



One-Stop Wear Resistant Service

30-Year Expert In Wear-Resistant Equipment Parts (Est. 1992) |
More Durable Parts, More Efficient Production

您的一站式耐磨服务专家

30年设备耐磨配件专家（始于1992）| 让配件更耐用，生产更高效

LUOYANG ZHILI NEW MATERIALS CO.,LTD
洛阳市致力新材料有限公司

Tel(电话): 0379-6363 5777

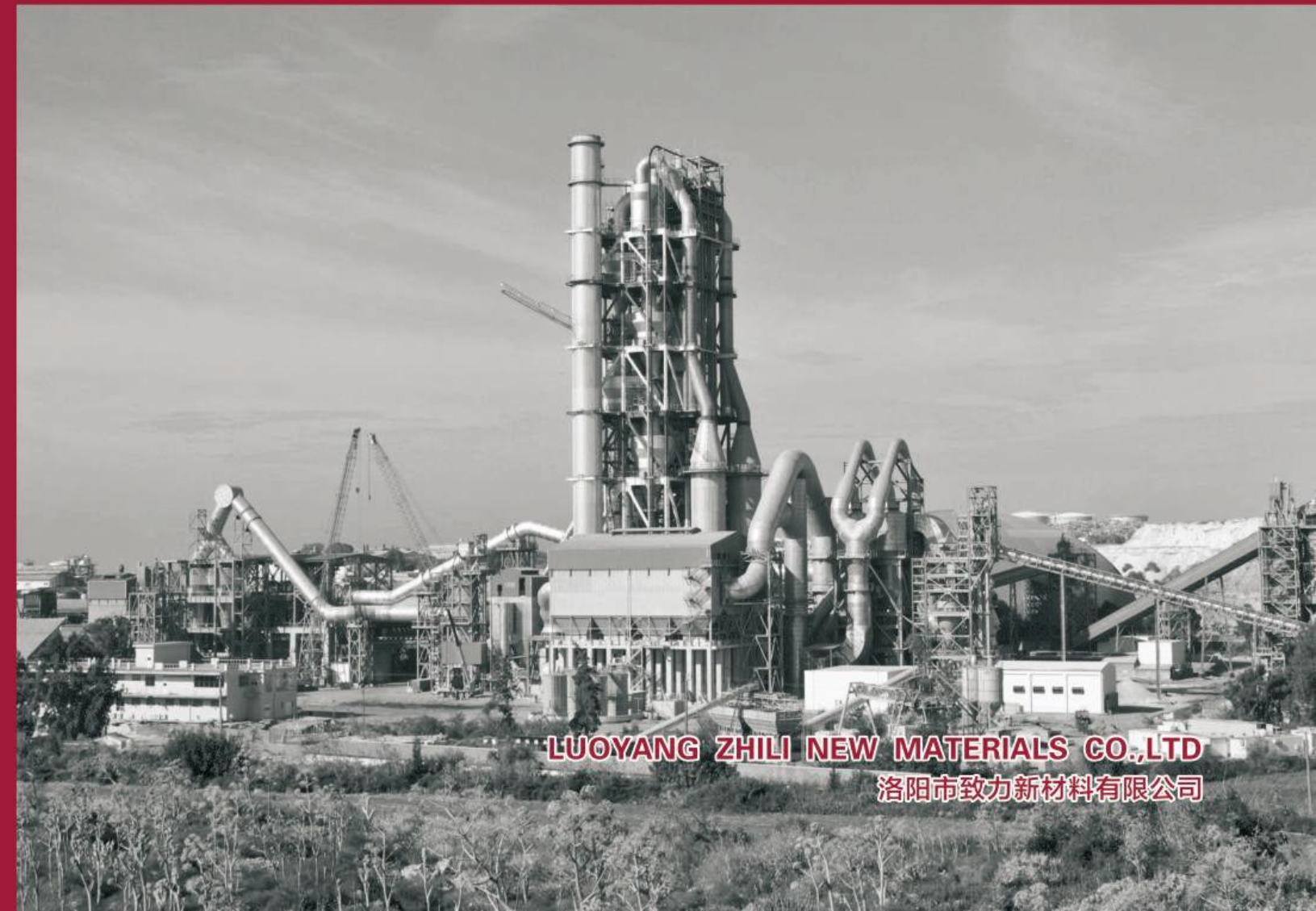
Web(网址): www.zhiliwearparts.com

www.global-casting.com/www.lyzhili.com

E-mail: info@lyzhili.com

Address: Xigong District, Luoyang City, Henan Province

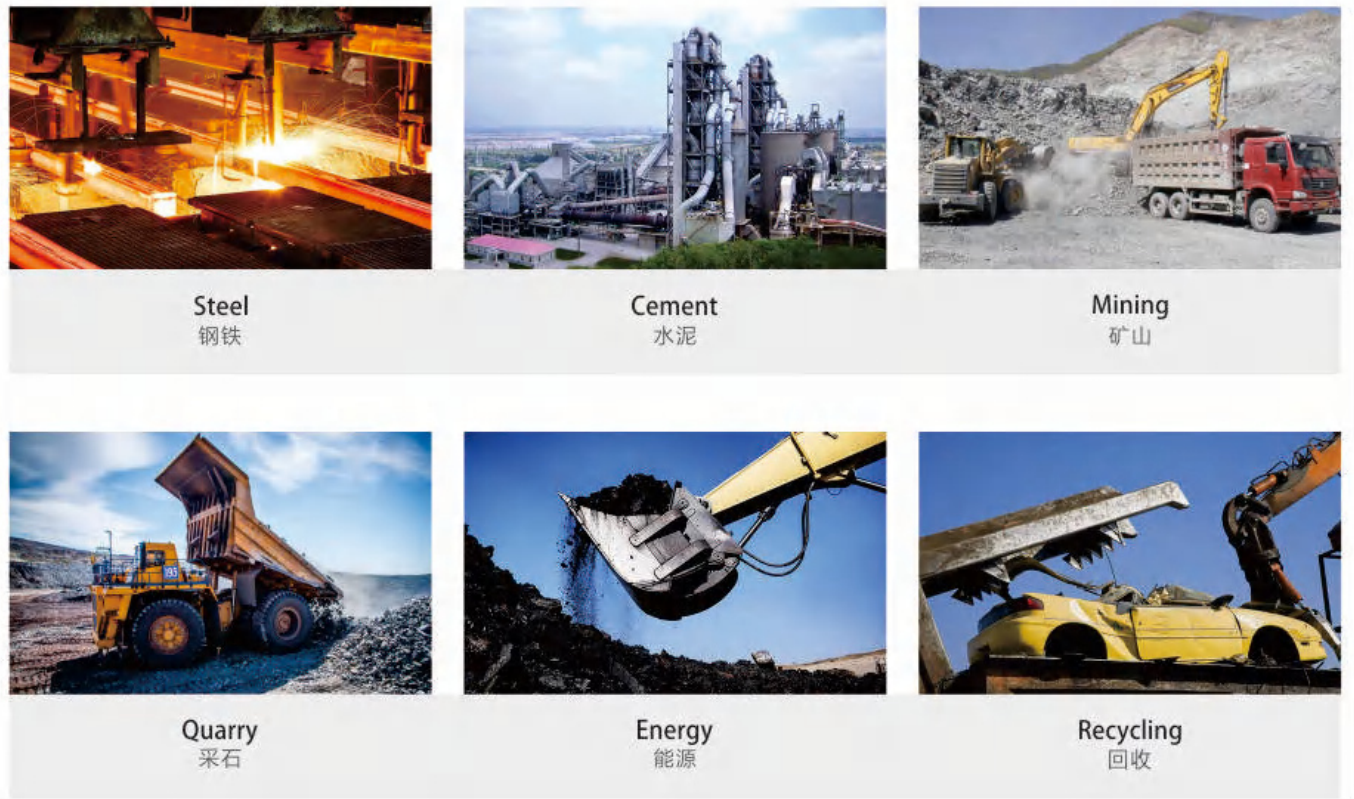
地址: 河南省洛阳市西工区



LUOYANG ZHILI NEW MATERIALS CO.,LTD

洛阳市致力新材料有限公司

Trusted By The Industry, Recognized For Quality 行业之选，品质共识



Company Introduction 公司介绍

Company Profile 公司简介

Luoyang Zhili New Materials established in 1992, is one of the world's leading wear-resistant materials processing center, providing high quality wearing parts service for mining, cement, power plant, steel, coal industries, etc. Located in a modern 18,000-square-meter facility, the company boasts three modern production lines: resin sand, lost foam, and iron mold sand coating, with a total annual production capacity of 18,000 tons. Advanced processes such as argon refining, composite inlaying, additive overlay welding, and isothermal heat treatment are employed to ensure stable and superior product performance. Leveraging our strong technical expertise, stable production capacity, and efficient delivery capabilities, we are committed to becoming our customers' most reliable partner.

