

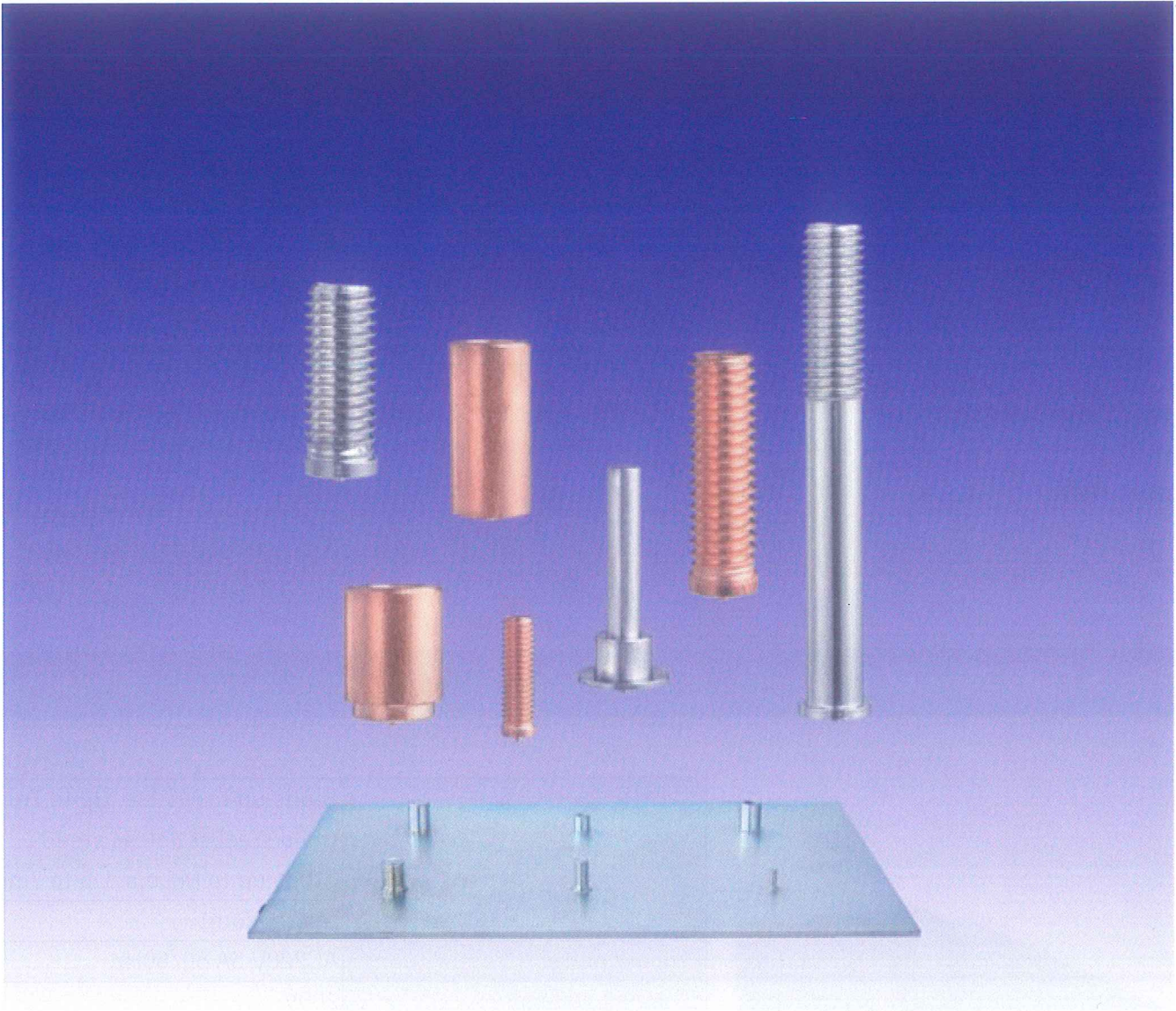
Clinching fasteners and professional CD stud welding

