1,800	80 lbs.	960 lbs.	515 lbs.	
3/8	24-1/8	DBA06-386-18	150	8	1,200	108 lbs.	864 lbs.	685 lbs.	
3/8	30-1/8	DBA06-482-18	150	7	1,050	130 lbs.	910 lbs.	897 lbs.	
3/8	36-1/8	DBA06-578-18	150	6	900	156 lbs.	936 lbs.	1,047 lbs.	
3/8	48-1/8	DBA06-770-18	150	6	900	208 lbs.	1,248 lbs.	1,394 lbs.	

<u>Deformed Bar Anchors</u> are designed for weld and bearing plates in concrete connections.

<u>Length:</u> Length is listed before weld. Stud diameters 3/8" and below will be approx. 1/8" shorter after welding.

TRU-WELD Deformed Bar Anchors can be made in any length above the standard minimum.

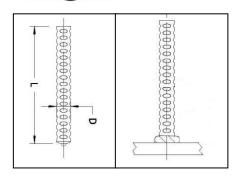
Material: Low carbon steel ASTM A496 / A1064

CHUCK	FOOT	GRIP	FERRULE FOOT
PART #	PART #	PART #	PLATE (DUAL LEG)
	B-1C	GC-037	QN-037
CN-037	B-1C	(Standard Duty)	(Standard Duty
CN-037	B-1C	GC-050	QN-050
		(Heavy Duty)	(Heavy Duty)

Mechanical Property Requirements				
	Type C			
Tensile Strength	80,000 psi min. (552 MPa)			
Yield Strength (0.5% offset)	70,000 psi min. (485 MPa)			

Type "C" Studs are cold-worked deformed steel bars manufactured in accordance with specification ASTM A496 having a nominal diameter equivalent to the diameter of a plain wire having the same weight per foot as the deformed wire. ASTM A496 specifies a maximum diameter of 0.628 in. (16mm). Any bar supplied above that diameter must have the same physical characteristics regarding deformations as required by ASTM A496.





TYPE **DBA** STUD

NO THREAD – FULL WELD BASE

TYPE **F** FERRULE SUPPLIED

WELD	STUD SP	ECIFICATIONS	WELD STUD PACKAGING			WELD STUD WEIGHTS			
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight	
1/2	8-1/8	DBA08-130-18	100	18	1,800	44 lbs.	792 lbs.	451 lbs.	
1/2	10-1/8	DBA08-162-18	100	18	1,800	54 lbs.	972 lbs.	529 lbs.	
1/2	12-1/8	DBA08-194-18	100	18	1,800	67 lbs.	1,206 lbs.	670 lbs.	
1/2	18-1/8	DBA08-290-18	100	12	1,200	98 lbs.	1,176 lbs.	972 lbs.	
1/2	24-1/8	DBA08-386-18	100	8	800	128 lbs.	1,024 lbs.	1,292 lbs.	
1/2	30-1/8	DBA08-482-18	100	7	700	160 lbs.	1,120 lbs.	1,572 lbs.	
1/2	36-1/8	DBA08-578-18	100	6	600	192 lbs.	1,152 lbs.	1,879 lbs.	
1/2	42-1/8	DBA08-674-18	100	6	600	222 lbs.	1,332 lbs.	2,180 lbs.	
1/2	48-1/8	DBA08-770-18	100	6	600	253 lbs.	1,518 lbs.	2,502 lbs.	
1/2	60-1/8	DBA08-962-18	100	3	300	314 lbs.	942 lbs.	3,140 lbs.	

<u>Deformed Bar Anchors</u> are designed for weld and bearing plates in concrete connections.

Length: Length is listed before weld. Stud diameters 1/2" will be approx. 1/8" shorter after welding.

TRU-WELD Deformed Bar Anchors can be made in any length above the standard minimum.

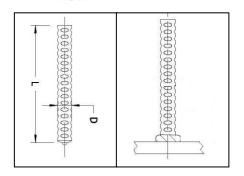
Material: Low carbon steel ASTM A496 / A1064

CHUCK	FOOT	GRIP	FERRULE FOOT PLATE
PART#	PART #	PART #	(DUAL LEG)
	B-1C	GC-050	QN-050
CN-050	B-1C	(Standard Duty)	(Standard Duty)
CIN-050	B-2C	GC-062	QN-062
	D-2C	(Heavy Duty)	(Heavy Duty)

Mechanical Property Requirements				
	Type C			
Tensile Strength	80,000 psi min. (552 MPa)			
Yield Strength (0.5% offset)	70,000 psi min. (485 MPa)			

Type "C" Studs are cold-worked deformed steel bars manufactured in accordance with specification ASTM A496 having a nominal diameter equivalent to the diameter of a plain wire having the same weight per foot as the deformed wire. ASTM A496 specifies a maximum diameter of 0.628 in. (16mm). Any bar supplied above that diameter must have the same physical characteristics regarding deformations as required by ASTM A496.





TYPE **DBA** STUD

NO THREAD – FULL WELD BASE

TYPE **F** FERRULE SUPPLIED

WELD	WELD STUD SPECIFICATIONS W			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight	
5/8	12-3/16	DBA10-195-18	50	18	900	51 lbs.	918 lbs.	997 lbs.	
5/8	18-3/16	DBA10-291-18	50	12	600	76 lbs.	912 lbs.	1,520 lbs.	
5/8	24-3/16	DBA10-387-18	50	8	400	102 lbs.	816 lbs.	2,040 lbs.	
5/8	30-3/16	DBA10-483-18	50	7	350	126 lbs.	882 lbs.	2,520 lbs.	
5/8	36-3/16	DBA10-579-18	50	6	300	151 lbs.	906 lbs.	3,020 lbs.	
5/8	42-3/16	DBA10-675-18	50	8	400	176 lbs.	1,408 lbs.	3,520 lbs.	
5/8	48-3/16	DBA10-771-18	50	6	300	197 lbs.	1,182 lbs.	3,962 lbs.	

<u>Deformed Bar Anchors</u> are designed for weld and bearing plates in concrete connections.

<u>Length:</u> Length is listed before weld. Stud diameters 5/8" will be approx. 3/16" shorter after welding.

TRU-WELD Deformed Bar Anchors can be made in any length above the standard minimum.

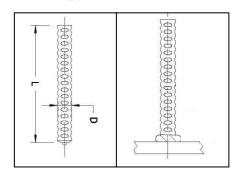
Material: Low carbon steel ASTM A496 / A1064

CHUCK	FOOT	GRIP	FERRULE FOOT
PART #	PART #	PART #	PLATE (DUAL LEG)
	B-2C	GC-062	QN-062
CN 063	B-2C	(Standard Duty)	(Standard Duty)
CN-062	D 26	GC-075	QN-075
	B-2C	(Heavy Duty)	(Heavy Duty)

Mechanical Property Requirements				
	Type C			
Tensile Strength	80,000 psi min. (552 MPa)			
Yield Strength (0.5% offset)	70,000 psi min. (485 MPa)			

Type C Studs are cold-worked deformed steel bars manufactured in accordance with specification ASTM A496 having a nominal diameter equivalent to the diameter of a plain wire having the same weight per foot as the deformed wire. ASTM A496 specifies a maximum diameter of 0.628 in. (16mm). Any bar supplied above that diameter must have the same physical characteristics regarding deformations as required by ASTM A496.





TYPE **DBA** STUD

NO THREAD – FULL WELD BASE

TYPE **F** FERRULE SUPPLIED

WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	TRU-WELD Part Number	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
3/4	12-3/16	DBA12-195-18	40	18	720	60 lbs.	1,080 lbs.	1,525 lbs.
3/4	18-3/16	DBA12-291-18	40	12	480	87 lbs.	1,044 lbs.	2,175 lbs.
3/4	24-3/16	DBA12-387-18	40	8	320	115 lbs.	920 lbs.	2,875 lbs.
3/4	30-3/16	DBA12-483-18	40	6	240	145 lbs.	870 lbs.	3,625 lbs.
3/4	36-3/16	DBA12-579-18	40	6	240	175 lbs.	1,050 lbs.	4,375 lbs.
3/4	42-3/16	DBA12-675-18	40	6	240	205 lbs.	1,230 lbs.	5,125 lbs.
3/4	48-3/16	DBA12-771-18	40	6	240	228 lbs.	1,368 lbs.	5,690 lbs.

<u>Deformed Bar Anchors</u> are designed for weld and bearing plates in concrete connections.

<u>Length:</u> Length is listed before weld. Stud diameters 3/4" will be approx. 3/16" shorter after welding.

TRU-WELD Deformed Bar Anchors can be made in any length above the standard minimum.

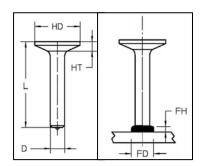
Material: Low carbon steel ASTM A496 / A1064

CHUCK PART #	FOOT PART #	GRIP PART #	FERRULE FOOT PLATE (DUAL LEG)	
CN-075	B-2C	GC-075	QN-075	
	_	(Standard Duty)	(Standard Duty)	

Mechanical Property Requirements			
	Type C		
Tensile Strength	80,000 psi min. (552 MPa)		
Yield Strength (0.5% offset)	70,000 psi min. (485 MPa)		

Type "C" Studs are cold-worked deformed steel bars manufactured in accordance with specification ASTM A496 having a nominal diameter equivalent to the diameter of a plain wire having the same weight per foot as the deformed wire. ASTM A496 specifies a maximum diameter of 0.628 in. (16mm). Any bar supplied above that diameter must have the same physical characteristics regarding deformations as required by ASTM A496.





PUNCHING SHEAR RESISTOR

TYPE **PSR** STUD

HEADED CONCRETE ANCHOR – FULL WELD BASE

TYPE F FERRULE SUPPLIED

WELD STUD SPECIFICATIONS							
D Diameter	L Length	TRU-WELD Part Number	HD Head Diameter	HT Head Height	FD Fillet Diameter	FH Fillet Height	
3/8	3-7/16	PSR06-055-11	1.190	.260	1/2	1/8	
1/2	2-5/8	PSR08-042-11	1.580	.330	11/16	5/32	
5/8	3-3/4	PSR08-060-11	1.980	.400	7/8	3/16	
3/4	4-3/8	PSR08-070-11	2.370	.470	1-1/16	1/4	

- 1) Tru-Weld studs are available in any length above the standard minimum.
- 2) Listed Ferrule above is for the standard flat down hand position.

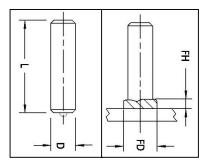
Diameter	FOOT PART #	GRIP PART #	FERRULE FOOT PLATE (DUAL LEG)
3/8	B-1C	GC-037	QN-037
1/2	B-1C	GC-050	QN-050
5/8	B-2C	GC-062	QN-062
3/4	B-2C	GC-075	QN-075

Mechanical Property Requirements					
Туре В					
Tensile Strength	65,000 psi min.				
Yield Strength	51,000 psi min.				
Elongation (% in 2 in.)	20% min.				
Elongation (% in 5x dia.)	15% min.				
Reduction of Area	50% min.				



TRU-WELD Stud Welding

NO THREAD STUD – FULL WELD BASE



TYPE NT STUD

TYPE F FERRULE SUPPLIED

D Stud Diameter	L Length (BW)	TRU-WELD Part Number	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number
1/4	7/8	NT04-014-11	23/64	7/64	FER04-F
5/16	7/8	NT05-014-11	7/16	7/64	FER05-F
3/8	7/8	NT06-014-11	1/2	1/8	FER06-F
7/16	1	NT07-016-11	19/32	9/64	FER07-F
1/2	1	NT08-016-11	11/16	5/32	FER08-F
5/8	1-5/16	NT10-021-11	7/8	3/16	FER10-F
3/4	1-5/16	NT12-021-11	1-1/16	1/4	FER12-F
7/8	1-9/16	NT14-025-11	1-1/8	5/16	FER14-F
1	1-7/8	NT16-030-11	1-3/8	3/8	FER16-F

<u>NT Studs</u> are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8"- 7/8" will be approx. 3/16" shorter after welding. 1" and above will be 1/4" shorter after weld. TRU-WELD NT Studs can be made in any length above the standard minimum.

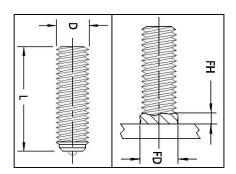
<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. NT Studs are also available in weldable stainless steel.

Mechanical Property Requirements				
Tensile Strength	61,000 psi min.			
Yield Strength	49,000 psi min.			
Elongation (% in 2 in.)	17% min.			
Elongation (% in 5x dia.)	14% min.			
Reduction of Area	50% min.			

