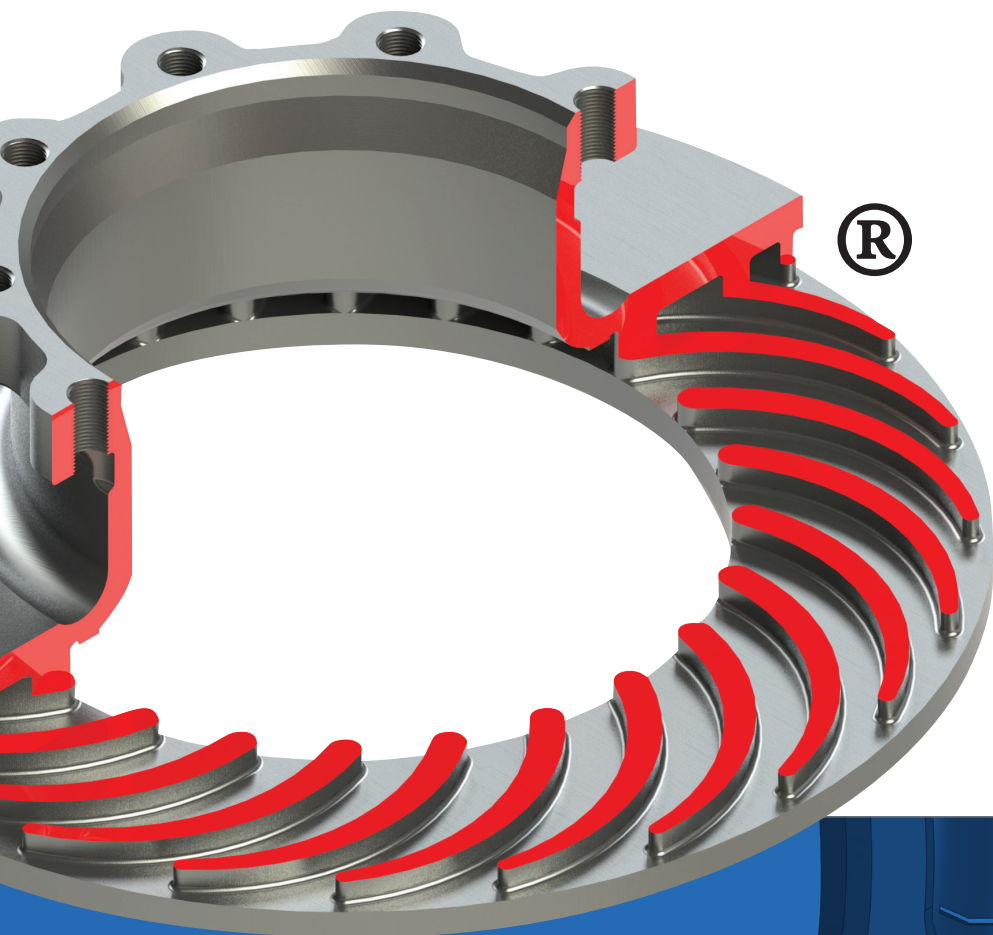


Introducing an Innovative Brake Disc for Commercial Vehicles

The size, weight and heavy working load of commercial vehicles means they are particularly prone to disc failure, however, we have introduced a more innovative Brake Disc that solves the problem and saves money.



FirstLink Auto Parts Ltd is one of the UK's leading after-market suppliers of brake components.

We have been exporting to mainland Europe, Africa and Australia since 1990.

Our products include brake discs/rotors, brake pads, brake drums, brake shoes, brake chambers and slack adjusters for commercial and off-road vehicles.

What really sets us apart is our state-of-the-art in-house R&D facility. If you need a precision engineered, premium quality alternative part, then we will work closely with you to develop a bespoke, exclusive product from idea through specification, production and delivery. This results in a range of high quality, lower cost products designed and supplied exclusively for you.

The discs, drums, pads and shoes are made to premium brand formula and comply with the new ECE90 regulation. Our brake chambers are also high quality and comply with industry standards SAEJ1469.

We have been the sub-contractor for First Bus UK for all their bus disc requirements since 2009. In addition we have also supplied discs & drums to all the major commercial vehicle brands for many years.