NIHON FLASH CO., LTD



NIHON FLASH

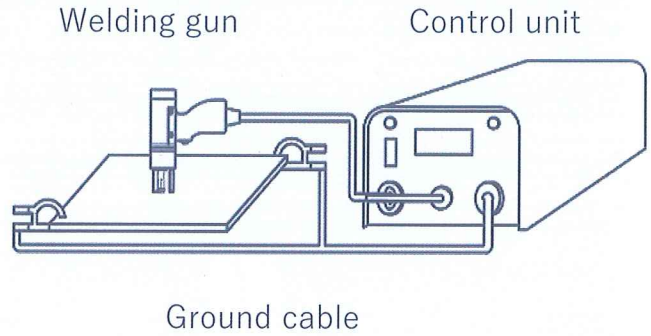
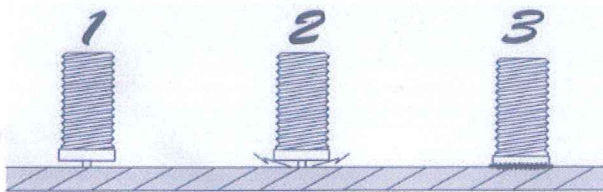
CD STUD WELDING SYSTEM



PRINCIPAL OF CD STUD WELDING MACHINE

The flash stud welding is the welding method which electric energy stored in the condenser and discharged at the tip of the stud bolt instantaneously. To weld a stud bolt just insert it in the gun and push on the switch, No other extra work is required.

This welding machine is a simple welding system consisting of a control unit (mainbody), gun and ground cable.



Push a stud bolt on the base metal

Push on the gun switch to weld

Welding is completed in about 0.004 second

PROSTUD FS-600GXA



Welding range	Studs up to M6 dia. Up to 7mm (mild steel, stainless steel)
	Studs up to M6 dia. Up to 7mm (aluminium)
Primary power	AC220V 5A 50/60Hz
Charging voltage	200V
Charging time	within 6 seconds
Dimension L × W × H	450 × 240 × 200mm
	without handle
Weight	20kg
Welding gun model	SGN or SGC (welding cable 6m)
Standard accessory cable	Power cable 5m
	ground cable 3m

- Stud diameter : up to $\Phi 7$
- FVC circuit applied : simple adjustment for charging voltage
- Made in Japan

PROSTUD FS-800GXA



Welding range	Studs up to M8 dia. Up to 9mm (mild steel, stainless steel)
	Studs up to M6 dia. Up to 7mm (aluminium)
Primary power	AC220V 15A 50/60Hz
Charging voltage	200V
Charging time	within 6 seconds
Dimension L × W × H	480 × 220 × 180mm
	without handle
Weight	25kg
Welding gun model	SGN or SGC
	(welding cable 6m)
Standard accessory cable	Power cable 5m
	ground cable 3m

- Stud diameter : up to $\Phi 9$
- FVC circuit applied : simple adjustment for charging voltage
- Made in Japan

PROSTUD FS-1000GXA



Welding range	Studs up to M10 dia. Up to 11mm (mild steel, stainless steel)
	Studs up to M6 dia. Up to 7mm (aluminium)
Primary power	AC220V 15A 50/60Hz
Charging voltage	200V
Charging time	within 6 seconds
Dimension L × W × H	615 × 334 × 222mm
	without handle
Weight	36kg
Welding gun model	SGN or SGC
	(welding cable 6m)
Standard accessory cable	Power cable 5m
	ground cable 3m

- Stud diameter : up to $\Phi 10$
- FVC circuit applied : simple adjustment for charging voltage
- The Greatest model of compact and light weight designed for welding of from M3 stud bolt to M10 stud bolt and $\Phi 10$ cap nut.
- Made in Japan

CD Weld Guns

Standard type

SGN

- Light weight
- Easy to use

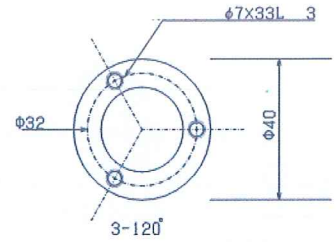


SGN is specifically designed easy to set up and use.

The fastener length can be rapidly changed by the adjustable leg set.

Spring pressure is easily adjusted for fastener materials.

Tripod of SGN



Corner used type

SGC

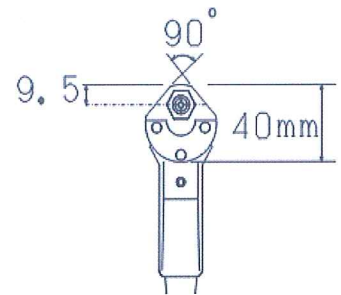
- Ideal for use in tight areas
- Light weight
- Easy to use



SGC is light weight and small footprint make it ideal for use in tight areas.