		Light Duty Standard		Light Sp	Standard Combination	
DIAMETER	CHUCK PART #	FOOT PART #	GRIP PART #	FOOT PART #	GRIP PART #	FOOT AND GRIP#
1/4	CN-025	B-1N	GN-025	B-1C	GC-025	QM-025
5/16	CN-031	B-1N	GN-031	B-1C	GC-031	QM-031
3/8	CN-037	B-1N	GN-050	B-1C	GC-050	QM-050
7/16	CN-043	B-1N	GN-043	B-1C	GC-043	QM-043
1/2	CN-050	B-2N	GN-062	B-2C	GC-062	QM-062
5/8	CN-062	B-2N	GN-075	B-2C	GC-075	QM-075
3/4	CN-075	B-2N	GN-075	B-2C	GC-075	QM-075
7/8	CN-087	B-3N	GN-087	B-3C	GC-087	QM-087
1	CN-100	B-3N	GN-100	B-3C	GC-100	QM-100

TFP Corporation/TRU-WELD 460 Lake Road Medina, Ohio 44256 (330) 725-7741 (330) 725-0161 Fax Sales@tfpcorp.com http://www.tfpcorp.com http://www.truweldstudwelding.com http://www.weldstud.com





FULL THREAD STUD – FULL WELD BASE

TYPE TT STUD

TYPE F FERRULE SUPPLIED

D	L	TRU-WELD	FD	FH	Ferrule
Stud Diameter	Length (BW)	Part Number	Weld Fillet Diameter	Weld Fillet Height	Part Number
1/4-20	3/4	TT04-012-11	23/64	7/64	FER04-F
5/16-18	3/4	TT05-012-11	7/16	7/64	FER05-F
3/8-16	3/4	TT06-012-11	1/2	1/8	FER06-F
7/16-14	7/8	TT07-014-11	19/32	9/64	FER07-F
1/2-13	7/8	TT08-014-11	11/16	5/32	FER08-F
5/8-11	1	TT10-016-11	7/8	3/16	FER10-F
3/4-10	1-3/16	TT12-019-11	1-1/16	1/4	FER12-F
7/8-9	1-11/16	TT14-027-11	1-1/8	5/16	FER14-F
1-8	1-11/16	TT16-027-11	1-3/8	3/8	FER16-F

Mechanical Property Requirements				
Tensile Strength	61,000 psi min.			
Yield Strength	49,000 psi min.			
Elongation (% in 2 in.)	17% min.			
Elongation (% in 5x dia.)	14% min.			
Reduction of Area	50% min.			

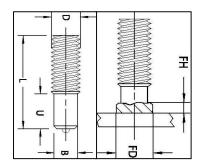
<u>Full Thread Studs</u> are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" – 7/8" will be approx. 3/16" shorter after welding. 1" Diameter studs and above will be approx. 1/4" shorter after weld. TRU-WELD TT Studs can be made in any length above the standard minimum.

<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. TT Studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

		Light Stand	•	Light Duty Split C		Standard Combination
DIAMETER	CHUCK PART #	FOOT PART #	GRIP PART #	FOOT PART #	GRIP PART #	FOOT AND GRIP#
1/4	CN-025	B-1N	GN-025	B-1C	GC-025	QN-025
5/16	CN-031	B-1N	GN-031	B-1C	GC-031	QN-031
3/8	CN-037	B-1N	GN-050	B-1C	GC-050	QN-050
7/16	CN-043	B-1N	GN-043	B-1C	GC-043	QN-044
1/2	CN-050	B-1N	GN-050	B-1C	GC-050	QN-050
5/8	CN-062	B-2N	GN-062	B-2C	GC-062	QN-062
3/4	CN-075	B-2N	GN-075	B-2C	GC-075	QN-075
7/8	CN-087	B-3N	GN-087	B-3C	GC-087	QN-087
1	CN-100	B-3N	GN-100	B-3C	GC-100	QN-100





PARTIAL THREAD STUD

TYPE TP STUD

TYPE P FERRULE SUPPLIED

D	L	TRU-WELD	В	U	FD	FH	Ferrule
Stud Diameter	Length (BW)	Part Number	Base Diameter	Base Length	Weld Fillet Diameter	Weld Fillet Height	Part Number
1/4-20	3/4	TP04-012-11	.215	3/8	5/16	3/32	FER04-P
5/16-18	3/4	TP05-012-11	.275	3/8	13/32	7/64	FER05-P
3/8-16	3/4	TP06-012-11	.330	13/32	7/16	7/64	FER06-P
7/16-14	7/8	TP07-014-11	.87	7/16	1/2	1/8	FER07-P
1/2-13	7/8	TP08-014-11	.448	1/2	19/32	5/32	FER08-P
5/8-11	1	TP10-016-11	.562	5/8	3/4	3/16	FER10-P
3/4-10	1-3/16	TP12-019-11	.680	13/16	7/8	1/4	FER12-P
7/8-9	1-11/16	TP14-027-11	.798	7/8	1	5/16	FER14-P
1-8	1-11/16	TP16-027-11	.915	15/16	1-1/8	5/16	FER16-P

TP STUDS are used in all types of applications.

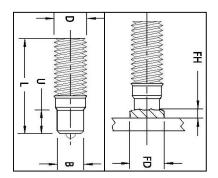
<u>Length:</u> TRU-WELD TP Studs can be made in any length above the standard minimum.

<u>Material:</u> Low Carbon Steel, ASTM A29 / A108, 1010-1020. TP Studs are also available in weldable stainless steel.

Mechanical Property Requirements						
Tensile Strength	61,000 psi min.					
Yield Strength	49,000 psi min.					
Elongation (% in 2 in.)	17% min.					
Elongation (% in 5x dia.)	14% min.					
Reduction of Area	50% min.					

		Light Duty Standard		Light Sp	Standard Combination	
DIAMETER	CHUCK PART #	FOOT PART #	GRIP PART #	FOOT PART #	GRIP PART #	FOOT AND GRIP #
1/4	CN-025	B-1N	GN-025	B-1C	GC-025	QN-025
5/16	CN-031	B-1N	GN-031	B-1C	GC-031	QN-031
3/8	CN-037	B-1N	GN-050	B-1C	GC-050	QN-050
7/16	CN-043	B-1N	GN-043	B-1C	GC-043	QN-044
1/2	CN-050	B-1N	GN-050	B-1C	GC-050	QN-050
5/8	CN-062	B-2N	GN-062	B-2C	GC-062	QN-062
3/4	CN-075	B-2N	GN-075	B-2C	GC-075	QN-075
7/8	CN-087	B-3N	GN-087	B-3C	GC-087	QN-087
1	CN-100	B-3N	GN-100	B-3C	GC-100	QN-100





THREADED STUD - REDUCED WELD BASE

TYPE TR STUD

TYPE R FERRULE SUPPLIED

D Stud Diameter	L Length (BW)	TRU-WELD Part Number	B Base Diameter	U Base Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number
3/8-16	3/4	TR06-012-11	.310	3/8	7/16	7/64	FER06-R
7/16-14	7/8	TR07-014-11	.373	3/8	1/2	1/8	FER07-R
1/2-13	7/8	TR08-014-11	.435	7/16	19/32	9/64	FER08-R
5/8-11	1	TR10-016-11	.500	1/2	11/16	5/32	FER10-R
3/4-10	1-3/16	TR12-019-11	.625	5/8	7/8	3/16	FER12-R

<u>TR Studs</u> are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" -3/4" will be approx. 3/16" shorter after welding.

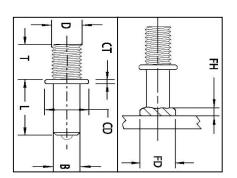
TRU-WELD TR Studs can be made in any length above the standard minimum.

<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. TR Studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required

Mechanical Property Requirements							
Tensile Strength	61,000 psi min.						
Yield Strength	49,000 psi min.						
Elongation (% in 2 in.)	17% min.						
Elongation (% in 5x dia.)	14% min.						
Reduction of Area	50% min.						

		Light Duty Standard		Light Sp	Standard Combination	
DIAMETER	CHUCK PART #	FOOT PART #	GRIP PART #	FOOT PART #	GRIP PART #	FOOT AND GRIP#
3/8	CN-037	B-1N	GN-037	B-1C	GC-037	QN-037
7/16	CN-043	B-1N	GN-043	B-1C	GC-043	QN-044
1/2	CN-050	B-1N	GN-050	B-1C	GC-050	QN-050
5/8	CN-062	B-2N	GN-062	B-2C	GC-062	QN-062
3/4	CN-075	B-2N	GN-075	B-2C	GC-075	QN-075





COLLAR STUD

TYPE CS STUD

THREADED TO COLLAR- PITCH DIAMETER WELD BASE

TYPE C FERRULE SUPPLIED

D Thread Diameter	T Thread Length	TRU-WELD Part Number	B Base Diameter	T Stud Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number
1/4-20	1/4	CS03-008-11-04-004	.215	1/2	23/64	7/64	FER04-C
5/16-18	3/8	CS04-008-11-05-006	.275	1/2	7/16	7/64	FER05-C
3/8-16	3/8	CS05-008-11-06-006	.330	1/2	1/2	1/8	FER06-C
1/2-13	3/8	CS07-009-11-08-006	.448	9/16	11/16	5/32	FER08-C

<u>Collar Studs</u> are used in all types of applications. They can be welded to a flat surface, or on the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1/2" and below will be approx. 1/8" shorter after welding.

TRU-WELD Collar Studs can be made in any length above the standard minimum.

<u>Material</u>: Low carbon steel, ASTM A29 / A108, 1010-1020. Collar Studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

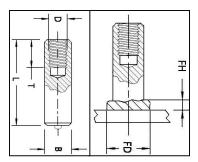
Mechanical Property Requirements						
Tensile Strength	61,000 psi min.					
Yield Strength	49,000 psi min.					
Elongation (% in 2 in.)	17% min.					
Elongation (% in 5x dia.)	14% min.					
Reduction of Area	50% min.					

		Light Stan	•	Light Sp	Standard Combination	
THREAD DIAMETER	CHUCK PART #	FOOT PART #	GRIP PART #	FOOT PART #	GRIP PART #	FOOT AND GRIP #
1/4"	CN-025	B-2N	GN-062	B-2C	GC-062	QN-062
5/16"	CN-031	B-2N	GN-062	B-2C	GC-062	QN-062
3/8"	CN-037	B-2N	GN-062	B-2C	GC-062	QN-062
1/2"	CN-050	B-2N	GN-075	B-2C	GC-075	QN-075



TRU-WELD Stud Welding

INTERNALLY TAPPED STUD – FULL WELD BASE



TYPE IT STUD

TYPE F FERRULE SUPPLIED

В	D	L	Т	TRU-WELD	FD	FH	Ferrule
Stud Diameter	Tap Diameter	Length (BW)	Tap Depth	Part Number	Weld Fillet Diameter	Weld Fillet Height	Part Number
1/4	#8-32	5/8	1/4	IT04-010-11-IC-004	23/64	7/64	FER04-F
5/16	#10-24	5/8	5/16	IT05-010-11-KF-005	7/16	7/64	FER05-F
3/8	1/4-20	13/16	3/8	IT06-013-11-04-006	1/2	1/8	FER06-F
7/16	5/16-18	1	1/2	IT07-016-11-05-008	19/32	9/64	FER07-F
1/2	3/8-16	1-1/8	9/16	IT08-018-11-06-009	11/16	5/32	FER08-F
5/8	7/16-14	1-3/16	5/8	IT10-019-11-07-010	7/8	3/16	FER10-F
3/4	1/2-13	1-7/16	3/4	IT12-023-11-08-012	1-1/16	1/4	FER12-F
7/8	5/8-11	1-5/8	15/16	IT14-026-11-10-015	1-1/8	5/16	FER14-F
1	3/4-10	2-1/4	1-1/8	IT16-036-11-12-018	1-3/8	3/8	FER16-F

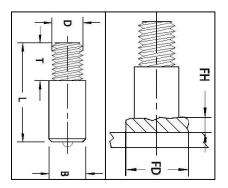
<u>Tapped Studs</u> are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle. <u>Length</u>: Length is listed before weld. Diameters 1/2" and below will be approx. 1/8" shorter after weld. 5/8" and above will be 3/16" shorter. TRU-WELD IT Studs can be made in any length above the standard minimum.

<u>Material:</u> Low Carbon Steel, ASTM A29 / A108, 1010-1020. IT Studs are also available in weldable stainless steel.

