PANDROL
Partners in excellence

WEL-D'STRESS® Hammer

Aluminothermic Welding

Pandrol developed the WEL-D'STRESS® hammer to improve the fatigue resistance of aluminothermic welds.

The WEL-D'STRESS® system introduces residual stresses of compression and prevents the appearance of fatigue stains when traffic is intense. The hammering procedure involves using the hammer for one minute from the web/head connection to the tip of the foot on either side of the collar (i.e. a minimum of four minutes for one weld).

When traffic is heavy, fractures can occur in welds in sensitive areas within six months of welding. Use of the WEL-D'STRESS® hammer completely removes this risk. Customers using the equipment since 2007 have found that the life expectancy of welds in high-traffic areas is identical to that of the rail.

TECHNICAL FEATURES

Pneumatic system
The WEL-D'STRESS® hammer is a pneumatic system.

Usable with cold and hot welding
WEL-D'STRESS® can be used with aluminothermic welds from ambient temperature up to 300°C maximum.

Designed for ease of use
The equipment has been designed to be extremely easy and intuitive to use.

Compact size
The kit is compact and easy to carry. It comes in a strong case, certified IP67.

Versatility
The WEL-D'STRESS® hammer can be used on all types of rail and very high traffic networks. This includes heavy haul lines and intense urban traffic networks, such as RER and Metro.

ADVANTAGES

- Using the WEL-D'STRESS® hammer results in a very significant increase in the length of time before an aluminothermic weld shows signs of fatigue.
- Less maintenance is needed – the life expectancy of welds in high traffic areas is identical to that of the rail.
- As a result, maintenance costs are reduced and the system offers optimised life cycle cost (LCC).
- There is increased availability of the infrastructure.
- The WEL-D'STRESS® hammer is easy to transport and use.
- The equipment is efficient and effective for welding on all types of rail and very high traffic networks.

COMPONENTS

1. Hammer
2. Supply hose to the hammer (5m)
3. Magnetic and telescopic LED lamp
4. 13 & 26 spanners

5&6. Plastic containers with long and short chisels

7. Tool holder

HAMMERING PROCEDURE

Hammer for one minute from the web/head connection to the tip of the foot on either side of the collar (i.e. four minutes minimum for one weld).

Web/head connection hammering.

Hammering zones.

Hammering at the tip of the foot.

LEARN MORE

www.pandrol.com