Reheating Furnace Refractories

Product Brochure

焦作金鑫恒拓新材料股份有限公司

JiaoZuo JinXin HengTuo Advanced Materials Co.,Ltd

Add: No.688 Guangxing Road(S),Bo'ai County, Jiaozuo city, Henan province, China

Tel: 0391-8676999

Web: www.jzjxht.com

Email: dingchaoxin@jzjxht.com

焦作金鑫恒拓新材料股份有限公司

JiaoZuo JinXin HengTuo dvanced M t eri al s Co.,Lt d

COMPANY INTRODUCTION 公司简介

Jiaozuo Jinxin Hengtuo Advanced Materials Co., Ltd. (founded 2011) is a total solution providerfor high-temperature furnaces and kilns, integrating R&D, manufacturing, installation, and maintenance.

Our products cover reheating furnaces, CFB boilers, gasifiers, non-ferrous rotary kilns, lime kilns, aluminum melting furnaces, submerged arc furnaces, waste melting furnaces, and more. We have participated in over 3,000 reheating furnace projects, accounting for more than 70% of China's new market. We are a domestic leader in regenerator chambers, burner blocks, anchor bricks, ceramic honeycombs, fast-dry/explosion-proof self-flow castables, no-baking castables, and "one ladle" iron ladle systems. We also provide turnkey contracting for steel ladles, tundishes, converters, blast furnaces, and iron ladles. Our customers include Baowu, Shougang, HBIS, Ansteel, and other major steel groups, with exports to Europe, the Americas, Southeast Asia, and the Middle East.

With an annual production capacity exceeding 200,000 tons and multiple intelligent production lines, we are a national high-tech enterprise and a Henan "Gazelle" company. We hold a Grade -III metallurgical engineering contracting qualification. Our technology center is a provincial-level R&D platform. We cooperate with leading universities, hold numerous patents and over 100 core patents, have participated in more than ten national/industry standards, and are certified to ISO 9001, ISO 14001, and ISO 45001.

Guided by our mission - "Better quality, more professional service, creating continuous value for customers" - and adhering to "technological innovation + intelligent manufacturing," we are committed to green, long-life refractories, striving to become a globally competitive refractory enterprise.

金鑫恒拓
JINXINHENGTUO

CORPORATE CULTURE 企业文化

Corporate Culture

Vision

打造客户信赖、受人尊重、具有国际竞争力的耐火材料企业集团

To build a refractory enterprise group that is trusted by customers, respected by society, and globally competitive.

Mission

以更优的质量，更专业、更完善的服务，持续为用户创造价值

To continuously create value for our customers through better quality, more professional and complete services.

Values

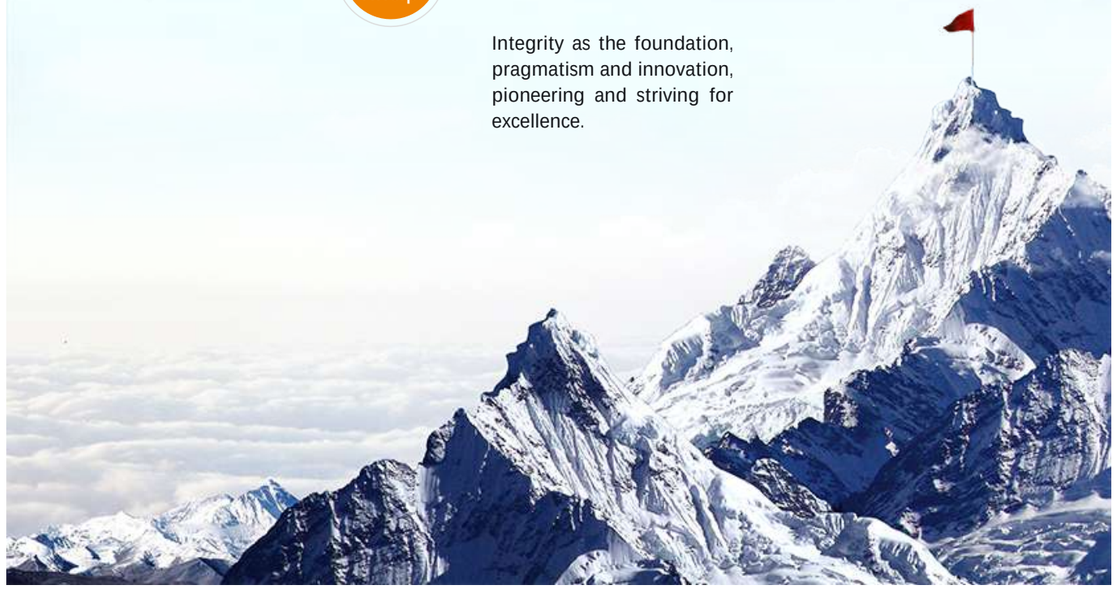
创新 奉献
进取 共赢

Innovation · Dedication
Enterprise · Win-Win

Guiding Principle

诚信为本，求实创新
开拓进取，追求卓越

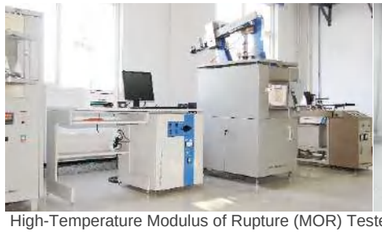
Integrity as the foundation, pragmatism and innovation, pioneering and striving for excellence.



APTITUDE HONOR 资质荣誉

RESEARCH DEVELOPMENT 研究开发

JinXin HengTuo provides leading technologies and system solutions in the refractory industry. We are committed to continuously reducing energy consumption in industrial furnaces and kilns through ongoing technological innovation and new product development. We offer our customers knowledge, experience, products, and services to help them solve challenges encountered during their development, thereby growing sustainably together with our customers.


High-Temperature Modulus of Rupture (MOR) Tester


Chemical Analysis Laboratory


Specimen Preparation Lab


Thermal Shock Resistance Tester


X-ray Fluorescence (XRF) Spectrometer


Box-type Resistance Furnace

金鑫恒拓
JINXINHENGTUO

INTELLIGENT MANUFACTURING 智能制造

Intelligent production equipment, large-scale packaging, and unmanned palletizing operations . Build a comprehensive industrial information platform to achieve real-time analysis of production system data, supporting online service functions such as fault warning, remote control, and quality diagnosis


Batching System


Tilting Mixer


Central Control Room


Tunnel Kiln


Intelligent Batching System


Automatic Packaging Robot


AGV Forklift

PRODUCT CATALOG 产品目录

Anchor Bricks

Our anchor bricks are available in two forming methods : mechanical pressing and castable vibration forming. Developed with a unique process, they offer high strength, high load softening temperature, and excellent volume stability. They have been used for many years in major steel enterprises such as Baowu, Shougang, and HBIS, with a market share of over 70%. Our low-iron, low-creep anchor bricks are made from high-quality raw materials including natural sintered low -iron mullite, effectively resisting high-temperature CO reduction cracking. They have been successfully applied in Baosteel Zhanjiang and Yansteel's rotary hearth furnaces.

Physical and Chemical Properties

Item	JH-LZ55	JH-LZ65	JH-MG60	JH-MG65
Al2O3 (%)	55	65	60	65
Bulk Density (g/cm³)	2.2	2.25	2.3	2.35
Cold Crushing Strength (MPa)	45	50	55	60
Refractoriness Under Load (0.2MPa RUL) (°C)	1450	1500	1450	1500
Forming Method	Mechanical Pressing	Mechanical Pressing	Casting	Casting
Packaging	Wooden Pallet	Wooden Pallet	Wooden Pallet	Wooden Pallet

Physical and Chemical Properties

Item	JH-LM65	JH-LMZ55	JH-LM55
Al2O3 (%) ≥	65	55	55
Fe2O3 (%) ≤	1.8	1.5	2
Bulk Density (g/cm3) ≥	2.4	2.3	2.25
Cold Crushing Strength (MPa) ≥	50	45	45
Refractoriness Under Load (0.2MPa RUL) (°C) ≥	1500	1470	1450
Forming Method	Mechanical Pressing		
Packaging	Wooden Pallet		

金鑫恒拓 JINXINHENGTUO

Regenerator Chambers & Burner Blocks

Our burner blocks and regenerator chambers feature excellent volume stability, high temperature resistance, crack resistance, and spalling resistance. They have been successfully used in more than 300 reheating furnaces at over 80 steel plants, including TISCO, Tangsteel, JISCO, NISCO, KISC, Chengde Steel, Jilin Steel, Rizhao Steel, Shandong Steel, Yanshan Steel, Xinfu Steel , and Jianlong Steel, among others.

