



CORROSION CONTROL

**EASYBOND**

**PIN BRAZING SYSTEM**



**“The ultimate electrical bond”**

*The safest, fastest, simplest and most effective electrical bonding method there is....*

## TRIED, TESTED AND TRUSTED

Pin Brazing was developed in Sweden during the 1950's for on site electrical bonding of cables and fittings onto rail and has become a preferred method for its strong, fast and yet safe connections that minimise any adverse effects on the metal.

During the 1980's the pipeline industry who require the same type of high standards as the rail industry saw the benefits of Pin Brazing as a low heat, yet strong alternative to other methods of electrical bonding onto various types of metals.



Pin Brazing rail bonds circa 1950

## VARIOUS APPLICATIONS AND OPTIONS

Easybond Pin Brazing is ideally suited for many applications including continuity bonding between pipes, across flanges, connection of cathodic protection test and current carrying cables and connection of bracelet galvanic anodes etc.

The Easybond MKII equipment is very robust, easy to operate, easy to maintain and ideal for on site works. The generator pin brazing gun is ideally suited to applications where a large quantity of connections are to be made at a static location such as a pipe coating yard, lay barge or workshop.

The EasyReach system has been developed for the connection of cathodic protection cables onto pipes that have been vacuum excavated and can extend to around 2.8m (9 ft) depth.



Threaded and Direct types of Pin Braze connections

## BENEFITS

### ◆ Speed of connection

Takes around 60 seconds for 1 connection.

### ◆ Low Temperature

The low melting point (650°C) and short brazing time minimise the thermal effects on the steel.

### ◆ All Weather

Pin brazing can be carried out in the wind rain or snow and damp conditions pose no problem.

### ◆ Easy to use

Operators can be trained effectively to operate and maintain the equipment in less than one hour.

### ◆ Versatile

Connections can be made at any orientation on a pipe.

### ◆ Maintenance

Huge range of spare parts means easy onsite maintenance.



## THE EASYBOND PIN BRAZING PROCESS

The Easybond MKII is powered by a 36V DC battery pack (or suitable welding generator when using the generator gun) capable of delivering 240A for use with BAC fused brazing pins, ceramic ferrules and cable lugs.

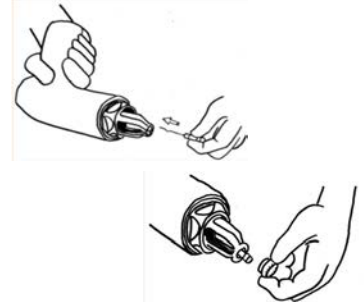
With the earth device in place the gun trigger is depressed and after approximately 1.5 to 2 seconds the circuit is mechanically broken as the fuse wire breaks, and the brazing pin is held into the molten pool of brazing alloy that rapidly cools into a homogenous and very strong connection.



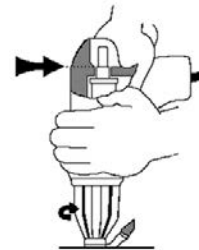
## 5 Easy Steps



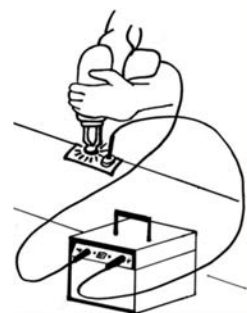
1. Clean to a bright metal finish



2. Load gun with pin & ferrule



3. Adjust as required



4. Pin Braze



5. Test the connection



**THE COMPLETE EASYBOND  
MKII PIN BRAZING SYSTEM**



**EXTENDED  
GENERATOR GUN**



**STANDARD  
GENERATOR GUN**



**BATTERY PACK AND  
CHARGE ADAPTER**



**EASYBOND REACH SYSTEM for  
vacuum excavated holes to 2.8m (9 ft)**



**TROLLEY FOR POWER  
UNIT**



**18v DIE GRINDER**



**IN CAR CHARGER**

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**EASYBOND MK II SYSTEM**

<b>Part #</b>	<b>Description</b>
<b>273 199 5660</b>	<b>Complete Easybond MKII unit (including all the following components)</b>
273 199 5610	Power Unit for Easybond MKII complete with battery pack
273 199 0780	Easybond Gun
270 071 5600	Pin holder for 8mm direct braze pins
270 074 8150	Ferrule holder for 8mm direct braze pins
273 190 0610	Toolkit
273 199 5020	Battery charger ELITE 110/230v supply
273 190 1360	Earth device
273 190 4680	Attaché case
278 900 1900	Manuals and training video on CD

