



- Factory
- Sales Office

WODON

TIANJIN WODON NEW MATERIAL TECHNOLOGY CO., LTD

Professional Manufacturer of Wear Resistant Materials

- Chromium Carbide Overlay Wear Plates
- Flux Cored Welding Wires
- Wear Resistant Hardfacing Pipes
- Wear Parts and Wear Liners



Sales hotline: +86 15720600046
Tel: +86 22 86897973
Web: www.chinawodon.com
E-mail: cs@chinawodon.com
Address: No.7 Erwei Road, Hexiwu Industrial Zone, Wuqing District, Tianjin, China

Expert on High Efficient One-stop Wear Solutions



About Wodon

Founded in 2004, Wodon Group focus on manufacturing and R&D of wear resistant materials. With ISO certified, we are professional in flux cored hardfacing welding wires, CCO wear plates, wear pipes and wear parts. Our products are widely used in mining industry, steel industry power plant, cement plant and engineering machinery etc.



Wodon is particularly strong on R&D of welding consumables. Our general engineer has more than 30 years' experience in welding wires new development. Nowadays, we achieved successfully more than 60 IPR rights and patents, and won good reputation and trust of customers all over the world.



Wodon Products & Service

Flux cored welding wires for hardfacing of wear plates
Hardfacing wires for cement vertical mill, steel mill roller etc
Hardfacing wires customizations with special chemical compositions
CCO wear plates(by open arc welding and submerged arc welding)
CCO wear plates customerizations
Wear pipes and wear parts
Hardfacing maintenance on-line service



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Company History

Started from a small factory built up in 2004, we Wodon company grow up to the top manufacturer of wear materials with 3 manufacturing bases in Tianjin, Jiangsu and Hebei provinces. The production capacity increased a lot to meet the market demands. The technologies are improved to supply more cost-efficient products. Wodon is getting more and more popular in wear industry.

Company Honor

Wodon company keep investing and innovation on improvement of processing and technology. We have more than 60 invention patents and we are entitled as “High-tech Enterprise” by government. We are awarded as “Specialized and Special New SME”. We are proud that we continuously developed very well these years.



Invention Patent and Practical Patent



New High-tech Enterprise

Third Party Test Report

Production Capacity

Nowadays, we have more facilities to support our production capacity.

8 production lines for hardfacing welding wires

138 sets of CCO wear plate welding platforms

25 sets of processing machines including plasma cutting machines, laser cutting machines, bending machines, automatic hardfacing machines for wear pipes etc.



Annual output of overlay wear plates

260000+ m²

Annual output of welding wires

16000+ tons

Annual output of wear parts

12000+ tons



Flux cored welding
wire workshop



Overlay wear plate workshop



Laser cutting machine



CNC underwater plasma
cutting machine



Wear pipe hardfacing machine



Multi functional bending machine



Press machine



CNC planer milling machine

R&D Ability

Innovation is our core value. As a high-tech enterprise, Wodon has a strong and steady team on R&D of wear materials. We keep long-term cooperations with Universities and research institutes such as Beijing University of Technology, Iron and Steel Research Institute, Beijing Electric Power Equipment Research Institute. We target at improvement of technology and new products.

With strength on research, we are much stronger on customization, both on flux cored welding wires and special chemical composition wear plates. High and steady quality products can meet the demands continuously.



Vickers Hardness Tester

Metallographic Microscope

Desktop Rockwell Hardness Tester



Germany Spectro Spark Direct Reader

ASTM G65 Dry Sand Rubber Wheel Abrasion Tester

Quality Control

As the ISO9001 certified company, we pay more attention on quality inspection, from the raw materials to the finished products. We have materials inspection, spot inspection, production on-site inspection and inspection before delivery. Strict inspections help us keep steady quality.

We controlled well on the thickness, the hardness, the chemical compositions and the deposition efficiency. Steady quality wear plates provide excellent resistance to severe abrasion and impact in many practical applications, which efficiently extends the service life of workpieces.