洛阳市致力新材料有限公司成立于1992年，是一家集研发、设计、生产、销售为一体的全球先进的耐磨材料加工中心，专注为采矿、水泥、电力、钢铁、煤炭等行业等提供高质量耐磨备件服务。

公司坐落于总面积18,000平方米的现代化厂区，拥有树脂砂、消失模、铁模覆砂三条现代化生产线，年总产能达1.8万吨。生产采用吹氩精炼、复合镶嵌、增材堆焊、等温热处理等先进工艺，确保产品性能稳定优异。我们凭借雄厚的技术实力、稳定的产能和高效的交付能力，致力于成为客户心中最可靠的合作伙伴。

Development History 发展历程

In 1992, we begin to engage in the casting of wear-resistant materials.

In 2010, we start to supply wear parts welding products and services to customer.

In 2017, we are authorized by Sweden Steel Group as hardox wear parts center, we have started to provide customers with hardox wear plate and Duroxite surfacing series of products and services.

In 2019, in order to expand production, shorten delivery time, and meet the order needs of domestic and foreign customers, the company established a branch factory in Yunnan and set up a new company.

In 2020, the ceramic metal composite series products developed by the company were successfully launched. Ceramic metal composite wear-resistant materials have been successfully applied to products such as hammer heads, plate hammers, grinding rollers and grinding discs, further improving the service life of wear-resistant parts, realizing the diversification, specialization and comprehensiveness of wear-resistant products, and meeting the various needs of customers.