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**OPTIONAL ACCESSORIES FOR EASYBOND II**

<b>Part #</b>	<b>Description</b>
273 199 0685	Die Grinder, c/w 2 x 18V batteries, case and fitted with burr
273 190 1370	Grinding burr
273 199 5040	Battery charger 12V supply - In Car Charger
273 199 5640	Spare Battery Pack- sealed type, (c/w 3 x batteries, harness, connector & charge adaptor )
273 190 1460	Extension Cable 2.5m length
273 100 4825	Trolley for EBII Power Unit

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**GENERATOR BRAZING GUNS**

<b>Part #</b>	<b>Description</b>
273 199 0240	Gun VF2300-ESAB c/w 8mm direct Pin & Ferrule Holder
273 199 5230	Gun VF2300 Extended c/w 8mm direct Pin & Ferrule Holder

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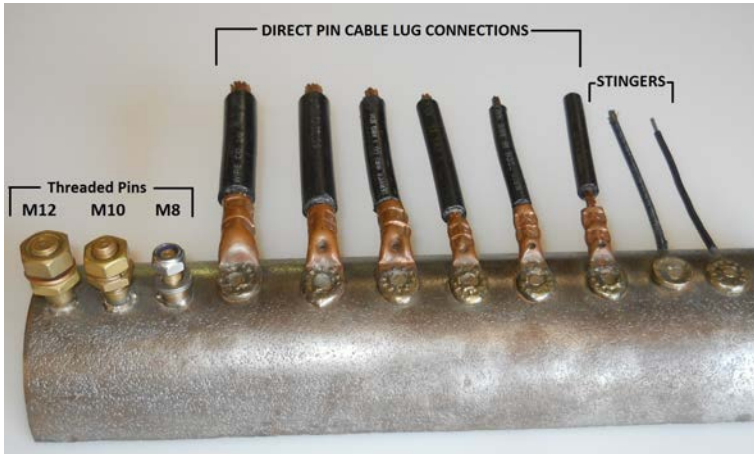
**EASYBOND REACH SYSTEM (EBRS)**

<b>Part #</b>	<b>Description</b>
<b>273 199 5100</b>	<b>EasyBond Reach System (including all the following components)</b>
273 199 5060	Gun & Long Reach Extension c/w earth device
270 071 5600	Pin holder for 8mm Direct brazing pins
270 074 8150	Ferrule holder for 8mm direct braze pins
273 199 5070	Trigger Device
273 199 5090	Grinder Conversion Kit
273 900 0280	Grinding Disk Holder
273 900 0290	Grinding Disks (100 Pack)

**Items also required that are common to Easybond Unit:**

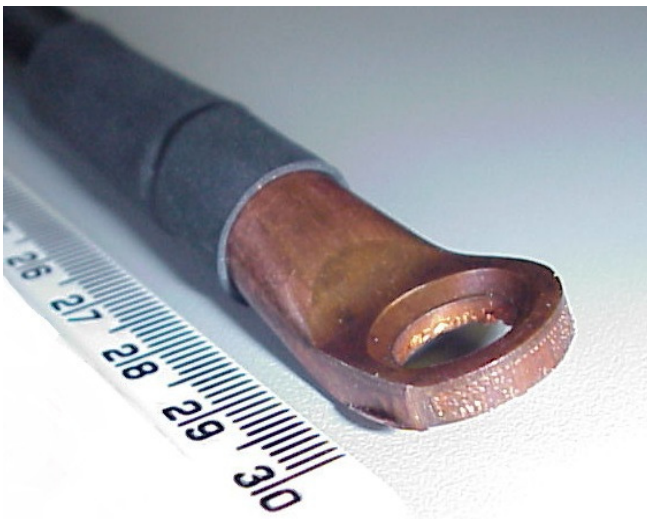
273 199 5610	Battery Box unit for Easybond II complete with battery pack
273 199 0685	Die Grinder, c/w 2 x 18V batteries, case and fitted with burr
273 199 5020	Battery charger 110/230v supply