Portable Thickness Gauge

Portable Hardness Tester



Portable Olympus Spectrometer

Chromium Carbide Overlay Wear plates



Characteristics of Wear plates

Outstanding Advantages

Chromium content	Carbide fraction volume	Hardness
27%-45%	30%-60%	58-65HRC

Perfect performance on wear resistance.	Excellent on extending the service life.
15 times higher than low carbon steel	2.5 times longer than domestic wear plates
5~8 times higher than heat-treated steel	1.5 times longer than imported wear plates
Flatness: Uniform flatness, with tolerance of $\pm 3\text{mm/m}$	Thickness: Uniform thickness

Product Classification

WD-1000/1100 CCO Wear Plates

By open arc welding, suitable for general wear, medium and low impact resistance.

Product Specifications	Customized wear plates are available		
Standard plate size (mm)	1400*3500	1500*3000	2000*3000
Overlay thickness (mm)	2 ~ 50		
Base plate thickness (mm)	4.5 ~ 100		
Chemical Composition	The chemical content defers to the thickness		
C content	3.0 ~ 5.0%		
Cr content	18 ~ 30%		
Cr7C3 fraction volume	About 30%		
Hardness	58-65 HRC		

WD-1200/1500 CCO wear plates

By submerged arc welding, suitable for severe wear, medium and low impact resistance.

Product Specifications	Customized wear plates are available		
Standard plate size (mm)	1400*3000	1400*3500	2100*3500
Overlay thickness (mm)	4 ~ 50		
Base plate thickness (mm)	4.5 ~ 100		
Chemical Composition	The chemical content defers to the thickness		
C content	3.0 ~ 7.0%		
Cr content	25 ~ 45%		
Cr7C3 fraction volume	30 ~ 60%		
Hardness	58-65 HRC		

Product Classification

WD-NC100 series Welded Overlay Wear Plates

Crack free wear plate, mainly used for sliding block and sliding plates in rolling mill.

Product Specifications	Customized wear plates are available
Standard plate size (mm)	/
Overlayer thickness (mm)	5 ~ 15
Base plate thickness (mm)	≥20
Hardness	> 45 HRC

WD-1600 series Welded Overlay Wear Plates

Impact resistant wear plates, independently developed R&D, suitable for medium to high impact.

Product Specifications	Customized wear plates are available
Standard plate size (mm)	1400*3000 1400*3500 2100*3500
Overlayer thickness (mm)	4 ~ 50
Base plate thickness (mm)	5.5 ~ 100
Chemical Composition	The chemical content defers to the thickness
C content	3.0 ~ 7.0%
Cr content	25 ~ 40%
Nb etc.	Customized according to customer requirements
Cr7C3 fraction volume	30 ~ 60%
Hardness	55-65 HRC

WD-G900 series Welded Overlay Wear Plates

Heat resistant wear plates, up to 850 in maximum.

Product Specifications	Customized wear plates are available
Standard plate size (mm)	1400*3500 1400*3000 2100*3500
Overlayer thickness (mm)	4 ~ 50
Base plate thickness (mm)	5.5 ~ 100
Chemical Composition	The chemical content defers to the thickness
C content	3.0 ~ 7.5%
Cr content	25 ~ 45%
Mo, Nb etc.	Customized according to customer requirements
Cr7C3 fraction volume	30~60%
Hardness	58-65 HRC