In 2023, we independently developed a heat resistant and wear-resistant technology - ceramic composite matrix reinforcement technology, which combines the advantages of high hardness, high modulus and high wear resistance of ceramic particles with the good toughness and strength of the metal matrix, effectively solving the issue of significant wear resistance degradation in high-manganese steel as temperatures rise.

In 2024, after strict review by the international certification body GICG, the company successfully passed the ISO quality management system certification and obtained the ISO9001 certification certificate.

1992年，开始从事耐磨材料的铸造。

2010年，开始为客户提供耐磨堆焊的产品及服务。

2017年，获得瑞典钢铁集团（SSAB）授权，成为其旗下悍达系列全球耐磨加工中心，开始为客户提供Hardox®耐磨板与Duroxite®堆焊两大系列的产品及服务。

2019年，为扩大生产，缩短交期，满足国内外客户的订单需求，公司在云南建立分工厂并设立新公司。

2020年，公司研发的陶瓷金属复合系列产品成功上市。陶瓷金属复合耐磨材料成功应用于锤头、板锤、磨辊磨盘等产品，进一步提高了耐磨件的使用寿命，实现了耐磨产品多样化，专业化，全面化，满足了客户的多种需求。

2023年，独立研发耐高温耐磨技术——陶瓷复合基体增强技术，兼具陶瓷颗粒高硬度、高模量和高耐磨性以及金属基体良好的韧性和强度等优点，解决了高锰钢在高温下耐磨性随着温度升高显著衰减的问题。

2024年，经过国际认证机构GICG的严格审核，公司顺利通过ISO质量管理体系认证，获得ISO9001认证证书。

Casting Expert 铸造专家

Advantage 优势

- 1.Advanced casting technology ensures castings with precise dimensions, excellent surface quality and up-to-standard internal performance.
- 2.Strong material R&D capability enables customized castings with wear-resistant, high-temperature-resistant and corrosion-resistant properties to enhance product competitiveness.
- 3.High-precision casting equipment improves production automation and stability for large-scale high-quality production.
- 4.Comprehensive testing equipment conducts full-process (raw materials/work-in-progress/finished products) inspection to ensure quality and customer confidence.

- ①先进铸造工艺，确保铸件尺寸精准、表面优良、内在性能达标。
- ②强材料研发能力，按需定制耐磨、耐高温、耐腐蚀铸件，提升产品竞争力。
- ③高精度铸造设备，提升生产自动化与稳定性，实现大规模高质量生产。
- ④完善检测设备，全流程（原材料 / 在制品 / 成品）检测，确保质量让客户放心。

Application 应用领域

Supplying for mining, cement plant, power plant, building material, energy, railway, highway, water conservancy, melting, chemical industry, recycling of Steel scrap.

矿山、水泥、电力、建材、能源、铁路、公路、水利、冶金、化工、废钢废件回收等行业提供服务。



Services 服务

- 1.Custom Casting: Tailor-made solutions based on customer needs.
- 2.Quality-Price Excellence + Composition Report: Transparent quality & cost, with authoritative composition analysis.
- 3.Professional Testing & Inspection: Full-process, high standards to secure quality.
- 4.Bidding Full-Support: One-stop assistance for efficient bid success.
- 5.Material Consulting: Analyze properties, offer scientific selection advice.
- 6.On-Site Survey & Customization: Accurate on-site mapping to support custom production.
- 7.Multilingual Seamless Communication: Break language barriers for smooth global business.

- ①专属定制铸造：按需定制，打造个性化铸造方案。
- ②质价双优 + 成分报告：质价透明，附权威成分分析。
- ③专业检测检验：全流程高标准，筑牢质量防线。
- ④招投标全程赋能：一站式支持，助力高效中标。
- ⑤材质咨询智囊：解析特性，提供科学选型建议。
- ⑥现场测绘定制：上门精准测绘，支撑定制生产。
- ⑦多语言无缝沟通：打破语言壁垒，顺畅对接国际业务。
- ⑧技术攻坚支援：专项突破难点，攻克研发生产瓶颈。

Common Spare Parts 常用备件

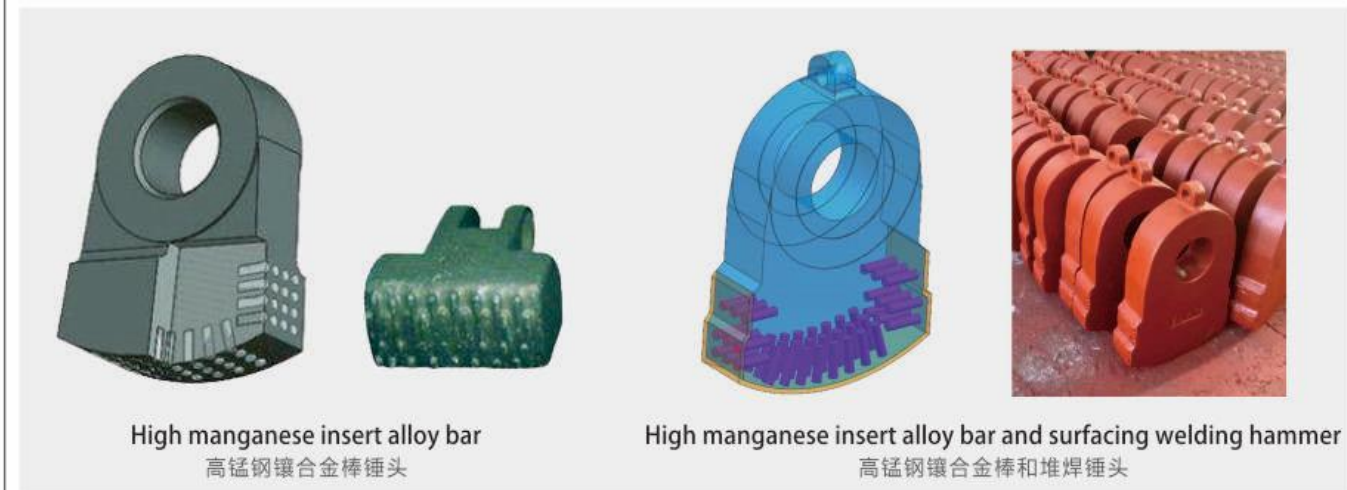
Hammer, liner, jaw plate, blow bar, mantle, concave, vertical mill, mill liner, OEM etc.