It is possible to welding as close as 10mm to the corner of base material.

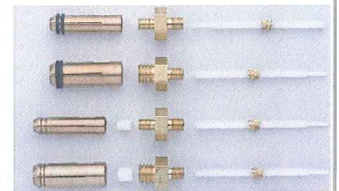
Spring pressure is easily adjusted for fastener materials.



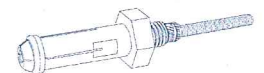
CD Stud Welding Accessories

Stud dia	Chucks	Part No.	Adaptors	Part No.	Adjustable stops	Part No.
M3 M4 M5 M6	 Outer diameter ϕ 10 full length 35mm	FCB-M3 FCB-M4 FCB-M5 FCB-M6	 For M3-M6	FRH-7		FSB3-12
M8 M10	 Outer diameter ϕ 14 full length 35mm	FCB-M8 FCB-M10	 For M8-M12	FRH-12		FSB3-12
M12	 Outer diameter ϕ 14 full length 35mm	FCB-12	 For M8-M12	FRH-12		FSB3-12
ϕ 6	 Outer diameter ϕ 6 full length 35mm	FCF- ϕ 6	 For M3-M6	FRH-7	 Cap diameter ϕ 5.5	FSF-3
ϕ 8 ϕ 9 ϕ 10	 Outer diameter ϕ 8-10 full length 35mm	FCF- ϕ 8 FCF- ϕ 9 FCF- ϕ 10	 For M8-M12	FRH-12	 Cap diameter ϕ 7.5	FSF-4
ϕ 12	 Outer diameter ϕ 12 full length 35mm	FCF- ϕ 12	 For M8-M12	FRH-12	 Cap diameter ϕ 7.5	FSF-4
ϕ 16	 Outer diameter ϕ 20 full length 41mm	FCF- ϕ 16	—	—	 Cap diameter ϕ 14	FSF-8

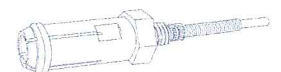
Our CD stud welding accessories are common to the CD weld gun of all models.



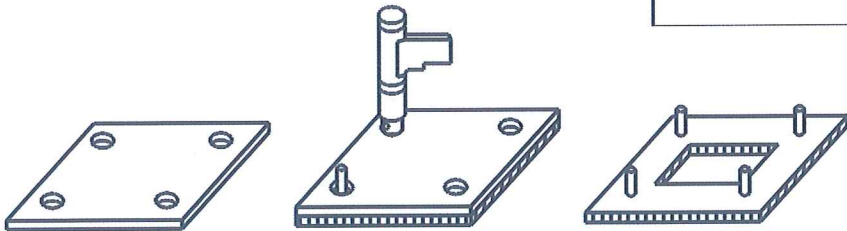
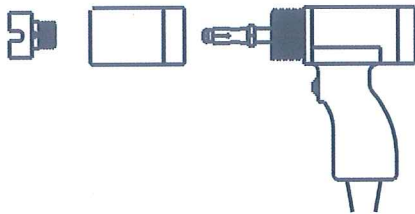
Set example M3



Set example M8

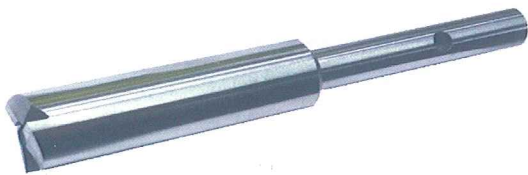


Positioning Jigs



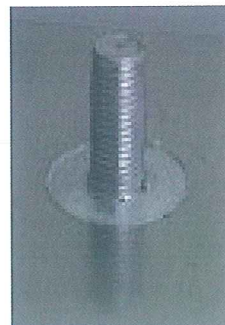
Main body of Positioning jig		
SGR-40		
Adaptors of Positioning jig		Stud dia.
SGA-20-6		Up to M6
SGA-25-6		Up to M6
SGA-25-8		M8 - M10
SGA-30-6		Up to M6
SGA-30-8		M8 - M10