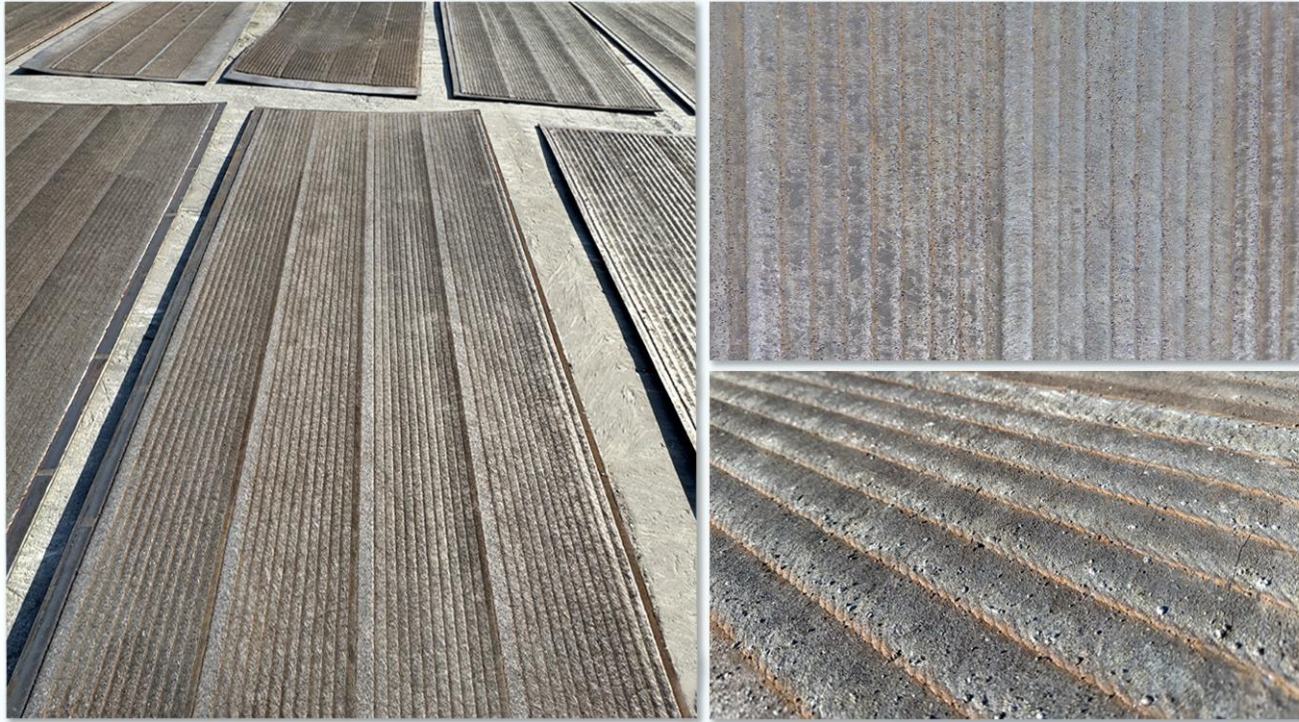
WD-D3000 series Special Custom Wear Plate

Customized wear plates according to requirements with special compositions for special applications.

Product Specifications	Customized wear plates are available
Standard plate size (mm)	1400*3500 1400*3000 2100*3500
Overlayer thickness (mm)	4 ~ 50
Base plate thickness (mm)	5.5 ~ 100
Hardness	58-65 HRC