锤头、衬板、颚板、板锤、轧臼壁、破碎壁、立磨辊套、立磨衬板、特殊定制件等。

Hammer Crusher Parts 锤式破碎机配件

Suitable Material: high chrome, bimetal composite, high manganese steel, high manganese insert alloy bar, high manganese welding, medium alloy steel, ceramic composite.

可选耐磨材质：高铬铸铁、双金属复合、高锰钢、高锰钢镶合金棒、高锰钢堆焊、中合金钢、陶瓷复合。



Impact Crusher Parts 反击式破碎机配件

Suitable Material: bimetallic composite, high chrome, high manganese steel, high manganese insert alloy bar, high manganese insert alloy bars and surfacing welding, alloyed super high manganese, ceramic composite.

可选耐磨材质：双金属复合、高铬、高锰钢、高锰钢镶合金棒、高锰钢镶合金棒+堆焊、合金化超高锰、陶瓷复合。



Ceramic Composite Matrix Reinforcement Technology—Heat Resistant And Wear-Resistant Technology

陶瓷复合基体增强技术—耐高温耐磨技术

Advantage 优势

- 1.Metal-ceramic is incorporated to traditional high-manganese steel matrices, and multi-level composite material is formed through in-situ self-generation technology. The in-situ generated substances achieve atomic-level bonding with the matrix, avoiding issues such as weak interfacial bonding and uneven distribution.
- 2.Ceramic particle-reinforced metal matrix composites combine the high hardness, high modulus, and excellent wear resistance of ceramic particles with the good toughness and strength of the metal matrix.
- 3.At ambient temperature, this material is double hardness compared to Mn18Cr2. At high temperatures, the reduction in hardness is minimal, effectively solving the issue of significant wear resistance degradation in high-manganese steel as temperatures rise.

- ① 在传统的高锰钢基体中，加入金属陶瓷，通过原位自生技术，形成多级结构复合材料，原位自生生成的物质与基体实现原子级结合，避免了界面结合差，分布不均等问题。
- ② 陶瓷颗粒增强钢铁基复合材料兼具陶瓷颗粒高硬度、高模量和高耐磨性以及金属基体良好的韧性和强度等优点。
- ③ 常温下其硬度较Mn18Cr2翻倍，高温下，其硬度较常温硬度降低较少，解决了高锰钢在高温下耐磨性随着温度升高显著衰减的问题。

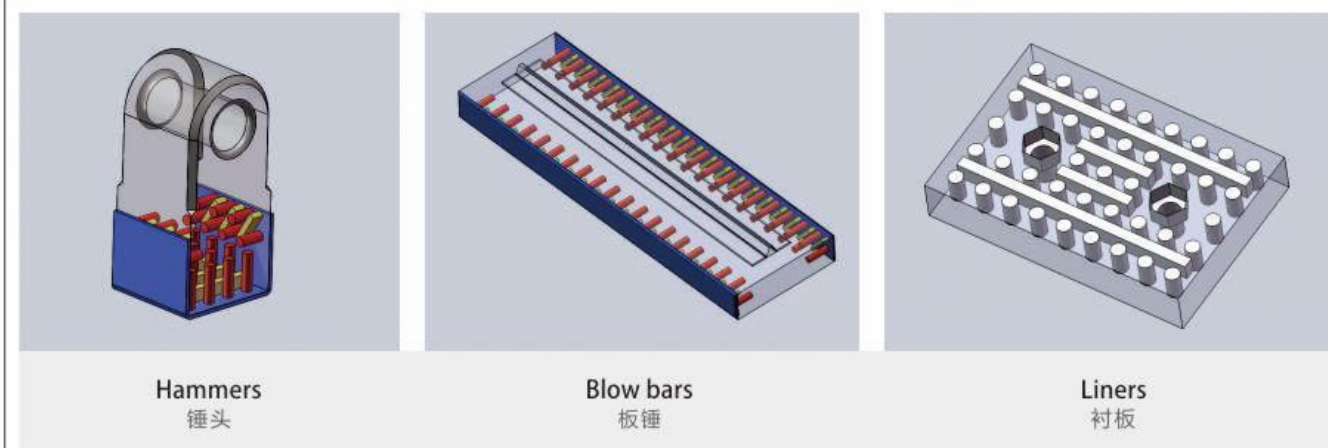
Applicable Products 适用产品

Hammers, blow bars, liners, etc.
锤头、板锤、衬板等。

Application 应用行业

Cement, mining, power, steel, coal mining, etc.
水泥、采矿、电力、钢铁、煤矿等。

Product Performance Diagram of Ceramic Matrix Composite Reinforcement Technology 陶瓷复合基体增强技术产品效果图



Cone Crusher Parts 圆锥破碎机配件

Suitable Material: high manganese steel, high manganese welding.

