

Iron and Steel - Steel Ingot Hot Delivery Vehicle Insulation Box



In the production processes of metallurgical enterprises, due to the complexity of production processes such as smelting and rolling, the transportation of slabs (steel ingots) plays a significant role in controlling production costs. To minimize energy consumption and reduce production costs, most metallurgical production enterprises use hot delivery of slabs (also known as hot delivery of slabs or steel ingots). Under these conditions, the insulation performance of the transportation box becomes crucial.



The general requirements for the lining structure of typical vehicle transportation insulation boxes include the following aspects: firstly, they must withstand long-term operation at high temperatures up to 1000°C, have excellent insulation performance, and be resistant to thermal shock. Secondly, they should facilitate



the loading and unloading of hot slabs (steel ingots) and be able to withstand vibration, impact, and bumps. Lastly, they should be lightweight, have a long service life, and be cost-effective.

Traditional lightweight brick linings have disadvantages, such as poor resistance to thermal shock and a tendency to crack and damage when subjected to long-term vibration, impact, and bumps.



The development and application of ceramic fiber materials, along with improved technology, provide a reliable basis for the design of vehicle insulation boxes. CCEWOOL ceramic fibers are lightweight, elastic, high-temperature resistant, fatigue-resistant, and capable of absorbing vibrations. With proper structural design and

quality assurance in construction, they can fully meet the aforementioned process requirements. Therefore, using CCEWOOL ceramic fibers as the lining structure for vehicle insulation boxes is the optimal choice for this type of insulation.