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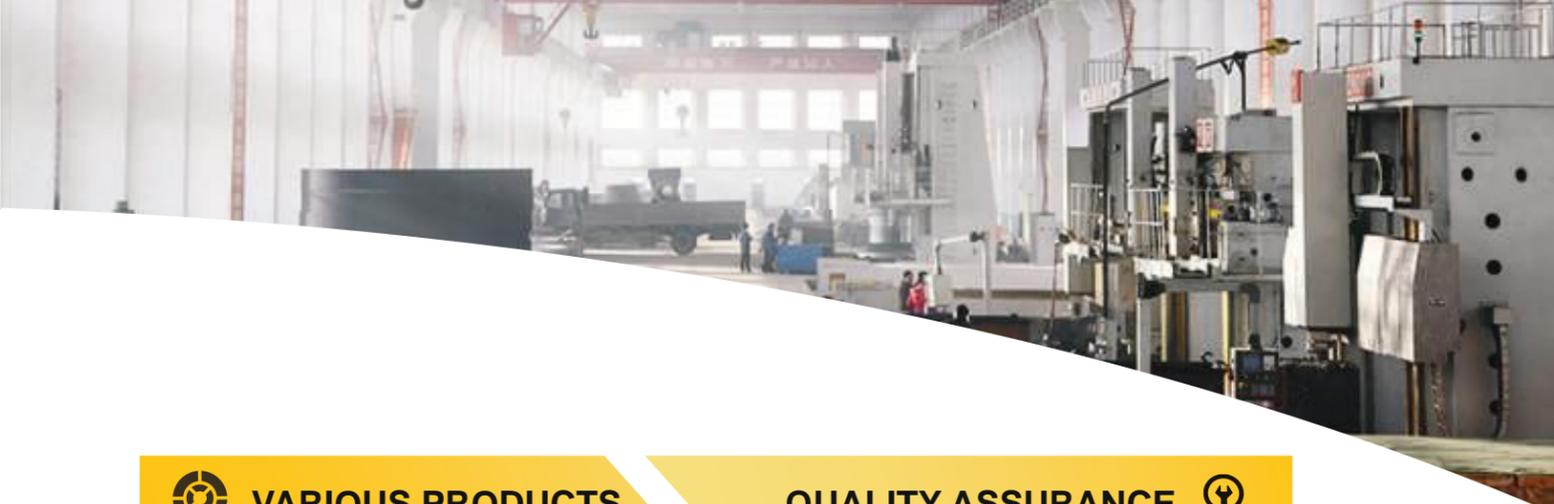
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**VARIOUS MINING & INDUSTRIAL CASTING PARTS
DINGWELL'S NORTH AMERICA**

**BALL MILL PARTS | VERTICAL ROLLER MILL PARTS
ROTARY KILN PARTS | STEEL CASTING PARTS**



BOOST UP YOUR REVENUE

Our competitive pricing, supreme quality, professional services will lead you to build more strength and profit.

VARIOUS PRODUCTS
 We are providing wide range of grinding medias: forging grinding balls, casting grinding balls, grinding rods and cylpebs.

QUALITY ASSURANCE
 Our automated equipments and latest technologies assure you can get the supreme quality products.

COST SAVING
 We are always try our best to offer you the most competitive price, in order to lower down your cost.

CUSTOMER SATISFACTION
 We are strongly recommended by our loyalty customers. Strong comparative advantage makes customer satisfaction.

FAST DELIVERY
 Our short and reliable lead time is the most effective way to improve your supply chain.

REDUCE INVENTORY
 We have warehouses in various locations, and we can provide the consignment stock for you.

ENGINEERING SERVICE
 We help you with prototyping services to create a one-stop shop for all your needs with the most advance software for design and innovation.

TECHNICAL SUPPORT
 Our technical and customer service team take pride in providing courteous and responsive support.

>> DINGWELL'S FACILITIES

Since 1945, Dingwell's has been one of the leading machining facilities and quality manufactures in North America. We are still growing strong after 70 years. We are always expanding our facilities both local and oversea, to meet client's requirements.