可选耐磨材质：高锰钢、高锰钢堆焊。



High manganese concave
高锰钢破碎壁

High manganese concave
高锰钢破碎壁

High manganese mantle
高锰钢轧臼壁

Jaw Crusher Parts 颚式破碎机配件

Suitable Material: high manganese steel, medium alloy steel, high manganese insert alloy bar.

可选耐磨材质：高锰钢、中合金钢、高锰钢镶合金棒。



High manganese jaw plate
高锰钢颚板

Meduim alloy steel jaw plate
中合金钢颚板

High manganese insert alloy bar jaw plate
高锰钢镶合金棒颚板

Vertical Mill Parts 立磨配件

Suitable Material: alloy steel, high chromium, low alloy steel composite welding, ceramic composite.

可选耐磨材质：合金钢、高铬、低合金钢复合堆焊、陶瓷复合。



High chrome roller
高铬磨辊

Vertical mill grinding table
立磨磨盘衬板

Vertical mill grinding table
立磨磨盘衬板



Ceramic grinding roller
陶瓷磨辊

Ceramic grinding table
陶瓷磨盘



Ceramic grinding roller
陶瓷磨辊

Ceramic grinding roller
陶瓷磨辊

Vertical Mill Parts 立磨配件

The Alloy studs inlaid surfacing welding vertical grinding roller is designed according to the working conditions and the wear resistance curve of the product. In the wear area, the powder metallurgy technology and surfacing technology are combined, and the special welding materials are used to form the inlay welding structure and metallurgical combination, improve the wear resistance and service life of the product, and achieve the regenerative repair to improve the service life of the product. This type of roller is suitable for extremely severe working conditions and can replace the ceramic roller and other products on the current market.

合金柱钉堆焊立磨磨辊根据工况和产品耐磨曲线进行设计，在磨损带区域通过粉末冶金技术和堆焊技术相结合，采用专用焊接材料形成镶焊结构和冶金结合，提高产品耐磨性和使用周期，并且实现可再生性修复提高产品使用寿命。该类磨辊适合于极端恶劣工况，替代目前市场上陶瓷辊。

Optional Materials: High Manganese Steel + TiC Alloy bar + Wear-Resistant Welding Layer.

可选材质：高锰钢镶TiC合金棒+堆焊。



The Extrusion Roller Of The Roller Press 合金柱钉堆焊辊压机挤压辊

The extrusion roller of the roller press is designed according to the working conditions and the wear resistance curve of the product. In the wear area, the powder metallurgy technology and surfacing technology are combined, and the special welding materials are used to form the inlay welding structure and metallurgical combination, improve the wear resistance and service life of the product, and achieve the regenerative repair to improve the service life of the product. This type of roller is suitable for extremely severe working conditions and can replace the alloy roller and other products on the current market.

合金柱钉堆焊辊压机挤压辊根据工况和产品耐磨曲线进行设计在磨损区域通过粉末冶金技术和堆焊技术相结合，采用专用焊接材料形成镶焊结构和冶金结合，提高产品耐磨性和使用周期，并且实现可再生性修复提高产品使用寿命。该类辊适合于 极端恶劣工况，替代目前市场上合金辊等产品。



Ball Mill Parts 球磨机配件

Suitable Material: alloy steel, high chrome, high manganese steel, high manganese insert alloy bar, nickel hard cast iron.

可选耐磨材质：合金钢、高铬铸铁、高锰钢、高锰钢镶合金棒、镍硬铸铁。



Ball Mill Parts 球磨机配件

Available materials: CADI alloy, high chromium, low chromium, manganese steel, alloy steel, etc.

可选材质：CADI合金、高铬、低铬、锰钢、合金钢等。

CADI Alloy Wear-Resistant Balls CADI合金耐磨球

CADI Alloy Wear-Resistant Balls utilize our company's proprietary new heat treatment process and composition design. They achieve a perfect combination of cost, hardness, and toughness, resulting in optimal performance. The technical indicators have reached advanced domestic and international levels, and can reduce production costs by 10%-30%.

CADI合金耐磨球采用我公司专有技术新型热处理工艺和成分设计，CADI合金耐磨球实现了成本、硬度和韧性完美结合，获得了最佳的性能。技术指标已达到国内外先进水平，可节约生产成本10%-30%。

Material 材质

Contains alloying elements such as chromium, copper, molybdenum, nickel, etc.

含有铬、铜、钼、镍等合金元素。

Mechanical Properties 力学性能

CADI Alloy Wear-Resistant Balls are a new product that perfectly combines hardness and toughness.

Initial surface hardness: HRC 52~58,
work-hardened surface hardness: HRC 60~68,
impact toughness: $AK \geq 15 \text{ J/cm}^2$.