Deburring tools

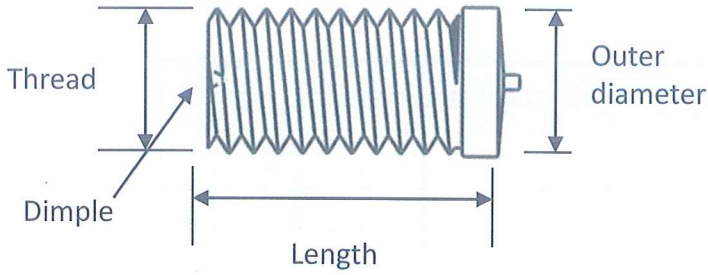


Easy removal of welding spatter around the stud.
Use the electric drill set.

Stud dia.	Part No.
M3	M3-S
M4	M4-S
M5	M5-S
M6	M6-S



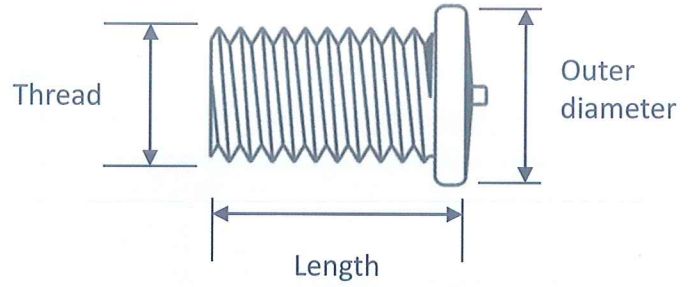
Non Flanged CD Weld Studs



FLC-D Cu M3 × 6 S

- Non flanged Length
- Thread (ISO,JIS)
- Cu: Copper plating
- Ni: Nickel plating
- Dimple
- FLC: Mild steel
- FLS: Stainless steel
- FLA: Aluminum

Flanged CD Weld Studs



FLC Cu M3 × 6 F

- Flanged Length
- Thread (ISO,JIS)
- Cu: Copper plating
- Ni: Nickel plating
- FLC: Mild steel
- FLS: Stainless steel
- FLA: Aluminum

Thread × P ISO,JIS	Length	Quantity /box	Material			Outer diameter
			Mild steel Cu or Ni	Stainless steel	Aluminum	
			FLC-D	FLS	FLA	
M3 × 0.5	6	1000	⊙ Cu	⊙		φ 3
	8	1000	⊙ Cu	⊙		
	10	1000	⊙ Cu	⊙		
	12	1000	⊙ Cu	⊙		
	15	1000	⊙ Cu	⊙		
	20	1000	⊙ Cu	⊙		
	25	1000	⊙ Cu	⊙		
M4 × 0.7	6	1000	⊙ Cu	⊙	⊙	φ 4
	8	1000	⊙ Cu	⊙	⊙	
	10	1000	⊙ Cu	⊙	⊙	
	12	1000	⊙ Cu	⊙	⊙	
	15	1000	⊙ Cu	⊙	⊙	
	20	1000	⊙ Cu	⊙	⊙	
	25	1000	⊙ Cu	⊙		
M5 × 0.8	8	1000	⊙ Cu	⊙	⊙	φ 5
	10	1000	⊙ Cu	⊙	⊙	
	12	1000	⊙ Cu	⊙	⊙	
	15	1000	⊙ Cu	⊙	⊙	
	20	1000	⊙ Cu	⊙	⊙	
	25	500	⊙ Cu	⊙		
M6 × 1	10	1000	⊙ Cu	⊙	⊙	φ 6
	12	1000	⊙ Cu	⊙	○	
	15	500	⊙ Cu	⊙	⊙	
	16MF	500			⊙ (A5052)	φ 6.5
	20	500	⊙ Cu	⊙	⊙	φ 6
	25	500	⊙ Cu	⊙	○	
	30	500	⊙ Cu	⊙		
M8 × 1.25	10	500	⊙ Cu	⊙		φ 8
	12	500	⊙ Cu	⊙		
	15	500	⊙ Cu	⊙		
	20	250	⊙ Cu	⊙		
	25	250	⊙ Cu	⊙		
	30	250	⊙ Cu	⊙		
M10 × 1.5	20	250	○ Ni	○		φ 10
	25	200	○ Ni	○		
	30	150	○ Ni	○		

