

## **Electronic PinBrazing**

**Fast and reliable  
cable bonding system**



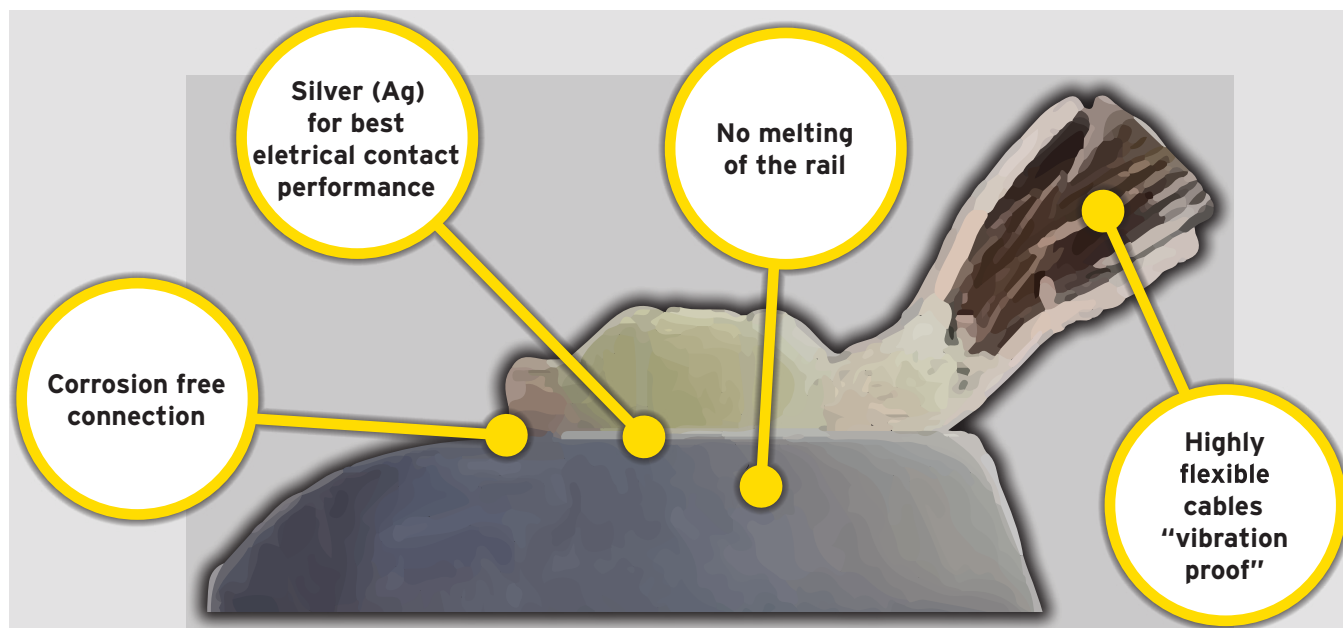


# PinBrazing

Track record with over  
100 million safe connections.

## Connect cables, fast and safe

Safetrack® patented electronic PinBrazing system is an extremely efficient, low temperature arc brazing method used for attaching electrical connectors to steel structures such as rails, without the need for drilling holes or welding. It is ideal for connecting cables for signaling, grounding and return/power but can also be used for connecting heat elements and cable clips.



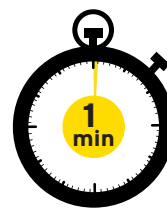
### Weather proof

With Safetrack's patented PinBrazing system you can complete your installations in any weather, any time. Rain or snow is no longer a problem.



### Safe for the user

No exothermic reaction and no risk for steam explosions. Our PinBrazing method is safe for the operator and safe for the rail.



### 1-minute process

The reduced time on site not only makes this method very cost efficient, it minimizes the risk to operators from being trackside.

### Ergonomic & Economical

- Automated brazing gun (patent)
  - No adjustment needed
- No special training needed
- Lightweight & easy to carry