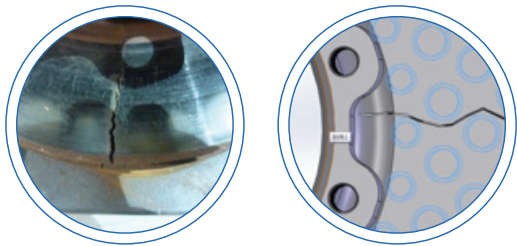


Racing Car Turbine Vent Design for Commercial Vehicle Brakes

The Problem

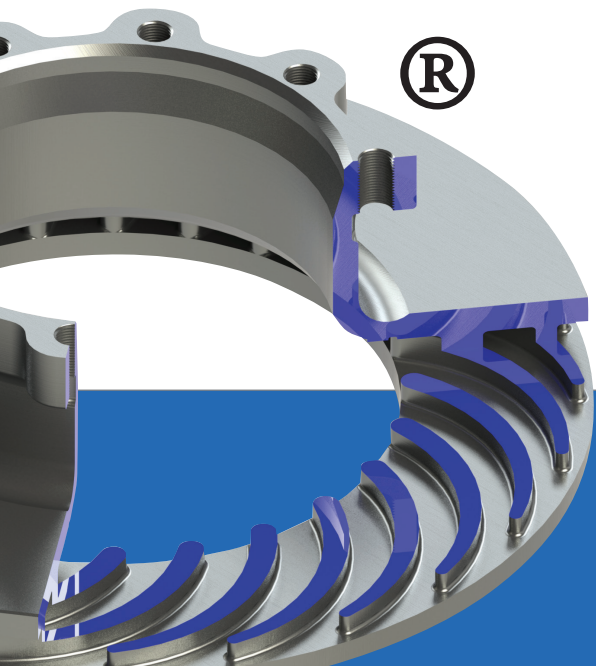
Nearly 85% of road accidents are caused by brake failures.

Brake discs work to slow or stop a vehicle by providing a friction force against the rolling motions of the wheels. At the same time however, the discs are subjected to major compressive and tangential loads along with severe frictional heating.



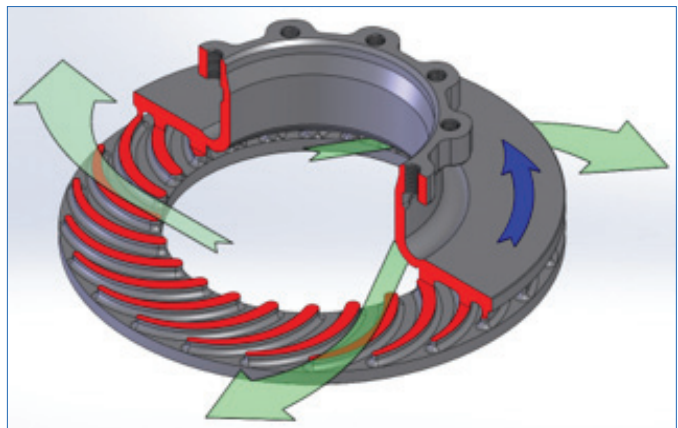
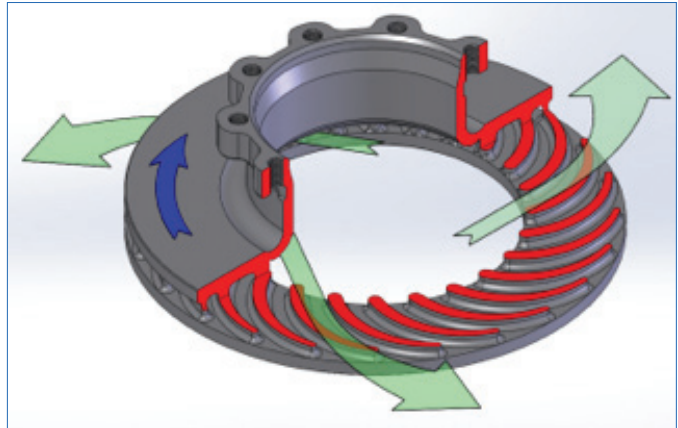
As a result, most failures of brake discs happen in the form of radial cracks or fractures. Vehicles mostly effected by thermal cracking are commercial vehicles including fire engines, motorway coaches, mountain buses and truck racing.

In commercial vehicles, the flash temperature on the braking surface can be increased to higher than 900°C in a few seconds by the clamping force of the brake caliper, consequently the repeated loads and heating causes surface radial cracks and plastic deformation.



The Solution

In order to reduce the temperature and thermal stresses, our approach is to introduce the advanced concept of Racing Car Turbine Vent Design into the re-design of commercial vehicles.



The advantages brought about through the new design include the following:

- Significantly increased air flow
- Lower working temperature
- Elimination of radial thermal cracks
- Reduced pad and disc wear
- Decrease in Caliper maintenance
- Disc weight reduced by up to 10%