Mechanical Property Requirements							
Tensile Strength	61,000 psi min.						
Yield Strength	49,000 psi min.						
Elongation (% in 2 in.)	17% min.						
Elongation (% in 5x dia.)	14% min.						
Reduction of Area	50% min.						

		_	Light Duty Standard		Light Duty Split		Light Duty Split		
DIAMETER	CHUCK PART #	FOOT PART #	GRIP PART #	FOOT PART #	GRIP PART #	FOOT AND GRIP #			
1/4	CN-025	B-1N	GN-025	B-1C	GC-025	QN-025			
5/16	CN-031	B-1N	GN-031	B-1C	GC-031	QN-031			
3/8	CN-037	B-1N	GN-050	B-1C	GC-050	QN-050			
7/16	CN-043	B-1N	GN-043	B-1C	GC-043	QN-044			
1/2	CN-050	B-2N	GN-062	B-2C	GC-062	QN-062			
5/8	CN-062	B-2N	GN-075	B-2C	GC-075	QN-075			
3/4	CN-075	B-2N	GN-075	B-2C	GC-075	QN-075			
7/8	CN-087	B-3N	GN-087	B-3C	GC-087	QN-087			
1	CN-100	B-3N	GN-100	B-3C	GC-100	QN-100			





SHOULDER STUD – FULL WELD BASE

TYPE S STUD

TYPE F FERRULE SUPPLIED

D Thread	T Thread	TRU-WELD Part Number	B	T Stud	FD Weld Fillet	FH Weld Fillet	Ferrule Part Number
Diameter	Length	rait Number	Diameter	Length	Diameter	Height	
1/4-20	3/8	3011-06-012-04-006	3/8	3/4	1/2	1/8	FER06-F
5/16-18	7/16	3011-07-014-05-007	7/16	7/8	19/32	9/64	FER07-F
3/8-16	1/2	3011-08-016-06-008	1/2	1	11/16	5/32	FER08-F
1/2-13	11/16	3011-10-020-08-011	5/8	1-1/4	7/8	3/16	FER10-F
5/8-11	11/16	3011-12-025-10-011	3/4	1-9/16	1-1/16	1/4	FER12-F
3/4-10	13/16	3011-14-030-12-013	7/8	1-7/8	1-1/8	5/16	FER14-F

<u>S Studs</u> are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

<u>Length:</u> Length is listed before weld. Stud diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8"-3/4" will be approx. 3/16" shorter after welding.

TRU-WELD S Studs can be made in any length above the standard minimum.

<u>Material:</u> Low carbon steel, ASTM A29 / A108, 1010-1020. S Studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

Mechanical Property Requirements					
Tensile Strength	61,000 psi min.				
Yield Strength	49,000 psi min.				
Elongation (% in 2 in.)	17% min.				
Elongation (% in 5x dia.)	14% min.				
Reduction of Area	50% min.				

		Light Stand	•	Light Duty Split		Standard Combination
BASE DIAMETER	CHUCK PART #	FOOT PART #	GRIP PART #	FOOT PART #	GRIP PART #	FOOT AND GRIP #
3/8	CN-025	B-1N	GN-050	B-1C	GC-050	QN-050
7/16	CN-031	B-1N	GN-043	B-1C	GC-043	QN-044
1/2	CN-037	B-2N	GN-062	B-2C	GC-062	QN-062
5/8	CN-050	B-2N	GN-075	B-2C	GC-075	QN-075
3/4	CN-062	B-2N	GN-075	B-2C	GC-075	QN-075
7/8	CN-075	B-3N	GN-087	B-3C	GC-087	QN-087



CD STUD WELDING MATERIAL CAPABILITIES

BASE MATERIAL	STUD MATERIAL					
DAGE WIATERIAL	MILD STEEL; 1010 - 1030	STAINLESS STEEL 302/304/305	ALUMINUM 1100/5086/6061	BRASS 70-30/65-35		
MILD STEEL: 1006-1030	EXCELLENT	EXCELLENT	NA	EXCELLENT		
MEDIUM CARBON STEEL: 1030-1050	GOOD	GOOD	NA	GOOD		
GALVANIZED SHEET DUCT OR DECKING	EXCELLENT	EXCELLENT	NA	NA		
STRUCTURAL STEEL	EXCELLENT	EXCELLENT	NA	EXCELLENT		
STAINLESS STEEL: 405,410,430, AND 300 SERIES (EXCL. 303)	EXCELLENT	EXCELLENT	NA	EXCELLENT		
LEAD-FREE BRASS, ELECTROLYTIC COPPER, LEAD-FREE ROLLED COPPER	EXCELLENT	EXCELLENT	NA	EXCELLENT		
MOST ALUMINUM ALLOYS OF THE 1000,3000,5000, AND 6000 SERIES 1	NA	NA	EXCELLENT	NA		
DIE-CAST ZINC ALLOYS	GOOD	GOOD	EXCELLENT	GOOD		

¹⁾ OTHER MATERIALS, SUCH AS 7000 SERIES ALUMINUM, TITANIUM ALLOYS, INCONEL, ETC. CAN BE WELDED UNDER SPECIFIED CONDITIONS.
2) GOOD – GENERALLY FULL STRENGTH RESULTS, DEPENDING ON THE COMBINATION OF STUD SIZE AND BASE METAL.

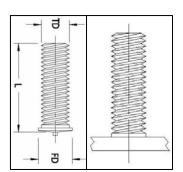
STANDARD LOAD CAPACITIES

STUD MATERIAL	STUD SIZE	MAX. FASTENING TORQUE (INCH/LBS,)	ULTIMATE TENSILE LOAD (LBS.)	MAX. SHEAR LOAD (LBS.)
	6-32	6.0	500	375
LOW-CARBON	8-32	12.0	765	575
COPPER FLASHED	10-24	14.0	960	720
STEEL	1/4-20	43.0	1,750	1,300
SIEEL	5/16-18	72.0	2,900	2,200
	3/8-16	106.0	4,300	3,250
	6-32	10.0	790	590
	8-32	20.0	1,260	940
STAINLES STEEL: 304	10-24	23.0	1,530	1,150
STAINLES STEEL: 304	1/4-20	75.0	2,880	2,160
	5/16-18	126.0	3,750	5,350
	3/8-16	186.0	4,850	7,150
	6-32	2.5	200	125
	8-32	5.0	295	185
ALUMINUM ALLOY:	10-24	6.5	380	235
1100	1/4-20	21.5	670	415
	5/16-18	36.0	1,125	695
	3/8-16	53.0	1,660	1,000
	6-32	3.5	375	235
	8-32	7.5	585	365
ALUMINUM ALLOY:	10-24	10.0	735	460
5086	1/4-20	32.5	1,360	850
	5/16-18	54.5	2,300	1,400
	3/8-16	81.0	3,400	2,100
	6-32	8.0	600	390
	8-32	16.0	860	560
DD 4 00 - 70 00 05 05	10-24	18.5	1,040	680
BRASS: 70-30, 65-35	1/4-20	61.0	1,950	1,275
	5/16-18	102.0	3,280	2,140
	3/8-16	150.0	4,800	3,160

^{*}MAXIMUM FASTENING TORQUE SHOULD DEVELOP FASTENER TENSION TO SLIGHTLY LESS THAN YIELD POINT.



TRU-WELD Stud Welding



TYPE CD STUD

FULLY THREADED CAPACITOR DISCHARGE STUD – FLANGED NO FERRULE NEEDED

	WELD STUD SPECIFICATIONS						
TD	L	TRU-WELD	FD				
Diameter and Thread Pitch	Min. Length before weld	Part Number	Flange Diameter				
#4-40	.250	CDEC-004-541	.187				
#6-32	.250	CDGC-004-541	.218				
#8-32	.250	CDIC-004-541	.250				
#10-32	.250	CDKF-004-541	.250				
#10-24	.250	CDKC-004-541	.250				
1/4-20	.375	CD04-006-541	.312				
5/16-18	.500	CD05-008-541	.375				
3/8-16	.500	CD06-008-541	.437				

CD STUDS ARE AVAILABLE IN VARIOUS LENGTHS, DIAMETERS, AND MATERIALS (TOO MANY TO LIST HERE)

PART NUMBERING CODES (CD STUDS)

PREFIX (IST FOUR DIGITS OR CHARACTERS)

CDEC = #4 CDKC= #10 CDGC = #6 CD04 = 1/4 CDIC = #8 CD05 = 5/16

SUFFIX (LAST THREE DIGITS)

FLANGE/NON-FLANGE (5 OR 6) TIP/NO TIP (4 OR 0) MATERIAL (1, 2, 3)

1 – MILD STEEL

2 – STAINLESS STEEL

3 - ALUMINUM

MATERIAL

MILD STEEL, STAINLESS STEEL, ALUMINUM, BRASS

PLATING

ALL MILD STEEL STUDS ARE COPPER PLATING (NICKEL PLATING AVAILABLE UPON REQUEST ANNEALING

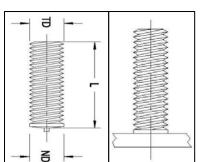
ALL STUDS ARE ANNEALED WHERE REQUIRED

	ESTIMATED WEIGHTS OF THREADED CD STUDS IN POUNDS PER 1000 PIECES							
LENGTH	#4-40	#6-32	#8-32	#10-24	1/4-20	5/16-18		
1/4	.69	1.00	1.39	1.79	3.08	4.90		
3/8	.94	1.38	1.93	2.50	4.37	6.98		
1/2	1.18	1.76	2.49	3.21	5.66	9.06		
5/8	1.43	2.13	3.04	3.93	6.95	11.13		
3/4	1.67	2.51	3.60	4.64	8.24	13.21		
7/8	1.92	2.89	4.15	5.35	9.52	15.29		
1	2.16	3.26	4.71	6.07	10.81	17.36		
1-1/4	2.65	4.02	5.82	7.50	13.39	21.52		
1-1/2	3.15	4.77	6.93	8.92	15.96	25.67		
1-3/4	3.64	5.52	8.04	10.35	18.54	29.83		

TFP Corporation/TRU-WELD 460 Lake Road Medina, Ohio 44256 (330) 725-7741 (330) 725-0161 Fax Sales@tfpcorp.com http://www.tfpcorp.com http://www.truweldstudwelding.com http://www.weldstud.com



TRU-WELD Stud Welding



TYPE \overline{CD} STUD FULLY THREADED CAPACITOR DISCHARGE STUD – NON-FLANGED NO FERRULE NEEDED

WELD STUD SPECIFICATIONS						
TD Diameter and	Min. Length	TRU-WELD Part Number	ND Nominal Diameter			
Thread Pitch #4-40	before weld .250	CDEC-004-641	.112			
#6-32	.250	CDGC-004-641	.138			
#8-32	.250	CDIC-004-641	.164			
#10-32	.250	CDKF-004-641	.190			
#10-24	.250	CDKC-004-641	.190			
1/4-20	.375	CD04-006-641	.250			
5/16-18	.500	CD05-008-641	.312			
3/8-16	.500	CD06-008-641	.375			

CD STUDS ARE AVAILABLE IN VARIOUS LENGTHS, DIAMETERS, AND MATERIALS (TOO MANY TO LIST HERE)

PART NUMBERING CODES (CD STUDS)

PREFIX (IST FOUR DIGITS OR CHARACTERS)

CDEC = #4 CDKC= #10 CDGC = #6 CD04 = 1/4 CDIC = #8 CD05 = 5/16

SUFFIX (LAST THREE DIGITS)

FLANGE/NON-FLANGE (5 OR 6) TIP/NO TIP (4 OR 0) MATERIAL (1, 2, 3)

- 1 MILD STEEL
- 2 STAINLESS STEEL
- 3 ALUMINUM

MATERIAL

MILD STEEL, STAINLESS STEEL, ALUMINUM, BRASS

PLATING

ALL MILD STEEL STUDS ARE COPPER PLATING (NICKEL PLATING AVAILABLE UPON REQUEST

ANNEALING

ALL STUDS ARE ANNEALED WHERE REQUIRED

	ESTIMATED WEIGHTS OF THREADED CD STUDS IN POUNDS PER 1000 PIECES						
LENGTH	#4-40	#6-32	#8-32	#10-24	1/4-20	5/16-18	
1/4	.69	1.00	1.39	1.79	3.08	4.90	
3/8	.94	1.38	1.93	2.50	4.37	6.98	
1/2	1.18	1.76	2.49	3.21	5.66	9.06	
5/8	1.43	2.13	3.04	3.93	6.95	11.13	
3/4	1.67	2.51	3.60	4.64	8.24	13.21	
7/8	1.92	2.89	4.15	5.35	9.52	15.29	
1	2.16	3.26	4.71	6.07	10.81	17.36	
1-1/4	2.65	4.02	5.82	7.50	13.39	21.52	
1-1/2	3.15	4.77	6.93	8.92	15.96	25.67	
1-3/4	3.64	5.52	8.04	10.35	18.54	29.83	



