

DALIAN DASHAN METALLURGICAL ENGINEERING TECHNOLOGY CO.,LTD
大连大山冶金工程技术有限公司

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**DALIAN DASHAN METALLURGICAL ENGINEERING
TECHNOLOGY CO.,LTD**
大连大山冶金工程技术有限公司



山，土有石而高

—许慎《说文解字》

大山者，巍峨、坚毅、朴实、厚重。

大山人用大山的品格与力量，以愚公移山、精卫填海的精神和信念铸就了巍峨雄伟、结晶器及相关备件研发生产的标杆企业。

Mountains (Dashan in Pinyin) stand lofty, perseverant, modest and dignified.

Dashan people, in virtue of the mountains' strength and essence, make Dashan standing out as a model enterprise specialized in R&D and manufacturing of conicaster, copper mould and relevant spare parts.

INTRODUCTION OF THE COMPANY

企业概况

GROUP SUBSIDIARIES

集团下属公司

Dalian Dashan Crystallizer Co., Ltd
 Dalian Dashan Heavy Machinery Co., Ltd
 Dalian Dashan Surface Treatment Co., Ltd
 Dalian Dashan Copper Co., Ltd
 Dalian Dashan Metallurgical Engineering Technology Co., Ltd

• 大连大山结晶器有限公司
 大连大山重工机械有限公司
 大连大山表面处理有限公司
 大连大山铜业有限公司
 大连大山冶金工程技术有限公司



Dalian Dashan Metallurgical Engineering Technology Co., Ltd (DDMET) is a subsidiary company of the Dashan Group. DDMET is mainly responsible for the general contracting of design, fabrication and installation for the Continuous Casting Machine Projects of the Dashan Group. The company's main functions include the design and engineering of metallurgical equipment, including but not limited to:

- Conceptual design,
 - Design of environmental protection equipment,
 - Technical consultation with sales, services and supply of related equipment.
- DDMET complete line of equipment supply include:
- Iron and steel smelting equipment,
 - Continuous casting equipment,
 - Rolling equipment,
 - Metallurgical auxiliary equipment and environmental protection equipment.

In addition DDMET offers a complete "turn key" design and supply of continuous casting machines and related spare parts, which have been exported to more than 40 countries worldwide. DDMET is proud of its motto: "science and technology first and innovation foremost" our mission is to provide our customers with the finest engineered equipment and technical services they deserve.

Dashan Group has a long history of designing and manufacturing different profiles of billet and round copper mould tubes, copper plates, mould assembly, continuous casting machines and its related spare parts.

Established in 1992, Dashan Group has achieved rapid and sustained growth to become the most professional manufacturer and engineering enterprise in China. The Group offers industry-leading billet and round mould assemblies and has the highest sales volume in the domestic market, which nearly take 1/3 of total China market share.

With its continual development, the Dashan Group has formed an integrated industrial structure providing design, product processing, manufacturing, and finished product efficiencies.

大连大山冶金工程技术有限公司是大山集团的下属子公司，主要负责大山集团连铸机项目的总包设计及连铸改造，是大山集团国际市场的出口窗口。公司的主要业务是承揽冶金工程技术开发及设计制造冶金专用设备、环保设备技术开发设计，技术咨询，技术服务及整套设备供货。公司的主要产品有钢铁冶炼设备、连铸设备、轧钢设备、冶金附属设备及环保设备。其中，连铸机成套设备及改造相关设备远销40多个国家和地区。公司始终坚持“科技第一，创新第一”为企业宗旨，坚持为广大客户提供优良可靠的设备和技术服务。

大山集团是专业设计、制造各类方圆坯、板坯结晶器铜管、铜板、总成及其相关备件和连铸机的专业制造商。集团自1992年成立大连大山结晶器有限公司以来，发展迅速，势头强劲，方圆坯总成产品一直领跑国内，销量位居行业之首，约占全国总销量的三分之一，产品覆盖率达95%以上，是中国最大的结晶器专业制造商之一。随着公司的不断发展壮大，已形成了从设计到产品加工制造再到成品优化处理的一体化产业格局。