Physical and Chemical Properties

Item	Condition	JH-AS65-SZ	JH-AS70-SZ	JH-AS75-SZ
Chemical Composition (%) ≥	Al2O3	65	70	75
Bulk Density (g/cm3) ≥	110°C × 16h	2.45	2.6	2.7
Permanent Linear Change on Heating (%)	1500°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +1.0
Modulus of Rupture (MPa) ≥	110°C × 16h	4	4	4
	1500°C × 3h	8	8	10
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	30	35
	1500°C × 3h	60	70	80
Maximum Service Temperature (°C)		1600	1600	1600
Packaging	Wooden Pallet			

Regenerator Chambers & Burner Blocks

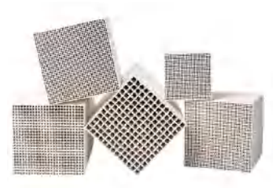
Physical and Chemical Properties

Item		JH-SA60	JH-SA65	JH-SA68
Chemical Composition (%) ≥	Al2O3	60	65	68
Bulk Density (g/cm3) ≥	110°C × 16h	2.35	2.40	2.45
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +1.0
Modulus of Rupture (MPa) ≥	110°C × 16h	6	6	6
	1350°C × 3h	6	7	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	30	45
	1350°C × 3h	60	65	65
Maximum Service Temperature (°C)		1350	1350	1350
Application		Regenerator Chamber		
Packaging		Wooden Pallet		

Physical and Chemical Properties

Item		JH-WA58	JH-WA65
Chemical Composition (%) ≥	Al2O3	58	65
Bulk Density (g/cm3) ≥	110°C × 16h	2.3	2.4
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	5
	1350°C × 3h	10	6
Cold Crushing Strength (MPa) ≥	110°C × 16h	40	40
	1350°C × 3h	70	70
Maximum Service Temperature (°C)		1400	1400
Packaging		Wooden Pallet	Wooden Pallet

Ceramic Honeycomb Regenerators



Specifications

Item	Square/Hexagonal	Round
Hole Shape	Square/Hexagonal	Round
Wall Thickness (mm)	0.8-1.6	3-4
Specific Surface Area (m2/m3)	700-875	300-350
Open Area Ratio (%)	50-70	35-42

Physical and Chemical Properties

Item		JH-M70 (Corundum-Mullite)	JH-M68 (Mullite)	JH-HM60 (High Thermal Storage)
Chemical Composition (%) ≥	Al2O3 + ZrO2	70	68	60
Bulk Density (g/cm3)		0.85	0.80	0.80
Cold Crushing Strength (MPa) ≥	Axial	10	8	8
	Lateral	1.5	1.2	1.0
Permanent Linear Change on Heating (1450°C × 12h) %		--	-2.0 to 0	-2.5 to 0
Permanent Linear Change on Heating (1500°C × 12h) %		-1.8 to 0	--	--
Refractoriness Under Load (0.1MPa RUL T0.6) (°C) ≥		1450	1430	1400
Specific Heat Capacity (1200°C) [J/(kg·K)] ≥		1100	1000	800
Packaging		Carton		

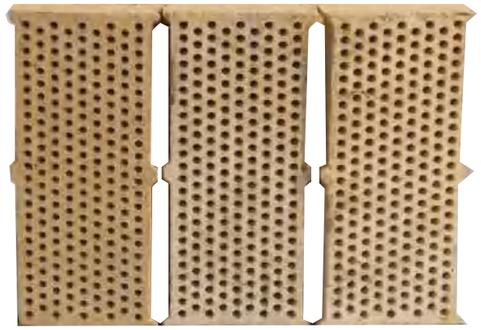
Castable Regenerator

Castable regenerators—vibration formed and high-temperature fired. Good thermal shock resistance, high temperature resistance, volume stability, erosion resistance, high heat storage. Used in 30+ steel plants including JISCO, Weigang, Yingkou Medium Plate, Hangzhou Steel, Tianggang, Yuanli, Huaxi Stainless Steel.

Physical and Chemical Properties

Item		JH-HR65A	JH-HR65B
Chemical Composition (%) ≥	Al2O3	65	--
	Al2O3 + Cr2O3	--	65
Bulk Density (g/cm3) ≥		2.3	2.3
Cold Crushing Strength (MPa) ≥		30	35

Grate Support Bricks



Grate support bricks for regenerative reheating furnace burner systems. Protect regenerator bodies and ceramic balls, extend service life. Made from corundum-mullite by mechanical pressing or castable vibration forming, high-temperature fired. Anti-spalling, erosion resistant, crack resistant, high-temperature deformation resistant. Used in 200+ furnaces at 40+ plants including JISCO, Weigang, Liangang. Well received by customers.

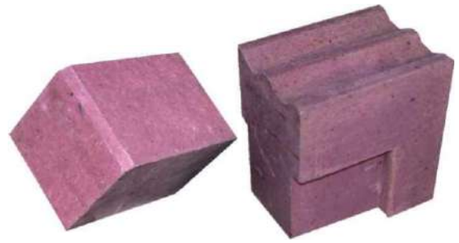
Specifications

Standard Grate Support Bricks	Dimensions (mm)
Length	250 / 300 / 350 / 400 / 450 / 500
Width	150 / 200 / 250
Thickness	100 / 120

Physical and Chemical Properties

Item		JH-GM80	JH-LB75	JH-LB65
Chemical Composition (%) ≥	Al2O3 + ZrO2	78	75	65
Bulk Density (g/cm3) ≥		2.6	2.5	2.4
Cold Crushing Strength (MPa) ≥		30	30	30
Refractoriness Under Load (0.1MPa RUL T0.6) (°C) ≥		1510	--	--
Forming Method		Mechanical Pressing	Casting	Casting
Packaging		Wooden Pallet	Wooden Pallet	Wooden Pallet

High-Wear Skid Rail Bricks & Platform Bricks



High-wear skid rail and platform bricks. Made from fused corundum and industrial chromium oxide/ zirconia. High strength, low creep, good volume stability, slag resistance, long life. For pusher-type and walking-beam reheating furnaces, discharge platforms, and other high-wear areas. Used in 300+ furnaces at 50+ steel plants. Also offer high-thermal-shock grades with tabular alumina and zirconia-mullite for intermittent heat treatment furnaces.

Physical and Chemical Properties

Item	JH-AK	JH-AZR	
Chemical Composition (%) ≥	Al2O3 + Cr2O3	88	85
Bulk Density (g/cm3) ≥		3.2	3.0
Modulus of Rupture (MPa) ≥		18	10
Cold Crushing Strength (MPa) ≥		120	90
Feature		High Wear Resistance	High Thermal Shock Resistance
Packaging		Wooden Pallet	Wooden Pallet

Low-Cement Refractory Castables

Low-cement refractory castables are formulated with high-quality raw materials of low alkali content and optimized particle size distribution, offering good flowability, easy installation, high strength, and excellent volume stability. They can be either cast directly into monolithic linings or precast into shapes. This castable series is specifically developed for reheating furnaces in steel rolling mills. The products have been successfully used in over 500 reheating furnaces across more than 100 steel plants, including Baowu, Masteel, and TISCO.

Item	Condition	JH-LN	JH-DA55	JH-DA60	JH-DA65	JH-DA70
Chemical Composition (%) ≥	Al2O3	42	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.2	2.25	2.3	2.4	2.5
Permanent Linear Change on Heating (%)	1300°C × 3h (JH-LN) / 1350°C × 3h (others)	-0.5 to 0	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	4	5	5	6	7
Modulus of Rupture (MPa) ≥	1350°C × 3h (1300°C × 3h for JH-LN)	5 (1300°C)	6	6	7	7
Cold Crushing Strength (MPa) ≥	110°C × 16h	25	30	30	35	40
Cold Crushing Strength (MPa) ≥	1350°C × 3h (1300°C × 3h for JH-LN)	40 (1300°C)	45	45	55	55
Maximum Service Temperature (°C)		1300	1350	1350	1350	1350
Application	Low-Temperature Zone Furnace Roof & Wall		Various Parts of the Furnace			
Packaging	25kg/bag + Ton Bag					
Storage	Keep Dry					
Shelf Life	6 Months					

金鑫恒拓
JINXINHENGTUO

Self-Flow Castables

Through careful selection of raw materials and optimized particle size distribution, combined with the introduction of ultra-fine powders and high-efficiency dispersants, we have developed a self-flow castable for reheating furnaces. This self-flow castable offers easy installation, self-flowing capability with densification, excellent volume stability, and good thermal shock resistance. It is particularly suitable for applications with complex shapes and narrow spaces. The product has been successfully used in over 500 reheating furnaces across more than 100 steel plants, including Baosteel, WISCO, Chengde Steel, Shaogang, and Hangzhou Steel.