Dingwell's oversea joint-venture covers the land area of 330,000 m². There are 1100 people including 68 technical engineers, annual capacity is totally 50000 tons steel castings.



Natural Gas Station



Natural Gas Heat Treatment Furnace



Sand Supplying System



Dingwell's owns 2 sets of 60 tons electric arc furnaces, and 4 large natural gas heat treatment furnaces. Auxiliary facilities include oxygen station, compressor station, gas station, carbon dioxide station, etc. A strong machining factory has been set up for our castings, there are 500 sets of various kinds of machining equipment including many advanced CNC machines in the workshop.



Electric Arc Furnace



Ladles



Large Machining Workshop



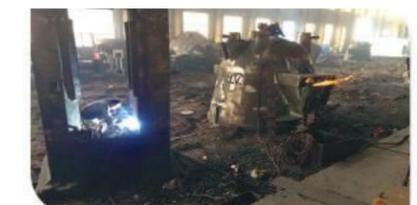
Gear Hobbing Equipment



100T Shot Blasting Workshop



Φ8m Vertical Lathe



Polishing Zone

>> BALL MILL CASTING PARTS

MILL LINER



● INCREASE PRODUCTION

Ball mill liners is to protect the cylinder of a direct hit from grinding media and material and friction, to increase grinding media for material crushing effect, helps to improve the efficiency of the grinding mill and reduce consumption of metal.

● HIGH WEAR AND IMPACT RESISTANCE

Double quenching of steel plate by the scientific and rational alloying element formula, makes the liner has good physical and chemical properties, hardness HRC45-55, impact toughness values more than 25J·m⁻³, life span is 2 times longer than the high manganese steel. Increase more than 5% of the production.

● HIGH STRENGTH AND TOUGHNESS

In liner quenching process, uses the reliable technology to make the product high strength, high hardness and high toughness, in order to meet the technological requirements of the wear resistance.

● HIGH AND ADAPTIVE PERFORMANCE

Compared to high manganese steel lining board, alloy double quenching of steel ball mill liner shows excellent performance. Able to adapt to the wet and dry grinding, mixing mill, etc.

SPECIFICATION

Model	Rotate Speed (r/min)	Grinding Media Weight (T)	Feeding Size(mm)	Discharge Size (mm)	Output(t/h)	Motor Power (KW)	Weight (T)
900x1800	36~38	1.5	≤20	0.075-0.89	0.65-2	18.5	4.6
1200x2400	36	3	≤25	0.075-0.6	1.5-4.8	30	12
1500x4500	27	11	≤25	0.074-0.4	3-6	110	21
1830x3000	25.4	11	≤25	0.074-0.4	4-10	130	28
1830x4500	25.4	15	≤25	0.074-0.4	4.5-12	155	32
1830x7000	24.1	23	≤25	0.074-0.4	7.5-17	245	36
2100x4500	23.7	24	≤25	0.074-0.4	8-43	245	42
2100x7000	23.7	26	≤25	0.074-0.4	8-48	280	50
2200x7000	21.7	35	≤25	0.074-0.4	15-28	380	54
2200x7500	21.7	35	≤25	0.074-0.4	15-30	380	56
2400x4500	21	30	≤25	0.074-0.4	8.5-60	320	65
2700x4000	20.7	40	≤25	0.074-0.4	12-80	400	94
2700x4500	20.7	48	≤25	0.074-0.4	12-90	430	102

MILL HEAD | MILL END COVER



● **MATERIAL** Carbon steel, low alloy steel, such as ZG200-400, ZG230-450, ZG270-500, ZG20SiMn, ZG35CrMo, ZG42CrMo, etc.

● **WEIGHT** Up to 50MT.

● **MECHANICAL PROPERTY** Yield Strength ≥275 MPA; Tensile Strength ≥485MPA; Elongation ≥22MPA.

TRUNNION | HOLLOW SHAFT



● Ball mill trunnion/hollow shaft is an important part to load the mill rotary body. The neck that connected to bearing liner have polishing machining and make sure its precision and smoothness. So it can meet the strict requirement for casting technology.