HISTORY OF COMPANY

公司发展历程

**BEST SUPPLIER OF
HIGH-QUALITY PRODUCTS
LEADER IN THE
METALLURGICAL INDUSTRY**
提供一流产品,做行业领军者

- 1992** 创立大连大山结晶器厂——方坯结晶器生产基地
Established Dalian Dashan Crystallizer Co.,Ltd
Production base of billet mould.
- 1995** 成功制造出第一台结晶器总成
Successfully produced the first mould assembly.
- 1997** 成为国内首家引进国外结晶器专利技术的企业，
并将这项技术广泛推广到国内外各大钢铁企业
Being the first company who introduced the
advanced mould patent to china and widely
used it on products.
- 2000** 铜管产量突破万支，创造同行业奇迹。
Created a miracle in the industry with 10
thousand mould tubes output a year.
- 2001** 公司研制的高效结晶器铜管获“辽宁省第四届
优秀新产品奖”、“大连市科技进步三等奖”；
并投入批量生产，实现年销量12000支，部分
产品出口至20多个国家和地区。
The developed efficient copper moulds, gained
many awards, were sold 12 thousand pieces
yearly, and some of them were exported to
more than 20 countries and regions.
- 2002** 创建大连大山表面处理有限公司——电镀生产基地
Established Dalian Dashan Surface Treatment
Co.,Ltd-coating base.
- 2003** 创建大连大山重工机械有限公司——结晶器
板坯及成套连铸机生产基地
Established Dalian Dashan Heavy Machinery
Co.,Ltd--production base of slab mould and
complete set of continuous casting machine.
- 2004** 大连大山结晶器有限公司、大连大山表面处
理有限公司同德国KME公司达成合资案
Established joint ventures with KME
- 2005** 创建大连大山铜业有限公司——铜材冶炼基地
Established Dalian Dashan Copper Co.,Ltd--
copper smelting base.
- 2007** 创建大连大山冶金工程技术有限公司——连
铸机设计研发中心
Established Dalian Dashan Metallurgical
Engineering Technology Co.,Ltd--research
and design center of continuous casting
machine.
- 2009** 大山结晶器有限公司乔迁新址，结晶器铜管
产能扩大至5万支/年
Dalian Dashan Crystallizer Co.,Ltd moved to
a new plant, and its capability of copper moulds
reached 50 thousand pieces per year.
- 2012** 大山新铜板车间成立
Established new dashan copper plate workshop.
- 2014** 至今
Up to now.

PROCESS EQUIPMENT

装备展示

CNC MACHINE: 9 SETS ORIGINATED FROM TAIWAN AND GERMANY

数控加工中心：德国、台湾进口数控机床9台

HYDRAULIC PRESS: 10 SETS

油压机：10台

EXTRUDING MACHINE: 4 SETS

挤压机：4台

MILLING MACHINE: 28 SETS

铣床：28台

BORING MACHINE 9 SETS

钻床：9台

FORGING MACHINE: 6 SETS

锻造机：6台

HEATING FURNACE: 6 SETS

加热炉：6台

ANALYSIS INSTRUMENT: SERIES OF EQUIPMENTS

分析仪：多种系列

WELDING MACHINE: MORE THAN 20 SETS

电焊机：20多台

ELECTROPLATING FACILITIES: 15 SETS

电镀设备：15台

LABORATORY EQUIPMENT: MORE THAN 30 SETS

实验室设备：30多台

CNC MACHINING CENTER

数控加工中心



① GRINDING MACHINE

抛光机

② TOOL PRESETTER MACHINE

对刀仪

③ DMG CNC MACHINING CENTER

DMG数控加工中心

④ HYDRAULIC PRESS

油压机

⑤ ELECTROPLATING EQUIPMENTS

电镀设备



CASTER PROCESS APPLICATION

连铸成套设备



我们已从事连铸技术的研究20年，处于行业领先地位。为连铸的设计及供应提供全方位的服务。

供货范围和服务:

- 提供各种方坯、圆坯和板坯连铸机
- 提供操作和冶金协助
- 交钥匙项目的实施
- 有效操作培训协助

我们可以提供改造方案来减少钢厂运营成本，以致力于为客户提供服务为荣。

DDMET has been a leader in the continuous casting technology research for 20 years, as such, DDMET has engaged in all aspects of continuous casting engineering design and supply.

Scope of supply and service:

- Billet, bloom, slab casters
- Operational and metallurgical assistance
- Turnkey project implementation
- Valued operational training assistance

DDMET provides our customers with "change ready" solutions to reduce costs of operation. DDMET provides itself as a company who honors our commitment to our customers.

① CASTER REVAMPING FOR THAILAND

泰国连铸机改造

② CASTER REVAMPING FOR USA

美国连铸机改造

③ CASTER FOR KAZAKHSTAN

哈萨克斯坦成套连铸机

④ 8 STRANDS CASTER FOR CHINA

国内八流连铸机



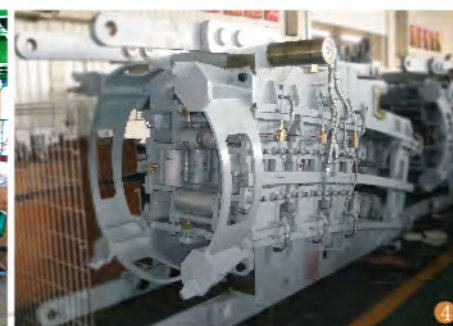
SPARE PARTS OF BILLET/ BLOOM CASTER

方坯连铸机备件

We can design and manufacture kinds of spare parts for billet caster according to customer's requirements, including ladle turret, tundish and tundish car, mould assembly, mould oscillator, secondary cooling segment, withdrawal straightener, dummy bar mechanism, hydraulic shear, flame cutting machine, table roller, cooling bed and pusher, etc.

