



Engine Cast Iron Bracket Vertical Modeling Production Line Customization High Strength

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Dongfeng
- Certification: IATF 16949:2016
- Minimum Order Quantity: 100 piece
- Packaging Details: Metal mesh box packaging
- Delivery Time: Spot goods
- Payment Terms: T/T
- Supply Ability: Annual production of 50000 pieces



Product Specification

- Surface Treatment: Powder Coating
- Type: Bracket
- Size: 20*20*20 Cm
- Operating Temperature: -40°C To 120°C
- Vibration Resistance: Yes
- Density: High
- Durability: High
- Included Components: Bracket, Bolts
- Color: Black
- Stability: Strong And Sturdy
- Mounting Position: Engine Block
- Compatibility: Fits Most Engines
- Efficiency: Effective
- Usage: Used In Engine Manufacturing
- Weather Resistance: Yes

for more products please visit us on dongfengtorsionaldamper.com

Product Description

Engine cast iron bracket: robust support, guarding the power core

In the complex structure of automobiles, the importance of the engine as the heart that drives the vehicle forward is self-evident. The cast iron bracket of the engine, as a key component supporting and fixing this power source, has a direct impact on the stability, safety, and engine efficiency of the entire vehicle in terms of its design and manufacturing quality. This article will provide a detailed introduction to engine cast iron brackets, including their structural characteristics, functional roles, material selection, manufacturing processes, and market applications, providing readers with a comprehensive and in-depth understanding.

1, Structural characteristics of engine cast iron bracket

The engine cast iron bracket usually consists of three parts: the main structure, connecting components, and fixing devices.

The main structure is the core part of the bracket, designed according to the shape, weight, and installation position of the engine to ensure stable support for the engine. Connectors are used to connect the bracket to the vehicle body or chassis, usually using bolts, nuts, and other fasteners to ensure the stability and reliability of the bracket. The fixing device is used to fix the engine on the bracket to prevent it from shaking or displacement during operation.

The structural design of the engine cast iron bracket fully considers the vibration characteristics and load requirements of the engine. Through reasonable structural layout and optimized material selection, effective support and fixation of the engine are achieved. At the same time, the geometric shape and dimensions of the bracket are precisely calculated to ensure a perfect match with the engine and body.

2, The functional role of engine cast iron bracket

Support and fixation: The main function of the engine cast iron bracket is to support and fix the engine, preventing it from shaking or displacement during operation. This not only ensures stable operation of the engine, but also avoids noise and vibration problems caused by engine shaking.

Shock absorption and noise reduction: Cast iron material has good damping characteristics, which can effectively absorb and disperse the vibration and noise generated during engine operation. Through reasonable design, the cast iron bracket of the engine can reduce the transmission of vibration and noise to a certain extent, and improve the ride comfort of the whole vehicle.

Protecting the engine: The cast iron bracket for the engine can also provide protection for the engine. During vehicle operation, especially on bumpy or uneven roads, the bracket can absorb and disperse impacts and vibrations from the road surface, thereby protecting the engine from damage.

Improving vehicle performance: The stable support and shock absorption and noise reduction functions of the cast iron engine bracket help to enhance the overall performance of the vehicle. By reducing vibration and noise, driving comfort and safety can be improved; By protecting the engine, its lifespan can be extended and maintenance costs can be reduced.

3, Material selection of engine cast iron bracket

Cast iron, as a commonly used engineering material, is widely used in the manufacturing of engine mounts due to its excellent mechanical and processing properties. Cast iron has the characteristics of high strength, high hardness, good wear resistance, and corrosion resistance, and can withstand the huge loads and vibrations generated during engine operation. Meanwhile, the cost of cast iron materials is relatively low, easy to process and shape, which is beneficial for reducing production costs and improving production efficiency.

When selecting cast iron materials, it is necessary to comprehensively consider factors such as their mechanical properties, processing performance, cost, and environmental requirements. In addition, the specific material and structural design of the bracket need to be determined based on factors such as the type, power, weight, and installation position of the engine.

4, Manufacturing process of engine cast iron bracket

The manufacturing process of engine cast iron brackets mainly includes steps such as casting, mechanical processing, and surface treatment.

Casting: Casting is one of the main manufacturing processes for engine cast iron brackets. Through casting technology, molten cast iron material can be injected into the mold, and after cooling, a support with complex shapes and structures can be obtained. The casting process has the advantages of high production efficiency, low cost, and suitability for large-scale production.

Mechanical processing: After casting is completed, the bracket needs to be machined to meet its dimensional accuracy and surface quality requirements. Mechanical processing includes processes such as milling, drilling, and grinding, which can ensure the dimensional accuracy and shape consistency of the support.

Surface treatment: In order to improve the corrosion resistance and aesthetics of the bracket, surface treatment is required. Common surface treatment methods include sandblasting, painting, electroplating, etc. These treatment methods can remove oxides and oil stains from the surface of the bracket, improve its surface smoothness and corrosion resistance.

5, Market application of engine cast iron bracket

Engine cast iron brackets are widely used in various types of automobiles, including sedans, trucks, buses, and construction machinery. With the rapid development of the automotive industry and intensified market competition, the market demand for engine cast iron brackets is also constantly increasing. Meanwhile, with the rapid development of new energy vehicles and intelligent driving technology, the performance and quality requirements for engine cast iron brackets are constantly increasing.

In order to meet market demand and technical requirements, manufacturers of engine cast iron brackets need to continuously improve and innovate manufacturing processes and technologies to enhance product quality and performance. At the same time, it is necessary to strengthen market research and customer demand analysis, and develop appropriate product and market strategies based on market demand and technological development trends.

6, Summary and Prospect

As a key component in the automotive power system, the performance and quality of the engine cast iron bracket have a significant impact on the stability, safety, and engine efficiency of the entire vehicle. By rational structural design and optimized material selection, as well as advanced manufacturing processes and technologies, engine cast iron bracket products with excellent performance and reliable quality can be manufactured.

In the future, with the rapid development of the automotive industry and intensified market competition, manufacturers of engine cast iron brackets need to continuously strengthen technological innovation and product research and development to improve product quality and performance levels. At the same time, it is necessary to strengthen market research and customer demand analysis, and develop appropriate product and market strategies based on market demand and technological development trends. Only in this way can we stand undefeated in the fierce market competition and make greater contributions to the development of the automotive industry.



Dongfeng (Shiyan) Torsional Damper Company Limited



gjh.8266@163.com



dongfengtorsionaldamper.com

10th Floor, Building B, Donghe Center, Dongfeng 3rd Road, Wuhan Economic and Technological Development Zone, China