Physical and Chemical Properties

Item		JH-SF55	JH-SF60	JH-SF65	JH-SF70
Chemical Composition (%) ≥	Al2O3	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.2	2.25	2.3	2.4
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +1.0	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	6	6	6
Modulus of Rupture (MPa) ≥	1350°C × 3h	8	8	8	9
Cold Crushing Strength (MPa) ≥	110°C × 16h	35	40	40	40
Cold Crushing Strength (MPa) ≥	1350°C × 3h	55	60	65	70
Maximum Service Temperature (°C)		1350	1350	1350	1350
Packaging: 25kg/bag + Ton Bag		Storage: Keep Dry		Shelf Life: 6 Months	

Spalling-Resistant Castables

Physical and Chemical Properties

Item		JH-DA60-H	JH-DA65-H
Chemical Composition (%) ≥	Al2O3	60	65
Bulk Density (g/cm3) ≥	110°C × 16h	2.3	2.4
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	5	6
Modulus of Rupture (MPa) ≥	1350°C × 3h	6	7
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	35
Cold Crushing Strength (MPa) ≥	1350°C × 3h	45	55
Maximum Service Temperature (°C)		1350	1350
Packaging: 25kg/bag + Ton Bag			
Storage: Keep Dry			
Shelf Life: 6 Months			

High-Strength Castables

High-strength castables offer high strength, excellent erosion resistance, high temperature resistance, good spalling resistance, and excellent volume stability. Our products have been used in various furnace types, including reheating furnaces, heat treatment furnaces, and bogie hearth furnaces.

Physical and Chemical Properties

Item	Condition	JH-HQ55	JH-HQ60	JH-HQ65	JH-HQ70
Chemical Composition (%) ≥	Al2O3	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.3	2.35	2.4	2.5
Permanent Linear Change on Heating (%)	1350°C × 3h (1500°C × 3h for JH-HQ70)	-0.5 to 0	-0.5 to 0	-0.5 to 0	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	6	7	7
Modulus of Rupture (MPa) ≥	1350°C × 3h (1500°C × 3h for JH-HQ70)	7	8	8	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	45	45	50	50
Cold Crushing Strength (MPa) ≥	1350°C × 3h (1500°C × 3h for JH-HQ70)	55	65	70	70
Maximum Service Temperature (°C)		1350	1350	1350	1350
Application	All Parts of Furnace				
Packaging: 25kg/bag + Ton Bag	Storage: Keep Dry			Shelf Life: 6 Months	

金鑫恒拓 JINXINHENGTUO

Mullite-Based High-Strength Castables

Our medium-temperature high-strength castable is developed through matrix optimization and adjusted particle size distribution. Using high-alumina bauxite and mullite as aggregates, with the addition of composite alumina micro-powder and silica fume, the castable achieves excellent flowability, high medium-to-high temperature strength, and good thermal shock resistance.

Physical and Chemical Properties

Item	Condition	JH-AS55	JH-AS60	JH-AS65	JH-AS70
Chemical Composition (%) ≥	Al2O3	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.2	2.3	2.4	2.5
Permanent Linear Change on Heating (%)	1100°C × 3h	-1.0 to 0	-1.0 to 0	-1.0 to 0	-1.0 to 0
	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	5	5	8	10
	1100°C × 3h	10	10	12	12
	1350°C × 3h	8	8	8	10
Cold Crushing Strength (MPa) ≥	110°C × 16h	40	45	50	50
	1100°C × 3h	60	70	70	75
	1350°C × 3h	50	60	60	65
Maximum Service Temperature (°C)		1350	1350	1350	1350
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 6 Months					

Steel Fiber Reinforced Castables

The addition of heat-resistant steel fibers to low-cement castables imparts excellent spalling resistance and erosion resistance to the material.

Physical and Chemical Properties

Item	Condition	JH-HQ55-G	JH-HQ60-G	JH-HQ65-G	JH-HQ70-G
Chemical Composition (%) ≥	Al2O3	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.3	2.35	2.45	2.55
Permanent Linear Change on Heating (%)	1350°C × 3h / 1500°C × 3h (JH-HQ70-G)	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	7	7	7	8
Modulus of Rupture (MPa) ≥	1350°C × 3h (others) / 1500°C × 3h (JH-HQ70-G)	8	8	8	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	45	50	50	50
Cold Crushing Strength (MPa) ≥	1350°C × 3h (others) / 1500°C × 3h (JH-HQ70-G)	65	70	70	70
Maximum Service Temperature (°C)		1350	1350	1350	1350
Application	All Parts of Furnace				
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 6 Months					

Precast Blocks for Heat Treatment Furnace Pads

Our precast blocks for heat treatment furnace pads offer high medium-temperature strength, excellent impact resistance, and long service life. They have been successfully used in steel plants including Liangang, Xingcheng Special Steel, and Shaogang.

Physical and Chemical Properties

Item	Condition	JH-TD60	JH-TD65
Chemical Composition (%) ≥	Al2O3	60	65
Bulk Density (g/cm3) ≥	110°C × 16h	2.4	2.45
Permanent Linear Change on Heating (%)	1000°C × 3h	-0.5 to 0	-0.5 to 0
Modulus of Rupture (MPa) ≥	110°C × 16h	12	15
Modulus of Rupture (MPa) ≥	1000°C × 3h	14	18
Cold Crushing Strength (MPa) ≥	110°C × 16h	60	80
Cold Crushing Strength (MPa) ≥	1000°C × 3h	70	90
Maximum Service Temperature (°C)		1200	1200

金鑫恒拓 JINXINHENGTUO

Slag-Resistant Castables for Furnace Bottom

Our slag-resistant castable for furnace bottoms is formulated with high-grade bauxite and magnesia-alumina spinel as the main raw materials, bonded with ultra-fine powder technology. It offers excellent slag resistance and is primarily used for furnace bottom applications in industrial kilns.

Physical and Chemical Properties

Item	Condition	JH-KZ75	JH-KZ80	JH-KZR65	JH-KZR70
Chemical Composition (%) ≥	Al2O3	75	80	--	--
Chemical Composition (%) ≥	Al2O3 + Cr2O3	--	--	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.6	2.75	2.4	2.5
Permanent Linear Change on Heating (%)	110°C × 16h	-0.2 to 0	-0.2 to 0	-0.2 to 0	-0.2 to 0
	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	6	6	6
	1350°C × 3h	7	7	7	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	50	55	30	30
	1350°C × 3h	60	65	60	65
Maximum Service Temperature (°C)		1350	1350	1350	1350
Application	Slag-Resistant Zone of Furnace Bottom				
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 6 Months					

Explosion-Proof Fast-Dry Castables

Explosion-proof fast-dry castable for reheating furnaces. Baking time: 3– 7 days depending on lining thi ckness (versus 12– 21 days for conventional castables). Saves 5+ days of baking time. Improves const ruction efficiency, saves energy. Used in 80+ furnaces at 40+ plants including Baosteel, Shaogang, Riz hao Steel, Jigang, Jianlong Steel. Well received by customers.

Physical and Chemical Properties

Item	Condition	JH-KG55	JH-KG60	JH-KG65	JH-KG70
Chemical Composition (%) ≥	Al2O3	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.25	2.35	2.4	2.45
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +1.0	-0.5 to +1.0
Modulus of Rupture (MPa) ≥	110°C × 16h	5	5	6	6
Modulus of Rupture (MPa) ≥	1350°C × 3h	7	7	8	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	40	45	50	50
Cold Crushing Strength (MPa) ≥	1350°C × 3h	60	65	70	70
Maximum Service Temperature (°C)		1350	1350	1350	1350
Application	Furnace Roof & Wall				
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 6 Months					

Explosion-Proof Fast-Dry Self-Flow Castables

Explosion-proof fast-dry self-flow castable. Based on self-flow castable with added explosion-proof agents. Baking time reduced to 1 – 7 days depending on thickness and location. Saves time and delivers economic benefits.