SPECIFICATION

Specification	Output	Mill rotate speed	Mill entry granularity	Grinding body load	Effective volume	Drive mode	Main electric machinery	Main decelerator	Equipment weight
m	t/h	r/min	mm	t	m ³		kW		t
Φ2.4×13	21-23	20.3	≤25	65	51.7	edge	800	JDX710	116
Φ2.6×13	28-32	19.61	≤25	75	60	edge	800	JDX800	149
Φ3.0×13	33-37	18.08	≤25	108	80.9	edge	1250	JDX900	172.3
Φ3.2×14	48-52	18.04	≤25	138	99.8	edge	1800	MBYX1100	228
Φ3.5×13	55-60	17.09	≤25	160	111.2	edge	2000	JDX1000/MBYX1100	250
Φ3.8×13	66	16.4	≤25	195	129.3	center	2500	MFYX250	286
Φ4.0×13	80-85	15.5	≤25	235	155	center	2800	JS140-A	220
Φ4.2×13	140-155	15.6	≤25	240	157	center	3550	JS150-B/MFX355	287

>> ROTARY KILN CASTING PARTS

GIRTH GEAR



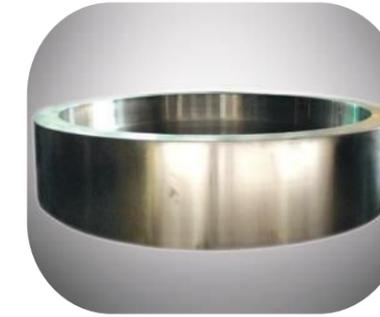
- **HIGH QUALITY**
Girth gear is key part of rotary kiln and ball mill. High quality for girth gear is required for long time operation requirement.
- **SPECIAL HEAT TREATMENT TECHNOLOGY**
DINGWELL'S casting adopts special heat treatment technology to optimize structure, improve hardness and enhance impact resistance of girth gear.
- **LONG LIFE SPAN**
DINGWELL'S steel casting adopts high strength steel to produce girth gear. Firstly characteristics optimization of rotary kiln is done to guarantee its stability during long time operation, also to prolong its working life.
- **WEIGHT & MATERIAL**
Weight is 10-35MT. Material: die steel, alloy steel, stainless steel, etc.

SUPPORTING ROLLER



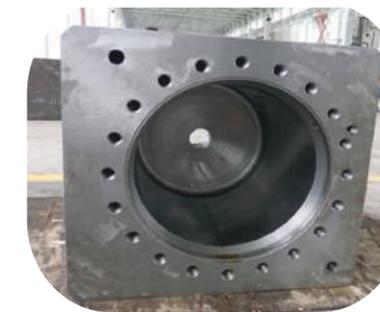
- **SATISFACTORY PERFORMANCE**
We bring forth to our customers Kiln Support Roller for a Rotary Kiln that are designed by our experienced professionals, who hold vast knowledge in this domain. Our professionals uses refractory material that are lined to protect the steel shell and reduce radiation losses.
- **MATERIAL**
Carbon steel, low alloy steel: ZG20SiMn, ZG50Mn, ZG35SiMn, ZG35CrMo, ZG35SiMnMo, ZG42CrMo, ZG40Cr, ZG40Mn etc.
- **WEIGHT**
3MT - 200MT.

ROLLING RING



- **STRICT STANDARD**
DINGWELL'S is professional in manufacturing the fittings for large mining machines. Our rolling ring is mainly used on large rotary kiln. After the ultrasonic flaw detection, our product reaches the level of the GB standard.
- **EXCELLENT WEAR RESISTANCE.**
We use ZG45 and ZG42CrMo to cast rolling ring to ensure high strength and excellent toughness, which is good for supporting.
- **ENHANCE TOUGHNESS**
We use advanced double medium quenching process, which enhance the hardness and toughness to get high wear resistance to adapt all kinds of bad working conditions.
- **WEIGHT & SIZE**
Weight: 5MT - 200MT; Diameter: 2M-9M.