Product Display

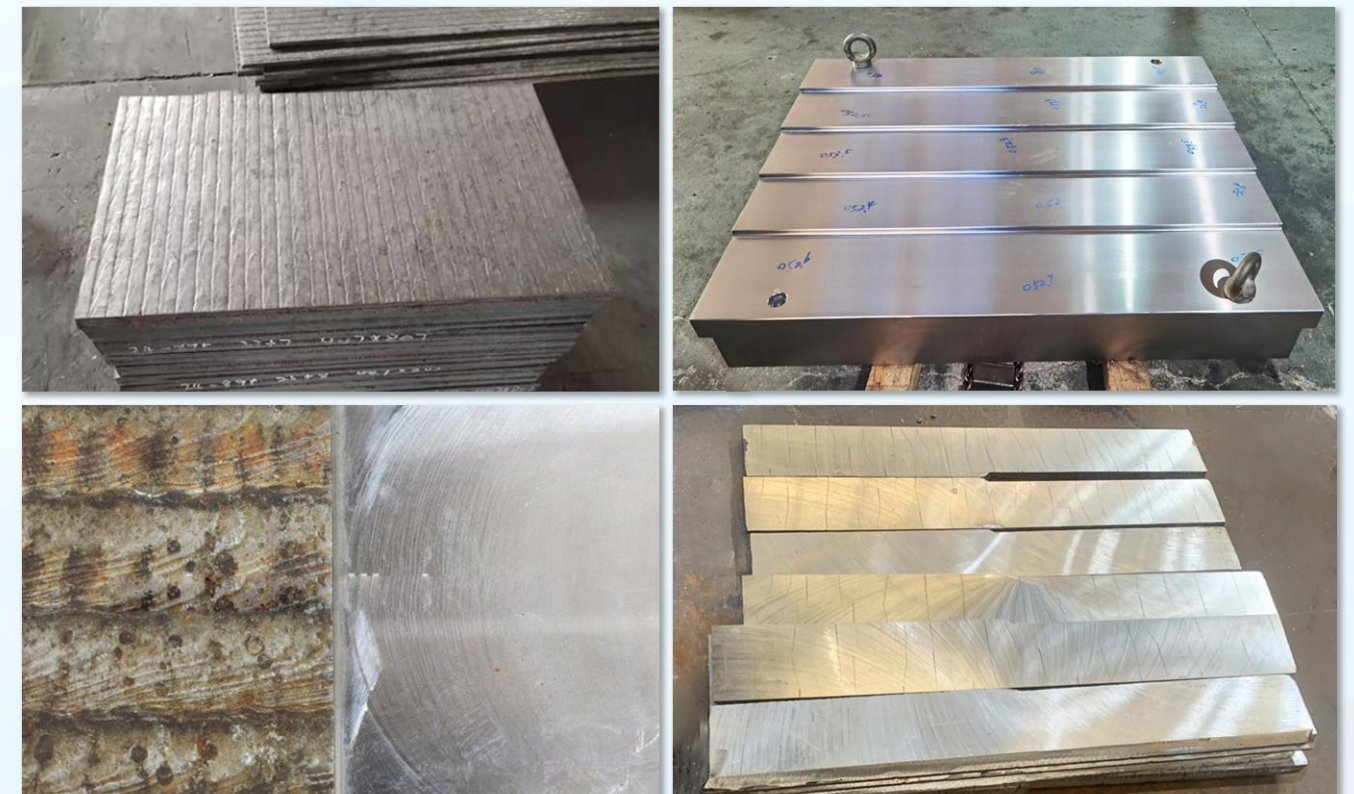
WD-1000/1100 CCO Wear Plates



WD-1200/1500 CCO Wear Plates



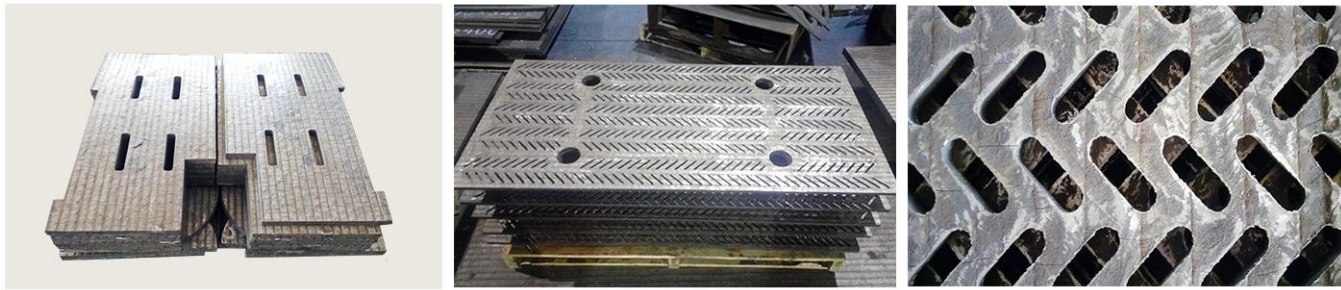
WD-NC100 series Welded Overlay Wear Plates