Physical and Chemical Properties

Item	Condition	JH-KSF55	JH-KSF60	JH-KSF65	JH-KSF70
Chemical Composition (%) ≥	Al2O3	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.20	2.25	2.30	2.35
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	6	6	6
Modulus of Rupture (MPa) ≥	1350°C × 3h	8	8	8	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	30	40	45
Cold Crushing Strength (MPa) ≥	1350°C × 3h	55	60	65	65
Maximum Service Temperature (°C)		1350	1350	1350	1350
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 6 Months					

Rapid-Baking High-Strength Castables

Rapid-baking high-strength castable is a specialized castable for emergency repairs of reheating furnaces. The baking/drying time of this castable is typically 24 hours, achieving rapid drying and baking while the furnace is being heated up. It is an ideal material for annual maintenance and major repairs of various reheating furnaces.

Physical and Chemical Properties

Item	Condition	JH-KH55	JH-KH60	JH-KH65	JH-KH70
Chemical Composition (%) ≥	Al2O3	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.20	2.30	2.35	2.40
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	5	5	6	6
Modulus of Rupture (MPa) ≥	1350°C × 3h	7	7	7	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	35	40	45
Cold Crushing Strength (MPa) ≥	1350°C × 3h	55	60	60	70
Maximum Service Temperature (°C)		1350	1350	1350	1350
Application	All Parts of Furnace				
Packaging: 25kg/bag + Ton Bag ; Shelf Life: 6 Months ; Storage: Keep Dry					

High-Alumina Mullite No-Baking Castables

Engineered from high-alumina bauxite aggregates and mullite, our no-baking castable is enhanced with composite ultra-fine powders and a sol-gel bonding system for an optimized matrix. It offers precisely controlled demolding strength, adjustable setting time, excellent flowability, and outstanding high-temperature performance. The unique colloidal chemistry creates a stable network structure that ensures efficient steam release during rapid heating: expansion joint molds can be removed in just 8 hours, support molds in 12 hours, and the furnace reaches 1300°C within 30 hours from cold start. Compared to traditional low-cement castables—which require 24 hours of curing and 15 – 20 days of baking—this product drastically cuts construction time and saves substantial energy. The setting time can be fine-tuned by adjusting the curing agent ratio. Environmentally friendly and efficient, it is the ideal solution for new reheating furnace installations, major overhauls, and emergency repairs.

Physical and Chemical Properties

Item	Condition	JH-WK55	JH-WK60	JH-WK65	JH-WK70
Chemical Composition (%) ≥	Al2O3	55	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.2	2.3	2.4	2.5
Permanent Linear Change on Heating (%)	1300°C × 3h (JH-WK55) / 1350°C × 3h (others)	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	3	3	4	4
Modulus of Rupture (MPa) ≥	1350°C × 3h (1300°C × 3h for JH-WK55)	6	6	7	7
Cold Crushing Strength (MPa) ≥	110°C × 16h	25	25	30	30
Cold Crushing Strength (MPa) ≥	1350°C × 3h (1300°C × 3h for JH-WK55)	45	45	55	55
Maximum Service Temperature (°C)		1350	1350	1400	1400
Packaging: 25kg/bag + Ton Bag		Storage: Keep Dry		Shelf Life: 6 Months	

Mullite No-Baking Castables

Mullite no-baking castables made from mullite, high-grade bauxite, alumina micro-powder, and silica ultra-fine powder. Sol-gel bonding, in-situ mullite formation. Good high-temperature performance. Allows rapid heating. Hardening time adjustable by curing agent ratio.

Physical and Chemical Properties

Item	Condition	JH-WK60-AS	JH-WK65-AS	JH-WK70-AS
Chemical Composition (%) ≥	Al2O3	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.3	2.4	2.5
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +1.0
Modulus of Rupture (MPa) ≥	110°C × 16h	4	5	5
Modulus of Rupture (MPa) ≥	1350°C × 3h	7	8	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	35	35
Cold Crushing Strength (MPa) ≥	1350°C × 3h	50	60	60
Thermal Shock Resistance (cycles) ≥	1100°C, Water Cooling	25	28	28
Refractoriness Under Load (0.2MPa RUL T0.6) (°C) ≥		1450	1480	1500
Maximum Service Temperature (°C)		1450	1450	1450

Low-Creep Mullite No-Baking Castables

Low-creep mullite no-baking castables—silicon metal added to mullite system. Si oxidizes to SiO2, reacts with Al2O3 to form mullite, creating volume expansion to offset creep. Solves shrinkage, cracking, settlement, tilting issues of conventional castables under high temperature and load. Extends lining life, improves safety.

Item	Condition	JH-WK60-LCP	JH-WK65-LCP	JH-WK70-LCP
Chemical Composition (%) ≥	Al2O3	60	65	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.3	2.4	2.5
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +1.0
Modulus of Rupture (MPa) ≥	110°C × 16h	4	5	5
Modulus of Rupture (MPa) ≥	1350°C × 3h	7	8	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	35	35
Cold Crushing Strength (MPa) ≥	1350°C × 3h	50	60	60
Thermal Shock Resistance (cycles) ≥	1100°C, Water Cooling	25	28	28
Refractoriness Under Load (0.2MPa RUL T0.6) (°C) ≥		1530	1550	1580
Creep Rate (%) ≤	1350°C × 50h	0.6	0.5	0.4

Physical and Chemical Properties

High-Strength Castables for Water-Cooled Pipe Wrapping

Compared to self-flow castables, water-cooled pipe wrapping castables offer higher physical strength, but require external vibration assistance during installation—making them a semi-self-flow castable. Formulated with high-quality bauxite combined with ultra-fine powder technology and high-efficiency additives, this product achieves improved rheology and enhanced high-temperature performance. It has been successfully used in more than 300 reheating furnaces across over 80 steel plants, including Yanshan Steel, Shougang, Shaogang, and Jigang, receiving consistently positive feedback from customers.

Physical and Chemical Properties

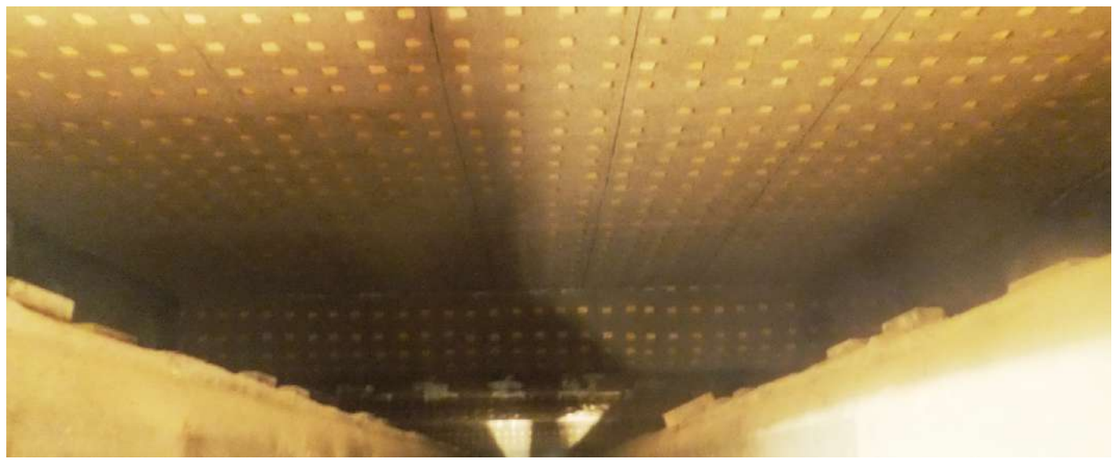
Item	Condition	JH-BZ55	JH-BZ60	JH-BZ65
Chemical Composition (%) ≥	Al2O3	55	60	65
Bulk Density (g/cm3) ≥	110°C × 16h	2.30	2.35	2.40
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	6	6
Modulus of Rupture (MPa) ≥	1350°C × 3h	8	8	9
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	35	35
Cold Crushing Strength (MPa) ≥	1350°C × 3h	50	55	55
Maximum Service Temperature (°C)		1350	1350	1350
Application	Water-Cooled Pipe Wrapping			
Packaging: 25kg/bag + Ton Bag				
Storage: Keep Dry				
Shelf Life: 6 Months				

Plastic Refractories

Plastic refractories—monolithic materials made from graded aggregates, powders, binders, and additives. Extruded into blocks, remains plastic after storage. Installed by ramming. Used in reheating furnaces, soaking pits, annealing furnaces, sintering furnaces. Moderate strength, good thermal shock resistance, low thermal conductivity, anti-spalling, slag resistant, long life, energy saving. Ideal for furnace walls, roofs, burners. Proven in Baosteel, Meishan Steel, Egang, Laigang, Liangang.

