

## PinBrazing

Cable Bonding System for  
Cathodic Protection and Grounding



*SilverLine*<sup>®</sup>

Safetrack application methods always use materials of the highest quality to ensure the best electrical conductivity, corrosion resistance and strength.

# PinBrazing

Cable Bonding System for Cathodic Protection and Grounding



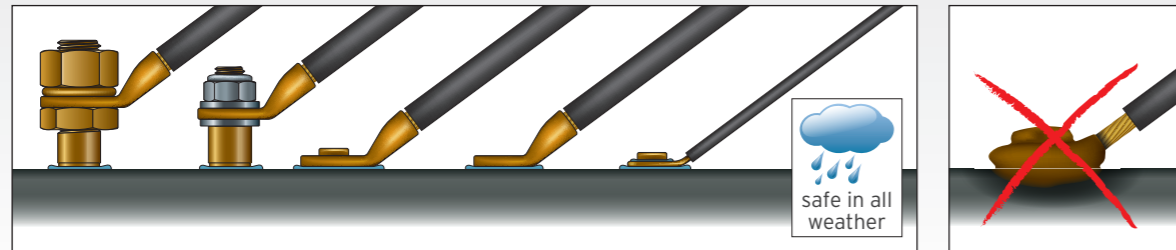
## PinBrazing - makes your installations in any weather!

### SAFE TRACK patented PinBrazing method offer:

Safe electrical connections to steel structures within Cathodic Protection systems such as pipelines, vessels, reinforcement bars, etc. No use of burning materials as with thermite welding.

### Safe in all weather conditions

With SAFETRACK battery driven electronic Pinbrazing Method you can do your installations in any weather, any time - rain and snow is no more a problem. No risk for the operator.

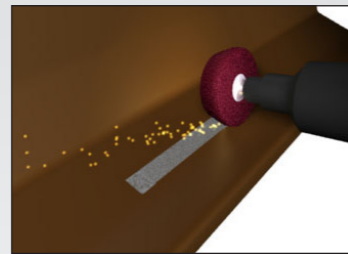


Brazing process - No melting of the work material

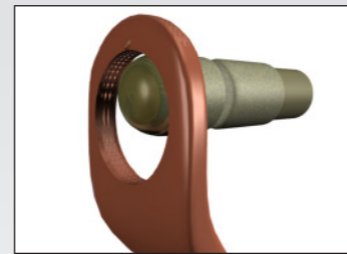
Not welding

## PinBrazing - procedure

The Safetrack PinBrazing method is fast and easy to use. Just follow these simple steps, to ensure a perfect brazing result each time.



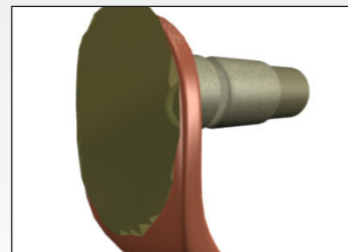
1 Preparation - grind for the ground magnet and the brazing area.



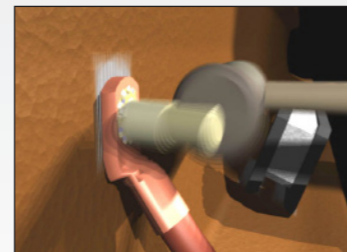
2 Pull the trigger - the brazing starts.



3 The capsule of the brazing pin opens. A special flux powder cleans the surface.



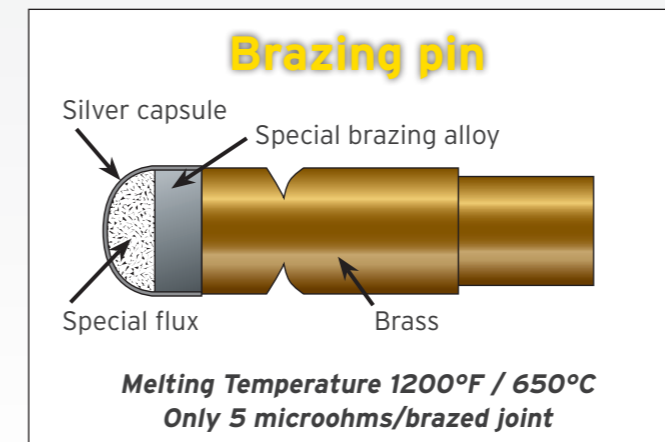
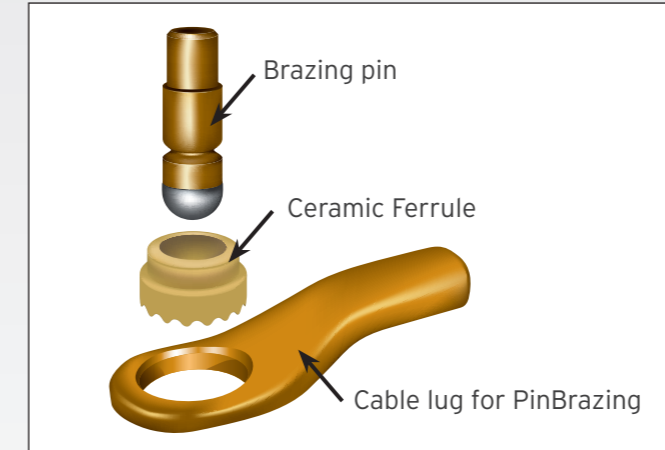
4 The silver soldering material melts and the process is automatically finished.



