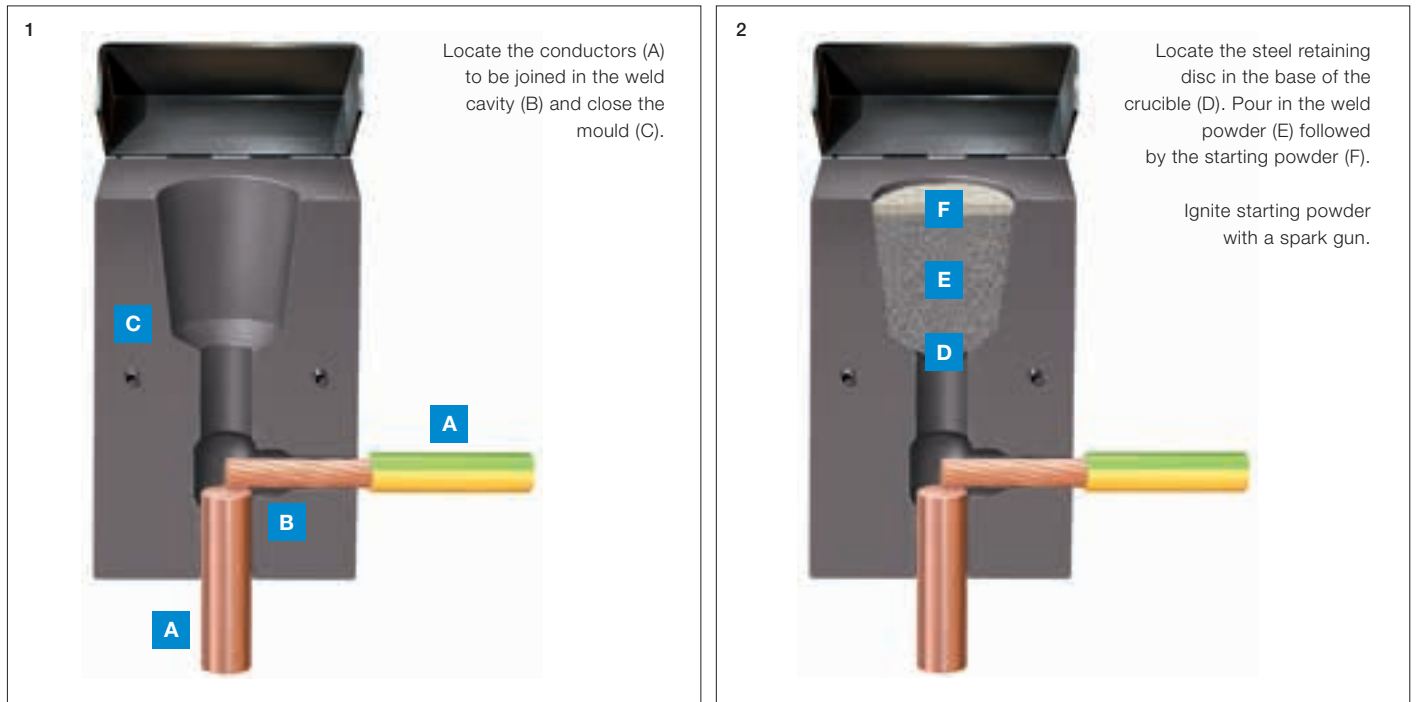


# FurseWELD

## Introduction



Making a FurseWELD joint is a simple procedure

9

### Moulds

The FurseWELD system of exothermic welding uses moulds to contain the exothermic reaction that creates safe and robust connections. Different types of moulds are available, whose use depends on the requirements of the project.

#### Full-sized graphite moulds

Market leading FurseWELD graphite moulds are extremely robust and capable of producing up to 75 connections each, if not more when properly maintained.

#### Mini-Moulds

FurseWELD mini-moulds are a cost effective alternative to full-sized moulds, especially where lower numbers of connections are required. They are smaller overall, less robust and therefore lower priced. Care is required in order to achieve similar service lives to full-sized moulds.