Physical and Chemical Properties

Item	JH-KS40	JH-KS45	JH-KS55	JH-KS65	JH-KS75
Chemical Composition (%) ≥ Al2O3	40	45	55	65	75
Bulk Density (g/cm3) ≥ 110°C × 16h	2.15	2.20	2.25	2.35	2.45
Permanent Linear Change on Heating (%) 110°C × 16h	-1.5 to 0	-1.5 to 0	-1.5 to 0	-0.5 to 0	-1.5 to 0
Permanent Linear Change on Heating (%) 1350°C × 3h	-1.5 to 0	-1.5 to 0	-1.5 to +0.5	-1.5 to +0.5	-1.5 to +0.5
Modulus of Rupture (MPa) ≥ 110°C × 16h	2.0	2.0	3.0	3.0	4.0
Modulus of Rupture (MPa) ≥ 1350°C × 3h	3.0	3.0	4.0	4.0	5.0
Thermal Conductivity W/(m·K) at 800°C	0.99	1.00	1.12	1.20	1.30
Thermal Conductivity W/(m·K) at 1000°C	1.00	1.10	1.36	1.45	1.55
Plasticity Index (%)	16-45	16-45	16-45	16-45	16-50
Application	Low-Temperature Zone		High-Temperature Zone		
Packaging: Carton, 25kg/box; Storage: Keep Dry; Shelf Life: 3 Months					



Plastic Castables

Plastic castables with a special binder system. Good workability and viscoplasticity absorb thermal stress. Excellent thermal shock and spalling resistance. Suitable for various reheating furnace applications.

Physical and Chemical Properties

Item	Condition	JH-PC50	JH-PC60	JH-PC65
Chemical Composition (%) ≥	Al2O3	50	60	65
Bulk Density (g/cm3) ≥	110°C × 16h	2.1	2.2	2.3
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	3	3	3
Modulus of Rupture (MPa) ≥	1350°C × 3h	5	6	6
Cold Crushing Strength (MPa) ≥	110°C × 16h	12	15	18
Cold Crushing Strength (MPa) ≥	1350°C × 3h	35	40	45
Maximum Service Temperature (°C)		1350	1400	1400
Packaging: 25kg/bag + Ton Bag				
Storage: Keep Dry				
Shelf Life: 6 Months				

Repair Mixes

Repair mixes for minor, medium, and emergency repairs. Local repairs allow normal furnace restart—no long baking time. Easy application, high bo nding strength, anti-spalling, good vol ume stability. Ideal for furnace walls, burners, and other areas.

Physical and Chemical Properties

Item	Condition	JH-XB55	JH-XB65
Chemical Composition (%) ≥	Al2O3	55	65
Bulk Density (g/cm3) ≥	110°C × 16h	2.2	2.3
Modulus of Rupture (MPa) ≥	110°C × 16h	3	4
Modulus of Rupture (MPa) ≥	1100°C × 3h	4	5
Cold Crushing Strength (MPa) ≥	110°C × 16h	15	20
Cold Crushing Strength (MPa) ≥	1100°C × 3h	20	40
Maximum Service Temperature (°C)		1350	1450
Application	Repair of Furnace Walls, Burners, and Other Areas		
Installation Method	Ramming		
Packaging: Powder: 25kg/bag + Ton Bag; Binder: 25kg/drum or 50kg/drum			
Storage: Keep Dry			

Wet-Mix Pumpable & Gunning Castables

Wet-mix pumpable castables made from high-quality bauxite, mullite, and optimized grading. SiO2 and Al2O3 micro-powders fill voids, dispersants improve flowability. Accelerator added during spraying for rapid setting and dense packing. High strength, good thermal shock resistance, fast installation.

Physical and Chemical Properties

Item	Condition	JH-BS60	JH-BS65	JH-BS68
Chemical Composition (%) ≥	Al2O3	60	65	68
Bulk Density (g/cm3) ≥	110°C × 16h	2.25	2.35	2.4
Bulk Density (g/cm3) ≥	1350°C × 3h	2.2	2.3	2.3
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	6	6
Modulus of Rupture (MPa) ≥	1350°C × 3h	6	7	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	30	45
Cold Crushing Strength (MPa) ≥	1350°C × 3h	60	65	65

Pumpable Fast-Dry Castables

Pumpable fast-dry castables with composite explosion-proof agents and organic fibers. Higher burst resistance temperature, rapid baking without cracking. Shortens furnace drying time, improves construction efficiency, saves baking energy.

Item	Condition	JH-BSK60	JH-BSK65	JH-BSK68
Chemical Composition (%) ≥	Al2O3	60	65	68
Bulk Density (g/cm3) ≥	110°C × 16h	2.25	2.35	2.4
Bulk Density (g/cm3) ≥	1350°C × 3h	2.2	2.3	2.3
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	5	6	6
Modulus of Rupture (MPa) ≥	1350°C × 3h	6	7	8
Cold Crushing Strength (MPa) ≥	110°C × 16h	30	30	45
Cold Crushing Strength (MPa) ≥	1350°C × 3h	60	65	65
Packaging: 25kg/bag + Ton Bag				
Storage: Keep Dry				
Shelf Life: 6 Months				

Physical and Chemical Properties

Pre-Assembled Modules for Reheating Furnace Working Lining

Designed for fast and efficient installation, our pre-assembled modular system for furnace walls and roofs eliminates the common headaches of conventional on-site castable construction—such as inconsistent water content, poor mixing, insufficient vibration, unconnected expansion joints, and winter construction delays. By simply assembling the modules on site, we drastically reduce construction time, shorten the furnace drying and baking schedule, and maximize the overall operational efficiency of your reheating furnace.

Physical and Chemical Properties

Item	Condition	JH-JRD60	JH-JRD65	JH-LW0.8	JH-LW1.0
Chemical Composition (%) ≥	Al2O3	60	65	25	28
Bulk Density (g/cm3) ≥	110°C × 16h	≥2.3	≥2.4	0.8 ± 0.1	1.0 ± 0.1
Permanent Linear Change on Heating (%)	110°C × 16h	-0.2 to 0	-0.2 to 0	-0.2 to 0	-0.2 to 0
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-1.0 to 0 800°C × 3h	-1.0 to 0 1000°C × 3h
Modulus of Rupture (MPa) ≥	110°C × 16h	5	8	--	--
Modulus of Rupture (MPa) ≥	1350°C × 3h	8	8	--	--
Cold Crushing Strength (MPa) ≥	110°C × 16h	45	50	1	3
Cold Crushing Strength (MPa) ≥	1350°C × 3h	60	60	1	3
Maximum Service Temperature (°C)		1350	1350	900	1000
Application		Working Lining		Insulating Lining	

Lightweight Castable Series

Engineered specifically for the operating conditions of thermal equipment, our lightweight castable series delivers an optimal balance of bulk density and structural strength. This advanced material helps reduce energy consumption, lower environmental emissions, and maximize economic returns during high-temperature furnace operation. Our lightweight high-strength castables provide moderate strength and outstanding insulation performance—making them ideal for both insulating back-up linings and working linings in industrial furnaces. With proven success in over 500 reheating furnaces at more than 100 steel plants—including Baosteel, WISCO, Masteel, TISCO, and Jianlong Steel—they are a trusted choice for demanding applications.

