

# SAFETY ALERT No. SA 02/2016

Please can line managers brief their teams on this alert



## UPS Incident

### Details of incident:

On Friday 1 July a Production Technician was injured whilst installing a UPS at one of our sites. These injuries were so significant that the technician required hospital treatment.

The UPS being installed was a RIELLO Sentinel Pro UPS and battery box.

Whilst connecting the UPS to the battery box the production technician noticed a fault code (F60) appearing on the UPS. He then powered down the UPS and continued to disconnect the UPS from the battery box. Whilst carrying out this the UPS exploded and the technician was hit in the chest by the metal casing.



Riello UPS 72V & 36V

### Damaged UPS



### Initial Investigation findings:

The investigation is still ongoing; however the following findings have been identified:

- The UPS was being over charged as identified by the failure code which caused hydrogen and oxygen to be released from the batteries on board the UPS.
- The battery box was 72v and the UPS DC input was 36v at that point the larger battery box rapidly discharged into the smaller battery system on board the UPS.
- The keyed interconnecting cable between the battery box and the UPS was configured to allow the connection between these products.
- The small printed safety manual provided does not mention this potential safety issue or the need to check voltages. This is mentioned within the manual available on a CD provided.

**The investigation is still ongoing and other causes may be identified and shared.**

### What we have learned:

- When connecting UPS systems ensure that nominal voltages are checked to ensure compatibility. **Do not** assume that if the interconnecting cable fits that the products are compatible and safe.
- Always read all the manuals or product information provided before installation.

Further information and guidance can be found at the following:

- <http://www.mpoweruk.com/leadacid.htm>
- <http://electrical.theiet.org/wiring-matters/52/smart-installations/index.cfm>
- <http://www.riello-ups.co.uk/products/1-UPS/44-sentinel-pro>
- <http://www.hse.gov.uk/pubns/indg139.pdf>



Use the reverse to record toolbox talk attendance and email the scan of the signed page to the H&S team on Safety@affinitywater.co.uk  
For further information or advice please contact a member of the H&S team

**We are committed to achieving zero harm**

Ref:

Issued By: Leigh Griffiths

Page 1 of 1

Tel: 07703059491

Date: 5 July 16

Originator: Leigh Griffiths