### Reliable

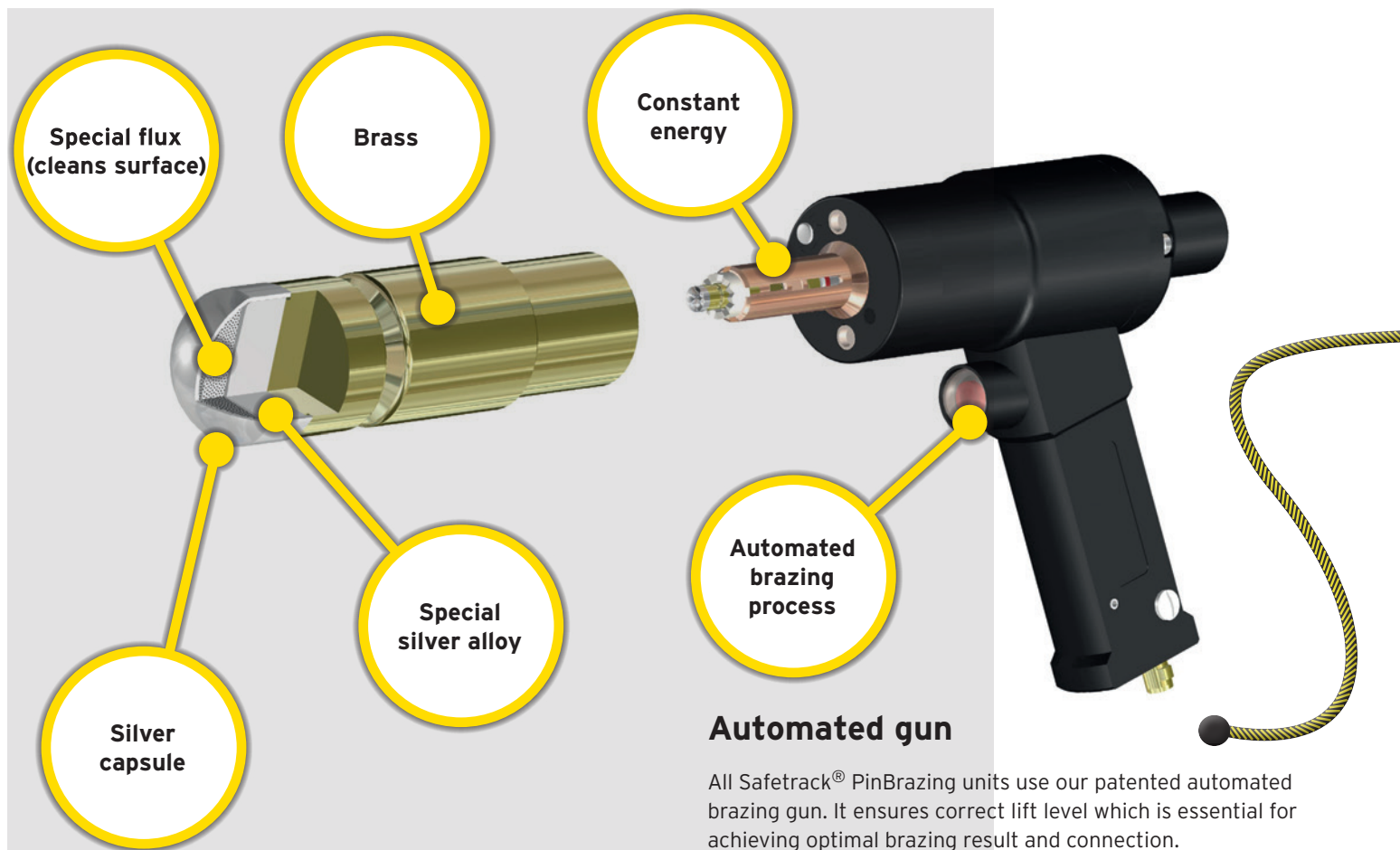
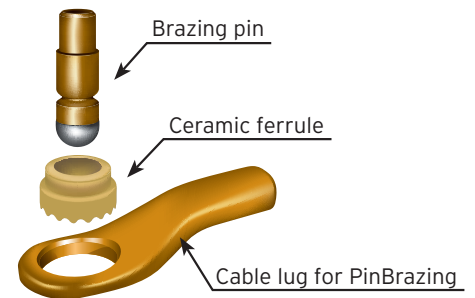
- Over 70 years of track record
- Lowest possible transition resistance, only 5 micro ohms/brazed joint
- Secure connection every time
- Constant Energy Control System (patent)
- Used in over 65 countries worldwide
- Stronger connection than the cable itself

### Safe for the rail

- Low temperature - Melting point of the silver alloy 650°C/1200°F
- Safe for the operator
- Enables broken rail detection
- No welding, no drilling
- No noise
- Battery powered

# The process


Grind the surface, attach the grounding device and prepare the gun with the brazing material. Pull the trigger and the equipment will distribute an exact amount of energy (patent) to the brazing pin. The flux cleans the surface and the special silver alloy melts onto the connected material and surface. In 1 second, you have created an extremely efficient and reliable silver connection.

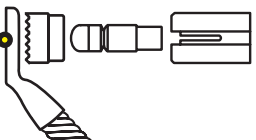


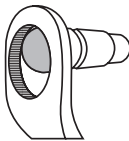
## Automated gun

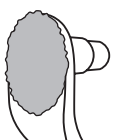
All Safetrack® PinBrazing units use our patented automated brazing gun. It ensures correct lift level which is essential for achieving optimal brazing result and connection. Our brazing gun is lightweight, easy to use and requires little to zero maintenance.

