## THE EASYBOND <br> PIN BRAZING SYSTEM



## "The ultimate electrical bond"

## PIN BRAZING

## 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 it's 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 $2.8 \mathrm{~m}(9 \mathrm{ft})$ depth.


Threaded and Direct types of Pin Braze connections

## BENEFITS

- Speed of connection Takes around 60 seconds for 1 connection.
- Low Temperature

The low meting point $\left(650^{\circ} \mathrm{C}\right)$ 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


## PIN BRAZING EQUIPMENT AND ACCESSORIES

PIN BRAZING

## THE COMPLETE EASYBOND MKII PIN BRAZING SYSTEM



EXTENDED GENERATOR GUN


STANDARD GENERATOR GUN


BATTERY PACK AND CARGE ADAPTER


TROLLEY FOR POWER UNIT



18v DIE GRINDER


IN CAR CHARGER

## EASYBOND MK II SYSTEM

| Part \# | Description |
| :--- | :--- |
| 2731995660 | Complete Easybond MKII unit (including all the following components) |
| 2731995610 | Power Unit for Easybond MKII complete with battery pack |
| 2731990780 | Easybond Gun |
| 2700715600 | Pin holder for 8mm direct braze pins |
| 2700748150 | Ferrule holder for 8mm direct braze pins |
| 2731900610 | Toolkit |
| 2731995020 | Battery charger ELITE 110/230v supply |
| 2731901360 | Earth device |
| 2731904680 | Attaché case |
| 2789001900 | Manuals and training video on CD |

## OPTIONAL ACCESSORIES FOR EASYBOND II

## Part \# Description

2731990685
2731901370
2731995040
2731995640
2731901460
2731004825
Grinding burr

Die Grinder, c/w $2 \times 18 \mathrm{~V}$ batteries, case and fitted with burr
Battery charger 12 V supply - In Car Charger
Spare Battery Pack- sealed type, (c/w $3 \times$ batteries, harness, connector \& charge adaptor )
Extension Cable 2.5m length
Trolley for EBII Power Unit

GENERATOR BRAZING GUNS

## Part \# Description

2731990240
2731995230
Gun VF2300-ESAB c/w 8mm direct Pin \& Ferrule Holder
Gun VF2300 Extended c/w 8mm direct Pin \& Ferrule Holder

## EASYBOND REACH SYSTEM (EBRS)

Part \# Description
2731995100
2731995060
EasyBond Reach System (including all the following components)
2700715600
Gun \& Long Reach Extension c/w earth device
2700748150
Pin holder for 8 mm Direct brazing pins
Ferrule holder for 8 mm direct braze pins
2731995070
Trigger Device
$2731995090 \quad$ Grinder Conversion Kit
$2739000280 \quad$ Grinding Disk Holder
$2739000290 \quad$ Grinding Disks (100 Pack)
Items also required that are common to Easybond Unit:
2731995610
Battery Box unit for Easybond II complete with battery pack
2731990685
Die Grinder, c/w $2 \times 18 \mathrm{~V}$ batteries, case and fitted with burr
2731995020
Battery charger $110 / 230 \mathrm{v}$ supply

## PIN BRAZING consumables



Stinger connection is suitable for \# 10 \& \#12 AWG wires ( $1 \mathrm{~mm}^{2}$ to $6 \mathrm{~mm}^{2}$ ) The 8 mm brazing pin fuses both the stinger and the wire to the substrate.
BAC manufacture a range of $650^{\circ} \mathrm{C}$ brazing pins, lugs and ferrules suitable for cables from $1 \mathrm{~mm}^{2}$ up to $50 \mathrm{~mm}^{2}$. 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 8 mm brazing pin and integrated Bond.



| Item \# | Part \# Description | Item \# | Part \# | Description |
| :---: | :---: | :---: | :---: | :---: |
|  | 2731990780 Standard brazing gun BB1/ Easybond MKII | 7 | 2731900570 | Contact nipple and washer |
| 1 | 2700748150 Ferrule holder for 8 mm direct brazing pins | 10 | 2730748220 | Centre piece complete |
|  | 2731000560 Ferrule holder for M8 threaded brazing pins | 12 | 2731900580 | Ejector rod complete |
|  | 2731001240 Ferrule holder for M10/M12 | 16 | 2700715340 | Remanence washer |
| 2 | 2731900560 Front piece complete with locking ring | 17 | 2731900590 | Conductor ring and |
| 4 | 2700748160 Locking ring | 20 | 2731900600 | Trigger assembly |
| 5 | 2700715600 Pin holder for 8 mm direct brazing pins | 25 | 2700715700 | Contact arm |
|  | 2731000550 Pin holder for M8 threaded brazing pins | 26 | 2731900110 | Contact set complete |
|  | 2731003870 Pin holder for M10 threaded brazing pins | 27 | 2731901310 | Cable 35 mm sq. 2.7 m long |
|  | 2731001230 Pin holder for M12 threaded brazing pins | 28 | 2731900610 | Tool kit |

62700715610 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.

# LIBERTY SALES \& DISTRIBUTION 

2880 Bergey Road, Suite F, Hatfield, PA 19440
19 West Maiden Street, Washington, PA 15301
Phone: (877) 373-0118 Fax: (888) 850-3787
Email: sales@libertysales.net web:www.libertysales.net
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