Physical and Chemical Properties

Item	Condition	JH-LW-0.6	JH-LW-0.8	JH-LW-1.0	JH-LW -1.2	JH-LW -1.3
Chemical Composition (%) ≥	Al2O3	25	25	28	30	35
Bulk Density (g/cm3)	110°C × 16h	0.6 ± 0.1	0.8 ± 0.1	1.0 ± 0.1	1.2 ± 0.1	1.3 ± 0.1
Permanent Linear Change on Heating (%)	1200°C × 3h	--	-1.0 to 0 800°C × 3h	-1.0 to 0 1000°C × 3h	-1.0 to 0	-1.0 to 0
Cold Crushing Strength (MPa) ≥	110°C × 16h	--	1	3	4	5
	1200°C × 3h	--	1 800°C × 3h	3 1000°C × 3h	4	6
Thermal Conductivity W/(m·K) ≤	700°C	0.25	0.28	0.35	0.40	0.45
Maximum Service Temperature (°C)		800	900	1000	1200	1200
Packaging: 25kg/bag + Ton Bag						
Storage: Keep Dry						
Shelf Life: 6 Months						

Physical and Chemical Properties

Item	Condition	JH-LW-1.5	JH-LW-1.65	JH-LW-1.8	JH-LW-2.0
Chemical Composition (%) ≥	Al2O3	35	40	42	45
Bulk Density (g/cm3)	110°C × 16h	1.5 ± 0.1	1.65 ± 0.1	1.8 ± 0.1	2.0 ± 0.1
Permanent Linear Change on Heating (%)	1300°C × 3h	-1.0 to 0 1250°C × 3h	-1.0 to 0	-1.0 to 0	-0.5 to +0.5 1350°C × 3h
Cold Crushing Strength (MPa) ≥	110°C × 16h	5	7	12	18
Cold Crushing Strength (MPa) ≥	1300°C × 3h	10 1250°C × 3h	10	15	25 1350°C × 3h
Thermal Conductivity W/(m·K) ≤	700°C	0.5	0.6	0.7	0.75
Maximum Service Temperature (°C)		1250	1250	1300	1350
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 6 Months					

High-Performance Lightweight Castables

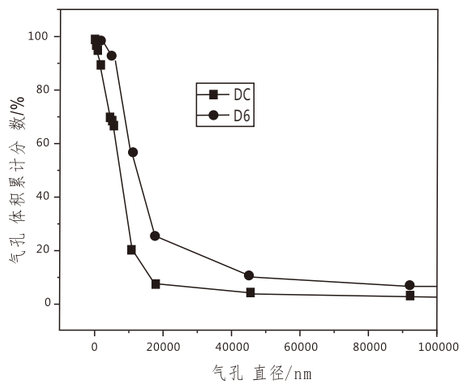
Our high-performance lightweight castable series is engineered with premium lightweight mullite aggregates, mullite hollow spheres, and andalusite, bonded with ultra-fine powders and calcium aluminate cement. Advanced micro-porosity technology creates a uniformly distributed micro-nano pore structure throughout the material, dramatically lowering thermal conductivity.

Through innovative particle interface strengthening, we have enhanced the bond between aggregates and matrix, delivering superior high-temperature strength for demanding applications. The optimized binder system and micro-powder formulation further improve workability and overall performance. The result is a lightweight high-alumina castable with exceptional thermal insulation, high strength at elevated temperatures, and excellent volume stability.

When applied to furnace roofs, walls, and high-temperature equipment in industrial furnaces operating between 1200°C and 1500°C, this castable achieves remarkable energy savings—reducing consumption by 10– 15% for our customers.

Physical and Chemical Properties

Item	Condition	JH-GLW1.5	JH-GLW1.8	JH-GLW2.0
Chemical Composition (%) ≥	Al2O3	45	50	55
Bulk Density (g/cm3)	110°C × 16h	1.5 ± 0.1	1.8 ± 0.1	2.0 ± 0.1
Permanent Linear Change on Heating (%)	1350°C × 3h	-1.0 to 0	0 to +0.8	0 to +0.8
Permanent Linear Change on Heating (%)	1500°C × 3h	--	--	0 to +1.0
Cold Crushing Strength (MPa) ≥	110°C × 16h	10	15	20
Cold Crushing Strength (MPa) ≥	1350°C × 3h	15	25	30
Cold Crushing Strength (MPa) ≥	1500°C × 3h	--	--	40
Thermal Conductivity W/(m·K) ≤	700°C	0.6	0.70	0.75
Maximum Service Temperature (°C)		1400	1450	1500
Packaging: 25kg/bag + Ton Bag				
Storage: Keep Dry				
Shelf Life: 6 Months				



Gunning Mixes

With the addition of high-efficiency binders, our gunning mix series offers low rebound loss, high strength, and excellent high-temperature volume stability, enabling fast furnace construction. This product series has been successfully applied in industrial furnaces at numerous steel plants, including Baowu, Yanshan Steel, Shougang Jingtang, Taishan Steel, Xining Special Steel, and Tangshan Ganglu.

Physical and Chemical Properties

Item	Condition	JH-PT1.0	JH-PT1.2	JH-PT1.3	JH-PT1.45
Chemical Composition (%) ≥	Al2O3	25	30	35	35
Bulk Density (g/cm3)	110°C × 16h	1.0 ± 0.1	1.2 ± 0.1	1.3 ± 0.1	1.45 ± 0.1
Permanent Linear Change on Heating (%)	1000°C × 3h	-1.0 to 0 800°C × 3h	-1.0 to 0 900°C × 3h	-1.0 to 0	-0.1 to 0
Cold Crushing Strength (MPa) ≥	110°C × 16h	2	2	4	5
Cold Crushing Strength (MPa) ≥	1000°C × 3h	1.5 800°C × 3h	3 900°C × 3h	4	6
Maximum Service Temperature (°C)		800	900	1000	1200
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 6 Months					

Item	Condition	JH-PT1.5	JH-PT1.8	JH-PT2.0	JH-PT2.2
Chemical Composition (%) ≥	Al2O3	35	35	40	50
Bulk Density (g/cm3)	110°C × 16h	1.5 ± 0.1	1.8 ± 0.1	2.0 ± 0.1	2.2 ± 0.1
Permanent Linear Change on Heating (%)	1000°C × 3h	-1.0 to 0	-1.0 to 0	-1.0 to 0 1200°C × 3h	-0.6 to 0 1200°C × 3h
Cold Crushing Strength (MPa) ≥	110°C × 16h	4	8	8	25
Cold Crushing Strength (MPa) ≥	1000°C × 3h	5	10	12 1200°C × 3h	25 1200°C × 3h
Maximum Service Temperature (°C)		1200	1200	1300	1300
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 6 Months					

Low-Cement Castables & Precast Shapes for Rotary Hearth Furnace

Based on the working conditions of rotary hearth furnaces, our company has developed low-cement castables for RHF walls and roofs. This castable effectively reduces erosion caused by zinc vapor and potassium/sodium chloride salts under RHF operating conditions, thereby extending the overall service life of the rotary hearth furnace.

Physical and Chemical Properties

Item	Condition	JH-ZDJ48	JH-ZDJ65	JH-ZDJ68
Chemical Composition (%)	Al2O3 ≥	48	65	68
Chemical Composition (%)	SiC ≥	--	--	2
Chemical Composition (%)	CaO ≤	--	2	2
Chemical Composition (%)	Fe2O3 ≤	--	1.5	1.5
Bulk Density (g/cm3) ≥	110°C × 16h	2.10	2.45	2.48
Permanent Linear Change on Heating (%)	1200°C × 3h	-0.5 to +0.5	-0.3 to +0.3	-0.3 to +0.3
Permanent Linear Change on Heating (%)	1500°C × 3h	--	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	5	8
Modulus of Rupture (MPa) ≥	1200°C × 3h	6	9	10
Modulus of Rupture (MPa) ≥	1500°C × 3h	--	10	12
Cold Crushing Strength (MPa) ≥	110°C × 16h	20	35	40
Cold Crushing Strength (MPa) ≥	1200°C × 3h	19	50	60
Cold Crushing Strength (MPa) ≥	1500°C × 3h	--	65	65
Thermal Shock Resistance (1100°C, Water Cooling) / cycles ≥		--	20	20
Application		Flue		Furnace Wall & Roof
Packaging: 25kg/bag + Ton Bag				
Storage: Keep Dry				
Shelf Life: 6 Months				

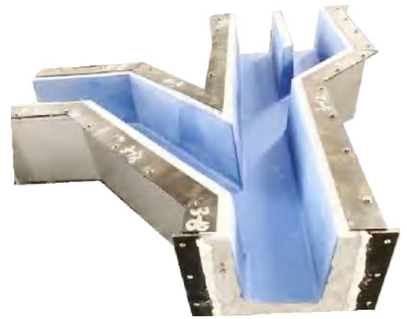
Precast Mix for Sidewall Bricks

Physical and Chemical Properties

Item		JH-ZDB-65	JH-ZDB-68
Chemical Composition (%)	Al2O3 ≥	65	68
Chemical Composition (%)	SiC ≥	--	2
Chemical Composition (%)	Fe2O3 ≤	1.5	1.5
Bulk Density (g/cm3) ≥	110°C × 16h	2.4	2.45
Permanent Linear Change on Heating (%)	1200°C × 3h	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥		8	10
Cold Crushing Strength (MPa) ≥		50	60
Packaging		Wooden Pallet	Wooden Pallet

Precast Blocks for Discharge Chute

The silicon carbide castable for rotary hearth furnace discharge chutes is developed using 97% silicon carbide as the main raw material, with the addition of silica fume and alumina micro-powder, and formulated through optimized particle size grading. This product exhibits excellent wear resistance and is ideally suited for use in rotary hearth furnace discharge chute areas. It has received positive feedback from users.