Wear Parts

Processing Technology

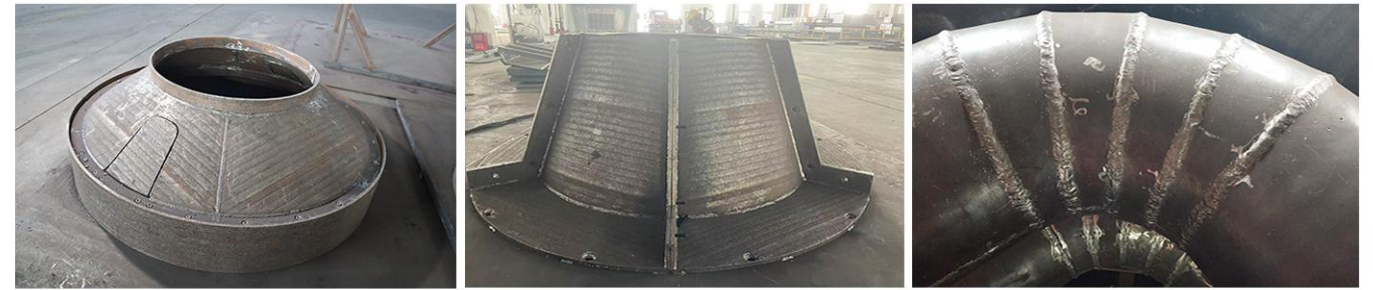
Holes Cutting



Embedded Bolt Welding



Assemble Welding



Bending



Grid Hardfacing



Groove Process



Product Display

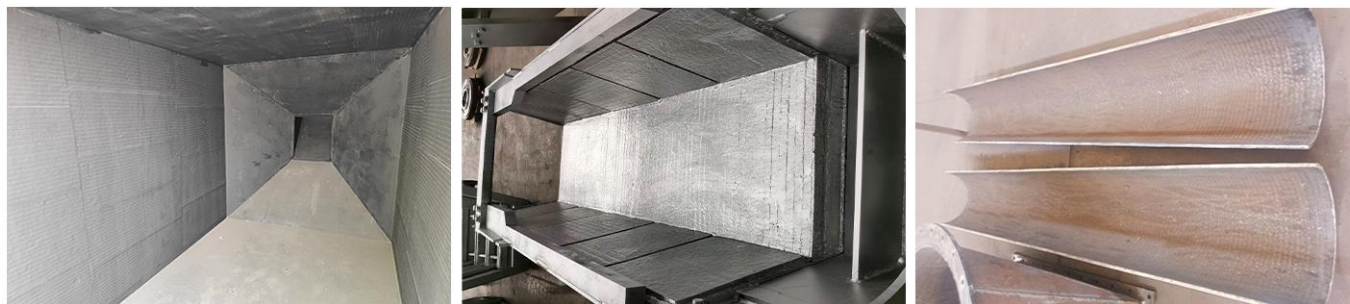
Flat Liners



Curved Liners



Chute Liners



Bucket Liners



Wear Resistant Hardfacing Pipe

Wear Pipes



Wear Elbows



Applications

Industrial Applications

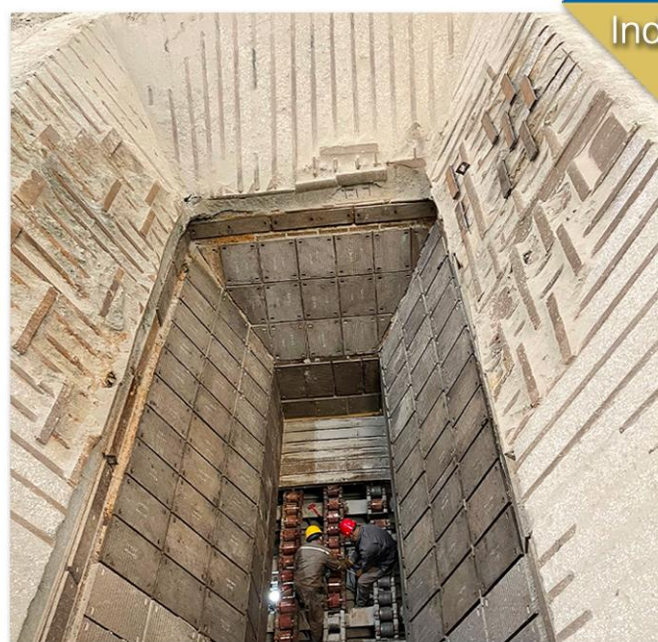


Mining



Industry

Wodon products are exported to more than 60 countries and regions around the world.