### FurseWELD products

- A powder cartridge is required for each joint to be made
- Handle clamps enable the mould to be handled when hot, and the two halves of the mould to be opened and clamped together
- Packing is required when welding to reinforcing bar

### Conductors

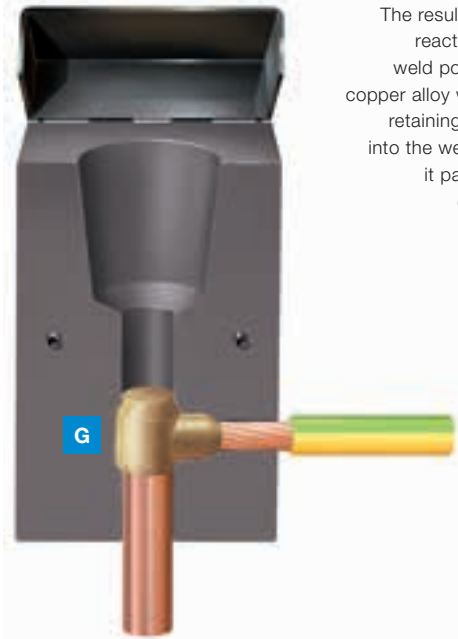
The range of FurseWELD moulds is designed to work with all common conductor formats.

- Flat tape conductor
- Stranded conductor
- Solid circular conductor

Conductors must be in the orientation shown to achieve the correct connection. Furse offers technical support to assist with selection of joint type. Please contact us where unsure, e.g. where you may be using compacted stranded conductor.

**If connections shown do not meet your requirements, please contact your local sales office.**

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The resulting exothermic reaction reduces the weld powder to molten copper alloy which melts the retaining disc and flows into the weld cavity where it partially melts the conductors (G).

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The molten copper alloy cools to leave a fusion weld of great mechanical and electrical integrity.

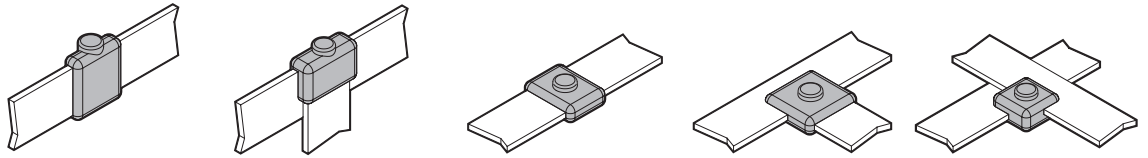
### SureSHOT

The FurseWELD SureSHOT system is a single-use ceramic mould supplied complete with retaining disc and powders. It has been designed for use in applications where only a few connections are required.



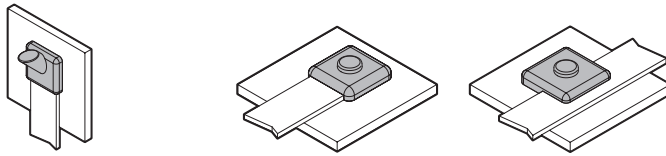
# FurseWELD

## Connection selection guide



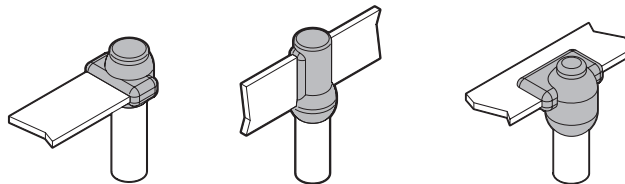
### Bar to bar

Connection Type	Type BB1	Type BB3	Type BB7	Type BB14	Type BB41
Section 9 / Page No.	9/8	9/9	9/10	9/11	9/12



### Bar to steel surface

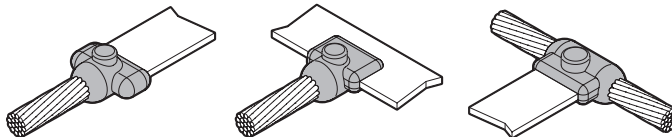
Connection Type	Type BS1	Type BS2	Type BS3
Section 9 / Page No.	9/13	9/14	9/15



### Bar to earth rod

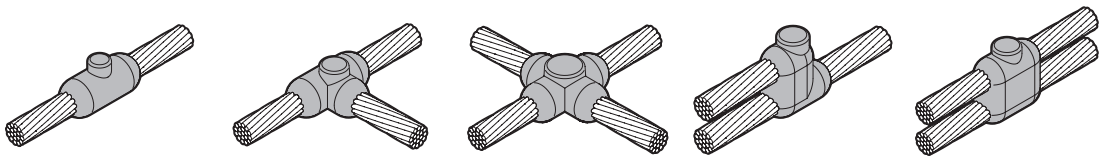
Connection Type	Type BR1	Type BR2	Type BR7
Section 9 / Page No.	9/16	9/18	9/20

