## **Arc Flash** (from electrical systems) **Steven Kirk**, **Schneider Electric**

**Arc flash** is typically caused by short circuits: as a result of operational faults, fires, or a build up of conductive material – and **can lead to electric shock**, **extensive burns or death**.

An arc flash may be 'confined' or 'open' and can result in:

- a blast wave
- ejection of molten metal (up to 20,000°c)
- UV radiation
- a cloud of superheated gas

**Arc flash can be prevented / mitigated** by assessing risks and applying controls including:

- Effective, properly maintained electrical distribution systems
- Properly trained staff
- Safe working distances
- Following safety procedures especially distribution system fault diagnosis and working live.
- Wearing appropriate PPE, which offers the correct level of protection for the task

**PPE** (for various activities and levels of risk) is available in the form of workwear that is designed for Arc Flash but should be regarded as the last resort after all other safety steps are in place