根据客户实际需要，我公司可提供设计并制造各类规格方坯连铸机备件，包括钢包回转台、中间罐及中间罐车、结晶器总成、结晶器振动装置、二冷段、拉矫机、引锭装置、液压剪、火焰切割机、辊道、冷床及推钢机等。

LADLE TURRET 钢包回转台



TUNDISH AND TUNDISH CAR ①
中间罐及中间罐车

MOULD HYDRAULIC OSCILLATOR ②
结晶器液压振动装置

MOULD SPRING OSCILLATOR ③
结晶器板簧振动装置

BILLET COOLING SEGMENT ④
方坯二冷段

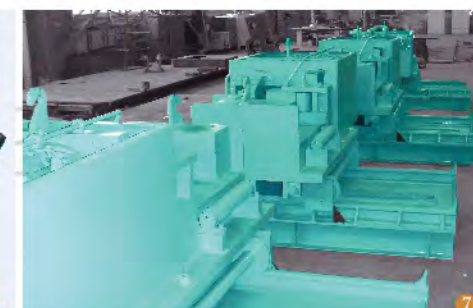
WITHDRAWAL STRAIGHTENER ⑤
拉矫机

DUMMY BAR MECHANISM ⑥
引锭装置

HYDRAULIC SHEAR ⑦
液压剪

TABLE ROLLER ⑧
辊道

VARIOUS WATER JACKETS ⑨
结晶器水套



SPARE PARTS OF SLAB CASTER

板坯连铸机相关备件

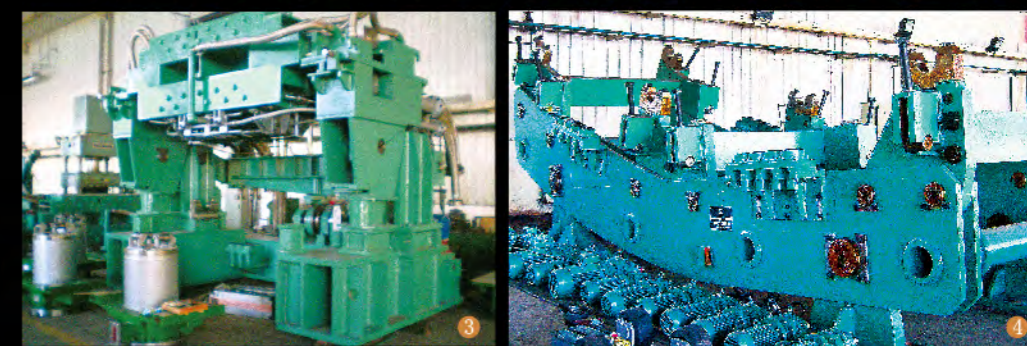
We can design and manufacture kinds of spare parts for slab caster according to customer's requirements, including ladle turret, tundish and tundish car, mould assembly, mould oscillator, zero segment, segment, withdrawal straightener, dummy bar mechanism, hydraulic shear, flame cutting machine, table roller, cooling bed and pusher, etc.

根据客户实际需要，我公司可提供设计并制造各类规格板坯连铸机备件，包括钢包回转台、中间罐及中间罐车、结晶器总成、结晶器振动装置、弯曲段、扇形段、引锭装置、火焰切割机、辊道、冷床及推钢机等。

TUNDISH AND TUNDISH CAR ①
中间罐 及中间罐车

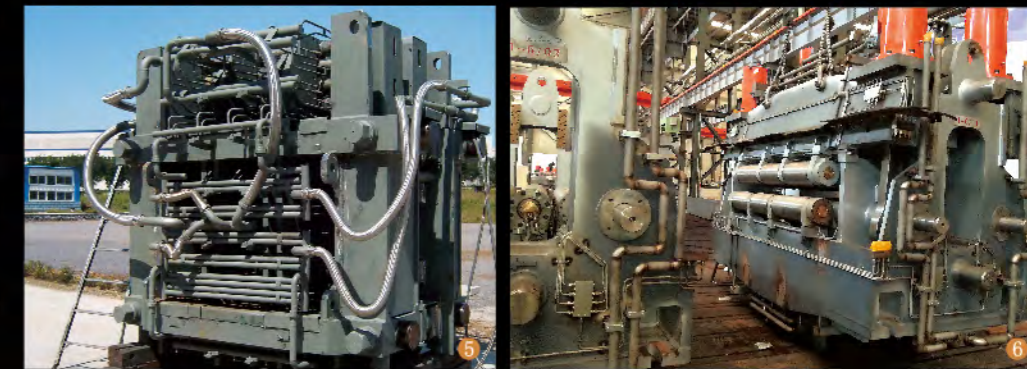


LADLE TURRET ②
钢包回转台



SLAB OSCILLATOR ③
板坯结晶器振动装置

SUPPORTING FRAME ④
支撑框架



SLAB ZERO SEGMENT ⑤
弯曲段

SLAB SEGMENT ⑥
扇形段

DUMMY BAR HEAD ⑦
引锭头



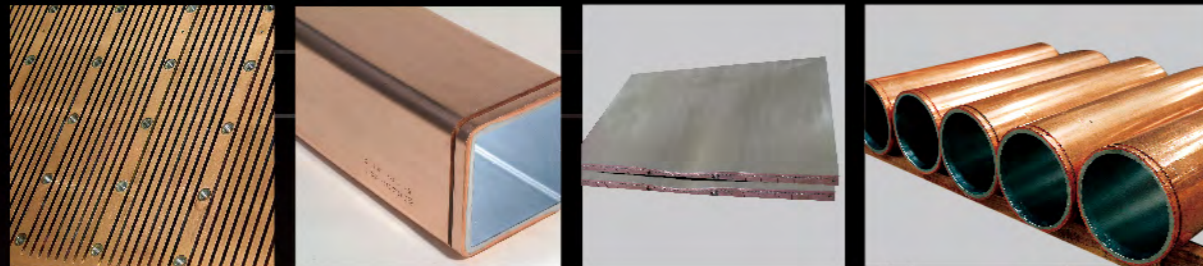
FLEXIBLE DUMMY BAR ⑧
柔性引锭杆

COPPER MOULD

结晶器

The copper mould is the core part of continuous casting machine and regarded as "heart" of it.

