

Coke & Carbon Series Products - Industry Application Introduction

1. Foundry Coke

Main Application & End Users (Sorted by Consumption Volume)

1. Auto parts foundries (largest consumption): Mainly used for producing engine blocks, gearboxes, brake components and new energy vehicle chassis parts, widely applied in ductile iron casting processes.
2. Construction machinery & general machinery foundries: Used for manufacturing machine tool beds, reducer housings, hydraulic parts, pumps, valves and agricultural machinery castings.
3. Ductile iron pipe & municipal casting factories: Applied in the production of ductile iron pipes, manhole covers, flanges and various municipal pipeline fittings.
4. Rail transit & wind power foundries: Suitable for casting bogies, wind turbine hubs, main shafts and other core rail and wind power components.
5. Small hardware & farm tool foundries: Used for ordinary small-sized grey iron casting parts with low cost and stable performance.
6. Rock wool industries

Product Overview: Professional and high-efficiency fuel specially designed for cupola furnaces, serving all types of casting workshops.

2. Metallurgical Coke

Main Application & End Users (Sorted by Consumption Volume)

1. Integrated steel mills (top consumption): Core raw material for blast furnace ironmaking and subsequent steelmaking, applied to the production of construction steel, steel plates and section steel.
2. Independent ironmaking & steel plants: Used for single blast furnace iron smelting and supporting converter steelmaking production.
3. Ferroalloy plants (FeSi, FeMn, FeCr): Serves as blast furnace reducing agent and framework structural material for ferroalloy smelting.
4. Non-ferrous smelters (Copper, Lead, Zinc): Acts as high-efficiency reductant and heating agent for non-ferrous metal blast furnace smelting.
5. Calcium carbide & yellow phosphorus chemical factories: Used as alternative carbon raw material for partial chemical smelting processes.

Product Overview: Indispensable core raw material for traditional blast furnace ironmaking and metallurgical industry.

3. Semi Coke (Lantan Coke)

Main Application & End Users (Sorted by Consumption Volume)

1. Calcium carbide plants (over 50% of total market demand): Core raw material for calcium carbide production, further supporting PVC and acetylene chemical manufacturing.
2. Ferroalloy factories (FeSi, silicomanganese, magnesium metal): Professional reductant for submerged arc furnaces, effectively reducing power consumption and production costs.
3. Steel mills: Ideal substitute for anthracite coal, used for furnace pulverized coal injection to optimize steelmaking efficiency.
4. Synthetic ammonia & coal gasification chemical plants: High-quality low-impurity raw material for industrial coal gas production.
5. Industrial boiler, glass & ceramic factories: Eco-friendly clean fuel, replacing traditional bulk coal to meet environmental protection production standards.

Product Overview: Cost-effective low-ash and low-sulfur carbon material, widely used in chemical and ferroalloy smelting industries.

4. Carbon Raiser

Main Application & End Users (Sorted by Consumption Volume)

1. EAF steelmaking plants (largest consumption): Special recarburizing additive for carbon adjustment in the smelting of carbon steel, stainless steel and special steel.
2. High-end ductile iron foundries: Used for manufacturing high-precision core parts such as auto crankshafts, wind power castings and hydraulic components, with high carbon absorption rate.
3. Precision casting factories: Applied in the production of stainless steel and heat-resistant alloy precision castings.
4. Refractory material manufacturers: Raw material for processing carbon bricks, alumina-carbon bricks and high-temperature resistant refractory products.
5. Brake pad & friction material factories: Used as carbon-based functional filler for friction and wear-resistant materials.

Product Overview: Essential high-efficiency recarburizing additive for steel smelting and high-grade precision casting industries.

5. Graphitized Petroleum Coke (GPC)

Main Application & End Users (Sorted by Consumption Volume)

1. Lithium battery anode material factories: Key raw material for producing artificial graphite anodes, widely used in new energy vehicle batteries and energy storage battery industries.
2. Premium steel & high-end ductile iron foundries: High-purity and low-sulfur top-grade carbon raiser, suitable for high-standard critical casting parts with ultra-high absorption rate.
3. Aluminum smelters: Special raw material for processing electrolytic aluminum prebaked anodes and cathode carbon blocks.
4. PV & semiconductor manufacturers: High-purity graphite raw material for silicon ingot crucibles and precision graphite accessories.
5. Advanced carbon product factories: Basic raw material for producing graphite electrodes and high-performance electrode paste.

Product Overview: High-purity low-sulfur carbon material, dedicated to new energy and high-end precision metallurgy fields.

6. Perlite Slag Remover

Main Application & End Users (Sorted by Consumption Volume)

1. Ductile iron foundries (top usage): Mainly used for slag removal, heat preservation and anti-oxidation of molten iron, suitable for auto parts and wind power castings production.
2. Steel & stainless steel foundries: High-temperature resistant slag cleaning agent, applicable for molten steel purification under 1600°C+ high temperature environment.
3. Investment precision casting factories: Professional covering and deslagging auxiliary for silica sol and water glass casting processes.
4. Aluminum & copper alloy foundries: Used for degassing, slag removal and heat preservation of non-ferrous metal liquid to improve casting quality.
5. Small cupola furnace foundries: Economical and efficient substitute for traditional plant ash, reducing production cost.

Product Overview: Universal high-efficiency auxiliary material for all ferrous and non-ferrous metal casting industries.

7. Electrode Paste

Main Application & End Users (Sorted by Consumption Volume)

1. Ferroalloy plants (largest consumption): Core self-baking electrode material for submerged arc furnaces, used for smelting silicon iron, silicomanganese, nickel alloy and chromium alloy.
2. Calcium carbide factories: Special electrode material for open and closed calcium carbide furnaces, ensuring stable furnace operation.

3. Industrial silicon & polysilicon smelters: Dedicated submerged arc furnace electrode for photovoltaic silicon raw material production.
4. Yellow phosphorus chemical plants: Matching electrode material for electric furnace phosphorus smelting process.
5. Special alloy factories: Applied in the smelting of silicon-calcium, silicon-aluminum and other special alloy products.

Product Overview: Exclusive professional self-baking electrode raw material for all submerged arc furnace high-temperature smelting equipment.