



## **TRU-WELD Stud Welding**

STANDARD STUD DESIGNS : THE STANDARD STUDS ILLUSTRATED IN THE TRU-WELD SPECIFICATION SHEETS WERE DEVELOPED TO COVER THE MAJORITY OF STUD REQUIREMENTS. WHEN SPECIAL STUD TYPES ARE NEEDED, TRU-WELD STANDS READY TO SUPPLY YOU WITH SPECIAL FASTENERS DESIGNED TO MEET YOUR REQUIREMENTS.

LENGTH: TRU-WELD STUDS ARE AVAILABLE IN ANY REQUIRED LENGTH ABOVE THE STANDARD MINIMUMS. THE LENGTH OF A STUD IS REDUCED APPROXIMATELY 1/8 TO 1/4 INCH DURING THE WELDING OPERATION. THIS CHANGE IN LENGTH MUST BE CONSIDERED WHEN SELECTING A STUD TO FIT YOUR PARTICULAR APPLICATION.

THREADS: ALL STANDARD TRU-WELD THREADED STUDS ARE THREAD ROLLED TO UNC CLASS 2A, WITH A MAXIMUM STANDARD THREAD LENGTH OF 3 INCHES. OTHER THREAD CLASSES AND PITCH DIAMETERS INCLUDING ISO METRIC THREADS ARE AVAILABLE ON REQUEST.

MATERIALS: TRU-WELD STUDS ARE MANUFACTURED FROM ASTM A-108 GRADES 1010 THRU 1020 STEEL, WHICH COMFORMS TO THE APPLICABLE A.W.S. AND I.C.B.O. STANDARDS

STAINLESS STEEL: TRU-WELD STUDS ARE AVAILABLE IN STAINLESS STEEL, WITH TYPES 302 AND 304 AS STANDARDS. OTHER GRADES IN THE 300 SERIES (EXCEPTING TYPE 303) ARE AVAILABLE ON REQUEST.

ALUMINUM : TRU-WELD STUDS ARE AVAILABLE IN ALUMINUM WITH 1100, 5000, AND 6000 SERIES AS STANDARDS. OTHER GRADES ARE AVAILIABLE ON REQUEST. CONSULT OUR ENGINEERING DEPARTMENT FOR SPECIFIC APPLICATIONS.



# **TRU-WELD** *Stud Welding*

PLATING: TRU-WELD STUDS ARE AVAILABLE WITH CORROSION RESISTANT COATINGS. OUR STANDARD COATING IS ZINC PLATING IN ACCORDANCE WITH THE ASTM-B633 SPECIFICATION. OTHER TYPES OF COATINGS ARE AVAILABLE. PLEASE CONTACT THE TRU-WELD ENGINEERING DEPARTMENT FOR ASSISTANCE IN SELECTING THE TYPE OF COATING TO MEET YOUR SPECIFIC NEEDS.

ANNEALING: WHEN REQUIRED TRU-WELD STUDS CAN BE SUPPLIED IN AN ANNEALED CONDITION. SPECIFICATIONS ARE AS FOLLOWS:

LOW CARBON STEEL: - ROCKWELL b 75 MAX.

STAINLESS STEEL: - ROCKWELL b 90 MAX.

FERRULES: ALL TRU-WELD STUDS ARE SUPPLIED WITH FERRULES DESIGNED FOR USE WITH THE PARTICULAR FASTENER ORDERED. THE TRU-WELD FERRULE IS SPECIALLY DESIGNED OF BALL CLAY AND TALC, AN EXCELLENT MATERIAL TO WITHSTAND HEAT SHOCK AS WELL AS REASONABLY HIGH TEMPERATURES WITHOUT MELTING OR BREAKING. THE TRU-WELD FERRULE COMPLEMENTS THE PERFECT-POSITION ARC INITIATOR AND THE UNIFORM FLUX LOAD TO EFFECT A TOP QUALITY WELD.

FLUX: TRU-WELD STUDS ARE SUPPLIED WITH A FLUX LOAD DESIGNED TO ASSURE EXCELLENT WELD QUALITY. STUD BASES 1/4 INCH IN DIAMETER AND OVER CAN BE SUPPLIED WITH THE STANDARD BALL FLUX LOAD OR WITH THE PARENT METAL ARC INITIATOR SOLID RING FLUX LOAD. STUD BASES UNDER 1/4 INCH IN DIAMETER ARE AVAILABLE WITH THE BALL OR RING FLUX LOADS AND CAN ALSO BE ORDERED WITH THE FLUXLESS LOCATER POINT.

WELD FILLET HEIGHT AND DIAMETER: THE DIMENSIONS SHOWN IN THE TRU-WELD SPECIFICATION SHEETS ARE THE MAXIMUM OBTAINED WHEN THE WELDING OPERATION HAS BEEN PROPERLY PERFORMED. EXCELLENT WELD QUALITY IS ASSURED BY FOLLOWING TRU-WELD OPERATING PROCEDURES.



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## STANDARD FERRULES

SUPPLIED WITH TRU-WELD STUDS



DDFG



F 1\*



FHD



C



P



R



A 2\*

THE TRU-WELD FERRULE (ARC SHIELD) IS SPECIALLY DESIGNED OF BALL CLAY AND TALC, AN EXCELLENT MATERIAL TO WITHSTAND HEAT SHOCK AS WELL AS REASONABLY HIGH TEMPERATURE WITHOUT MELTING OR BREAKING. THE TRU-WELD FERRULE COMPLEMENTS THE PERFECT-POSITION ARC INITIATOR AND THE UNIFORM FLUX LOAD TO EFFECT A TOP-QUALITY WELD. SPECIAL FERRULES ARE AVAILABLE ON REQUEST.

1\* THE "F" FERRULE IS ALSO AVAILABLE IN LOW PROFILE VERSIONS.

2\* THE A FERRULE PICTURED IS THE COMBINATION INSIDE-OUTSIDE ANGLE FERRULE. THE INSIDE ONLY AND OUTSIDE ONLY FERRULES ARE ALSO STANDARD STOCK ITEMS.