CADI合金耐磨球是硬度和韧性完美结合的新型产品。

初始表面硬度：HRC52~58，
使用后表面硬度：HRC60~68，
冲击韧性 $AK \geq 15 \text{ J/cm}^2$ 。

Advantages 优势

1. Work hardening characteristics.
2. Low wear Loss.
3. Low breakage rate.
4. Resists sphericity loss (Does not lose round shape),
5. Improves grinding efficiency and fineness.
6. Technical performance is superior to forged steel balls. It is the only cast grinding ball suitable for use in semi-autogenous (SAG) mills. Offers better cost-effectiveness compared to forged/rolled steel balls, high-chromium balls, and low-chromium balls, enabling users to reduce production costs.

- ①加工硬化特性。
- ②磨耗低。
- ③破碎率低。
- ④不失圆。
- ⑤提高磨矿效率和磨矿细度。
- ⑥技术性能优于锻造球，是唯一可用于半自磨机的铸造磨球。性价比优于锻轧球、高铬球、低铬球，可以降低用户的生产成本。

N-30 Alloy Wear-Resistant Balls - Application Examples N-30合金耐磨球使用效果图



SAG mill



SAG mill



Ball mill

Customized Product 定制产品

Suitable Material: high manganese steel, high manganese steel + TiC alloy bar + wear-resistant welding layer.

可选耐磨材质: 高锰钢、高锰钢+TiC合金棒+耐磨焊层。



High manganese star wheel
合金超高锰星轮

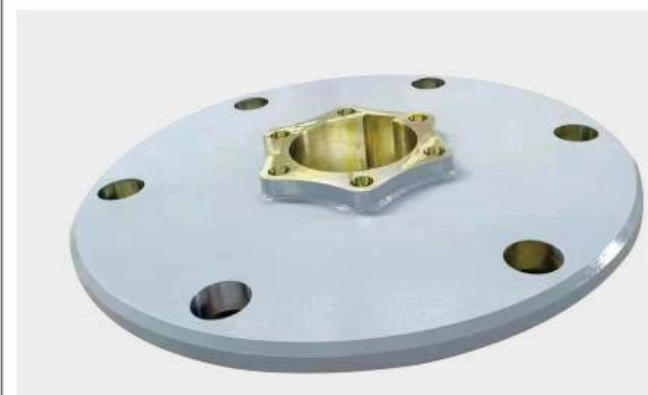


Grinding balls for power plants
电厂用研磨球

Customized Product 定制产品

Suitable Material: High strength plate Q690, High manganese steel or Super high manganese insert alloy bar.

可选耐磨材质: 高强板Q690、高锰钢或超高锰合金棒。



Rotor discs
锤盘



Super high manganese insert alloy bar rotor
超高锰合金棒转子

Customized Product 定制产品

Suitable Material: low alloy steel with hardness alloy, low alloy steel with welding, high manganese steel.

可选耐磨材质: 低合金钢加硬质合金、低合金钢加堆焊、高锰钢。



Ceramic-lined pipe
陶瓷贴片管道



Feed plate for Apron pan conveyors
链板输送机用进料板

Customized Product 定制产品

Suitable Material: GCr15SiMn.

可选耐磨材质: 高碳高铬轴承钢。



Roller sleeves
辊套

Suitable Material: high manganese steel.

可选耐磨材质: 锰钢。



Yun que bar / Anvil
承击砧

Customized Product 定制产品

Suitable Material: High manganese steel, high manganese with welding, heat resistant steel or other alloy steel.

可选耐磨材质: 高锰钢, 高锰钢堆焊, 耐热钢或其他合金钢。

Suitable Material: 45# steel with hardfacing.

可选耐磨材质: 钢板加工件加堆焊。



Chain link
链节



Clamp
夹板

Customized Product 定制产品

Suitable Material: high chromium iron.

可选耐磨材质: 高铬。

Suitable Material: 42CrMo with hard facing.

可选耐磨材质: 42CrMo加堆焊。



Inner nozzle ring
喷嘴环



Bull ring for coke mill
耐磨环

Heat Resistant Steel 耐热钢



Pre-heater scraper
挂片



kiln guard plate
窑尾护板



Cooler grate
篦板



Valve plate
阀板



Grate bar
篦条



Air cannon nozzle
预热器喷嘴



Kiln inlet plate
窑口护板



Grate plates
篦板



Cross bar
推力棒

Quality Inspection 质量检测

Quality is the most vital part of our production. We take advantage of any possible chance to increase our quality. We conduct product quality inspections for each production process and form a quality inspection report. After production, we will put multiple tests on our products to make sure that our products are much better than what acceptable.