Estimated Weights for Threaded Studs In Pounds Per 1000 Pieces

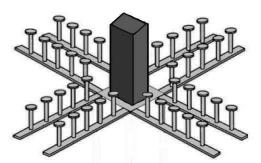
Length	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"	7/8"
3/4	8.3	12.8	18.8	25.5	34.5			
1	11.0	17.0	25.0	34.0	46.0	70.0		
1-1/4	13.8	21.3	31.3	42.5	57.5	87.5	133.8	
1-1/2	16.5	25.5	37.5	51.0	69.0	105.0	160.5	243.8
1-3/4	19.3	29.8	43.8	59.5	80.5	122.5	187.3	284.4
2	22.0	34.0	50.0	68.0	92.0	140.0	214.0	325.0
2-1/4	24.8	38.3	56.3	76.5	103.5	157.5	240.8	365.6
2-1/2	27.5	42.5	62.5	85.0	115.0	175.0	267.5	406.3
2-3/4	30.3	46.8	68.8	93.5	126.5	192.5	294.3	446.9
3	33.0	51.0	75.0	102.0	138.0	210.0	321.0	487.5
3-1/4	35.8	55.3	81.3	110.5	149.5	227.5	347.8	528.1
3-1/2	38.5	59.5	87.5	119.0	161.0	245.0	374.5	568.8
3-3/4	41.3	63.8	93.8	127.5	172.5	262.5	401.3	609.4
4	44.0	68.0	100.0	136.0	184.0	280.0	428.0	650.0
4-1/4	46.8	72.3	106.3	144.5	195.5	297.5	454.8	690.6
4-1/2	49.5	76.5	112.5	153.0	207.0	315.0	481.5	731.3
4-3/4	52.3	80.8	118.8	161.5	218.5	332.5	508.3	771.9
5	55.0	85.0	125.0	170.0	230.0	350.0	535.0	812.5

Estimated Weights of No Thread Studs in Pounds Per 1000 Pieces

Length	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"	7/8"
3/4	6.0	10.5	16.4	23.5	31.9	41.7			
1	8.0	14.0	21.8	31.3	42.5	55.6	86.6		
1-1/4	10.0	17.5	27.3	39.1	53.1	69.5	108.3	156.0	
1-1/2	12.0	21.0	32.7	47.0	63.8	83.4	129.9	187.2	254.0
1-3/4	14.0	24.5	38.2	54.8	74.4	97.3	151.6	218.4	297.5
2	16.0	28.0	43.6	62.6	85.0	111.2	173.2	249.6	340.0
2-1/4	18.0	31.5	49.1	70.4	95.6	125.1	194.9	280.8	382.5
2-1/2	20.0	35.0	54.5	78.3	106.3	139.0	216.5	312.0	425.0
2-3/4	22.0	38.5	60.0	86.1	116.9	152.9	238.2	343.2	467.5
3	24.0	42.0	65.4	93.9	127.5	166.8	259.8	374.4	510.0
3-1/4	26.0	45.5	70.9	101.7	138.1	180.7	281.5	405.6	552.5
3-1/2	28.0	49.0	76.3	117.4	148.8	194.7	303.1	436.8	595.0
3-3/4	30.0	52.5	81.8	125.2	159.4	208.5	324.8	468.0	637.5
4	32.0	56.0	87.2	128.6	170.0	222.4	346.4	499.2	680.0
4-1/4	34.0	59.5	92.7	133.0	180.6	236.3	368.1	530.4	722.5
4-1/2	36.0	63.0	98.1	140.9	191.3	250.2	389.7	561.6	765.0
4-3/4	38.0	66.5	103.6	148.7	201.9	264.1	411.4	592.8	807.5
5	40.0	70.0	109.0	156.5	212.5	278.0	433.0	624.0	850.0

TRU-WELD STUD WELDING

Punching Shear Resistor (PSR) Studs



Typical PSR Stud Layout

TRU-WELD offers the TRU-TRACE Advantage!

- TRU-WELD PSR Studs have heat codes stamped on the head that allow traceability to the specific Mill Certification of the stud.
- This expands TRU-WELD's Quality Control Program to trace all PSR Studs up to the point they are poured in concrete!

Punching Shear Resistor (PSR) Application;

Tru-Weld punching shear resistor (PSR) studs are large-headed shear connectors that are welded to flat steel bars (creating stud rails) and used for shear reinforcement in flat concrete slabs to replace stirrups and column capitals to resist the punching shear stress in the slabs.

Studs of a predetermined length and diameter, according to design specifications in compliance with IBC and UBC Structural Steel Welding Standards, are used to extend the column perimeter into the floor or foundation slab. This reduces the amount of reinforcing bar required in an area and column congestion resulting in easier and faster installation, as well as lower cost.

Using these PSR stud rails, you increase the punching shear capacity at the base of the concrete columns, resulting in a significant reduction in slab thickness. This creates a substantial savings in labor and material costs.

Contact a Tru-Weld Sales Rep for ordering details! 1-800-321-5588

PSR Stud Specifications

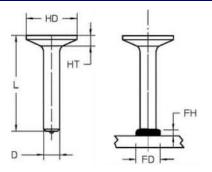
 Stud Diameter
 Head Diameter
 Head Thickness

 3/8" (9.5mm)
 1.19" (30.1mm)
 0.26" (5.3mm)

 1/2" (12.7mm)
 1.58" (40.2mm)
 0.33" (7.1mm)

 5/8" (15.9mm)
 1.98" (50.2mm)
 0.40" (8.9mm)

 3/4" (19.1mm)
 2.37" (60.2mm)
 0.47" (10.7mm)



Material; ASTM A108 / A29 Grade 1010-1020

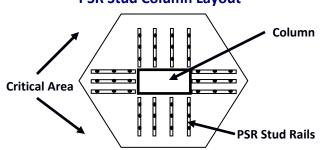
Properties; Yield - 51,000 PSI Tensile - 65,000 PSI Elongation - 20% Min. Reduction Of Area - 50% Min.

TRU-WELD Studs comply with the requirements of AWS D1.1- 2008 Structural Welding Code. (ICC-ES# - ESR-2822)

Benefits of Using PSR Stud Rails;

- 1. Eliminating the need for column capitals and stirrups
- 2. Reduction of setup and installation time.
- 3. Reduction of congestion around column/slab connections.
- 4. Distribution of force over a greater critical area.
- Providing higher tensile strength and more ductile performance of the concrete slab.

PSR Stud Column Layout





460 Lake Road
Medina, Ohio 44256
http://truweldstudwelding.com
Truweld@tfpcorp.com

(800) 321-5588 Toll Free

(330) 725-7741 Phone

(330) 725-0161 Fax

MADE IN AMERICA



TRU-WELD STUD WELDING

Stainless Steel Weld Studs



TRU-WELD offers all of our high-quality weld studs in Type 302, 304L, 316L, and 430 Stainless Steel in any length above the standard minimum.

TRU-WELD STAINLESS STEEL WELD STUDS

- CONCRETE ANCHORS
- SHEAR CONNECTORS
- PSR STUDS
- FULL THREAD STUDS
- PARTIAL THREAD STUDS
- NO THREAD STUDS
- COLLAR STUDS
- INTERNAL THREAD STUDS
- REDUCED BASE STUDS
- KNOCK-OFF STUDS

302 Stainless - Material Characteristics

Type 302 stainless steel is a general purpose material with greater corrosion resistance to that of mild steel. Type 302 stainless steel produces very good, strong welds.

304L Stainless - Material Characteristics

High strength, excellent corrosion resistance and minimized carbon content make Types 304L stainless steel useful for applications where welding is required. For severely corrosive environments, Type 304L is preferred because of its greater immunity to intergranular corrosion. These grades are suitable for all applications specifying Type 302.

316L Stainless - Material Characteristics

Type 316 stainless steel is widely used in applications requiring corrosion resistance superior to Type 304, or good elevated temperature strength. Type 316L is used extensively for weldments where its immunity to carbide precipitation due to welding assures optimum corrosion resistance.

430 Stainless - Material Characteristics

Type 430 weldable stainless steel has high corrosion resistance, as well as elevated temperature strength which makes it less likely to crack at elevated temperatures. Type 430 Stainless Steel is a magnetic material.

Contact a TRU-WELD Sales Rep for ordering details! 1-800-321-5588



460 Lake Road
Medina, Ohio 44256
http://truweldstudwelding.com
Truweld@tfpcorp.com

(800) 321-5588 Toll Free

(330) 725-7741 Phone

(330) 725-0161 Fax

MADE IN AMERICA



STUD WELDING EQUIPMENT & ACCESSORIES CATALOG



www.truweldstudwelding.com TWE@tfpcorp.com

6400 N. Honeytown Road Smithville, OH 44677 Phone: (330) 725-7744

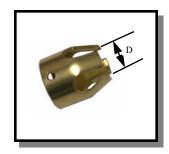
Fax: (330) 669-2473





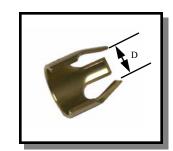
CLOSED FERRULE GRIP (1" LONG) BRASS

STUD SIZE	FOOT SIZE	GRIP DIA.(D)	PART NO.	PRICE
3/16	SMALL	.305	GN-019	
1/4	SMALL	.380	GN-025	
5/16	SMALL	.445	GN-031	
3/8	SMALL	.505	GN-037	
7/16	SMALL	.585	GN-043	
1/2	SMALL	.650	GN-050	
5/8	MEDIUM	.785	GN-062	
3/4	MEDIUM	1.030	GN-075	
7/8	LARGE	1.203	GN-087	
1"	LARGE	1.406	GN-100	



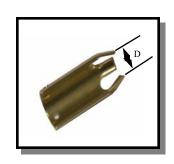
SPLIT FERRULE GRIP (1" LONG) BRASS

STUD SIZE	FOOT SIZE	GRIP DIA.(D)	PART NO.	PRICE
3/16	SMALL	.305	GC-019	
1/4	SMALL	.380	GC-025	
5/16	SMALL	.445	GC-031	
3/8	SMALL	.505	GC-037	
7/16	SMALL	.585	GC-043	
1/2	SMALL	.650	GC-050	
5/8	MEDIUM	.785	GC-062	
3/4	MEDIUM	1.030	GC-075	
7/8	LARGE	1.203	GC-087	
1"	LARGE	1.406	GC-100	



LONG SPLIT FERRULE GRIP (2" LONG) BRASS

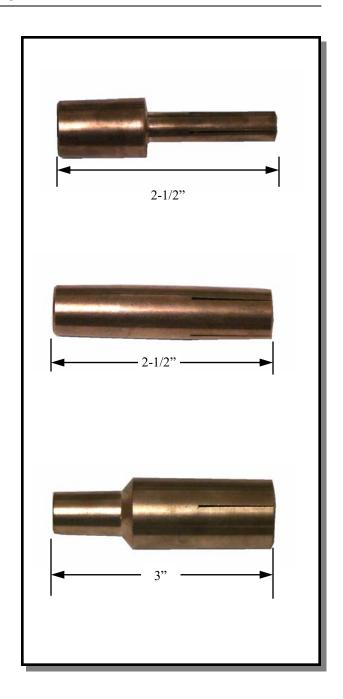
STUD SIZE	FOOT SIZE	GRIP DIA.(D)	PART NO.	PRICE
1/4	SMALL	.380	GD-025	
5/16	SMALL	.445	GD-031	
3/8	SMALL	.505	GD-037	
7/16	SMALL	.585	GD-043	
1/2	SMALL	.650	GD-050	
5/8	MEDIUM	.785	GD-062	
3/4	MEDIUM	1.030	GD-075	



