



# STUD WELDING SYSTEM

Philippine Contractors Accreditation Board ACCREDITED

SPLIT SECOND NO-HOLE FASTENING

#### What is Fusion Stud Welding?

Fusion Stud Welding is versatile, quickly and one step fastening system, it's process by which a metal stud is joined to a metal workpeice by heating both parts with an arc of electricity. Compared with other welding and fastening processes, Fusion stud welding offers faster assembly with fewer steps.





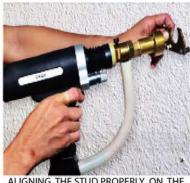
### **Process**

Stud welding is essentially an electric arc welding process, with the stud itself serving as the electrode.

- 1. A stud and ceramic ferrule are inserted in the stud welding gun.
- 2. The stud end is pressed against the work and the trigger is squeezed.
- **3.** An electric arc between the stud and work creates a pool of molten metal which is confirmed by the ferrule and the stud is automatically thrust by spring action into the pool.
- 5. Solid-state timing controls each step of the process.
- 4. The metal solidifies in a split-second and the stud completely welded across its base metal.



INSERTING OF CERAMIC INTO STUDS



ALIGNING THE STUD PROPERLY ON THE METAL SURFACE



PRESSING THE STUD INTO METAL SURFACE



SPLIT- SECOND STUD WELDING INSTALLATION

## **Shear Connectors**

Shear connectors are typically used in composite steel construction to tie the concrete to steel members and resist shear forces between the concrete slab and steel members. They are widely used in steel building, bridges, etc.

Diameter	Length	Ceramic Ferrule
13	45-165	UF13
16	45-225	UF16
19	45-255	UF19   UFT19
22	85-255	UF22

<sup>\*</sup>Not listed dimensions are available upon request



Weld Through Metal Deck



Weld Through Structural Beam

















# Threaded Studs

Type PD studs are recommended to be used for weld to heavy gauge base materials to get full fastener strength. They unthreaded weld base corresponds to the pitch diameter of the thread, the maximum load is identical to the load of 4.8 crew.



Type RD studs have a reduced weld base diameter. Thus they can produce a smaller weld collar than other type studs The smaller weld collar allows it to be used on smaller clearance holese application. But the strength of the assembly is determined by the reduced weld base.



Type FD studs are threaded almost to the top of the welding tip. Thus after welding the studs are threaded up to weld collar, they are recommended to be used in whenever full fastener length needed.



Please feel free to contact us for more sizes.

#### LIST OF OUR PROJECTS INSTALLED WITH STUD WELDING

- Abs-Cbn Soundstage
- 1x135 Puting Bato Coal Fired Power Plant
- 1x135 Semirara Powerplant
- · 2x150MW Coal Powerplant
- Anchor Grandsuites
- Alphaland Mall
- Aquatic Center Project
- BDO Tower
- · CEP Building
- CitiBank Credit Card Center
- Park Terraces
- West Superblock Project
- Iconic Project
- CNS/ATM NAIA Project
- DMCI Plaza Ext
- · DOH Retrofitting Works
- Eagle Cement Corp Silo
- Imperium at Capitol Commons
- Estancia at Capitol Commons
- Filinvest Mall Expansion
- · Globe Tower
- · Goro Nickel
- GT Tower International

- · Hotel H20
- · ICEC Tower
- JG Summit Petrochemicals Warehouse Project
- · Limestone Silo
- · Mamasita's Project
- · Manila Bay Resort
- · Manila CSC Project
- Manila Ocean Park
- Mckinley Place
- · Metrobank Grand Hyatt Tower
- National Museum Project
- NLEX Toll Plaza Project
- · Novotel Araneta
- · Northen Cement Corp Silo Project
- · NSTP Building N & O Project
- · One Legaspi Tower
- · OPERA Circuit Makati Project
- Park Terraces 2
- · Philippine Centenial Freedom Ring
- · Phividec Project
- · Plant Opera
- · Power Plant Mall Expansion
- The Procemium Phase 2

- · Porak Warehouse
- · PSSLAI Atrium
- · Rockwell Mall and Hotel
- Royalton Project
- · San Mariano Bridge Project
- · San Miguel Yamamura Expansion Project
- Sec 210mw Coal Fired Power Plant
- · Shari-la Fort
- · SM Bay
- · SM Skydome
- SM Air Residences Project
- SM MOA Atrium Project
- · Solaire Casino
- · Sonata Private Residences
- Subic Mall
- The Residences (Greenbelt Ezperanza)
- · Therma Visayas Energy
- · Torre Lorenzo Malate Project
- · Uptown Bonifacio Global Taguig
- Viridian Tower
- West Superblock Project



24th Floor Trident Tower, 312 Sen. Gil Puyat Ave., Makati City, Philippines

> (+632) 8817-9004 / 8817-8914 / 8844-6967 @ LOCAL: 111, 121, 122 or 124