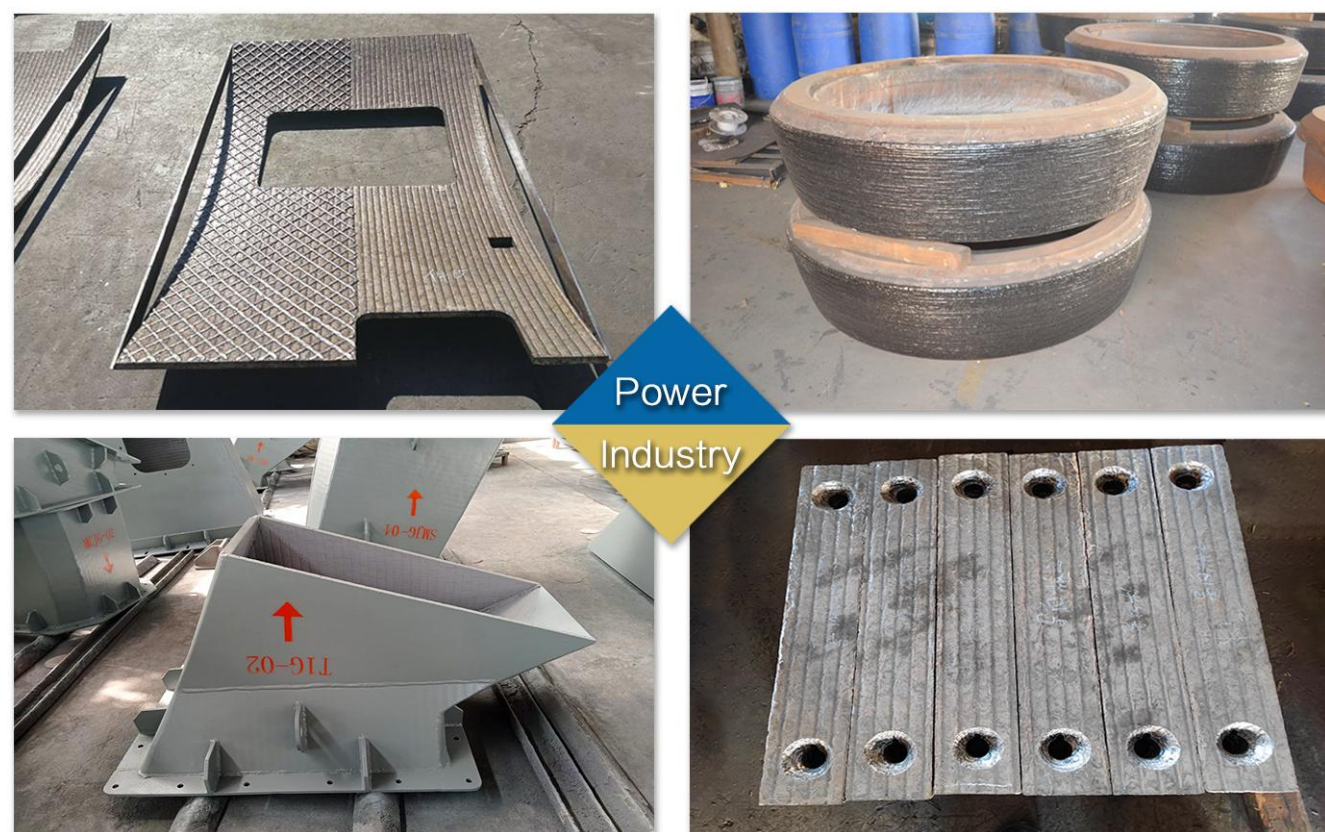


Steel
Industry



Cement
Industry





Power
Industry



Port
Industry

Applications

Other Applications



Other
cases

Wodon can customize products flexibly according to customers' needs.



Flux Cored Welding Wires



Outstanding Advantages

Quality Control

No joints
No broken arc; Stable arc
No spallations after welding
Uniform stress release

Deposition Efficiency

Deposition efficiency
Less spatter
Less smoke
Deposition efficiency > 90%

Full Range of Categories

Independent R&D capability
More varieties are available

- Diameter** 1.2mm, 1.6mm, 2.0mm, 2.4mm, 2.8mm, 3.2mm, 4.0mm
- Hardfacing welding wires for single layer, double-layer and multi-layer;
- Options** Gas shield welding wires for repairing, heat-resistance, impact-resistance;
- Hardfacing welding wires with special chemical compositions.

Product Classification

Wear Plate Welding Wire

Model	Spec.(mm)	HRC	Main Ingredient	Applications
HD161	2.8、3.2	58~65	C、Cr、Mn、Si	For hardfacing single layer wear plate
HD161+	2.8、3.2	58~65	C、Cr、Mn、Si	For hardfacing single layer wear plate
HD181	2.8、3.2	58~65	C、Cr、Mn、Si	For hardfacing ultrathin wear plate
HD30	2.8、3.2	55~63	C、Cr、Mn、Si	For hardfacing multiple wear plate