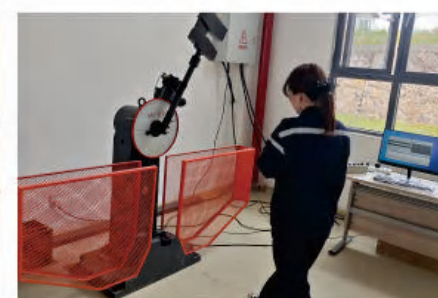
质量是我们产品很重要的部分。我们利用一切机会，想尽一切办法来提高我们产品的质量。我们对每一个生产环节都进行产品质量检验，并形成质检报告。最后，我们会对产品进行发货前的质量检查以确认我们的质量高于“可以接受”的程度。



Spectrum analyzer
光谱分析仪



Metallographic microscope
金相显微镜



Pendulum impact testing machine
摆式冲击试验机



Tensile testing machine
拉伸试验机



Benchtop hardness tester
台式硬度仪



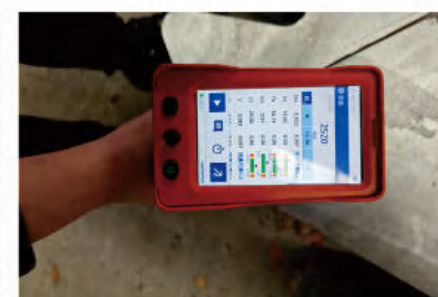
3D scanner
3D 扫描仪



Ultrasonic flaw detector
超声波探伤仪



Magnetic particle tester
磁粉探伤仪



Portable spectrometer
便携式光谱仪

Welding Expert 堆焊专家

Advantage 优势

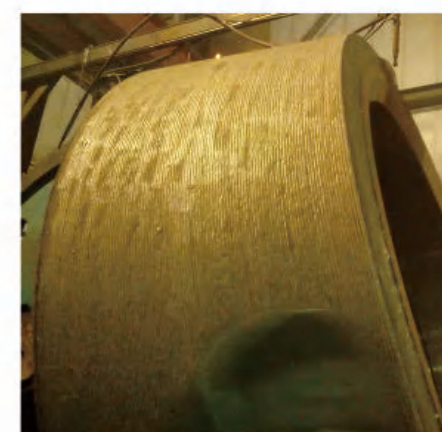
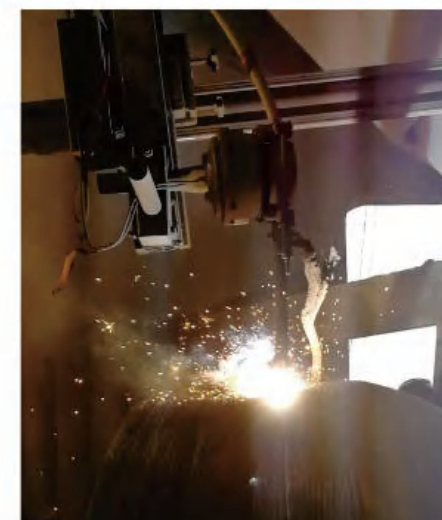
- 1.The world's leading surfacing solution provider has SSAB's world-leading Duroxite® hardfacing technology.
- 2.All products adopt ASTM G65 standard of American national laboratory.
- 3.Database case support for all SSAB processing service centers around the world.
- 4.Cost-effective solution provider.
- 5.Professional construction team.
- 6.Advanced welding equipment and inspection system.

- ① 拥有SSAB旗下全球领先的Duroxite®耐磨堆焊技术。
- ② 产品全部采用美国国家实验室ASTM G65标准。
- ③ 全球所有SSAB加工服务中心数据库案例支持。
- ④ 高性价比解决方案提供商。
- ⑤ 专业的施工团队。
- ⑥ 先进的堆焊设备与检测体系。

Services 服务

- 1.Provide professional customized surfacing services according to your needs.
- 2.Adopt strict on-site management standards and comprehensive service tracking mechanism.
3. Perfect quality control system service.
- 4.Online welding service.
- 5.Offline welding service.
- 6.Various welding material available.

- ① 根据您的需要，提供专业的交钥匙堆焊服务。
- ② 采用严格的现场管理标准，全面的服务跟踪机制。
- ③ 完善的质量监控体系服务。
- ④ 在线堆焊服务。
- ⑤ 离线堆焊服务。
- ⑥ 多种焊材选择。



Hardox Wear Parts Center 悍达加工中心

Advantage 优势

1. SSAB (Sweden steel group) official authorization our company as welding wear-resisting products processing center.
2. All hardox plate provider quality inspection report is available for all steel plate of hardox, you can trace the quality in SSAB official.
3. 11 kinds of wear-resistant plate series are applicable to different working conditions.
4. The processing technology obtained the SSAB official technical support.

- ① SSAB (瑞典) 旗下 Hardox® (悍达) 耐磨钢板官方授权, 悍达耐磨产品加工中心。
- ② 所有的悍达钢板均可提供质检报告单, 您可以在 SSAB 官方进行质量追溯。
- ③ 11 种悍达耐磨板系列可适用不同工况。
- ④ 加工技术获得 SSAB 官方技术支持。

Application 应用领域

It mainly used in anti-wear condition. Crusher, sieve plate, feeder, hopper, hoist, blade plate, conveyor, bucket, cutter plate, gear, sprocket, etc.