结晶器是连铸机的核心部件，又誉为连铸设备的“心脏”。



COPPER MOULD TUBE

结晶器铜管

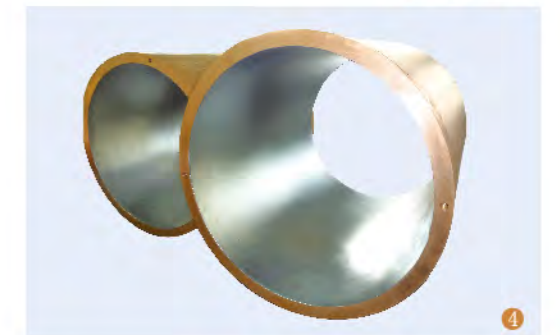
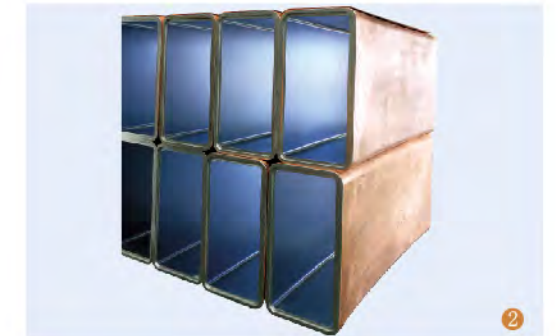
COPPER MOULD TUBE 550×720×720-R15000mm
矩形坯结晶器铜管 550×720×720-R15000mm



为客户提供方坯、圆坯、矩形坯等结晶器铜管
产品规格：覆盖市面所需所有尺寸
方坯从60mmx60mm至700mmx700mm
圆坯从Φ80mm至Φ1000mm
矩形坯从135mmx430mm至550mmx720mm
锥度设计：根据客户的需求提供不同铜管
内腔锥度，主要形式为单、多锥和抛物线形式
产 能：50000支/年
材 质：DHP、CuAg、CuCrZr
镀 层：Cr、复合镀

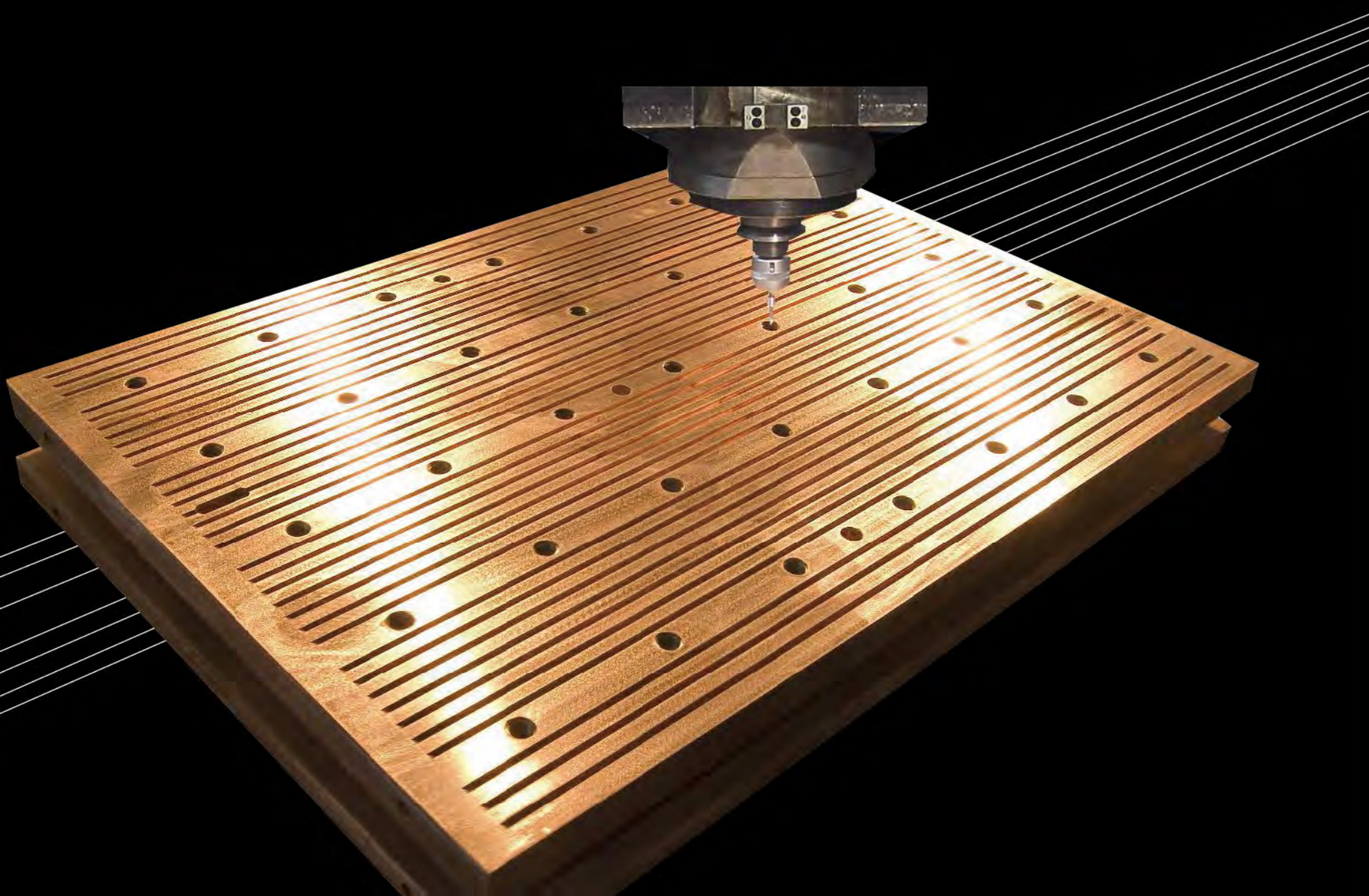
We can offer billet, round and bloom copper mould tubes with all existing specification and design.
-Size of billet mould tube is from 60mmx60mm to 700mmx700mm, of round one from Φ80mm to Φ1000mm, of bloom one from 135mmx430mm to 550mmx720mm.
-Taper design: according to customer's needs and working environments.
-Featured designs with single taper, multi taper and parabolic curve.
-Capability: 50000 pcs/year
-Material: DHP, CuAg, CuCrZr
-Coating: Cr, alloy coating