Physical and Chemical Properties

Item	Condition	ZDC-55
Chemical Composition (%) ≥	SiC	55
Chemical Composition (%) ≥	Al2O3	25
Bulk Density (g/cm3) ≥		2.55
Modulus of Rupture (MPa) ≥		10
Cold Crushing Strength (MPa) ≥		80
Packaging		Wooden Pallet

Alkali-Resistant Castables for Rotary Hearth Furnace

The alkali-resistant castable for rotary hearth furnaces is made from calcined flint clay, kaolin, and other main raw materials, with the controlled addition of ultra-fine powders to improve the density of the castable, and bonded with pure calcium aluminate cement. This castable is suitable for long-term use under high-temperature alkaline conditions and is the preferred material for rotary hearth furnace flue areas.

Physical and Chemical Properties

Item	Condition	JH-JB48
Chemical Composition (%) ≥	Al2O3	48
Bulk Density (g/cm3) ≥	110°C × 16h	2.1
Permanent Linear Change on Heating (%)	1200°C × 3h	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6
Modulus of Rupture (MPa) ≥	1200°C × 3h	6
Cold Crushing Strength (MPa) ≥	110°C × 16h	20
Cold Crushing Strength (MPa) ≥	1200°C × 3h	30
Maximum Service Temperature (°C)		1200
Packaging: 25kg/bag + Ton Bag		
Storage: Keep Dry		
Shelf Life: 6 Months		

Silicon Carbide Bricks

Physical and Chemical Properties

Item		ZDT-85
Chemical Composition (%)	SiC	≥ 85
Bulk Density (g/cm3)		≥2.70
Cold Crushing Strength (MPa)		≥90
Refractoriness Under Load (0.2MPa RUL T0.6) (°C)		≥1600
Packaging		Wooden Pallet

金鑫恒拓
JINXINHENGTUO

High-Temperature Bonding Mortar

JH-HP85 high-strength mortar is developed using corundum powder as the main raw material, combined with ultra-fine powders and high-efficiency binders. This product features high bonding strength and excellent wear resistance, making it an ideal bonding material for high-temperature applications in reheating furnaces.

Physical and Chemical Properties

Item	Condition	JH-HP85
Chemical Composition (%)	Al2O3 ≥	85
Bonding Modulus of Rupture (MPa) ≥	200°C × 16h	5
Bonding Modulus of Rupture (MPa) ≥	1000°C × 3h	4
Bonding Modulus of Rupture (MPa) ≥	1400°C × 3h	5
Particle Size (%)	< 1.0mm	100
Particle Size (%)	> 0.5mm, max	2
Particle Size (%)	< 0.075mm, min	50
Packaging: Powder: 25kg/bag + Ton Bag; Binder: 25kg/drum		
Storage: Keep Dry		
Shelf Life: 6 Months		

Fireclay Bricks

Physical and Chemical Properties

Item	Condition	PN-1	PN-2	PN-3
Apparent Porosity (%) ≤		24	26	28
Cold Crushing Strength (MPa) ≥		30	25	20
Refractoriness Under Load (0.2MPa RUL T0.6) (°C) ≥		1300	1250	1200
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.1	-0.5 to +0.2	--
Packaging		Wooden Pallet	Wooden Pallet	Wooden Pallet

High-Alumina Bricks

Physical and Chemical Properties

Item	Condition	LZ-80	LZ-75	LZ-65	LZ-55	LZ-48
Al2O3 (%) ≥		80	75	65	55	48
Apparent Porosity (%) ≤		22	24	24	22	22
Cold Crushing Strength (MPa) ≥		55	50	45	40	35
Refractoriness Under Load (0.2MPa RUL T0.6) (°C) ≥		1530	1520	1500	1450	1420
Permanent Linear Change on Heating (%)	1500°C × 2h	-0.4 to +0.2	-0.4 to +0.2	--	--	--
	1450°C × 2h	--	--	-0.4 to +0.1	-0.4 to +0.1	-0.4 to +0.1
Packaging		Wooden Pallet				

Fireclay Insulating Fire Bricks

Physical and Chemical Properties

Item	Condition	JH-NG1.3	JH-NG1.2	JH-NG1.0	JH-NG0.8	JH-NG0.6
Bulk Density (g/cm3) ≤		1.3	1.2	1.0	0.8	0.6
Cold Crushing Strength (MPa) ≥		5.0	4.5	3.5	2.5	1.3
Test Temperature for Permanent Linear Change ≤ 2% (° C)		1350	1350	1300	1250	1200
Thermal Conductivity at 350 ° C [W/(m · K)] ≤		0.55	0.50	0.40	0.35	0.25
Packaging		Carton or Wooden Pallet				

High-Alumina Insulating Fire Bricks

Physical and Chemical Properties

Item	JH-LG-1.2	JH-LG-1.0	JH-LG-0.8	JH-LG-0.6
Al2O3 (%) ≥	48	48	48	48
Fe2O3 (%) ≤	2.0	2.0	2.0	2.0
Bulk Density (g/cm3)	1.2	1.0	0.8	0.6
Cold Crushing Strength (MPa) ≥	4.5	3.5	2.5	1.6
Test Temperature for Permanent Linear Change ≤ 2% (°C)	1400	1400	1400	1350
Thermal Conductivity at 350°C [W/(m·K)] ≤	0.55	0.50	0.35	0.25
Packaging	Carton or Wooden Pallet			

Fireclay & High-Alumina Refractory Mortars

Fireclay and high-alumina refractory mortars are composed of refractory powders, binders, and additives. These mortars exhibit excellent workability, with no sedimentation, segregation, or sagging, meeting the ideal joint requirements for masonry. They offer material, labor, and time savings, with high cold bonding strength that ensures firm adhesion between joints and bricks, good high-temperature volume stability, and high refractoriness and refractoriness under load.

Physical and Chemical Properties

Item	Condition	JH-NN45	JH-NN55	JH-GL65	JH-GL70
Chemical Composition (%) ≥	Al2O3	45	55	65	70
Bonding Modulus of Rupture (MPa) ≥	110°C × 16h	1	1	1	1
Bonding Modulus of Rupture (MPa) ≥	1200°C × 3h	3	4	4	4
Permanent Linear Change on Heating (%)	1200°C × 3h	-5 to 1	-5 to 1	-5 to 1	-5 to 1
Setting Time (min)		1 to 3	1 to 3	1 to 3	1 to 3
Particle Size (%)	< 1.0 mm	100	100	100	100
Particle Size (%)	> 0.5 mm, max	2	2	2	2
Particle Size (%)	< 0.075 mm, min	50	50	50	50
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 12 Months					

Item	Condition	JH-GL60P	JH-GL65P	JH-GL70P	JH-GL75P
Chemical Composition (%) ≥	Al2O3	60	65	70	75
Bonding Modulus of Rupture (MPa) ≥	110°C × 16h	2	2	2	2
Bonding Modulus of Rupture (MPa) ≥	1400°C × 3h	6.0	6.0	6.0	6.0
Permanent Linear Change on Heating (%)	1400°C × 3h	-5 to 1	-5 to 1	-5 to 1	-5 to 1
Setting Time (min)		1 to 3	1 to 3	1 to 3	1 to 3
Particle Size (%)	< 1.0 mm	100	100	100	100
Particle Size (%)	> 0.5 mm, max	2	2	2	2
Particle Size (%)	< 0.075 mm, min	50	50	50	50
Packaging: 25kg/bag + Ton Bag					
Storage: Keep Dry					
Shelf Life: 12 Months					

金鑫恒拓 JINXINHENGTUO

High-Strength Steel Fiber Castables for Rotary Kilns

The steel fiber reinforced erosion and wear-resistant castable for rotary kilns is made from high-grade bauxite, sintered mullite, and other main raw materials, with the addition of silica fume, alumina micro-powder, and calcium aluminate cement as the binder system. This castable exhibits high medium-temperature strength, good volume stability, and excellent wear resistance.