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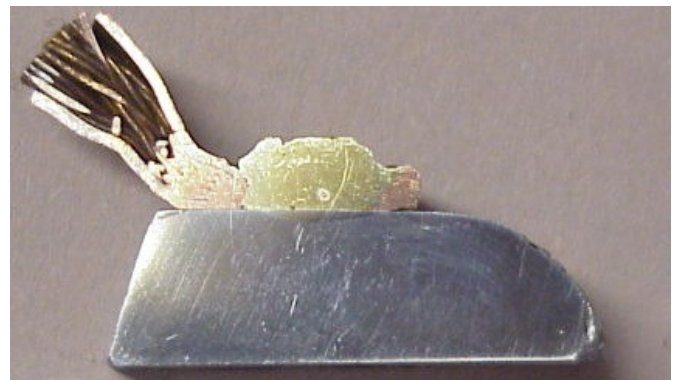


Stinger connection is suitable for # 10 & #12 AWG wires (1mm<sup>2</sup> to 6mm<sup>2</sup>) The 8mm brazing pin fuses both the stinger and the wire to the substrate.

BAC manufacture a range of 650°C brazing pins, lugs and ferrules suitable for cables from 1mm<sup>2</sup> up to 50mm<sup>2</sup>. All BAC brazing pins are manufactured to the highest standards to ensure a safe, consistent and reliable connection.

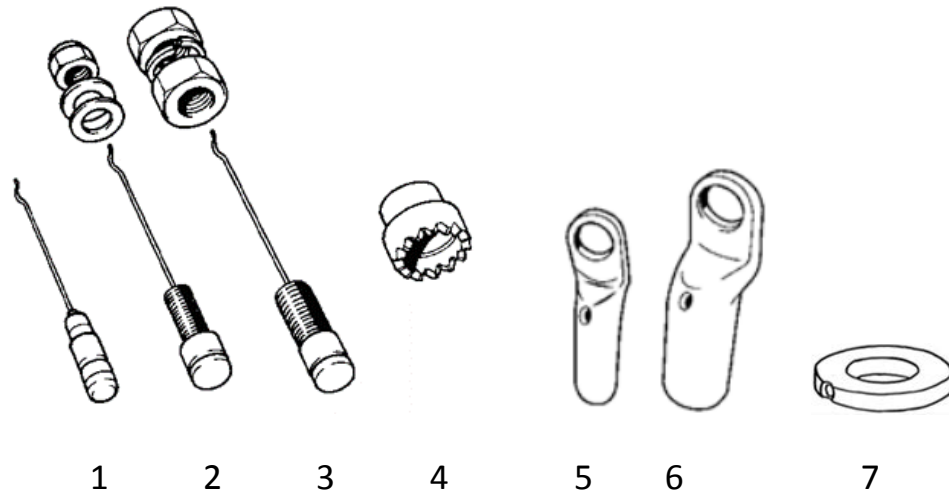


BAC produce a factory made integrated cable bond whereby the cable strands form part of the cable lug so that the cable and the lug are both pin brazed onto the substrate negating the need for a mechanical crimp.



Cross section of 8mm brazing pin and integrated Bond.





**BRAZING PINS WITH FUSE WIRE**

**1, 2 & 3**

Part #	Description
278 190 3250	8mm Direct Brazing Pin.....(Min Pack size 100)
270 083 3520	8mm Direct Brazing Pin Extra Solder B...(Min Pack size 100)
278 190 0430	M8 Threaded Brazing Pin.....(Min Pack size 50)
278 190 3450	M10 Threaded Brazing Pin.....(Min Pack size 40)
278 190 2560	M12 Threaded Brazing Pin.....(Min Pack size 40)

**FERRULES**

**4**

Part #	Description
270 065 7230	Ceramic Ferrule 8mm for direct pins.....(Min Pack size 100)
270 077 3680	Ceramic Ferrule 12mm for threaded pins...(Min Pack size 50)

