

PROJECT

FanBrake

High heat dissipating Brake for heavy duty vehicles through an enabling annular disc Fan effect (FanBrake)

Funding: European (Horizon 2020)

Duration: Jun 2015 - Oct 2015

Status: Complete

Total project cost: €71,429

EU contribution: €50,000



Call for proposal: H2020-SMEINST-1-2014

[CORDIS RCN : 196431](#)

Objectives:

Europe's heavy goods vehicle market is a major contributor to the economy with a total production of 616,000 vehicles at a market value of €61 billion and 241,000 new registrations per year (2013). Hence, it is expected that safety of the people, goods and vehicles involved is critical. Yet, in 2011, HGVs and Lorries accounted for 1,317 fatalities, most of which were drivers.

A major factor contributing to the poor safety record of HGVs is the limited ability of their brakes to remove heat at a sufficient rate to avoid brake fade, a condition where the thermal capacity of the brake has been exceeded and the brake operates at reduced effectiveness or failure. FanBrake aims to address these limitations through a the development of a high heat dissipating brake that will remove heat at a faster rate than brakes that are currently used, thereby improving the safety performance of HGVs.

The result of the proposed project has the potential to significantly improve safety, provide light weighting benefits and reduce cost through reduced number of brakes installed and component replacements in HGVs. Other potential applications for FanBrake include rail and construction vehicles.

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Fennaco Ltd

Address:

7-9 NORTH PARADE BUILDINGS

BATH

BA1 1NS

United Kingdom

EU Contribution: €50,000

Technologies:

Road vehicle design and manufacturing
High heat dissipating brake system

Development phase: Research/Invention

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Road transport

Transport sectors: Freight transport

Transport policies: Safety/Security

Geo-spatial type: Other