- ① **BILLET COPPER MOULD TUBE**
200×200×850-R9000mm
方坯结晶器铜管
200×200×850-R9000mm
- ② **BLOOM COPPER MOULD TUBE**
240×400×900-R10000mm
矩形坯结晶器铜管
240×400×900-R10000mm
- ③ **ROUND COPPER MOULD TUBE**
Φ330×900-R10000mm
圆坯结晶器铜管
Φ330×900-R10000mm
- ④ **ROUND COPPER MOULD TUBE**
Φ700×800-R16005mm
圆坯结晶器铜管
Φ700×800-R16005mm



COPPER MOULD PLATE

结晶器铜板



为客户提供各类传统结晶器铜板、CSP铜板、FTSC铜板、H型钢铜板和组合大方坯结晶器铜板及其修复。
产品规格: 从120mm x 850mm 至 3600mm x 1000mm
厚度: 40mm- 55mm
产能: 铜板3000块/年
材质: CuAg、CuCrZr
镀层: 、镍、铬、镍钴、复合镀

We can offer conventional copper plates, CSP plates, FTSC plates, beam blanks and build-up plates with applicable maintenance.
-Specification: From 120mmx850mm to 3600mmx1000mm
-Thickness: 40mm-55mm
-Capability: 3000 pcs/year
-Material: CuAg, CuCrZr
-Coating: Ni, Cr, NiCo, Multi-coating

- ① **CSP COPPER MOULD PLATE**
CSP结晶器铜板
- ② **BEAM BLANK COPPER MOULD ASSEMBLY**
H型钢铜板装配
- ③ **CONVENTIONAL COPPER MOULD PLATE**
传统结晶器铜板
- ④ **NARROW FACE COPPER MOULD PLATE**
窄边铜板



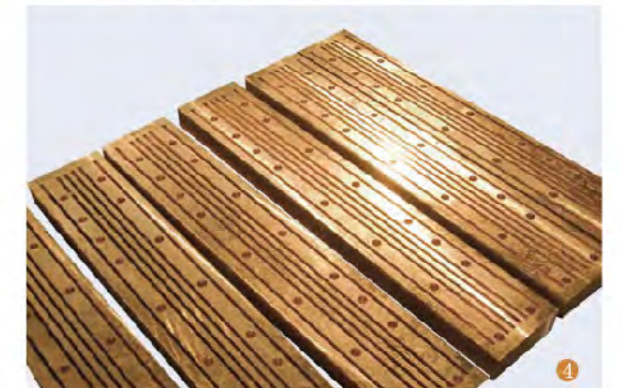
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MOULD ASSEMBLY

结晶器总成

We can design and produce various billet, round, bloom and slab mould assemblies according to customer's specific requirements.