Gas Shielding Welding Wire

Model	Spec.(mm)	HRC	Main Ingredient	Applications
D114	1.6	50~55	C、Cr、Mn	For hardfacing hammer head,hammer plate and other high impact parts
D172	1.2、1.6	≥40	C、Cr、Mo	For hardfacing bucket gear,mining machinery and others
D212	1.2、1.6	≥45	C、Cr、Mo	For hardfacing the surface of wear parts, such as gear,digger,mining machinery etc
D256	1.6	HB≥170	C、Mn	For hardfacing high manganese rail,bulldozer and other wear parts under impact
D313	1.6	45~50	C、Cr	For hardfacing continuous casting roller
D322	1.6	55~63	C、W、Mo	For repairing die and toughening tool and mechanical parts with high wear performance
D405	1.6	53~60	C、Cr、Mo、W、V	For hardfacing hot rolling roll
D430	1.6	35~40	C、Cr	For hardfacing general corrosion resistant parts
D502Mo	1.6	35~45	C、Cr、Mo	For hardfacing valve
D518	1.6	40~50	C、Cr、Mo、Ni	For hardfacing continuous casting rollerr
D688	1.2、1.6	50~58	C、Cr	For hardfacing heavy wear parts
D788	1.2、1.6	50~60	C、Cr	For hardfacing heavy wear parts
D788A	1.2、1.6	50~60	C、Cr	For hardfacing heavy wear part, single layer welding only
D888	1.2、1.6	58~65	C、Cr	For hardfacing heavy wear parts
D995	1.6	58~65	C、Cr、Nb、W、V	For hardfacing heat resistant wear parts
D688 Welding rod	4.0	50~62	C、Cr	For welding by severe abrasive wear parts

Steel Mill Roller Welding Wire

Model	Spec.(mm)	HRC	Main Ingredient	Applications
D430	2.4、3.2	35~45	C、Cr	For hardfacing common corrosive component
320H	3.2、4.0	~	C、Cr	For hardfacing continuous casting roller
224	3.2、4.0	45~55	C、Cr、Mo、W	For hardfacing hot rolled billet roller
224B	3.2、4.0	50~60	C、Cr、Mo、W	For hardfacing hot rolled billet roller
414N	3.2、4.0	40~50	C、Cr、Mo	For hardfacing continuous casting roller
414-O	3.2、4.0	40~50	C、Cr、Mo	For hardfacing continuous casting roller

Vertical Cement Mill Welding Wire

Model	Spec.(mm)	HRC	Main Ingredient	Applications
HB100	2.8、3.2	58~63	C、Cr、Mo	For repairing Coal grinding mill,Grinding disc, Cement vertical mill
HB100L+	2.8、3.2	58~63	C、Cr、Mo	
HB100+	2.8、3.2	58~63	C、Cr、Mo	
HB350	2.8、3.2	55~63	C、Cr、Mo、Nb	
HB650	2.8、3.2	58~63	C、Cr、Mo、Nb	

Cement Squeeze Roller Welding Wire

Model	Spec.(mm)	HRC	Main Ingredient	Applications
D01	2.8	~	C、Cr、Mo	For base layer
D100Mo	2.8	55~63	C、Cr、Mo	For buffer layer
D650	2.8	55~63	C、Cr、Mo	For pattern layer

Wodon develops a variety of flux cored welding wires according to customers needs,which can meet the wear requirements of various working conditions.

Product Display



Hardfacing and Repairing



Hardfacing and Repairing Service

Squeeze Roller Repairing

Our special Squeezing roller welding wires, we guarantee high hardness and abrasion resistance after repairing with a service life after repairing no less than 8000 hours.

Services: Repair the Squeeze roller in our factory; Provide the special materials to the customers.

Vertical Mill, Grinding Roller, Mill Disk Repairing

Our company has a professional repairing team for vertical mill, providing cost-effective solutions according to the working condition. The life span of mill disk after welding is twice than the original casting and grinding roller's life span is 1.5 times than the original.

Services: Hardfacing on new casting products; Vertical mill repairing in our factory; Provide the special materials and the customers do it by themselves.

Wear Parts Repairing

Our company provides professional wear parts repairing, rebuilding, cladding and hardfacing services, to renew or improve wear resistance on the original parts and also prolong service life, bringing economic benefits.

Services fields: Wear repairing and surface modification.

Applications: Roll, flange, mud pump, screw conveyor, crusher bucket teeth, coulter, scraper, block ring, etc.