^{***}ADD \$1.00 FOR COPPER GRIPS***

ADJUSTABLE CHUCKS

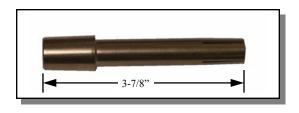
CTUD DIA	DART NO	DDICE
STUD DIA. 2MM (.079)	PART NO. CN-002M	PRICE
#2	CN-002IVI	
12 GA & #4	CN-010	
1/8 & #5	CN-012	
10 GA & #6	CN-013	
4MM (.155)	CN-004M	
#8	CN-015	
#10 & 5MM (.196)	CN-018	
6MM (.236)	CN-006M	
.215	CN-021	
.330	CN-033	
1/4	CN-025	
5/16	CN-031	
8MM	CN-008M	
3/8	CN-037	
10MM (.390)	CN-010M	
7/16	CN-043	
12MM (.472)	CN-012M	
1/2	CN-050	
14MM (.551)	CN-014M	
9/16	CN-056	
5/8	CN-062	
16MM	CN-016M	
.680	CN-068	
18MM (.708)	CN-018M	
3/4	CN-075	
7/8	CN-087	
20MM	CN-020M	
1"	CN-100	
	== =	



LONG AND RECTANGULAR CHUCKS

3-7/8" LONG ADJUSTABLE CHUCKS

STUD SIZE	PART NO.	PRICE
#6	CM-013	
#8	CM-015	
#10 & 5MM	CM-018	
6 MM	CM-006M	
1/4	CM-025	
5/16	CM-031	
8MM	CM-008M	
.330	CM-033	
3/8	CM-037	
10MM	CM-010M	
7/16	CM-043	
12MM	CM-012M	
1/2	CM-050	
9/16	CM-056	
5/8	CM-062	
3/4	CM-075	



SIZES CM-025 AND UNDER ARE BERYLLIUM

4-3/4" EXTRA LONG ADJUSTABLE CHUCKS

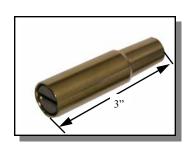
STUD SIZE	PART NO.	PRICE
#6	CL-013	
#8	CL-015	
#10	CL-018	
1/4	CL-025	
5/16	CL-031	
3/8	CL-037	
7/16	CL-043	
1/2	CL-050	
5/8	CL-062	
3/4	CL-075	



SIZES CL-025 AND UNDER ARE BERYLLIUM

RECTANGULAR CHUCKS

STUD SIZE	PART NO.	PRICE
1/8 X 1/4	CR-CA	
1/8 X 3/8	CR-CB	
1/8 X 5/8	CR-CC	
1/8 X 7/8	CR-CH	
1/8 X 1"	CR-CE	
1/4 X 3/4	CR-CF	



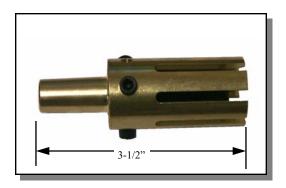
HEADED STUD CHUCKS

3/8 DIA. HEADED ANCHOR CHUCK (3/4" DIA. HEAD)

PART NO.	DESCRIPTION	PRICE
CH-037	COMPLETE ASSY.	
CH-037-1	SLEEVE ONLY	
CH-037-2	BASE ONLY	
CH-037-3	STOP SCREW	
SCREWS	10-32 X 3/8	

1/2 DIA. HEADED ANCHOR CHUCK (1" DIA. HEAD)

CRIPTION PRICE
MPLETE ASSY.
EVE ONLY
E ONLY
P SCREW



5/8 & 3/4 DIA. HEADED ANCHOR CHUCK (1-1/4" DIA. HEAD)

PART NO.	DESCRIPTION	PRICE
CH-075	COMPLETE ASSY.	
CH-075-1	SLEEVE ONLY	
CH-075-2	BASE ONLY	
CH-075-3	STOP SCREW	

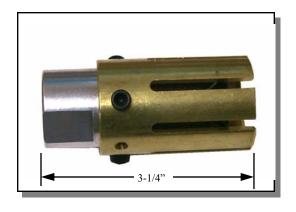
7/8 DIA. HEADED ANCHOR CHUCK (1-3/8" DIA. HEAD)

PART NO.DESCRIPTIONPRICE

CH-087	COMPLETE ASSY
CH-087-1	SLEEVE ONLY
CH-087-2	BASE ONLY
CH-075-3	STOP SCREW

1" DIA. HEADED ANCHOR CHUCK (1-5/8 DIA. HEAD)

PART NO.	DESCRIPTION	PRICE
CH-100	COMPLETE ASSY.	
CH-100-1	SLEEVE ONLY	
CH-100-2	BASE ONLY	
CH-075-3	STOP SCREW	
SCREWS	10-32 X 1/2	



SPECIAL CHUCKS / LEGS

Y ANCHOR CHUCKS



ANCHOR SIZE	PART NO.	PRICE
3/16	CY-018	
1/4	CY-025	
5/16	CY-031	

ARC STUD WELDING LEGS



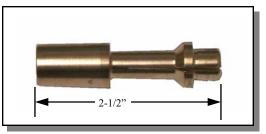
LENGTH	DIA.	PART NO.	PRICE
7"	5/16	L-03107	
9"	5/16	L-03109	
14"	5/16	L-03114	
18"	5/16	L-03118	
7"	3/8	L-03707	
9"	3/8	L-03709	
14"	3/8	L-03714	
18"	3/8	L-03718	
24"	3/8	L-03724	
27"	3/8	L-03727	
32"	3/8	L-03732	
36"	3/8	L-03736	
48"	3/8	L-03748	
5/16 LEG \	WASHER	L-031-1	
5/16 LEG 9	SCREW	L-031-2	
3/8 LEG W	/ASHER	L-037-1	
3/8 LEG S	CREW	L-037-2	

BENT STUD CHUCK



STUD DIA.	BEND	PART NO.	PRICE
3/8	90 deg	CB-037-90	
3/8	45 deg	CB-037-45	
1/2	90 deg	CB-050-90	
1/2	45 deg	CB-050-45	
5/8	90 deg	CB-062-90	
5/8	45 deg	CB-062-45	
3/4	90 deg	CB-075-90	
3/4	45 deg	CB-075-45	

MALE CHUCKS



HOLE SIZE	PART NO.	PRICE
8/32	CX-008-32	
10-24	CX-010-24	
10-32	CX-010-32	
1/4-20	CX-025-20	
5/16-18	CX-031-18	
3/8-16	CX-037-16	
1/2-13	CX-050-13	
5/8-11	CX-062-11	
3/4-10	CX-075-10	
1/4	CX-025	
3/8	CX-037	
1/2	CX-050	
5/8	CX-062	

MISCELLANEOUS GUN PARTS



DESCRIPTION PART NO. PRICE

Connector Stud 033-506



Threaded Chuck Extension 033-504



Tapered Chuck Adapter 033-505

WELD THRU DECK ACCESSORIES

WELD THRU DECK FOOT ASSEMBLY



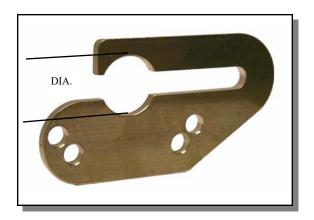
PART NO.	DESCRIPTION	PRICE
B-0021	FOOT ASSY.	
B-0021-1	FOOT ONLY	
B-0021-2	EXTENSION BAR	
B-0021-3	1/4-20 X 1 SCREWS	

WELD THRU DECK FERRULE HOLDER



PART NO.	DESCRIPTION	PRICE
B-0060-1	3/4 WTD/7/8 FLAT	
B-0060-2	3/4 FLAT	
B-0060-3	5/8 FLAT	
B-0060-4	1" FLAT	
B-0060-5	1/2 FLAT	

REFACTORY FERRULE FOOT PLATE



PART NO.	NECK DIA.	PRICE
QY-025-1	.810	
QY-025-2	.930	
QY-025-3	1.030	

HEAVY DUTY FERRULE GRIP



PART NO.	STUD DIA.	PRICE
GH-050	1/2	
GH-062	5/8	
GH-075	3/4	
GH-087	7/8	
GH-100	1	

CLOSED FEET













STANDARD CLOSED FEET

STUD SIZE	PART NO.	PRICE
1/8-1/2	B-1N	
1/8-1/2	B-1N	
1/8-1/2	B-6N	
5/8-3/4	B-2N	
5/8-3/4	B-2N	
5/8-3/4	B-7N	
7/8-1"	B-3N	
7/8-1"	B-3N	
1/8-1/2	B-4N	
5/8-3/4	B-5N	
1/8-3/8	028-833	
	1/8-1/2 1/8-1/2 1/8-1/2 5/8-3/4 5/8-3/4 5/8-3/4 7/8-1" 7/8-1" 1/8-1/2 5/8-3/4	1/8-1/2 B-1N 1/8-1/2 B-1N 1/8-1/2 B-6N 5/8-3/4 B-2N 5/8-3/4 B-2N 5/8-3/4 B-7N 7/8-1" B-3N 7/8-1" B-3N 1/8-1/2 B-4N 5/8-3/4 B-5N

SPLIT FEET













STANDARD SPLIT FEET

PRO-WELD INT. 1/8-1/2 B-1C	
NELSON NS-20 1/8-1/2 B-1C	
NELSON NS-30 1/8-1/2 B-6C	
PRO-WELD INT. 5/8-3/4 B-2C	
NELSON NS-20 5/8-3/4 B-2C	
NELSON NS-30 5/8-3/4 B-7C	
PRO-WELD INT. 7/8-1" B-3C	
NELSON NS-20 7/8-1" B-3C	
BANTAM A-58 1/8-1/2 B-4C	
BANTAM A-58 5/8-3/4 B-5C	
BANTAM C-2 1/8-1/2 B-4CR (RECESSED)	
BANTAM C-2 5/8-3/4 B-5CR (RECESSED)	

PSR Accessories



PSR Side Load Chucks

Size	Part Number	Part Description
3/8"	CSL-037L	3/8 Side Load Chuck Long
3/8	CSL-037S	3/8 Side Load Chuck Short
1/2"	CSL-050L	1/2 Side Load Chuck Long
1/2	CSL-050S	1/2 Side Load Chuck Short
5/8"	CSL-062L	5/8 Side Load Chuck Long
5/6	CSL-062S	5/8 Side Load Chuck Short
3/4"	CSL-075L	3/4 Side Load Chuck Long
3/4	CSL-075S	3/4 Side Load Chuck Short



Leg Wideners

Part Number	Part Description
CSLX	Mid-Leg Widener
CSLX	At Gun Leg Widener



Ferrule Foot Plate

	Part Number	Part description
	QNW-037	3/8F Ferrule Foot Plate
QNW-050		3/8FHD And 1/2F Ferrule Foot Plate
ſ	QNW-062	1/2FHD And 5/8F Ferrule Foot Plate
	QNW-075	5/8FHD And 3/4F Ferrule Foot Plate

PSR Accessories



1/2" PSR Chuck

Part Number	Part Description
CH-500-PSR	1/2" PSR Chuck

SPECIAL FEET AND FERRULE PLATES

SPLIT BI-POD FEET

STUD SIZE	PART NO.	PRICE
1/8-1/2	BP-1C	
5/8-3/4	BP-2C	
7/8-1"	BP-3C	



CLOSED BI-POD FEET

STUD SIZE	PART NO.	PRICE
1/8-1/2	BP-1N	
5/8-3/4	BP-2N	
7/8-1"	BP-3N	





TWIN LEG FERRULE FOOT PLATE

STUD SIZE	PART NO.	PRICE
1/4	QN-025	
5/16	QN-031	
3/8	QN-037	
1/2	QN-050	
5/8	QN-062	
3/4	QN-075	
7/8	QN-087	
1"	QN-100	



SINGLE LEG FERRULE FOOT PLATE

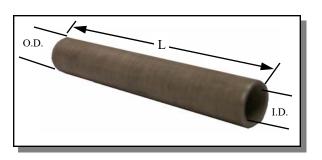
STUD SIZE	PART NO.	PRICE
1/4	QM-025	
3/8	QM-037	
1/2	QM-050	
5/8	QM-062	
3/4	QM-075	
7/8	QM-087	



SPECIAL ACCESSORIES

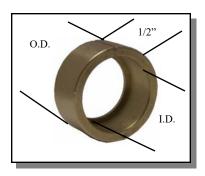
FERRULE TUBING

STUD SIZE	PART NO.	I.D.	O.D.	L	PRICE
#8	MP-015	.291	.360	36"	
#10	MP-018	.305	.375	36"	
1/4	MP-025	.380	.500	36"	
5/16	MP-031	.445	.562	36"	
3/8	MP-037	.505	.625	36"	
7/16	MP-043	.585	.687	36"	
1/2	MP-050	.650	.750	36"	
5/8	MP-062	.785	.906	36"	
3/4	MP-075	1 030	1 156	36"	