根据客户的不同需求，设计并制造各类方坯、圆坯和板坯总成。

SLAB MOULD ASSEMBLY

板坯结晶器总成



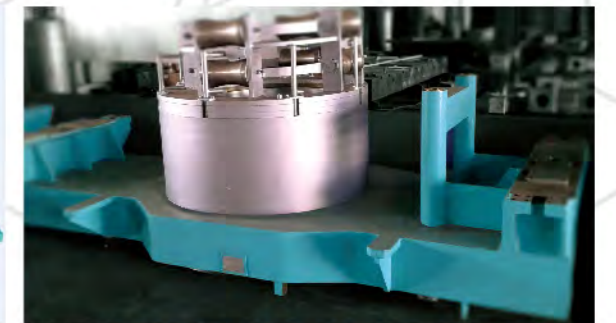
BILLET MOULD ASSEMBLY
方坯结晶器总成



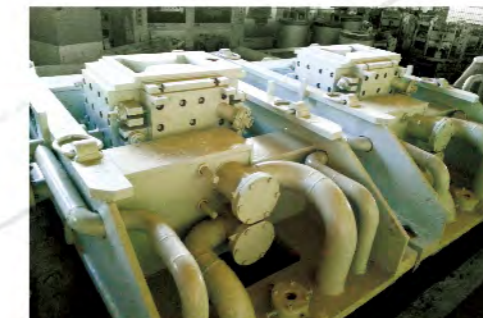
BLOOM MOULD ASSEMBLY
大方坯结晶器总成



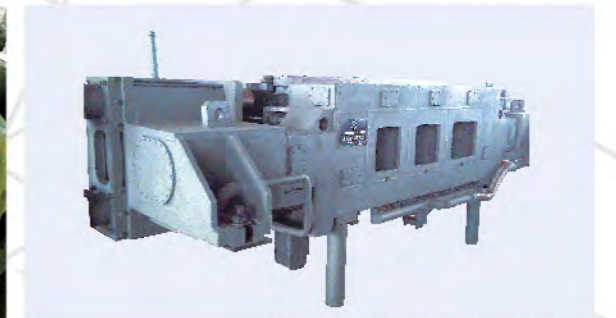
ROUND MOULD ASSEMBLY
圆坯结晶器总成



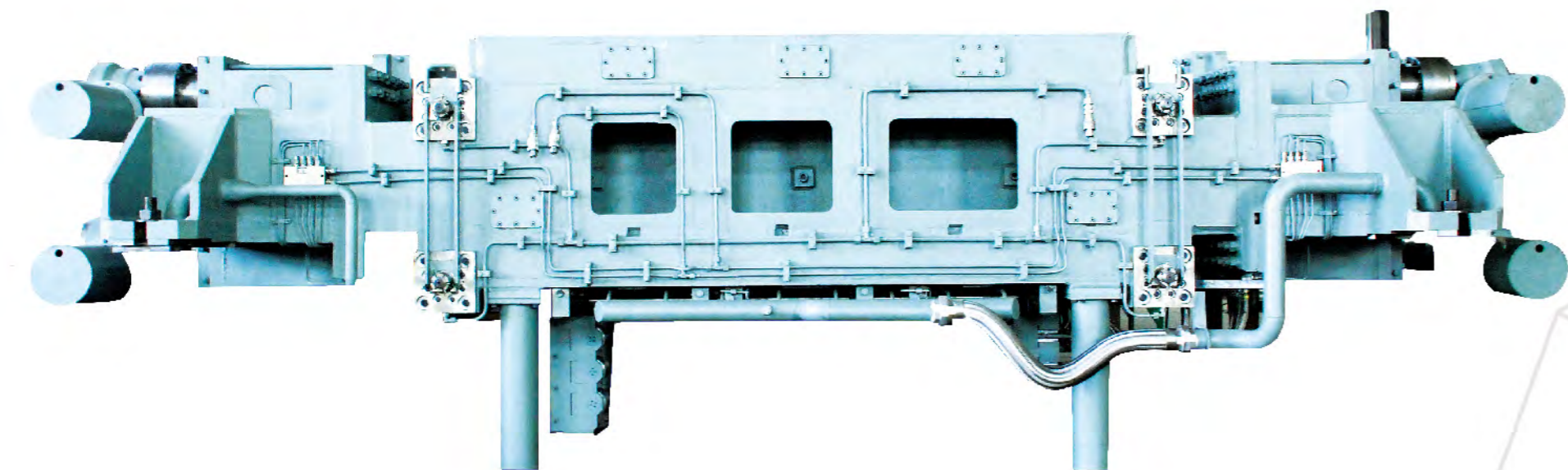
Φ700 ROUND MOULD ASSEMBLY
Φ700圆坯结晶器总成



BEAM BLANK MOULD ASSEMBLY
H型钢结晶器总成



SLAB MOULD ASSEMBLY
板坯结晶器总成



TECHNOLOGY

技术

The primary productive force of the enterprise
企业的第一生产力

产品加工使用德国先进设备，保证产品加工精度。集团现有员工超过500人，大专以上学历186人，硕士研究生8人，中科院研究员1人，教授4人，专业技术人员占30%以上，汇集了来自中科院等国内知名企事业单位多名行业专家。

- With advanced equipments purchased from Germany, Dashan is able to offer our customer the finest machined products. The Group has over 500 engineers and technicians including:
 - 186 bachelors degree,
 - 8 masters degree,
 - 1 senior analyst from Chinese Academy of Sciences and 4 professors,
 - more than 30% of our staff are technicians.