9



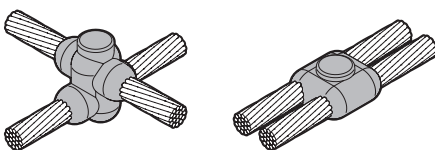
### Cable to bar

Connection Type	Type CB1	Type CB4	Type CB5
Section 9 / Page No.	9/22	9/23	9/24

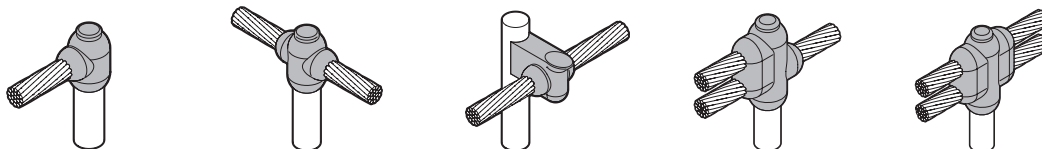


### Cable to cable

Connection Type	Type CC1	Type CC2	Type CC4	Type CC6	Type CC7
Section 9 / Page No.	9/25	9/26	9/27	9/28	9/29

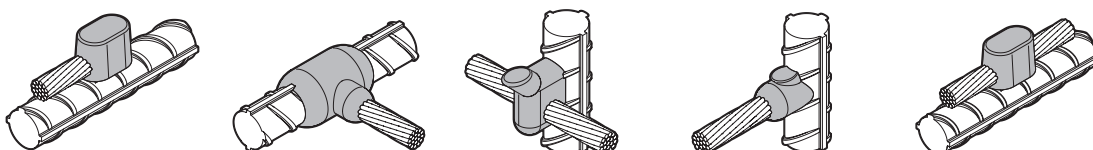


Connection Type	Type CC11	Type CC14
Section 9 / Page No.	9/30	9/31



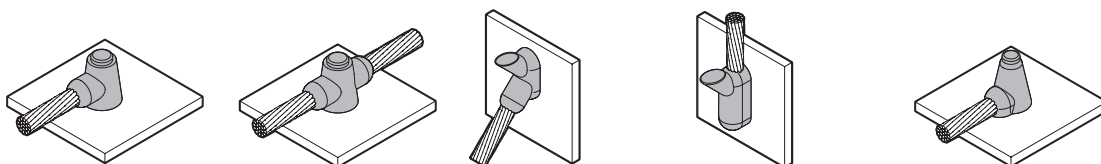
**Cable to earth rod**

Connection Type	Type CR1	Type CR2	Type CR3	Type CR17	Type CR24
Section 9 / Page No.	9/32	9/33	9/34	9/35	9/36



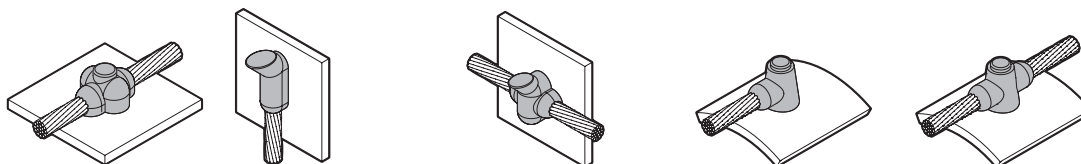
**Cable to reinforcing bar**

Connection Type	Type CRE1	Type CRE2	Type CRE3	Type CRE6	Type CRE17
Section 9 / Page No.	9/37	9/38	9/39	9/40	9/40



**Cable to steel surface & pipe**

Connection Type	Type CS1	Type CS2	Type CS3	Type CS7	Type CS8
Section 9 / Page No.	9/41	9/41	9/42	9/42	9/43



Connection Type	Type CS9	Type CS25	Type CS27	Type CS32	Type CS34
Section 9 / Page No.	9/43	9/44	9/44	9/45	9/46



**Stud to steel surface**

Connection Type	Type RS1	Type RS2
Section 9 / Page No.	9/47	9/47

**SureSHOT**

Connection Type	Type SS1	Type SS2
Section 9 / Page No.	9/49	9/49

**Conductors must be in the orientation shown to achieve the correct connection**

Furse offers technical support to assist with selection of joint type. If connections shown do not meet your requirements, please contact your local sales office on +44 (0)115 964 3700 (UK), +971 (0)4 609 1635 (Dubai) or +65 6776 5711 (Singapore) for assistance.