FERRULE TUBE BUSHING

STUD SIZE	PART NO.	I.D.	O.D.	PRICE
#8	MB-015	.360	.875	
#10	MB-018	.375	.875	
1/4	MB-025	.500	.875	
5/16	MB-031	.562	.875	
3/8	MB-037	.625	.875	
7/16	MB-043	.687	.875	
1/2	MB-050	.750	.875	
5/8	MB-062	.906	1.156	



GAS ADAPTOR FEET FOR ALUMINUM WELDING (SPECIFY GUN TYPE WHEN ORDERING)



PART NO. BG-1
USE WITH FERRULE



PART NO. BG-2 USE WITHOUT FERRULE

FOOT ONLY BG-2-1 SPARK SHIELD ONLY BG-2-2 VALVE ASSY. BG-2-3



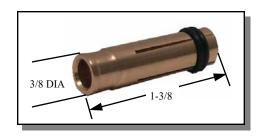
PART NO. BG-3 USE W/ARC-656 GAS UNIT

FOOT ONLY BG-3-1 SPARK SHIELD ONLY BG-3-2 HOSE CONNECTOR 119-0010

CAPACITOR DISCHARGE ACCESSORIES

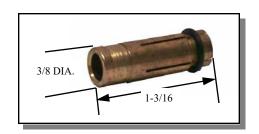
"B" COLLETS

STUD DIA	PART NO.	PRICE
3 MM	CDB-003M	
14 GA	CDB-008	
12 GA & #4	CDB-010	
1/8 GA & #5	CDB-012	
10 GA & #6	CDB-013	
4 MM	CDB-004M	
#8	CDB-015	
#10	CDB-018	
5 MM	CDB-005M	
6 MM	CDB-006M	
.215	CDB-021	
1/4	CDB-025	
5/16	CDB-031	



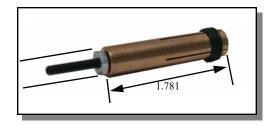
"B" COLLETS AGM STYLE

STUD DIA.	PART NO.	PRICE
14 GA	CDB-008A	
12 GA	CDB-010A	
#6	CDB-013A	
#8	CDB-015A	
#10	CDB-018A	
1/4	CDB-025A	



SOYER COLLETS

STUD DIA.	PART NO.	PRICE
#6	CDBS-013	
4 MM	CDBS-004M	
#8	CDBS-015	
#10	CDBS-018	
5 MM	CDBS-005M	
6 MM	CDBS-006M	
1/4	CDBS-025	
5/16	CDBS-031	



CAPACITOR DISCHARGE ACCESSORIES

ONE PIECE CONTACT/MAGNETIC CHUCK

PART NO. PRICE 039-613

MAGNETIC CHUCK

PART NO.	DESCRIPTION	PRICE
035-301	COMPLETE ASSY	
017-633	MAGNET ONLY	
029-615	CONDUCTOR PLATE	
039-609	INSUL. TUBE	
039-610	INSUL. DISC	
SCREW	10-32 X 7/8	





"B" COLLETS PROTECTOR

STUD SIZE	PART NO.	PRICE
14 GA X 12 GA	028-837	
10 GA	028-838	
BODY ONLY	028-836	
12 GA INSERT	028-834	
10 GA INSERT	028-835	



"B" STOP

STUD	STOP	PART NO.	PRICE
1/4	1-1/4	033-781	
3/8	1-1/8	033-782	
1/2	1"	033-783	
5/8	7/8	033-784	
3/4	3/4	033-785	
7/8	5/8	033-775	
1"	1/2	033-776	
1-1/8	3/8	033-777	
1-1/4	1/4	033-778	
1-3/8 (BUTTON STOP)	1/8	033-779	
UNIVERSAL		033-780	



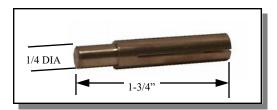
SHORT BUTTON STOP



UNIVERSAL "B" STOP

CAPACITOR DISCHARGE ACCESSORIES

COLLETS INSERTS FOR WELD STUDS



STUD DIA.		
X DEPTH	PART NO.	PRICE
#4 X 1/4	CI-010-025	
#4 X 3/8	CI-010-037	
#4 X 1/2	CI-010-050	
#4 X 1"	CI-010-100	
#6X 1/4	CI-013-025	
#6 X 3/8	CI-013-037	
#6 X 1/2	CI-013-050	
#6 X 5/8	CI-013-062	
#6 X 3/4	CI-013-075	
#6X 1"	CI-013-100	
10GA X 1/2	CI-014-050	
10GA X 3/4	CI-014-075	
10GA X 1	CI-014-100	
#8X 1/4	CI-015-025	
#8 X 3/8	CI-015-037	
#8 X 1/2	CI-015-050	
#8 X 5/8	CI-015-062	
#8 X 3/4	CI-015-075	
#8X 1"	CI-015-100	
#10 X 1/4	CI-018-025	
#10 X 3/8	CI-018-037	
#10 X 1/2	CI-018-050	
#10 X 5/8	CI-018-062	
#10 X 3/4	CI-018-075	
#10X 1"	CI-018-100	
1/4 X 1/4	CI-025-025	
1/4 X 3/8	CI-025-037	
1/4 X 1/2	CI-025-050	
1/4 X 5/8	CI-025-062	
1/4 X 3/4	CI-025-075	
1/4 X 1"	CI-025-100	
5/16 X 3/8	CI-031-037	
5/16 X 1/2	CI-031-050	
5/16 X 5/8	CI-031-062	
5/16 X 3/4	CI-031-075	
5/16 X 1"	CI-031-100	
3/8 X 1/2	CI-037-050	
3/8 X 3/4	CI-037-075	
3/8 X 1"	CI-037-100	
J, J / L	J. JJ/ 100	

COLLETS INSERTS FOR WELD PINS



STUD DIA.		
X DEPTH	PART NO.	PRICE
12GA X 1/2	CIP-010-050	
12GA X 3/4	CIP-010-075	
12GA X 1"	CIP-010-100	
10GA X 1/2	CIP-014-050	
10GA X 3/4	CIP-014-075	

STANDARD SPARK SHIELD



STUD RANGE	PART NO.	PRICE
14 GA – #6	033-764	

VENTED SPARK SHIELD



STUD RANGE	PART NO.	PRICE
14 GA – 10 GA	033-769	

TEMPLATE TUBE ADAPTOR



TEMPLATE I.D.	PART NO.	PRICE
1" DIA.	039-839	
1-1/4" DIA.	039-840	

ADAPTORS

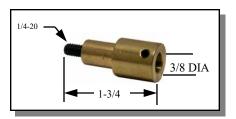




<u>PARTNO.</u> <u>PRICE</u> 044-082 7/8 LONG

033-746 1-9/16 LONG

K-B ADAPTORS



PART NO. PRICE

039-464

B-N ADAPTOR



PART NO. PRICE

039-468

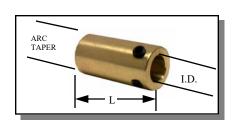
K-N ADAPTORS



PART NO. PRICE

033-750

ADAPTORS



<u>PART NO</u> .I.D. <u>PRICE</u> 044-083 N-B 3/8 ID

044-084 N-C 1/4 ID

MISCELLANEOUS ADAPTORS

PART NO.	DESCRIPTION	PRICE
MT-0008	TEMPLATE TUBE	
	1/4-1/2 ARC STUDS	
MT-0012	TEMPLATE TUBE	
	5/8-3/4 ARC STUDS	
033-505L	L-TEC CHUCK	
	ADAPTOR	
033-749	K-CI ADAPTORS	
754 450 040	NC 20 CHILCK ADAD	TODO

751-458-049 NS-30 CHUCK ADAPTORS

THREADED TAPERED ADAPTORS



PART NO. PRICE

MT-0003

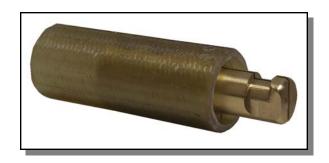
PART NO. DESCRIPTION PRICE

033-505 Chuck Adaptor

033-506 Connector Stud

WELD CABLE CONNECTORS

HEAVY DUTY HI TEMP CONNECTOR





PART NO.	DESCRIPTION	PRICE	PART NO.	DESCRIPTION	PRICE
107-0006	4/O (M) HI TEMP		107-0007	4/O (F) HI TEMP	
107-0006-1	4/O (M) SLEEVE		107-0007-1	4/O (F) SLEEVE	
107-0006-2	4/O BRASS ONLY		107-0007-2	4/O BRASS ONLY	
107-0007-MF COPPER WRAP	HI TEMP PIN	(FITS	(M) OR (F))		

LIGHT DUTY CONNECTOR





PART NO.	DESCRIPTION	PRICE
107-0010	1/O (M) FIBER SHELL	
107-0011	1/O (F) FIBER SHELL	
107-0012	#4 (M) FIBER SHELL	

CONTROL CABLE CONNECTORS

CONTROL CABLE CONNECTOR







PRICE

PART NO.	DESCRIPTION
107-0014	MALE 4 POLE CONNECTOR
107-0015	FEMALE 4 POLE CONNECTOR
107-0001	PANEL MOUNT CONNECTOR

HUBBELL STYLE CONNECTOR



2-WIRE (M)



PANEL MOUNT



HUBBELL (M)

PART NO.	DESCRIPTION	PRICE
107-0016	2-WIRE (M)	
107-0017	2-WIRE (F)	
107-0018	2-WIRE (PANEL MOUNT)	
107-0019	(M) RUBBER COVER	
107-0020	(F) RUBBER COVER	
107-0030	HUBBELL (M)	
107-0032	HUBBELL (F)	
107-0031	HUBBELL (PANEL MOUNT)	

PANEL MOUNT CAMLOK CONNECTORS





PRICE

PART NO.	DESCRIPTION
107-0003	MALE PANEL MOUNT
107-0002	FEMALE PANEL MOUNT

WELD CABLE LUGS





PART NO.	DESCRIPTION	PRICE
123-0003	#4 W/#10 HOLE	
123-0001	#1 W/#10 HOLE	
123-0006	#1 W/1/4 HOLE	
123-0002	#1 W/3/8 HOLE	
123-0008	1/O W/3/8 HOLE	
123-0009	1/O W/1/2/ HOLE	
123-0013	4/O W/3/8 HOLE	
123-0010	4/O W/1/2/ HOLE	
	, - , , , -	

ACCESSORIES



PART NO.	DESCRIPTION	PRICE
102-0041	ALLEN WRENCH SET	
102-0042	CHUCK EJECTOR KEY	



6400 N. Honeytown Road Smithville, Ohio 44677

(330) 725-7744 Phone (330) 669-2473 Fax

CAPACITOR DISCHARGE STUD WELDER





Model: TWE-250 Stud Welder Description

Incorporates the latest solid state technology into a compact and rugged CD Stud Welder. This system has the capacity to weld studs and pins (including cupped head pins) ranging from 14-guage through 1/4" full flanged stainless steel studs.

SPECS	TWE-250
SIZE	15-3/4" Length, 8" Width, 9" Height
WEIGHT	24 lbs.
WELD RANGE	14 gauge through 1/4" Stainless
DUTY CYCLE	30 studs per minute (including 1/4")
PRIMARY POWER	110 VAC @ 50/60Hz 10 Amp circuit or 220 VAC @50/60Hz 5 Amp circuit
CHARGE VOLTAGE	35-200 VDC

Operational and Safety Features

- LED Voltage Meter
- Safety Shutdown
- Cooling Fan
- Front-Panel Informational LED's
- Dial-Down weld voltage control

Made In the USA

Version 1.5 12/20/2011

- Digital DC voltage readout on all models (allows for more accurate and repeatable weld settings).
- · Cooling fan in all models for increased efficiency.
- Dial-down DC voltage setting (no need to turn off the unit when resetting to a lower voltage).
- Only 10 amp circuit requirement (unit fused @ 10 amps).
- 66,000 micro farad capacitors charging to 200 VDC for greater power output @ lower DC voltage requirements.
- Terminal connections on the capacitors are over 5/8" in diameter for a good seat of the terminal buss bars to increase reliability.
- The terminal connections on the capacitors have 1/4-28 socket set screws inserted into each one. The socket set screw is used to make the connection to the buss bar. This eliminates damaging the threads in the aluminum connectors of the capacitor, ensuring a solid connection.
- Rigid internal construction connecting the entire internal unit to the front and rear panels minimizes the opportunity of the components coming loose during handling or operations.
- Sheet metal is powder-coated for greater durability, texture, and appearance.
- Stud Guns are ergonomically designed for better hand fit and comfort (reduces operator fatigue for increased weld repeatability).
- Stud Guns have a permanent internal spring with easy adjustment for various spring pressures allowing an increased opportunity to apply
 the correct spring pressure to the weld (no need for a variety of different springs for various applications).
- Stud Guns can be configured for "B" Collets, "CI" Collets, Euro Collets or standard tapered chucks.
- The TWE CD Unit weighs less than most other available models for ease or carrying.