**CABLE LUGS - SUITABLE FOR ALL 8MM DIRECT BRAZING PINS & FERRULE**

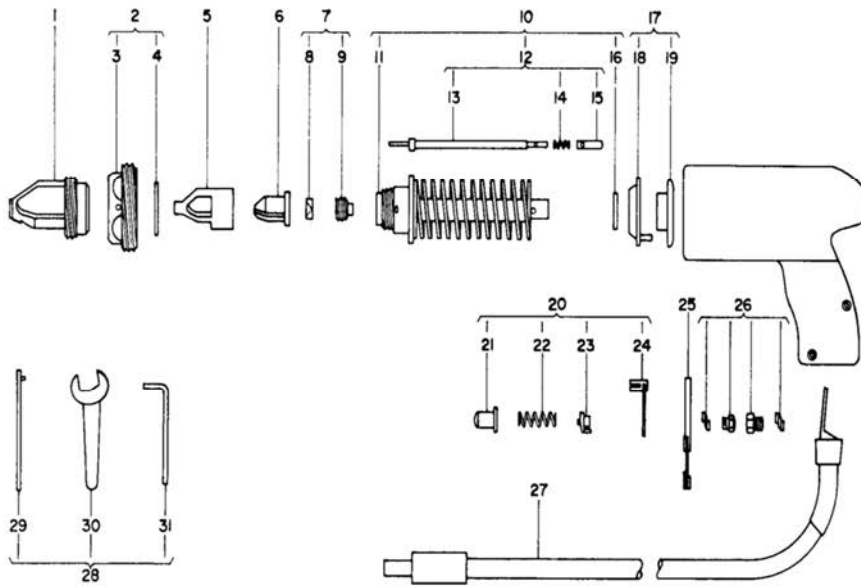
**5 & 6**

Part #	Description
278 100 7360	Cable lug 10mm <sup>2</sup> cable.....(Min Pack size 100)
278 100 9000	Cable lug 16mm <sup>2</sup> cable.....(Min Pack size 100)
270 088 7800	Cable lug 25mm <sup>2</sup> cable.....(Min Pack size 50)
278 100 7810	Cable lug 35mm <sup>2</sup> cable.....(Min Pack size 50)
270 088 7790	Cable lug 50mm <sup>2</sup> cable.....(Min Pack size 50)
278 100 9890	Cable lug # 6 - #8 AWG cable.....(Min Pack size 50)
278 100 8590	Sleeve 2.5mm <sup>2</sup> t/s 278 100 7360.....(Min Pack size 100)
278 100 8750	Sleeve 4mm <sup>2</sup> t/s 278 100 7360 .....(Min Pack size 100)
278 100 9270	Sleeve 6mm <sup>2</sup> t/s 278 100 7360 .....(Min Pack size 100)

**CONNECTION KITS - STINGER - INDIVIDUAL & KITS**

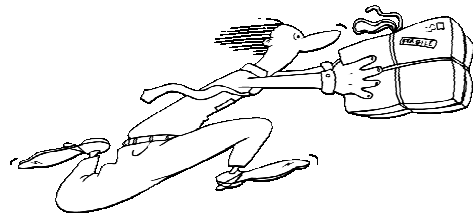
**1 & 7**

Part #	Description
278 100 8012	Stinger #12 AWG to suit 1 - 2.5mm <sup>2</sup> cable (Pack size 100) 2 hole
278 100 8042	Stinger #10 AWG to suit 4 - 6mm <sup>2</sup> cable (Pack size 100) 2 hole
278 100 8050	Stinger #12 AWG kit comprising 2781008010 #12AWG Stinger (50), 2781903250 Brazing pin (50) & 2700657230 Ferrule (50). Pack size 50.
278 100 8060	Stinger #10 AWG kit comprising 2781008010 #10AWG Stinger (50), 2781903250 Brazing pin (50) & 2700657230 Ferrule (50). Pack size 50.



Item #	Part #	Description	Item #	Part #	Description
	273 199 0780	Standard brazing gun BB1/ Easybond MKII	7	273 190 0570	Contact nipple and washer (5 pack)
1	270 074 8150	Ferrule holder for 8mm direct brazing pins	10	273 074 8220	Centre piece complete
	273 100 0560	Ferrule holder for M8 threaded brazing pins	12	273 190 0580	Ejector rod complete
	273 100 1240	Ferrule holder for M10/M12 threaded brazing pins	16	270 071 5340	Remanence washer
2	273 190 0560	Front piece complete with locking ring	17	273 190 0590	Conductor ring and insulating ring
4	270 074 8160	Locking ring	20	273 190 0600	Trigger assembly
5	270 071 5600	Pin holder for 8mm direct brazing pins	25	270 071 5700	Contact arm
	273 100 0550	Pin holder for M8 threaded brazing pins	26	273 190 0110	Contact set complete
	273 100 3870	Pin holder for M10 threaded brazing pins	27	273 190 1310	Cable 35mm sq. 2.7m long
	273 100 1230	Pin holder for M12 threaded brazing pins	28	273 190 0610	Tool kit
6	270 071 5610	Spark shield			

*All Easybond MKII equipment, consumables and spare parts are normally ex stock and ready for same day delivery at our UK facility and at authorised distributors world wide.*



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