Hardfacing and Repairing Cases



Wodon Service

With more than 20 years experience, Wodon becomes a popular brand in domestic and global markets. We supply:

- Professional technical support
- High quality and traceable products
- Timely response
- Punctual delivery
- Perfect after service



12 h Offer Prices



24 h Offer Solutions



48 h Rush to the Site
(within China Mainland)

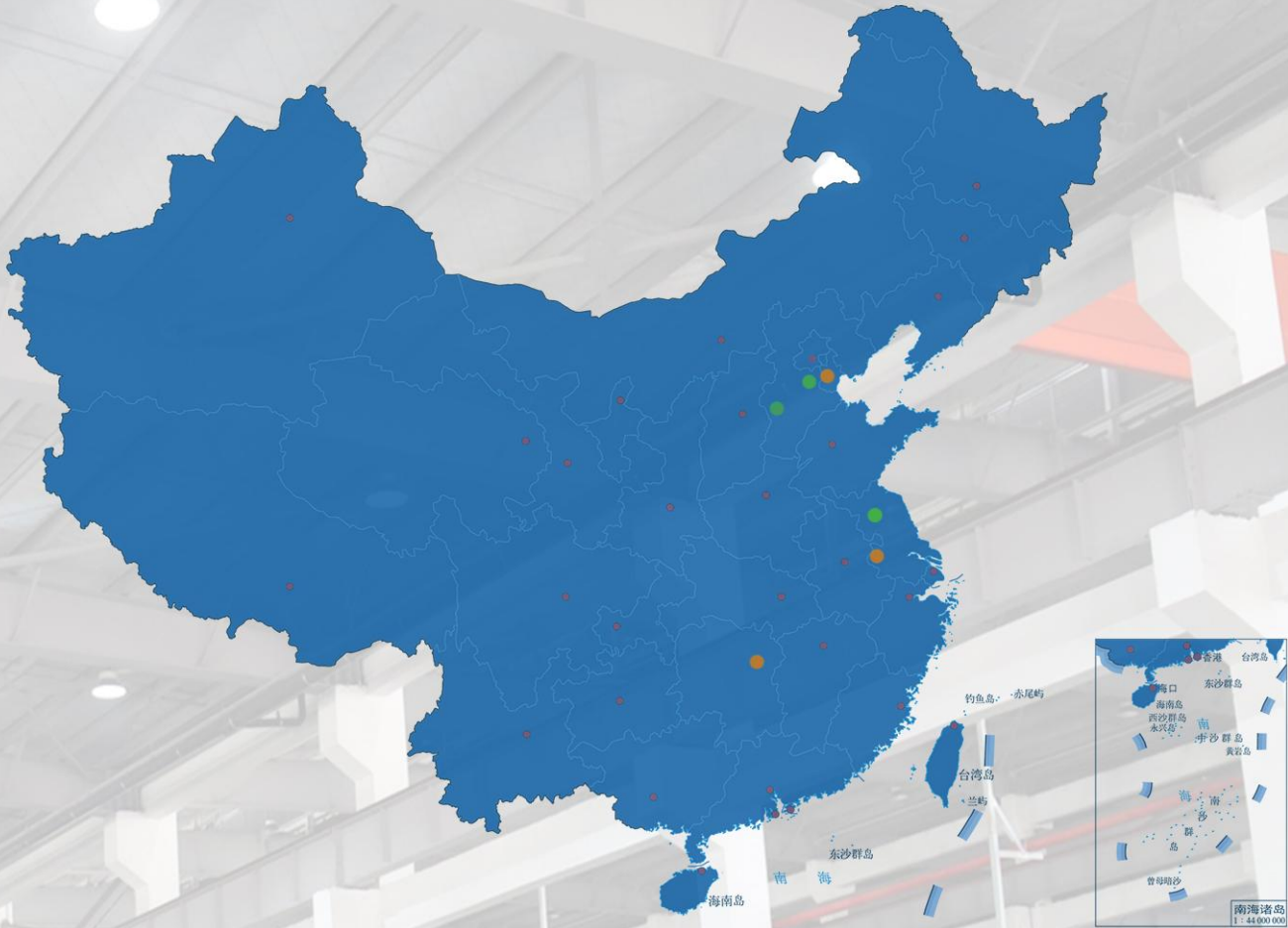


7 (Day) * 24 (hour)
Telephone Communication



+86 15720600046

WODON



Manufacturing Base

Tianjin Factory

Jiangsu Factory

Hebei Factory

Sales Center

Tianjin Office

Jiangsu Office

Hunan Office