

# Startwel<sup>®</sup> Ignition System

Aluminothermic welding



The Startwel<sup>®</sup> Ignition System is a new, easy way for welders to ignite the weld charge to initiate the pour process of the Pandrol aluminothermic weld. It has been developed and patented by Pandrol to replace the traditional 'sparkler' igniter design.

The ignition system is engineered to fit precisely into the round opening in the lid of the Pandrol crucible. Once the crucible is prepped and ready to pour, Startwel<sup>®</sup> can be placed in the lid and deployed safely by removing the metal clip grounding the prongs. On ignition, a drop of molten metal falls inside the crucible and causes combustion of the aluminothermic charge.

## → TECHNICAL FEATURES

### **Crucible compatibility**

Startwel<sup>®</sup> works with both the Pandrol One-Shot crucible and disposable crucible.

### **Designed for ease of activation**

The system is activated by touching the prongs on the starter handle with those on the starter, initiating a small electrical charge.

### **Consistent ignition point**

Once activated, the Startwel<sup>®</sup> Ignition System thimble ignites and drops a small amount of liquid charge onto the top of the weld charge inside the crucible, safely and consistently initiating the pour process.

### **Long-lasting battery**

The system uses a reliable lithium-ion battery. Over 100 starters can be ignited on one battery charge.

### **Ergonomic design**

The Startwel<sup>®</sup> handle has been designed for efficiency and comfort. The system is packed in a compact and lightweight suitcase.

### **Non-hazardous classification**

Startwel<sup>®</sup> cannot be activated until the pin is removed. As a result, it has a non-hazardous classification.

## → ADVANTAGES

- The Startwel® Ignition System guarantees constant and reliable ignition.
- Because the ignition point is always in the same place, welds are consistently precise.
- Startwel® improves aluminothermic welding safety for track technicians.
- It is lightweight and compact for technicians to carry on site and is easy and comfortable to use.
- Its non-hazardous classification for transport means that it is safe for standard shipping.



## → COMPONENTS

1. Startwel® handle
2. Rechargeable battery
3. Startwel® thermic starter 10 pack
4. Lithium-ion battery charger
5. Metal protective case

## → PROCESS OVERVIEW



- Check the battery charge by pressing the button and looking at the LED indicator
- Remove the pin from the thermit starter



- Insert the starter into the hole in the lid of the crucible.



- Press the prongs of the Startwel® onto the thermit starter
- Press and hold the trigger until ignition
- The pour process has initiated when the red light becomes visible

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