

## An Electrifying KTP by Harvey Kangley

#### **AUS LTD**

AUS design, manufacture, supply and repair specialist equipment for the Electrical Supply, Rail, Arboriculture and Telecoms industries.

AUS offer services including design, CNC machining, welding, the inspection and testing of earthing, lifting and fall arrest equipment, as well as training in the safe use of PPE, safety, rescue and earthing equipment. 

#### The KTP's Objective

develop and establish methodologies for Ο innovative product design, analysis and multicriteria optimisation, in a highly constrained design environment.

To apply the new methodologies to the design of novel products for rail electrification and the electrical supply industry

#### The Motivation

AUS Identified a knowledge gap that a KTP could solve. Gaining this knowledge would enable AUS to fully develop new products in house and meet customer approval requirements to commercialise the new products.

Ultimately, AUS wanted to utilise their knowledge and contribute to the modernisation of the UK's railway and electrical supply infrastructure.



**25 New Products (so far...). Examples Include:** 

A) A patented method of connecting composite (FRP) profiles that provides a viable and competitive alternative to steel/concrete, in structural applications, with a carbon benefit >50%, mass reduction >60%, minimal maintenance requirements, and electrical insulation.

**B)** Devices to prevent the disruptive failure of electrical Link Boxes and ultimately protect the public from exhibit 'C'



#### **New Components for Rail Electrification:**

AUS have successfully developed a of optimised mechanical range components to replace electrification components that were designed as early as 1960. Benefits Include:

- Reduced component count & mass
- Improved reliability & whole life cost for the customer
- Reduced environmental impact

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## **The Innovation**







**Stage 4: Commercialisation** 

**Final (Project) Review Meeting** 

#### More on this **KTP**:







**Publicity Article** 

### Knowledge Transfer **Partnerships**

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