

BREMBO – at the cutting edge of brake disc technology

It weighs less, has new star-shaped venting pillars, is made of a special cast iron and operates at lower temperatures. This is the new Star Pillar venting disc for commercial vehicles that Brembo has put onto the market and begun to supply to its customer, Schmitz Cargobull, a European leader in the semi-trailer sector.

The Star Pillar disc is a major development for heavy vehicles of the pillar ventilated disc that was fitted for the first time as long ago as 1985 to the Lancia Thema, and today continues to be a top performer preferred by several major vehicle manufacturers.

The pillar vented disc is less susceptible to the risk of thermal shock and disc breakage. Active safety is improved due to the special shape of the venting pillars that slow down and even block the formation of surface cracks on the disc. This is very important for heavy vehicles that travel thousands of kilometres a year and for which an efficient braking system is vital to safety.

Cracks are caused by superficial heat damage that increases as disc wear increases. Thermal shock tests performed by Brembo Group technicians have shown that after 100 brake stops the length of cracks on Brembo pillar vented discs is limited to 8mm, whereas it can reach up to 31mm on conventional discs.

The disc has been designed and patented by Brembo and weighs 7 to 10% less than a conventional disc. It also reduces fuel consumption thereby contributing to fighting pollution and safeguarding the environment.

Lower operating temperatures also increase service life thus reducing the need for replacement, and resolving the problem of the disposal of used discs.

Improved heat dissipation and lower operating temperatures also put less stress on the brake pads, and brake callipers which will also therefore last longer and need less frequent replacement.

This new self-venting disc is made of special high carbon, low silicone content cast iron that cannot be easily obtained in standard production and which requires the technologically advanced plants and specialised metallurgical expertise in which Brembo has invested hugely in recent years.