QUALITY AND AFTER-SALE SERVICE

质量和售后服务

The key to enterprise's success
企业的生存之本

质量是根本，公司从原材料生产开始，对整个流程采取全面的有效质量管理手段，每道工序都经过严格质量控制和检测。此外，公司还配备了完善的检测设备来确保质量管理的可靠性，竭力为客户提供一流的产品。

QUALITY ASSURANCE is the top priority of the Group. With strict quality control and standardized and essential part every procedure of our production process.

公司拥有完善的售后服务团队，及时走访客户，了解客户需求，协助客户评估产品，优化产品性能，提高产品使用寿命，并积极有效协助客户解决生产中出现的各类问题。

We have the best sales network and after-sale service team in the industry to analyze and optimize performance of our products and to solve any problems which may occur during casting process.



MAJOR ACHIEVEMENTS

主要业绩

凭借优良的产品性能，公司产品畅销国内外600多家钢铁企业。

国内市场:产品销往天钢、包钢、昆钢、唐钢、武钢、攀钢、沙钢、杭钢、广钢、柳钢、济钢、南钢、等500余家钢铁企业，结晶器铜管国内市场占有率约35%左右，占市场主导地位。

国际市场:产品出口印度、德国、美国、土耳其、南非、巴基斯坦、智利、巴西、泰国、新加坡、印度尼西亚等40多个国家和地区。

With good performance, our products are attracting more than 600 steel companies.

Domestic market includes Tiangang Steel, Baogang Steel, Kungang Steel, Wugang Steel, Pan-gang Steel, Shagang Steel, Hanggang Steel, Guanggang Steel, Liugang Steel, Jigang Steel, Nangang Steel, ect. more than 500 steel enterprises. The possessive rate of mould tube is about 35%, taking the leadership in domesitc market.

Abroad market includes India, Germany, United States, Turkey, South Africa, Pakistan, Chile, Brazil, Thailand, Singapore, Indonesia etc. more than 40 states and areas.

COMPLETE CCM AND CCM REVAMPING

整套连铸及改造

No./序号	Description/描述	Customer/客户	Country/国家
1	Complete set of CCM with 2 strands for billet 100x100mm 两流100方成套连铸机	Urmia Steel Urmia钢厂	Iran 伊朗
2	Complete set of CCM with 2 strands for billet 130x130mm 两流130方成套连铸机	SSGPO SSGPO集团	Kazakhstan 哈萨克斯坦
3	Complete set of CCM with 2 strands for billet 150x150mm 两流150方成套连铸机	Li Group 李氏集团	Nigeria 尼日利亚
4	Complete set of CCM with 6 strands for billet 150x150mm, 180x180mm, 200x200mm 六流150方, 180方, 200方成套连铸机	Baft Steel Baft钢厂	Iran 伊朗
5	Complete set of CCM with 3 strands for round 400mm 三流400mm圆坯成套连铸机	STG STG	Italy 意大利

6	Revamping of R6m CCM with 4 strands, billet section size 100x100mm, 130x130mm, 150x150mm R6米100方, 130方, 150方四流连铸机改造	M Metal Steel M Metal钢厂	Thailand 泰国
7	Revamping of R10m CCM with 3 strands, billet section size 150x150mm, 200x200mm, 350x350mm R10米150方, 200方, 350方三流连铸机改造	Warren Steel Warren钢厂	USA 美国
8	Complete set of R9.5m CCM with 7 strands, billet section size 150x150mm, 165x165mm 七流150方和165方成套连铸机	Ma Steel Co.,Ltd 马钢集团	China 中国
9	Complete set of R9m CCM with 7 strands, bloom section size 160x160mm, 165x225mm 七流160方和165x225mm矩形成套连铸机	Tianjin Steel Co.,Ltd 天津钢铁有限公司	China 中国
10	Complete set of R12m CCM with 5 strands, round section size 220mm and 310mm 五流220mm和310mm圆坯成套连铸机	Shandong Shouguang Iron and Steel Co.,Ltd 山东寿光钢铁有限公司	China 中国

CCM SPARE PARTS

连铸备件

No./序号	Description/描述	Customer/客户	Country/国家
1	130x130mm mould assembly 130方结晶器总成	CVS CVS	Turkey 土耳其
2	150x150mm mould assembly 150方结晶器总成	Acelor Mittal 阿赛洛米塔尔钢铁集团	Kazakhstan 哈萨克斯坦
3	150x150mm, 200x200mm, 350x350mm mould assembly 150方, 200方, 350方结晶器总成	Warren Steel Warren钢厂	USA 美国
4	Φ130mm, Φ170mm, Φ190mm, Φ220mm mould assembly 130圆, 170圆, 190圆, 220圆结晶器总成	Steel plants in CIS 独联体钢厂客户	Azerbaijan 阿塞拜疆
5	Slab mould assembly 板坯结晶器总成	Toscelik Toscelik钢厂	Turkey 土耳其
6	Slab CCM backup plate 板坯结晶器背板	Acelor Mittal 阿赛洛米塔尔钢铁集团	Kazakhstan 哈萨克斯坦
7	Rigid dummy bar 刚性引锭杆	Gerdau 盖尔道钢铁集团	USA 美国