^{**} Specifications are subject to change without prior notice



6400 N. Honeytown Road Smithville, Ohio 44677

(330) 725-7744 Phone (330) 669-2473 Fax

flanged stainless steel studs.

CAPACITOR DISCHARGE STUD WELDER





Model: TWE-321 Stud Welder Description

Incorporates the latest solid state technology into a compact and rugged CD Stud Welder. This system has the capacity to weld studs and pins (including cupped head pins) ranging from 14-guage through 5/16" full

SPECS

TWE-321

SIZE

18-3/4" Length, 8" Width, 9" Height

WEIGHT

29 lbs.

WELD RANGE

14 gauge through 5/16" Stainless

DUTY CYCLE

30 studs per minute (including 5/16")

PRIMARY POWER

110 VAC @ 50/60Hz 10 Amp circuit or 220 VAC @50/60Hz 5 Amp circuit

CHARGE VOLTAGE

35-200 VDC

Operational and Safety Features

- LED Voltage Meter
- Safety Shutdown
- Cooling Fan
- Front-Panel Informational LED's
- Dial-Down weld voltage control

Made In the USA

Version 1.5 12/20/2011

** Specifications are subject to change without prior notice

- Digital DC voltage readout on all models (allows for more accurate and repeatable weld settings).
- Cooling fan in all models for increased efficiency.
- Dial-down DC voltage setting (no need to turn off the unit when resetting to a lower voltage).
- Only 10 amp circuit requirement (unit fused @ 10 amps).
- 99,000 micro farad capacitors charging to 200 VDC for greater power output @ lower DC voltage requirements.
- Terminal connections on the capacitors are over 5/8" in diameter for a good seat of the terminal buss bars to increase reliability.
- The terminal connections on the capacitors have 1/4-28 socket set screws inserted into each one. The socket set screw is used to make the connection to the buss bar. This eliminates damaging the threads in the aluminum connectors of the capacitor, ensuring a solid connection.
- Rigid internal construction connecting the entire internal unit to the front and rear panels minimizes the opportunity of the components coming loose during handling or operations.
- Sheet metal is powder-coated for greater durability, texture, and appearance.
- Stud Guns are ergonomically designed for better hand fit and comfort (reduces operator fatigue for increased weld repeatability).
- Stud Guns have a permanent internal spring with easy adjustment for various spring pressures allowing an increased opportunity to apply
 the correct spring pressure to the weld (no need for a variety of different springs for various applications).
- Stud Guns can be configured for "B" Collets, "CI" Collets, Euro Collets or standard tapered chucks.
- The TWE CD Unit weighs less than most other available models for ease or carrying.



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CAPACITOR DISCHARGE STUD WELDER





Model: TWE-375

Stud Welder Description

Incorporates the latest solid state technology into a compact and rugged CD Stud Welder. This system has the capacity to weld studs and pins (including cupped head pins) ranging from 14-guage through 3/8" full flanged stainless steel studs.

SPECS	TWE-375
SIZE	18-3/4" Length, 8" Width, 9" Height
WEIGHT	34 lbs.
WELD RANGE	14 gauge through 3/8" Stainless
DUTY CYCLE	30 studs per minute (including 3/8")
PRIMARY POWER	110 VAC @ 50/60Hz 10 Amp circuit or 220 VAC @50/60Hz 5 Amp circuit
CHARGE VOLTAGE	35-200 VDC

Operational and Safety Features

- LED Voltage Meter
- Safety Shutdown
- Cooling Fan
- Front-Panel Informational LED's
- Dial-Down weld voltage control

Made In the USA

Version 1.5 12/20/2011

- Digital DC voltage readout on all models (allows for more accurate and repeatable weld settings).
- Cooling fan in all models for increased efficiency.
- Dial-down DC voltage setting (no need to turn off the unit when resetting to a lower voltage).
- Only 10 amp circuit requirement (unit fused @ 10 amps).
- 132,000 micro farad capacitors charging to 200 VDC for greater power output @ lower DC voltage requirements.
- Terminal connections on the capacitors are over 5/8" in diameter for a good seat of the terminal buss bars to increase reliability.
- The terminal connections on the capacitors have 1/4-28 socket set screws inserted into each one. The socket set screw is used to make the connection to the buss bar. This eliminates damaging the threads in the aluminum connectors of the capacitor, ensuring a solid connection.
- Rigid internal construction connecting the entire internal unit to the front and rear panels minimizes the opportunity of the components coming loose during handling or operations.
- Sheet metal is powder-coated for greater durability, texture, and appearance.
- Stud Guns are ergonomically designed for better hand fit and comfort (reduces operator fatigue for increased weld repeatability).
- Stud Guns have a permanent internal spring with easy adjustment for various spring pressures allowing an increased opportunity to apply
 the correct spring pressure to the weld (no need for a variety of different springs for various applications).
- Stud Guns can be configured for "B" Collets, "CI" Collets, Euro Collets or standard tapered chucks.
- The TWE CD Unit weighs less than most other available models for ease or carrying.

^{**} Specifications are subject to change without prior notice



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CAPACITOR DISCHARGE PIN WELDER



Model: TWP-2 Pin Welder Description

Incorporates the latest solid state technology into a compact and rugged, portable CD Pin Welder. This system has the capacity to weld pins (including Cup Head pins) up to 10-gauge and CD Studs up to #10.

SPECS	TWE-PIN WELDER
SIZE	12.5" L x 10.1" W x 6.0" H (315mm x 255mm x 150mm)
WEIGHT	Approx. 12.5 lbs.
	Weld Pins - Up to 10 gauge
WELD RANGE	CD Studs - Up to #10
	Cup Head Pins
DUTY CYCLE	16-20 pins per minute
PRIMARY POWER	110 VAC @ 50/60Hz 15 Amp circuit
	220 VAC @50/60Hz 7.5 Amp circuit
CHARGE VOLTAGE	35-110 VDC

Operational and Safety Features

- LED Voltage Meter
- Safety Shutdown
- Cooling Fan
- Front-Panel Informational LED's
- Dial-Down weld voltage control

Made In the USA

Version 1.4 4/25/2011

- Digital DC voltage readout (allows for more accurate and repeatable weld settings).
- Cooling fan for increased efficiency.
- Dial-down DC voltage setting (no need to turn off the unit when resetting to a lower voltage).
- Only 15 amp circuit requirement (unit fused @ 15 amps).
- Terminal connections on the capacitor are over 5/8" in diameter for a good seat of the terminal buss bars to increase reliability.
- The terminal connections on the capacitor have 1/4-28 socket set screws inserted into each one. The socket set screw is used to make the connection to the buss bar. This eliminates damaging the threads in the aluminum connectors of the capacitor, ensuring a solid connection.
- Rigid internal construction connecting the entire internal unit to the front and rear panels minimizes the opportunity of the components coming loose during handling or operations.
- The TWE-Pin Welder is mounted in a rugged outer case for greater durability, texture, and appearance.
- The TWE-Pin Welder weighs less than 13 pounds for ease of carrying.
- Stud Guns are ergonomically designed for better hand fit and comfort (reduces operator fatigue for increased weld repeatability).
- Stud Guns have a permanent internal spring with easy adjustment for various spring pressures allowing an increased opportunity to apply
 the correct spring pressure to the weld (no need for a variety of different springs for various applications).
- Stud Guns can be configured for "B" Collets, "CI" Collets, Euro Collets or standard tapered chucks.

^{**} Specifications are subject to change without prior notice



6400 N. Honeytown Road Smithville, OH 44677

(330) 725-7741 Phone (330) 669-2473 Fax

SC900 STUD WELDING SYSTEM







DESCRIPTION

The SC900 is a fully integrated stud welding system for ferrule-shielded and gas-shielded drawn arc stud welding. The SC900 contains digital controls for weld time, weld current, and gas purge time. The system was designed to be a perfect fit for shop use, welding up through 1/2" studs. This is all contained in a compact, portable package.

Includes;

800 Amp Power Supply Controller, TWE19000 Light Duty stud gun, 25 feet of #2 AWG combo cable, and 15 feet of #2 AWG ground cable with clamp.

Version 1.2 05/09/2013

FEATURES		
Weld Range	1/8" to 1/2"	Consistent welding regardless of stud diameter.
Duty Cycle	1/8" through 1/4" - unlimited 3/8" - 5 to 6 per minute 1/2" - 2 to 3 per minute	 Adjustable weld time, weld current, gas purge time for a wide range of process control. Great short cycle performance on thick and thin base materials. Two handle lift for practical portability. Stud Job Counter that can be reset for every job.
Dimensions	Height Width Length Weight	12.6" (320mm) 11" (280mm) 22.4" (570mm) 106 lbs. (48Kg)
Input Voltages		230 / 460 VAC 3-Phase 60Hz
Fusing Requirements	(Slow Acting)	230 / 50 Amps 460 / 25 Amps

^{**} Specifications are subject to change without prior notice



6400 N. Honeytown Road Smithville, OH 44677

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SC1400 STUD WELDING SYSTEM







DESCRIPTION

The SC1400 is fully integrated stud welding system with digital controls for time and current. This system was designed to be a perfect fit for shop use excelling at small to medium-sized diameter studs, all in a compact, affordable package.

Includes;

1400 Amp Power Supply, TWE18500 Medium Duty stud gun, 35 feet of 2/0 weld and control cable and 25 feet of 2/0 ground cable.

Version 1.6 10/03/2012

		FEATURES
Weld Range	1/4" - 5/8" Diameter	Consistent welding regardless of stud diameter.
Duty Cycle	1/4" Thru 3/8" - Unlimited 1/2" - 22 to 24 per minute 5/8" - 9 to 10 per minute	 Smooth arc curve targeted for small to medium-sized diameter studs. Enhanced Duty Cycle for production requirements. Capable of up to 100 feet of 2/0 welding cable accommodates a large variety of work station layouts. Stepless time and current control allow for infinite settings for fine-tuning the welding output. Stud Job Counter that can be reset for every job.
Dimensions	Height Width Length Weight	22" (559mm) 25" (635mm) 30" (762mm) 380 Lbs. (172kg)
Input Voltages		230 / 460 / 575 VAC 3 Phase 60Hz
Fusing Requirements	(Slow Acting)	230 / 120 Amps 460 / 60 Amps 575 / 50 Amps

^{**} Specifications are subject to change without prior notice



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SC1600 STUD WELDING SYSTEM







DESCRIPTION

The SC1600 is fully integrated stud welding system with digital controls for time and current. This system was designed to be a perfect fit for shop use excelling at small to medium-sized diameter studs, all in a compact, affordable package.

Includes;

1600 Amp Power Supply, TWE17000 Heavy Duty stud gun, 35 feet of 4/0 weld and control cable and 25 feet of 4/0 ground cable.

Version 1.6 10/03/2012

		FEATURES
Weld Range	1/4" - 3/4" Diameter	Consistent welding regardless of stud diameter.
Duty Cycle	1/4" Thru 3/8" - Unlimited 1/2" - 22 to 24 per minute 5/8" - 9 to 10 per minute 3/4" - 4 to 5 per minute	 Smooth arc curve targeted for small to medium-sized diameter studs. Enhanced Duty Cycle for production requirements. Capable of up to 100 feet of 4/0 welding cable accommodates a large variety of work station layouts. Stepless time and current control allow for infinite settings for fine-tuning the welding output. Stud Job Counter that can be reset for every job.
Dimensions	Height Width Length Weight	22" (559mm) 25" (635mm) 30" (762mm) 380 Lbs. (172kg)
Input Voltages		230 / 460 / 575 VAC 3 Phase 60Hz
Fusing Requirements	(Slow Acting)	230 / 120 Amps 460 / 60 Amps 575 / 50 Amps

^{**} Specifications are subject to change without prior notice



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SC1900 STUD WELDING SYSTEM







DESCRIPTION

The SC1900 is fully integrated stud welding system with digital controls for time and current. This system was designed to be a perfect fit for shop use excelling at small to medium-sized diameter studs, all in a compact, affordable package.

Includes;

1800 Amp Power Supply, TWE17000 Heavy Duty stud gun, 35 feet of 4/0 weld and control cable and 25 feet of 4/0 ground cable.

