Brake Discs

Overview, features and benefits

www.boschautoparts.co.uk





- ► Casting and manufacturing tolerances to OE quality
- ► Individual research and development using cutting-edge machines and test procedures
- ► Wide product range with the highest proportion of high carbon discs resulting in greater product performance
- Vehicle-specific solutions



Thanks to the use of high-quality materials, Bosch brake discs can cope with extreme conditions. For example, on full braking, the braking power is several times higher than the power of the engine. Temperatures in excess of 750°C can occur between the pad and the brake disc. Only discs of top quality material are able to withstand such extreme thermal and mechanical stress over the course of time.

Bosch brake discs are the first choice when it comes to preventing brake vibrations or annoying squeals.

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Material

Bosch is an expert in brake disc manufacturing. Investment in research, development and production facilities has led to know-how in choosing the right material and also valuable experience in workmanship. As a cast iron producer with competence in materials, Bosch applies a number of casts, many of which are enriched with alloy components. For example, molybdenum, copper, chrome, titanium. In the market, Bosch brake discs stand out with:

- ► High thermal diffusivity
- ► Low thermoelectric voltage
- ► High resistance to thermal tears
- ▶ Optimal dampening properties

Cast Steel - Safe, Perfect, Proper

As engine performance is enhanced and vehicle weight increases, demands on braking systems also rise steadily. Only brake discs made from high-grade materials and homogenous casting structures without trapped air and friction will meet the specifications of the vehicle manufacturers.

Uncompromising Precision: High Carbon

High-carbon discs made from a highly carbonized grey cast iron divert heat without thermal tears or distortions. This prevents the brakes from vibrating, improves delay, and increases resistance and service life of the brake discs.

The technology behind the disc

- 1 Venting
 Where required necessary to dissipate heat.
- 2 Anti-corrosion plating
 No cleaning required before installation with long-lasting protection.
- 3 Application specific casting
 Widest range of high carbon and alloy
 materials to match OE specifications,
 ensuring correct level of heat
 dissipation and preventing
 disc deformation.
- 4 Heat groove
 Acts as a thermal barrier reducing the heat transfer to the hub.
- 5 Precise surface finish
 Enables shorter bedding in period and eliminates noise and vibration problems.
- 6 Balancing
 Each vented disc is balanced for perfect operation.



Competitor comparison - Brake disc casting quality

Brake Discs Summary:

- Casting and manufacturing tolerances of OE quality
- ► Wide product range with the highest proportion of high carbon discs
- ▶ Designed to exceed EU requirements of ECER90, rigorously tested under AMS criteria
- ▶ Vehicle-specific solutions