BEARING CHOCK | BEARING SHAFT



- **LONG TIME OPERATION**
The bearing chock is made from SCW480 material guarantee the quality of the finished product. The bearing chock can still keep stable and effective and less loss in high-load and long time operating through the practice of inspection.
- **REAL-TIME OBSERVATION**
The bearing chock is equipped with observation oil level. The operators can see the oil level height and timely supply oil. So it can prevent lead to bad lubrication for lack of oil and avoid the bearing damage accidents.
- **RELIABLE PROTECTION OF BEARING**
Take out the bearing outer roof and prevent dust from entering the bearing box. So ensure the service life and safe and reliable operation of the bearing.
- **WEIGHT**
3MT - 20MT.

GRINDING ROLLER



● CUSTOMIZATION SERVICE

DINGWELL'S can provide the customization service according to different processing requirements from the customers. We can also provide the grinding roller in the state of finished parts including casting, finish machining and overlaying.

● STRONG WEAR-RESISTANT PERFORMANCE

The grinding rollers are with the features of high hardness, good anti-cracking, strong wear-resistant performance.

● PROFESSIONAL METHOD

During the production of the grinding rollers, we carry out the dressing and finishing by arc air gouging handled by professional workers which can guarantee the quality of the steel castings.

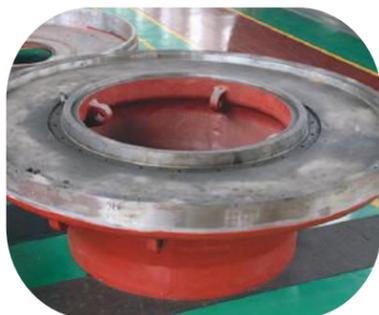
● QUALITY ASSURANCE

Prior to leaving the factory, all the grinding rollers shall be NDT inspection on the force-bearing surfaces as per process inspection methods to ensure each of the grinding rollers is good in quality.

● WEIGHT

Weight is 20MT - 120MT.

GRINDING TABLE



● EXCELLENT PERFORMANCE

The grinding table is one of the key parts of vertical roller mill. It includes drag rings, segments (lining plate) and bases. The optimization and improvement are made by us on the traditional grinding table casting technology, that the most advanced sodium silicate-bonded sand molding technology, to overcome the deficiencies in structure and make the grinding base bear force equivalently. All of these avoid the problem of material's washout on the non-wear-resisting surface.

● WEIGHT

20MT - 150MT.

WHEEL HUB



● FUNCTION

Wheel hub is the core part of grinding roller assembly. The roller cover is fixed on the hub, and the hub is installed on roller shaft, which forms the grinding roller assembly. Generally speaking, roller shell and wheel hub is connected together in the tapered structure, which is convenient for easy maintenance and disassembly.

● WEAR-RESISTANCE

The Wheel hub produced by DINGWELL'S has good wear-resistance, and are hard to break.

● QUALITY SYSTEM

The fabrication route is governed by the provisions of the implemented Quality System ISO 9001: 2000. The standard documentation ensures the full traceability of every process step.

● WEIGHT

5MT - 30MT.

SWING LEVEL | ROCKER ARM



● FUNCTION

The swing level/rocker arm is mainly composed of upper rocker, down rocker, rocker arm shaft, bearing, bearing seat etc. The upper rocker arm used to install the roller, the down rocker arm connects with hydraulic system. Two rocker arms are connected into a whole by shaft, taper sleeve and taper pin.

● WEIGHT

10MT - 25MT.

>> OTHER STEEL CASTING PARTS

FIXED & MOVABLE JAW PLATE



- FUNCTION**
 fixed and swing movable jaw plate is major component of large jaw crusher. It is widely used in the mine industry, chemical engineering, cement industry, steel and iron industry, etc. DINGWELL'S carries out the technology improvement and innovation in making the casting parts by summarizing our cast experience.
- UNIQUE HEAT TREATMENT**
 We applies unique heat treatment technology, has improved the hardness and impact resistance of crush jaw. Thus, product performance is largely enhanced.
- LONG TIME RUNNING**
 Crush jaws are made of high strength steel. We optimized the production of crush jaws according to operation features of mainframe, which largely secures crush jaws' stability and working life under long-time running.
- WEIGHT & MATERIAL**
 Weight is 5MT - 30MT.