8	Hydraulic shear frame, dummy bar 液压剪框架, 引锭杆	North America Stainless Steel 北美不锈钢厂	USA 美国
9	Mould oscillator 结晶器振动装置	Republic Lorain Steel Republic Lorain钢厂	USA 美国
10	Withdrawal straightener 拉矫机	SDI SDI钢厂	USA 美国

COPPER MOULD TUBES

结晶器铜管

No./序号	Description/描述	Customer/客户	Country/国家
1	115x115x900-R5000mm	Cape Gate Cape Gate钢厂	South Africa 南非
2	130x130x812.8-R4876.8mm	Acelor Mittal 阿赛洛米塔尔钢铁集团	USA 美国
3	160x160x900-R9000mm	Tata Steel 塔塔钢铁集团	Singapore 新加坡
4	165x165x1000-R9000mm	JSW JSW钢铁集团	India 印度
5	150x300x1000-R9000, 150x350x1000-R9000mm	Sail DSP Sail钢铁集团	India 印度
6	200x200x780-R10000mm	North America Stainless Steel 北美不锈钢厂	USA 美国
7	200x200x780-R10000mm, 250x320x780-R10000mm	Esfahan Steel 伊斯法罕钢厂	Iran 伊朗
8	Φ130, Φ170, Φ190, Φ220x800-R6005mm	Steel plants in CIS 独联体钢厂客户	Azerbaijan 阿塞拜疆
9	Φ289x800-R10000mm, Φ311x800-R10000mm	Warren Steel Warren钢厂	USA 美国

10	Φ400x800-R11000mm	CVS CVS	Turkey 土耳其
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COPPER MOULD PLATES

结晶器铜板

No./序号	Description/描述	Customer/客户	Country/国家
1	795x900x55mm	Super Smelter Super钢厂	India 印度
2	2080x800x40mm	Acelor Mittal 阿赛洛米塔尔钢铁集团	Kazakhstan 哈萨克斯坦
3	2200x904x67mm, 1850x704x67mm	AHMSA AHMSA钢厂	Mexico 墨西哥
4	2266x900x45mm	Hormozgan Steel Co Hormozgan钢厂	Iran 伊朗
5	1650x900x45mm	Panzhuhua Steel Co.,Ltd 攀钢	China 中国
6	1656x704x60mm	Tianjin Iron&Steel Co.,Ltd 天钢	China 中国
7	1730x1100x40.5mm	Tangshan Iron&Steel Co.,Ltd 唐钢	China 中国
8	1980x900x45mm	Wuhan Iron&Steel Co.,Ltd 武钢	China 中国
9	1810x1100mm(CSP)	Wuhan Iron&Steel Co.,Ltd 武钢	China 中国
10	1970x1200mm(CSP)	Tonggang Group 通钢	China 中国

COKE OVEN EQUIPMENT

焦炉设备

DDMET, one of dominant enterprises for design, manufacture, installation and commissioning of coke oven machinery in China, is capable of manufacturing the coke oven machineries with kinds of specifications for 3.2m, 3.8m, 4.3m, 5.5m and 6.25m stamp-charging coke ovens. It has been coming up to the advanced domestic standard in field of design, manufacture and installation of coke oven machinery.

大连大山冶金工程技术有限公司是中国焦炉机械设计、制造、安装、调试的主导企业，能够设计制造各种规格型号的焦炉机械，用于3.2m、3.8m、4.3m、5.5m及6.25m捣固式焦炉。焦炉机械的设计及制造、安装水平始终处于国内先进水平。

① **ELECTRIC LOCOMOTIVE**

电机车

② **GUIDE CAR**

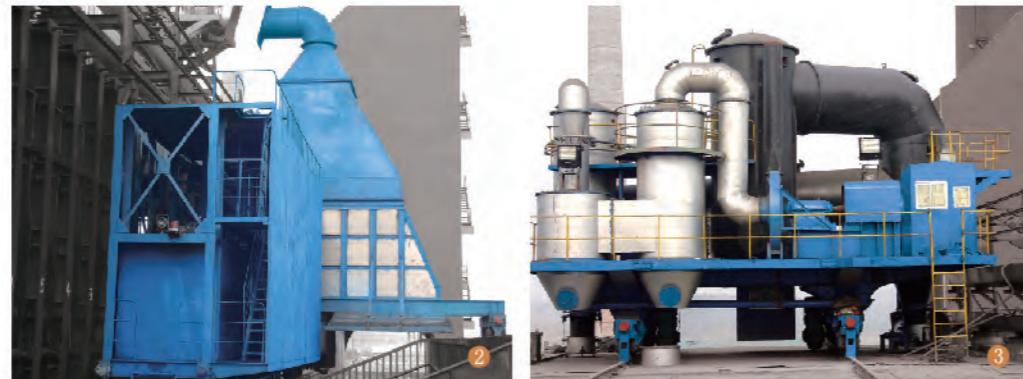
拦焦车

③ **DEDUSTING CAR**

除尘车

④ **CHARGING/PUSHING CAR**

装煤推焦车



6 M ABOVE COKE OVEN EQUIPMENT FOR EXPORT



CHARGING CAR

装煤车



QUENCHING CAR

熄焦车



ELECTRIC LOCOMOTIVE

电机车



QUENCHING CAR

熄焦车