

Material Compatibility Tables

Weldability

The general welding properties of Studfast weld studs are given in the table. Select from the 1st column in the table your product parent material. Read across to the column corresponding to the weld stud material. The general welding properties of the 2 materials is then given to enable you to evaluate the compatibility of your selection.

Capacitor Discharge “CD” Weld Studs

Parent Material	Stud Material				
	Mild Steel	Stainless Steel	Aluminium Alloy	Pure Aluminium	Brass
Low Carbon Mild Steel	<i>Good</i>	<i>Good</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Good</i>
Steel up to 0.6% carbon	<i>Fair</i>	<i>Good</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Good</i>
Austenitic Stainless Steel	<i>Good</i>	<i>Good</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Fair</i>
Zinc Coated Steel	<i>Fair</i>	<i>Fair</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Good</i>
Electro Galvanised Steel	<i>Fair</i>	<i>Fair</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Good</i>
Hot Rolled Structural Steel	<i>Fair</i>	<i>Fair</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Fair</i>
Aluminium Alloy	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Good</i>	<i>Good</i>	<i>Not Weldable</i>
Pure Aluminium	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Good</i>	<i>Good</i>	<i>Not Weldable</i>
Lead Free Brass	<i>Good</i>	<i>Fair</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Good</i>
Lead Free Copper	<i>Fair</i>	<i>Fair</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Good</i>
Leaded Brass	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Not Weldable</i>	<i>Not Weldable</i>

Drawn Arc “DA” & Short Cycle “SCDA” Weld Studs

Parent Material	Stud Material		
	Mild Steel	Stainless Steel	Zinc Plated Mild Steel
Low Carbon Mild Steel	<i>Good</i>	<i>Good</i>	<i>Fair</i>
Steel up to 0.6% carbon	<i>Fair</i>	<i>Good</i>	<i>Fair</i>
Austenitic Stainless Steel	<i>Good</i>	<i>Good</i>	<i>Fair</i>
Zinc Coated Steel	<i>Fair</i>	<i>Fair</i>	<i>Fair</i>
Electro Galvanised Steel	<i>Fair</i>	<i>Fair</i>	<i>Fair</i>
Hot Rolled Structural Steel	<i>Fair</i>	<i>Fair</i>	<i>Fair</i>