## PANDROL



STARTWEL®
Electrical
Ignition System

**OPERATION MAINTENENCE MANUAL** 



**Issue 06**1st February 2019

Partners in excellence



## **STARTWEL® Electrical Ignition System**

STARTWEL® is the electrical ignition system for aluminothermic welding charges, developed and patented by Pandrol.

It has been designed to guarantee constant and reliable ignition.

In addition to the quality STARTWEL® brings to welding, it also makes work safer for track technicians.

On ignition, a drop of molten metal falls inside the crucible and causes combustion of the aluminothermic charge.

The ignition point is always in the same place, thus obtaining reliability and constancy in weld repetition.

#### **CAUTION**

The charge must always be horizontal in the crucible



## 1. Conditions for Use and Storage

#### 1.1 Storage

Store in the original packaging, in a dry and adequately ventilated room. Keep away from heat, sparks, flames and any source of ignition. Do not expose thermic starters to electric current.

#### 1.2 Safety and Use

The safety pin must imperatively remain "clipped in" and be removed only during use.

Use only the STARTWEL® electric handle to power up the starter. The thermic starter can only be powered up when it is in a housing appropriate for its use. Use only for ignition of an aluminothermic charge, to the express exclusion of any other use. Risk of burning in the event of improper use.

#### **1.3** Fire

The molten steel produced by the aluminothermic reaction may cause violent projections on contact with snow, ice, water, damp floors or frost.

In the event of a fire, use dry sand to the exclusion of any other product.

#### **WARNING**

It is strictly forbidden to use water to put out a fire caused by the aluminothermic portion.



# 2. Using the STARTWEL® Electrical Ignition System

Figure 1:

LED	Capacity	
	> 2/3	
	> 1/3	
	< 1/3 Reserve	
⊕ LED		

Check the battery charge status by pressing the button (LED indicator)

Figure 2:



Flashing green LED = recharge the battery

Figure 3:



If the cap is a filter cap, use a tool to clear the position provided for the starter.

Figure 4:



Remove the pin from the starter.

#### **NOTE**

This operation must be carried out away from the crucible.



Figure 5:



Insert the starter in the hole in the cap.

Figure 6:



Position the ignition indicator so that it is visible.

Figure 7:



Place the electrodes of the electric handle on the terminals of the STARTWEL® starter.

Figure 8:



Press and hold the trigger until ignition.



Figure 9:



Charge has started when the red light becomes visible.

#### **WARNING**

Do not use the electric trigger on the STARTWEL® starter with the pin in place or on any conductive surfaces: Copper, Aluminium, Steel, etc.

Figure 10:



Figure 11:





# 3. Components of the STARTWEL® kit

Figure 12:



	Component	Part N°	PADS N°
	StartWel® (Ignition System Complete case)	73-00-82632507	0046/014969
1	StartWel® Handle (only)	82632509	0046/014962
2	Rechargeable battery	82632504	0046/014964
	Complete Handle (Starter+battery)	82632503	0046/014963
3	StartWel® Thermic Starter 10 pack	71-00-82632501	0046/014965
	StartWel® Thermic Starter 100 pack (10x10)	71-00-82632502	0046/014966
4	Li-Ion Battery Charger		0046/014967
5	StartWel® metal case (only)	82632506	0046/014968

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