ROLLING MILL HOUSING



- IMPACT RESISTANCE**
 Making by the high molecular structure material, endows the roll housing with the good performance of impact resistance and less abrasion.
- CORROSION RESISTANCE**
 The rolling mill housing is casted with good performance of corrosion resistance, which protect the surface from the cooling water's corrosion.
- WEIGHT**
 23MT - 97MT.

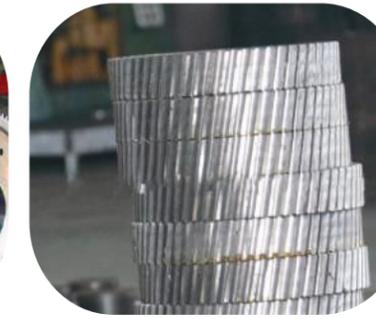
SLAG POT



KILN SHELL



PINION GEAR



WE PROVIDE ALL KINDS OF CASTING PRODUCTS
TO SATISFY YOUR MINING AND INDUSTRIAL REQUIREMENTS

PRODUCT FEATURES

- Durable
- Good Dimensional Accuracy
- Excellent Tensile Strength
- Superb Surface Finishing
- Accrue Level Of Tolerance
- Easy To Use & Install

PRODUCTION PROCEDURE

ORDER → DESIGN DRAWING → PLANNING PROCESS → SIMULATION OF CASTING → MAKING MODELS → MOLDING → FOULDING → OUT OT PIT → CLEANING → HEAT TREATMENT → FINISHED MACHINING → FLAW DETECTION → DEFECT TREATMENT → GENERAL TEMPERING → QUALITY TEST → PACKING & DELIVERY



We use most advanced casting solidification and mold filling simulation software to ensure the accuracy of our production.

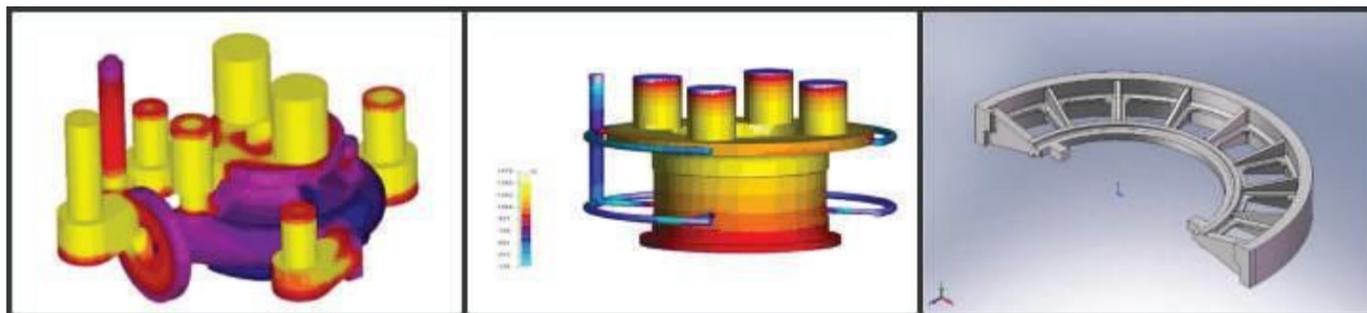
The system consists of three modules: pre-processor, main-solver and post processor.

Virtual test plans and automatic optimization

Parametric design of casting rigging

Modeling capabilities for all casting processes

Automatic result evaluation and assessment



3 Dimensional Pouring Stimulation

Casting Color and Temperature

3 Dimensional Stereogram



SAMPLE STORAGE



SPECTROMETER



IMPACT TESTER



HARDNESS TESTER



VIBRATING SIEVING MACHINE



VARIOUS TESTING MACHINES
ASSURE SUPREME QUALITY



C & S ANALYZER



Si-Mn-P ANALYZER



IMPACT SPECIMEN PROJECTOR



LEVER STRENGTH TESTER



ULTRASONIC DEVISE



MAGNETIC DEVISE



SAND TESTER



SUPREME QUALITY

ON-TIME DELIVERY

COMPETITIVE PRICE