Version 2.1 10/03/2012

FEATURES CONTROL OF THE PROPERTY OF THE PROPER		
Weld Range	1/4" - 7/8" Diameter	Consistent welding regardless of stud diameter.
Duty Cycle	1/4" Thru 3/8" - Unlimited 1/2" - 22 to 24 per minute 5/8" - 9 to 10 per minute 3/4" - 4 to 5 per minute 7/8" - 3 to 4 per minute	 Smooth arc curve targeted for small to medium-sized diameter studs. Enhanced Duty Cycle for production requirements. Capable of up to 100 feet of 4/0 welding cable accommodates a large variety of work station layouts. Stepless time and current control allow for infinite settings for fine-tuning the welding output. Stud Job Counter that can be reset for every job.
Dimensions	Height Width Length Weight	22" (559mm) 25" (635mm) 30" (762mm) 390 Lbs. (177kg)
Input Voltages		230 / 460 / 575 VAC 3 Phase 60Hz
Fusing Requirements	(Slow Acting)	230 / 120 Amps 460 / 60 Amps 575 / 50 Amps

^{**} Specifications are subject to change without prior notice



6400 N. Honeytown Road Smithville, Ohio 44677

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SC2400 STUD WELDING SYSTEM

Heavy Duty Steel Fabrication Shop Stud Welding System







Made In the USA

DESCRIPTION

The SC2400 is a fully integrated stud welding system with two digital controls for time and current. The system was designed to meet the most challenging stud welding jobs.

Includes;

Power Supply Controller, TWE17000 Heavy Duty stud gun, 50 feet of 4/0 weld and control cable and 25 feet of 4/0 ground cable

FEATURES		
Weld Range	1/4" - 1" Diameter	Consistent welding regardless of stud diameter.
Duty Cycle	1/4" Thru 5/8" - Unlimited 3/4" - 18 to 24 per minute 7/8" - 12 to 14 per minute 1" - 6 to 8 per minute	 Enhanced Duty Cycle for production requirements. Powerful output for even the largest diameter jobs. Stepless time and current control allow for infinite settings for fine-tuning the welding output. Safety welding interlock keeps system from double triggering and saves on chuck wear. Stud Job Counter that can be reset for every job.
Dimensions	Height Width Length Weight	29" (736.6mm) 28" (711.2mm) 36" (914.4mm) 665 Lbs. (302kg)
Input Voltages		230 / 460 / 575 VAC 3 Phase 60Hz
Fusing Requirements	(Slow Acting)	230 / 180 Amps 460 / 90 Amps 575 / 80 Amps

^{**} Specifications are subject to change without prior notice



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SC2402 STUD WELDING SYSTEM

Heavy Duty Steel Fabrication Shop Stud Welding System





Made In the USA

DESCRIPTION

The SC2402 is a fully integrated stud welding system with two digital controls for time and current. The system was designed to meet the most challenging stud welding jobs, including thru-deck applications (this also includes G90 decking).

Includes;

Power Supply Controller, TWE17000 Heavy Duty stud gun, 50 feet of 4/0 weld and control cable and 25 feet of 4/0 ground cable

FEATURES		
Weld Range	1/4" - 1" Diameter	Consistent welding regardless of stud diameter.
Duty Cycle	1/4" Thru 5/8" - Unlimited 3/4" - 18 to 24 per minute 7/8" - 12 to 14 per minute 1" - 6 to 8 per minute	 Enhanced Duty Cycle for production requirements. Powerful output for even the largest diameter jobs. Stepless time and current control allow for infinite settings for fine-tuning the welding output. Safety welding interlock keeps system from double triggering and saves on chuck wear. Stud Job Counter that can be reset for every job.
Dimensions	Height Width Length Weight	29" (736.6mm) 28" (711.2mm) 36" (914.4mm) 760 Lbs. (345kg)
Input Voltages Fusing Requirements	(Slow Acting)	380 / 400 VAC 3 Phase 50Hz 380 / 100 Amps 400 / 100 Amps

^{**} Specifications are subject to change without prior notice



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SC3400 STUD WELDING SYSTEM







DESCRIPTION

The SC3400 is a fully integrated stud welding system with two digital controls for time and current. The system was designed to meet the most challenging stud welding jobs, including thru-deck applications (this also includes G90 decking).

Includes;

3000 Amp power supply, TWE17000 Heavy Duty stud gun, 50 feet of 4/0 weld and control cable and 25 feet of 4/0 ground cable.

FEATURES		
Weld Range	1/4" - 1-1/4" Diameter	Consistent welding regardless of stud diameter.
Duty Cycle	1/4" Thru 5/8" - unlimited 3/4" - 22 to 24 per minute 7/8" - 16 to 18 per minute 1" - 12 to 14 per minute 1-1/4" - 4 to 5 per minute	 Smooth arc curve allows for the wide range of welding. Enhanced Duty Cycle for production requirements. Powerful output for even the largest diameter jobs. Stepless time and current control allow for infinite settings for fine-tuning the welding output. Safety welding interlock keeps system from double triggering. Stud Job Counter that can be reset for every job.
Dimensions	Height Width Length Weight	28" (736.6mm) 29" (711.2mm) 36" (914.4mm) 760 Lbs. (345kg)
Input Voltages		230 / 460 / 575 VAC 3 Phase 60Hz 400 VAC 3 Phase 50Hz
Fusing Requirements	(Slow Acting)	230 / 200 Amps 460 / 100 Amps 575 / 90 Amps

^{**} Specifications are subject to change without prior notice



6400 N. Honeytown Road Smithville, Ohio 44677

(330) 725-7744 Phone (330) 669-2473 Fax

SC3402 DUAL-GUN STUD WELDING SYSTEM







DESCRIPTION

The SC3402 is fully-integrated, dual-gun, stud welding system with two digital controls for time and current. The system was designed to meet the most challenging stud welding jobs, including thru-deck applications (this also includes G90 decking).

Includes;

3000 Amp power supply, two (2) TWE17000 heavy duty stud guns, two (2) cable sets of 50-ft. of 4/0 weld and control cable, and two (2) sets of 25-ft. 4/0 ground cable.

		FEATURES
Weld Range	1/4" - 1-1/4" Diameter	Consistent welding regardless of stud diameter.
Duty Cycle	1/4" Thru 5/8" - unlimited	Smooth arc curve allows for the wide range of welding.
	3/4" - 22 to 24 per minute	Enhanced Duty Cycle for production requirements.
	7/8" - 16 to 18 per minute	Powerful output for even the largest diameter jobs.
	1" - 12 to 14 per minute 1-1/4" - 4 to 5 per minute	 Stepless time and current control allow for infinite settings for fine- tuning the welding output.
		Safety welding interlock keeps system from double triggering.
		Stud Job Counter that can be reset for every job.
Dimensions	Height	28" (736.6mm)
	Width	29" (711.2mm)
	Length	36" (914.4mm)
	Weight	875 Lbs. (397kg)
Input Voltages		230 / 460 / 575 VAC 3 Phase 60Hz
		400 VAC 3 Phase 50Hz
Fusing	(Slow Acting)	230 / 200 Amps
Requirements		400 / 100 Amps
		460 / 100 Amps
** C 'C '		575 / 90 Amps

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6400 N. Honeytown Road Smithville, OH 30043

(330) 725-7744 Phone (330) 669-2473 Fax

TWE 17000Heavy Duty Stud Gun



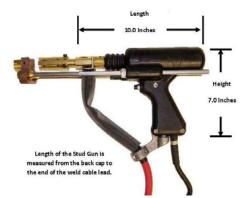
Made In the USA

DESCRIPTION

The TWE17000 has been designed to fit comfortably for all hands, including when wearing a work glove. The neck of the handle has been tapered so that when grasped, the trigger can be accessed easily, without any unnecessary strain. The handle length allows for better balance of the stud gun and it keeps the welding cable and connector away from your hand, minimizing operator fatigue.

FEATURES

The TWE17000 heavy duty stud gun has a welding range from 1/8" through 1-1/4" diameter studs.



The TWE17000 is approximately 10.0" long from the weld cable to the back cap, and approximately 7" long from the top of the stud gun to the bottom of the handle. The overall weight of the stud gun is approximately 5.2 pounds (excludes 8.5 feet of 4/0 weld cable and 8 feet of control cable (This also excludes all connectors, legs, and foot piece.).

The TWE17000 can be ordered to operate with any type of stud welding equipment. Simply specify the make and model of your equipment and we will provide you with a stud gun connection that is compatible with you unit, regardless of the manufacturer.

Order your TWE17000 Heavy Duty Stud Gun from your local TRU-WELD Equipment Distributor.



6400 N. Honeytown Road Smithville, OH 44677

(330) 725-7744 Phone (330) 669-2473 Fax

TWE 18500 Medium Duty Stud Gun



Made In the USA

DESCRIPTION

The TWE85000 has been designed to fit comfortably for all hands, including when wearing a work glove. The neck of the handle has been tapered so that when grasped, the trigger can be accessed easily, without any unnecessary strain. The handle length allows for better balance of the stud gun and it keeps the welding cable and connector away from your hand, minimizing operator fatigue.

FEATURES

The TWE18500 is approximately 8.5" long from the weld cable to the back cap, and approximately 7" long from the top of the stud gun to the bottom of the handle. The overall weight of the stud gun is approximately 4.8 pounds (excludes 8.5 feet of 2/0 weld cable and 9 feet of control cable. This also excludes all connectors, legs, and foot piece.)

The TWE18500 can be ordered to operate with any type of stud welding equipment. Simply specify the make and model of your equipment and we will provide you with a stud gun connection that is compatible with you unit, regardless of the manufacturer.

Order your TWE18500 Medium Duty Stud Gun from your local TRU-WELD Equipment Distributor.



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(330) 725-7744 Phone (330) 669-2473 Fax

TWE 19000 Light Duty Stud Gun



Made In the USA

DESCRIPTION

The TWE19000 has been designed to fit comfortably for all hands, including when wearing a work glove. The neck of the handle has been tapered so that when grasped, the trigger can be accessed easily, without any unnecessary strain. The handle length allows for better balance of the stud gun and it keeps the welding cable and connector away from your hand, minimizing operator fatigue.

FEATURES

The TWE19000 is approximately 8.0" long from the weld cable to the back cap, and approximately 7" long from the top of the stud gun to the bottom of the handle. The overall weight of the stud gun is approximately 4.2 pounds (excludes 8.5 feet of 2/0 weld cable and 9 feet of control cable. This also excludes all connectors, legs, and foot piece.)

The TWE19000 can be ordered to operate with any type of stud welding equipment. Simply specify the make and model of your equipment and we will provide you with a stud gun connection that is compatible with you unit, regardless of the manufacturer.

Order your TWE19000 Light Duty Stud Gun from your local TRU-WELD Equipment Distributor.



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(330) 725-7744 Phone (330) 669-2473 Fax

GENERATOR STUD WELDING SYSTEM

Heavy Duty Steel Stud Welding System



Made In the USA

The TRU-WELD Diesel Generator is a fully-integrated, stud welding system that offers portability along with your stud welding needs. This system incorporates a SC3400 Heavy Duty Stud Welder with its own portable power source, which enables you to finish jobs effectively and efficiently, without the costly task of disconnecting the power and moving the unit as the job requires.

SYSTEM FEATURES

- Aluminum weather enclosure
- **Full sound attenuation**
- **Critical Sound muffler**
- **Block engine heater**
- **Battery charger**
- **Electronic governor**

- Auto-Start control w/over-speed and over-crank shut down
- Automatic low-water shut down
- Alternator w/Permanent Magnet **Generator and Automatic Voltage** Control
- Two (2) 120 VAC outlets



Version 1.4 10/03/2012

SPECIFICATIONS	
Power	480 VAC, 3 Phase
Amp Load Capacity	300 Amps
Generator	256 KVA
Circuit Breaker	350 Amp (Main Line)

^{**} Specifications are subject to change without prior notice

HTTP://TruweldStudWelding.com

SYSTEM INCLUDES;

- **Mobile Generator**
- **SC3400 Heavy Duty Welder**
- TWE17000 Heavy Duty Stud Gun
- 25 ft. 4/0 ground cable w/clamp
- 50 ft. 4/0 starter combo cable
- 100 ft. 4/0 combo cable







A Division of Tru-Fit Products Corporation 460 Lake Road Medina, OH 44256 www.tfpcorp.com

Remit To;

Tru-Weld Equipment 460 Lake Road Medina, Ohio 44256

Manufactured by;

Tru-Weld Equipment 6400 N. Honeytown Road Smithville, Ohio 44677