主要应用于抗磨损工况。破碎机, 筛板, 入料器, 给料漏斗, 提升机, 刃板, 输送机, 挖斗, 刀板, 齿轮, 链轮等。



Services 服务

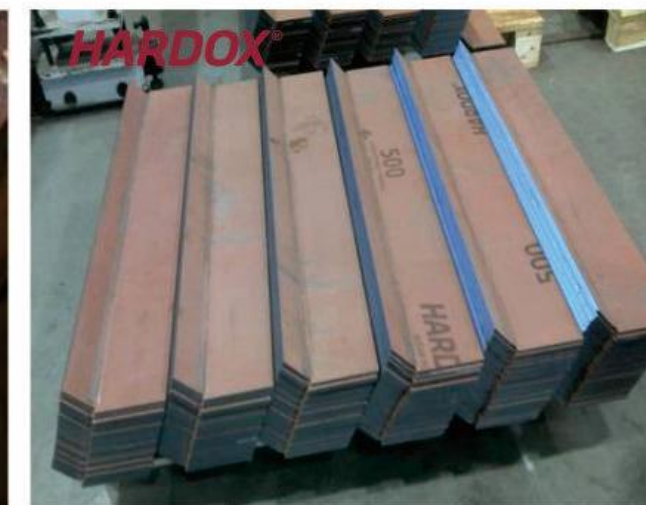
1. According to your working condition, we provide professional and wear-resistant steel plate.
2. It is suitable for the advanced 3D cnc cutting machine, which can produce the reliable wear-resistant plate with high precision.
3. We offer on site services include survey, manufacture and install wear-resistant parts.
4. Hardox wear products of the normal operation time management services.

- ① 根据您的工况, 提供专业的悍达耐磨钢板。
- ② 使用领先的3D数控切割机, 为您加工出精度极高的可靠耐磨板。
- ③ 我们可以现场测量、制造和安装耐磨件。
- ④ 悍达耐磨产品的正常运行时间管理服务。

Hardox Authorization Certificate 悍达授权证书



Hardox Processing Parts 悍达加工件



Hardfacing Overlay Plate Duroxite®堆焊复合板

Advantage 优势

- 1.Brings you a longer serving life ,working under extreme wear conditions,The sertving life can be extended for weeks, months or even years without problems.
- 2.It can make the equipment extremely wear-resistant,serving longer time and increase production efficiency and reduce cost.
- 3.Duroxite is manufactured by SSAB, which has extensive metallurgical knowledge and technology in the field of wear resistance.
- 4.It is suitable for sliding wear environment, has good impact resistance feature and can withstand different types of wear, such as abrasion, high heat, metal to metal and erosion wear.

- ①为您带来更持久的使用周期，可在极端磨损的条件下无故障的延长数周、数月甚至数年。
- ②可使设备具有极高耐磨性，寿命更长并提高生产效率，降低成本。
- ③Duroxite® 由SSAB制造，SSAB 拥有耐磨领域的广泛冶金知识和技术。
- ④适用于滑动磨损环境，抗冲击性能好，能承受不同类型的磨损，如磨蚀、高热、金属对金属以及冲刷磨损等。

Applying Field 应用领域

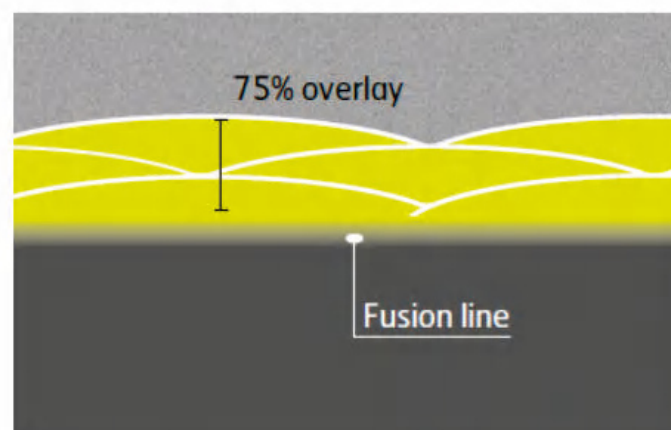
Focus on providing wear-resistant equipment accessories for mining, cement, power, steel, coal, pulp and paper industries.

专注为采矿，水泥，电力，钢厂，煤炭、纸浆和造纸等行业提供耐磨设备配套配件服务。

Applications 应用范围

Hoisting shovel grabs, car linings, excavator buckets, fan blades, loader buckets, shell liners, bull dozer jackets, and bucket bushings. shovel liners, transition groove liners, screw conveyors, cement mill liners, wood peeling machine linings.

吊铲抓斗、车箱衬板、挖掘机铲斗、风扇叶片、装载机铲斗、外壳衬板、推土机护套、料斗衬套、平地机衬垫、裙板、铲土衬板、过渡槽衬板、螺旋输送机、水泥磨机衬板、木材剥皮机衬里、涡形衬垫。



Side By Side, Win Together 并肩同行，共赢未来



Site Visit CEMEX Mexico
拜访墨西哥西麦斯水泥



Site Visit CEMEX Egypt
拜访埃及西麦斯



Site Visit LafargeHolcim
拜访拉法基水泥



Site Visit HOLCIM
拜访豪瑞集团



Site Visit TITAN
拜访泰坦水泥



Site Visit Manaseer Group
拜访马纳西尔集团



Site Visit Unacem Cement
拜访尤纳森水泥



Site Visit Yura Cement
尤拉水泥



Site Visit Heidelberg
拜访海德堡水泥



Site Visit Cementos Fortaleza
拜访堡垒水泥



Site Visit Cemento INKA S.A.
拜访印加水泥



Site Visit MISR Cement Group
拜访米斯尔水泥