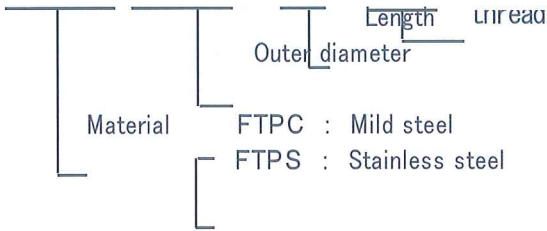
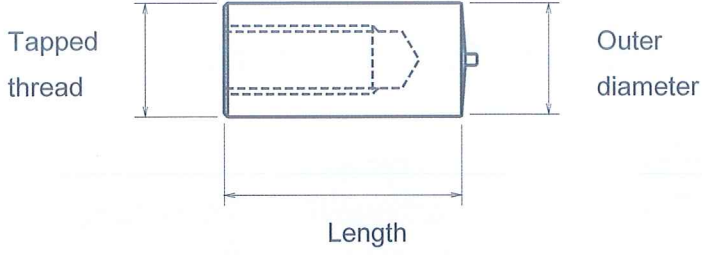
Thread × P ISO,JIS	Length	Quantity /box	Material			Outer diameter
			Mild steel Cu or Ni	Stainless steel	Aluminum	
			FLC-D	FLS	FLA	
M3 × 0.5	6	1000	⊙ Cu			φ 4.5
	8	1000	⊙ Cu	⊙	⊙	
	10	1000	⊙ Cu	⊙	⊙	
	12	1000	⊙ Cu	⊙	⊙	
	15	1000	⊙ Cu	⊙	⊙	
	20	1000	⊙ Cu	⊙	⊙	
	25	1000	⊙ Cu	⊙		
	30	1000	⊙ Cu			
M4 × 0.7	6	1000		⊙		φ 5.5
	7	1000	⊙ Ni			
	8	1000	⊙ Ni			
	10	1000	⊙ Ni	⊙		
	12	1000				
	15	1000	⊙ Ni	⊙		
	20	1000	⊙ Ni	○		
	25	1000	○ Ni			
M5 × 0.8	10	1000	⊙ Ni	○		φ 6.5
	12	1000	⊙ Ni			
	15	1000	⊙ Ni	○		
	20	1000	⊙ Ni	○		
	25	500	⊙ Ni			
	30	500	⊙ Ni			
M6 × 1	10	1000	⊙ Ni			φ 7.5
	12	1000				
	15	500	⊙ Ni			
	20	500	⊙ Ni			
	25	500	⊙ Ni			
	30	500	⊙ Ni			
M8 × 1.25	10	500	⊙ Ni			φ 9.5
	15	500	⊙ Ni			
	20	250	⊙ Ni			
	25	250	⊙ Ni			
M10 × 1.5	20	250	⊙ Ni			φ 10.8
	25	200	⊙ Ni			
	30	150	⊙ Ni			

•⊙: Standard ○: Sub Standard Blank: Special Order

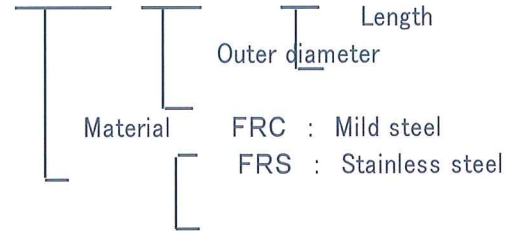
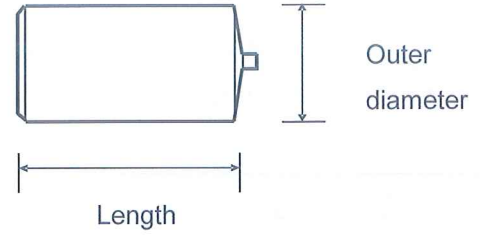
•Other diameters, lengths and materials are available by special order.

•All of our products are manufactured for reliability and consistently high quality and are RoHS compliant as standard.