Physical and Chemical Properties

Item	Condition	JH-HZY60	JH-HZY65	JH-HZY68
Chemical Composition (%) ≥	Al2O3	60	65	68
Bulk Density (g/cm3) ≥	110°C × 16h	2.4	2.45	2.5
Permanent Linear Change on Heating (%)	1100°C × 3h	-0.5 to +0.5	-0.5 to +0.5	0.5 to +0.5
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	6	8	9
Modulus of Rupture (MPa) ≥	1100°C × 3h	8	10	12
Modulus of Rupture (MPa) ≥	1350°C × 3h	9	10	12
Cold Crushing Strength (MPa) ≥	110°C × 16h	60	60	70
Cold Crushing Strength (MPa) ≥	1100°C × 3h	80	80	90
Cold Crushing Strength (MPa) ≥	1350°C × 3h	90	90	100
Packaging: 25kg/bag + Ton Bag				
Storage: Keep Dry				
Shelf Life: 6 Months				

Special Castables for Rotary Kiln, Grate Cooler Hood, Burner & Kiln Hood

Physical and Chemical Properties

Item	Condition	JH-HY17K	JH-HY17P	JH-HY17M
Chemical Composition (%) ≥	Al2O3 + SiC	70	70	75
Bulk Density (g/cm3) ≥	110°C × 16h	2.75	2.75	2.4
Permanent Linear Change on Heating (%)	1100°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	8	8	10
Modulus of Rupture (MPa) ≥	1100°C × 3h	10	10	12
Cold Crushing Strength (MPa) ≥	110°C × 16h	80	80	100
Cold Crushing Strength (MPa) ≥	1100°C × 3h	90	100	120
Application		Kiln Hood Special Castable	Burner Special Castable	High-Wear & Erosion Resistant Castable

Andalusite Castables for Central Area of Submerged Arc Furnace Roof

Physical and Chemical Properties

Item	Condition	JH-DLD70
Chemical Composition (%) ≥	Al2O3	70
Bulk Density (g/cm3) ≥	110°C × 16h	2.7
Permanent Linear Change on Heating (%)	1500°C × 3h	0 to +1.0
Modulus of Rupture (MPa) ≥	110°C × 16h	5
Modulus of Rupture (MPa) ≥	1500°C × 3h	10
Cold Crushing Strength (MPa) ≥	110°C × 16h	35
Cold Crushing Strength (MPa) ≥	1500°C × 3h	80
Maximum Service Temperature (°C) ≥		1600

Made from high-grade bauxite, andalusite, and corundum powder, bonded with ultra-low cement. Features high RUL, excellent thermal shock resistance, and anti-spalling properties. Proven in submerged arc furnace applications.

金鑫恒拓 JINXINHENGTUO

High-Strength Wear-Resistant Castables for CFB Boilers & Gasifiers

The high-strength wear-resistant castable series is manufactured using ultra-fine powder technology, which imparts excellent workability and superior high-temperature physical properties to the castables. This product offers high strength, excellent wear resistance , erosion resistance, and good thermal shock resistance. It is mainly used for CFB boilers, gasifier linings, and other severely worn areas.

Physical and Chemical Properties

Item	Condition	JH-HMD70	JH-HMD75	JH-HMD80
Chemical Composition (%) ≥	Al2O3	70	75	80
Bulk Density (g/cm3) ≥	110°C × 16h	2.65	2.7	2.8
Permanent Linear Change on Heating (%)	1100°C × 3h	-0.5 to 0	-0.5 to 0	-0.5 to 0
Permanent Linear Change on Heating (%)	1350°C × 3h	-0.5 to +0.5	-0.5 to +0.5	-0.5 to +0.5
Modulus of Rupture (MPa) ≥	110°C × 16h	8	10	12
Modulus of Rupture (MPa) ≥	1100°C × 3h	12	14	16
Modulus of Rupture (MPa) ≥	1350°C × 3h	12	14	14
Cold Crushing Strength (MPa) ≥	110°C × 16h	60	80	90
Cold Crushing Strength (MPa) ≥	1100°C × 3h	80	90	100
Cold Crushing Strength (MPa) ≥	1350°C × 3h	90	90	100
Wear Loss at Room Temperature (cm3) ≤ (after firing at 1000°C × 3h)		7	6	5
Maximum Service Temperature (°C)		1500	1500	1500
Packaging: 25kg/bag + Ton Bag				
Storage: Keep Dry				
Shelf Life: 6 Months				

Wear-Resistant Plastic Refractories for CFB Boilers & Gasifiers

The high-strength wear-resistant plastic refractories series are made from high-quality bauxite, corundum, and other main raw materials, with the addition of various ultra-fine powders, clay, and other plasticizing agents, bonded with phosphate. They offer excellent plasticity, superior adhesion, high-temperature wear resistance, and resistance to erosion and spalling. They are mainly used for CFB boilers, gasifier linings, and other severely worn areas.

Physical and Chemical Properties

Item	Condition	JH-PKS70	JH-PKS75
Chemical Composition (%) ≥	Al2O3	70	75
Bulk Density (g/cm3) ≥	110 ° C × 16h	2.4	2.5
Permanent Linear Change on Heating (%)	850 ° C × 3h	-0.5 to 0	-0.5 to 0
Permanent Linear Change on Heating (%)	1100 ° C × 3h	-0.5 to 0	-0.5 to 0
Modulus of Rupture (MPa) ≥	110 ° C × 16h	5	7
Modulus of Rupture (MPa) ≥	850 ° C × 3h	7	9
Modulus of Rupture (MPa) ≥	1100 ° C × 3h	9	10
Cold Crushing Strength (MPa) ≥	110 ° C × 16h	40	40
Cold Crushing Strength (MPa) ≥	850 ° C × 3h	60	70
Cold Crushing Strength (MPa) ≥	1100 ° C × 3h	80	90
Wear Loss at Room Temperature (cm3) ≤		8	6
Plasticity Index (%)		15 to 40	15 to 40
Maximum Service Temperature (° C)		1500	1500
Packaging: Powder: 25kg/bag + Ton Bag; Binder: 25kg/drum			
Storage: Keep Dry			
Shelf Life: 6 Months			

金鑫恒拓
JINXINHENGTUO

High-Temperature Micro-Expansion Plastic Refractories for CFB Boilers & Gasifiers

Physical and Chemical Properties

Item	Condition	JH-WPZK40
Chemical Composition (%) ≥	Al2O3	40
Bulk Density (g/cm3) ≥	110°C × 16h	2.2
Permanent Linear Change on Heating (%)	110°C × 3h	-0.5 to 0
Permanent Linear Change on Heating (%)	1400°C × 3h	+2 to 3.5
Modulus of Rupture (MPa) ≥	110°C × 16h	10
Modulus of Rupture (MPa) ≥	1400°C × 3h	6
Cold Crushing Strength (MPa) ≥	110°C × 16h	14
Cold Crushing Strength (MPa) ≥	1400°C × 3h	20
Plasticity Index (%)		40 to 60
Maximum Service Temperature (°C)		1500
Application	Furnace Roof Sealing Device	
Packaging:	Powder: 25kg/bag + Ton Bag; Binder: 25kg/drum or 50kg/drum	
Storage:	Keep Dry	

Bed Material for Boilers

Using sepiolite and lightweight aggregates as the main raw materials, this plastering material features strong bonding strength, no cracking or peeling on the surface after drying, excellent fire resistance, low thermal conductivity and good thermal insulation, significant energy-saving benefits, and good plasticity for convenient application.

Physical and Chemical Properties

Item	JH-MT1.0	JH-MT1.3	JH-MT1.5
Bulk Density (g/cm3)	1.0 ± 0.1	1.3 ± 0.1	1.5 ± 0.1
Cold Crushing Strength	25 KPa	3 MPa	8 MPa
Thermal Conductivity (Average Temperature 25°C ± 5°C) ≤	0.07	0.15	0.25
Loss on Ignition (Including Organics & Combustibles) ≤	3%	3%	3%
Maximum Service Temperature (°C) ≤	600	800	1000
Application: Used as a surface coating/plastering layer over insulating castables on furnace roofs and ladle inner walls.		Remarks: Crack-free, non-spalling, excellent fire resistance, and resistant to cracking under temperature fluctuations and vibration	