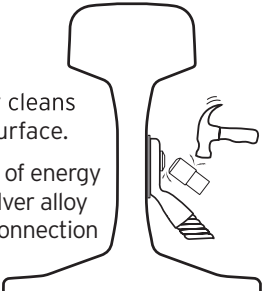
## Step by step

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1. Clean the brazing & grounding area with a grinding machine (special pin required).
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2. Attach the ground device and point the prepared material to the grinded brazing area.
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3. Pull the trigger. The pin lifts and creates an arc. The special flux powder cleans and prepares the surface.
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4. An exact amount of energy (patent) melts the silver alloy and completes the connection in 1 second.
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5. Finish by knocking off the control shaft of the brazing pin with a hammer. You have now created an extremely efficient and reliable silver connection.

# PinBrazing equipment

What separates Safetrack® PinBrazing systems from other brands is the patented properties: Constant Energy, Automatic brazing devices, easy handling and low to no need for maintenance.

## ECONECT®

- a whole new level of performance.

- **High capacity**  
60 brazings per charge  
1h Recharge
- **Battery powered**  
Nano Li-Ion, long life and lead-free.
- **Digitized**  
Same perfect brazing result everytime (patent)
- **Lightweight**  
Only 9,8 kg (21,6 lb)
- **Automatic Gun**  
Self adjusting (patent)
- **Prepared for SafeBond®** (patent)
- **Part no. 94350**  
Cpl. set with grinder  
Add charger:  
8048 (for 110-230V)  
80561 (for car use)



### S30 X/C

Electronic PinBrazing equipment

- 40-60 brazings per charge
- Constant Energy (Patent)
- Automatic Brazing Gun (patent)
- Rail wheels & Tool box can be fitted
- Part no. 9307 Cpl. set with grinder  
Add charger 8049 (for 110-230V)  
or 8055 (for car use)

### S300

Electronic PinBrazing equipment

- For use with a welding inverter, no batteries.
- Unlimited capacity
- Constant energy
- Automatic Brazing Gun (patent)
- Part no. 93807 (Add inverter RW674010 & grinder 593070)

### S101

Electronic PinBrazing equipment

- 100 brazings per charge
- Constant energy
- Automatic Brazing Gun (patent)
- Insulated rail & rubber wheels
- Part no. 9060 Cpl. set with grinder  
Add charger 8049 (for 110-230V)  
or 8055 (for car use)



### Quality - Tested & Approved

Safetrack material is thoroughly tested by third party, on site and in our own laboratory for corrosion resistance, fatigue tests etc.

Safetrack is  
ISO 9001 certified.



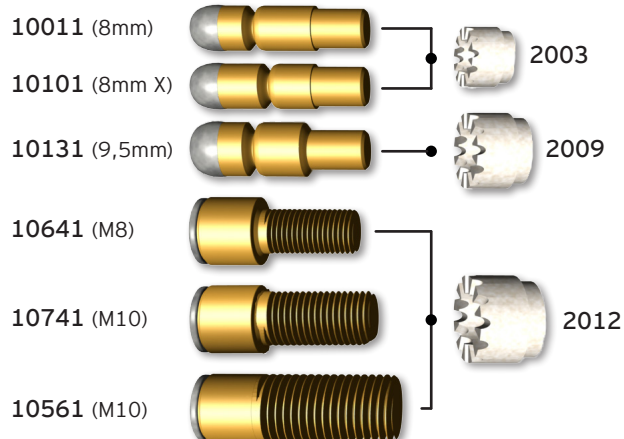
# Consumables

a selection for all needs and situations

## T-connectors



## Brazing pins & ferrules



## Pinbrazing clamps



## Rail bonds & connectors



## Installation examples



## Accessories



### Grounding Magnet

Powerful, Switchable  
Complete device with cable  
● 80730



### Grounding Grip

For non-magnetic material  
No need to grind first  
● 8071



### Insulation Bag

For Econect  
Increased capacity in even colder weather  
● 937005



### Angle Gun

For PinBrazing in crossings  
● 910151



### Carrying Harness

For Econect  
Complete with holster  
● 93690



### Handy

Cart for S30 X/C  
Rail wheels + tool box  
● 9361



### Ring Holder

● 9202 for 8-9,5 mm pin  
● 9204 for M8-M12 threaded pin



### Pin Holder

● 9211 for 8-9,5 mm pin  
● 9213 for M8 threaded pin  
● 9215 for M10 threaded pin  
● 9217 for M12 threaded pin



### Extended Pin & Ring Holder

PinBrazing in narrow spaces  
● 9227 for 8-9,5mm pin  
● 9229 for M8-M12 threaded pin

## Leading manufacturer of patented electrical cable connection system

Safetrack Baavhammar AB, founded 1988, is the leading manufacturer of electrical cable connection systems for the Railway, Grounding and Cathodic Protection Industry. With systems such as PinBrazing, SafePlug®, SafeBond® and temporary rail cable clamps in our assortment, Safetrack supplies all the modern cable application methods to clients in more than 65 countries.

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

### References



**For all enquiries please contact your nearest Cable Services branch:**

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