CD Weld Tapped Pads



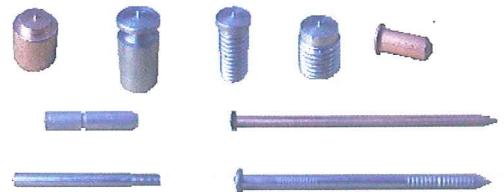
Non Flanged (No Thread) CD Weld Pins



Outer diameter	Length	Tapped thread	Mild steel		Quantity /box
			Copper plating	steel	
φ 6	5	M3	◎		1000
	6		◎	○	1000
	7		◎	○	1000
	8		◎	◎	1000
	9		◎	○	1000
	10		◎	◎	1000
	11		◎		1000
	12		◎		1000
	15		◎		500
	20		◎	◎	500
φ 8	6	M4	◎		1000
	8		◎		1000
	10		◎	◎	500
	12		◎	◎	500
	15		◎	◎	500
	20		◎	○	250
φ 10	10	M5	◎		500
	15		◎	○	250
	20		◎		250
	10	M 6	◎		500
	15		◎		250
	20		◎		250
	25		◎		200

Outer diameter	Length	Mild steel		Quantity /box
		Copper plating	steel	
φ 5	10			1000
	10	◎		1000
φ 6	12	◎		1000
	15			500
	20	◎		500
φ 8	10	◎		500
	15			500
	20			250

materials	materials	size	N	N	KG/箱
plate for general structure (Thickness = 6mm)	Carbon steel wire for cold heading (SWCH)	M3	2,156	1,253	1.4
		M4	3,822	2,242	3.9
		M5	5,880	3,450	6.1
		M6	8,722	5,092	10.2
		M8	14,700	8,658	22.4
		M10	22,246	13,325	45.9
		M3	3,038	1,899	2.3
stainless steel plate (SUS304) (Thickness = 6mm)	stainless steel wire for cold heading (SUS304)	M4	5,586	3,419	4.7
		M5	9,310	5,651	9.2
		M6	13,230	7,909	16.3
		M8	23,030	14,394	38.8
		M10	33,320	22,371	86.7
		M3	588	313	0.4
plate(A1100) (Thickness = 6mm)	wire (A1050)	M4	1,078	588	0.9
		M5	1,666	933	1.9
		M6	2,352	1,324	3.3

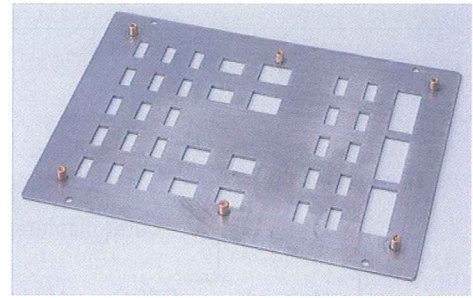
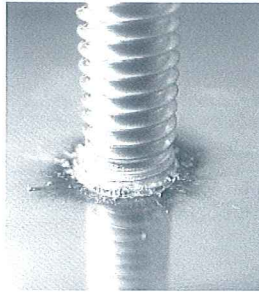
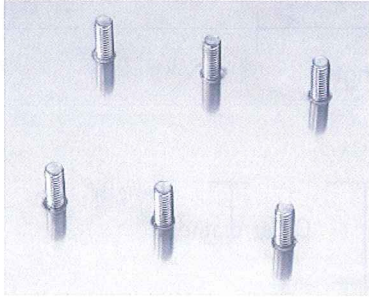


- ◎ : Standard ○ : Sub Standard Blank : Special Order
- Other diameters, lengths and materials are available by special order.
- All of our products are manufactured for reliability and consistently high quality and are RoHS compliant as standard.

Nihon Flash's CD stud welding machine features a simple system comprising a main unit, stud gun and a ground cable.

The system is easy to operate. Simply insert a bolt into the stud gun, push it against the base material and press the switch.

The standard stud gun can be used to weld bolts made from iron, stainless steel, aluminum, titanium, etc.



Without the need to prepare holes in the base material or to use a subsidiary material for welding, the system can be used to momentarily weld bolts as large as M12.

Since the welding process is completed in 3-5/1,000ths of a second, there is almost no thermal influence on the reverse side of the base material, so a beautiful appearance can be maintained.

Since we carry out everything from design of the stud welder and stud bolts to their manufacturing in an integrated fashion at our own factory, we can provide special specification machines and special size bolts, etc., to meet the demands of virtually any user.



Clinching fasteners and professional CD stud welding

NIHON FLASH CO., LTD

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