5 Knock off the control shaft on the brazing pin with a hammer.

## PinBrazing vs Thermite Welding

- **Fast** - The PinBrazing process takes only a second and the whole preparation takes less than a minute.
- **Does not affect internal coatings**
- **Safe for the material** - Does not melt the work material as exothermic methods (thermite) does. Just a thin layer of silver is applied between the pipe and the cable wires.
- **Suitable for use on pipe lay barge** - No need for special moulds.
- **Safe for the operator** - battery driven 36V DC system and no hazardous materials.
- **Strong, molecular connection** - Silver assure a strong molecular binding with the lowest possible transition resistance.
- **Easy, automated process** - Just pull the trigger and the automatic 1-second-process do the job.



## Our own production and R&D

We work in close cooperation with our clients to offer the most suitable method for connecting their electrical cables.

### Research and development

Safetrack is constantly working to improve and develop the methods for connecting cables. Our facilities includes necessary test equipments for cold chamber tests, fatigue tests and other instruments for metallurgical studies.



SnakeBite® - New patented PinBrazing connection for connecting anode leads without cable lugs.

## Safetrack Rail Bonding Technologies



Safetrack Baavhammar AB, the leading manufacturer of electrical connection systems for Railways, Grounding and the Cathodic Protection Industry. With systems such as PinBrazing, Safe-Plug®, SafeBond® in our assortment we can supply any of the modern cable application method to our clients.

For more information about our solutions for Rail Bonding Technologies, please visit: [www.safetrack.se](http://www.safetrack.se)

## ECONECT

### Digital PinBrazing Unit

This unit reaches a whole new level of performance.

- **High capacity** - 50 brazings / charging
- **Green** - Lithium Ion battery, long life and lead-free. Recharged in 2h.
- **Digitized** - Even safer brazings
- **Constant Energy Control System** (Patent)
- **Automatic Brazing Gun** (Patent)
- **Grinder/Tool Case /Grounding Device**
- **System Voltage** - 36V DC
- **Lightweight** - Only 9,8 kg (21,6 lb), 60% lower weight
- **Ergonomic** - easy to carry



## S30 X/C

### Electronic PinBrazing Unit

The patented S30 X/C is a small and portable pinbrazing unit made specially for cathodic protection installations.

- **Brazing Capacity**  
40-60 Brazings per charge
- **Constant Energy Control System** (Patent)
- **Automatic Brazing Gun** (Patent)
- **Grinder/Tool Case/Grounding Device**
- **System Voltage** - 36V DC
- **Weight** - 22-25 kg (48-55lb)



## S300

### Electronic Pin brazing Unit for use with welding machine

When a large numbers of brazings is needed such as for pipe coating yards, lay barges, off shore etc. Then the S300 unit can be used.

- **Powered** by welding inverter (not incl.)
- **Automatic Brazing Gun** (Patent)
- **Grounding Device**
- **Required power supply**  
250-300A
- **Weight** - 6,5kg (14lb)



## Accessories & Consumables



Batteries, battery chargers, brazing pins, ferrules and a large assortment of different jumper bonds or cable lugs, brazing sleeves etc.

To see our wide range of accessories and consumables, please visit:

**www.safetrack.se**

## References

During several decades have we supplied material for over 60 millions of connections spread in over 45 countries worldwide.

- **Acergy** (Pipelaying vessels), USA
- **Nord Stream**, Russia-Germany
- **CABGOC** (Chevron), Angola, Africa
- **Exxon Mobil**
- **Subsea 7** (Pipelaying vessels)
- **SAIPEM**, Kazakhstan

## Safetrack Baavhammar AB

L. Moelleberga  
S-245 93 Staffanstorp, SWEDEN

Tel. +46 (0)40 44 53 00  
Fax. +46 (0)40 44 55 53  
e-mail: cathodic@safetrack.se

www.safetrack.se