

## 源自百年首钢 服务世界钢铁

EXPERTISE FROM HUNDRED-YEAR SHOUGANG

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## Sintering Engineering and Technology 烧结工程与技术





# 概述

## Introduction

首钢国际工程公司专注于烧结技术的自主创新，拥有完善的技术储备，以最优化的方案为全球客户提供烧结工程咨询、工程设计、工程总承包、技术装备制造和项目管理等服务。

首钢国际工程公司充分发挥企业设计院的优势，不断总结和吸取生产中的经验及技术成果，不断进行技术开发和技术创新，形成了独特的技术优势和丰富的管理经验，拥有多项专利技术和专有技术，并荣获多项省部级技术奖励。拥有从75m<sup>2</sup>至550m<sup>2</sup>不同规模的烧结机研发技术和建设能力，为国内外20余家用户提供了30多项烧结工程设计及总承包服务。自主设计的首钢京唐550m<sup>2</sup>烧结机创造了中国企业新纪录。

BSIET focuses on sintering technology innovation, has improved the technical reserves, optimizes the program to provide global customers with sintering engineering consulting, engineering design, general project contracting, technical equipment manufacturing and project management services.

BSIET gives full play to the advantages of enterprise design institute, constantly

sums up and draws on the experience of production and technological achievements, continues to perform technology development and innovation, forms the unique technical advantages and rich management experience, has a number of patented technologies and know-how and has gained many provincial and ministerial level technology awards.

BSIET has R&D technology and building ability on sintering machine of different sizes from 75m<sup>2</sup> to 550m<sup>2</sup>, and provides more than 30 sintering project design and EPC for more than 20 customers at home and abroad. The independently designed Shougang Jingtang 550m<sup>2</sup> sintering machine created a new Record of China Enterprises.

首钢京唐550m<sup>2</sup>烧结机  
冶金行业全国优秀工程设计一等奖、冶金科技进步一等奖  
Shougang Jingtang 550m<sup>2</sup> sintering machine  
1<sup>st</sup> Prize of National Excellent Engineering Design in Metallurgical Industry  
1<sup>st</sup> Prize of Metallurgical Science and Technology

# 优势技术

## Advantaged Technologies

首钢国际工程公司注重将技术研发与生产实际相结合，通过不断改进形成了多项自主创新的烧结核心技术和专利技术。

### ★ 大型烧结机（550m<sup>2</sup>）工艺装备技术

该技术在首钢京唐钢铁厂成功应用，通过优化工艺布置、采用领先可靠的工艺设备、配置先进的自动化控制系统，确保项目投产后运行稳定，达到并超过了设计水平。

BSIET pays attention to combing technology R&D with actual production and has formed a number of independent and innovative core and patented technologies for sintering engineering through continuous improvement and innovation.

### ★ Process equipment and technology for large sintering machine (550m<sup>2</sup>)

Successful application in Shougang Jingtang, stable operation after start-up is ensured and the design level is reached and exceeded by optimization of process layout, adopting advanced and reliable process equipment and provision of advanced automation control system.



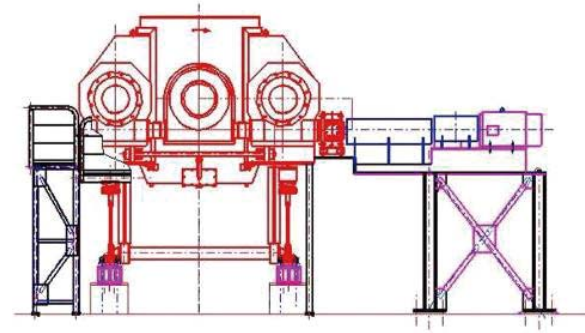


### ★ 烧结机柔性传动装置

悬挂安装，柔性支撑，具有一定范围的随动性，适应烧结机跑偏调节的要求，传动扭矩大，结构紧凑，成本低，占地少。

### ★ Flexible drive unit of sintering machine

Suspended installation, flexible support, with a range of mobility, meeting swaying regulation requirements for sintering machine, big drive torque, compact structure, low cost, small floor area.



### ★ 烧结机加宽型台车

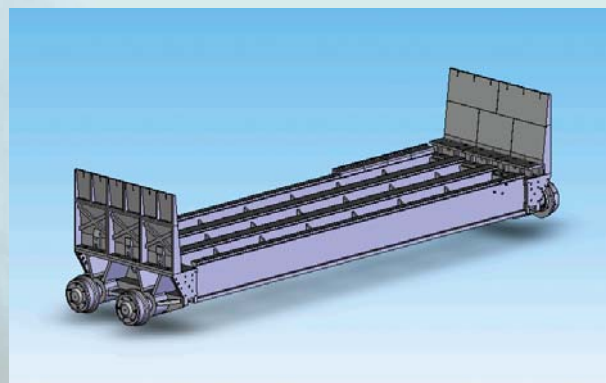
明显减少烧结台车侧壁部位的漏风量，使烧结过程中沿台车侧壁抽吸的空气形成气流通过烧结生料，改善边缘部位的烧结状况，从而减少返矿数量，提高烧结设备的生产率，降低能源消耗。

通过采用加宽技术，可以实现烧结面积增加10%，烧结产量增加约5-12%，吨矿耗风量降低约5-10%，烧结矿电耗、煤耗用量减少，单位能耗降低。

### ★ Broadened pallet of sintering machine

To significantly reduce air leakage on side wall position of sintering pallet, enabling suction air along pallet side wall during sintering to form air flow passing sintering green mixture improving sintering condition of edge position, so as to realize reduction of return fines, to enhance productivity of sintering equipment, to lower energy consumption.

Through broadened technology, sintering area can be increased by 10%, sintering output increased by approx. 5-12%, and blast volume per ton can be decreased by 5-10%. Electric and coal consumption will be reduced and energy consumption per ton will also be decreased.



### ★ 环冷机加宽型台车

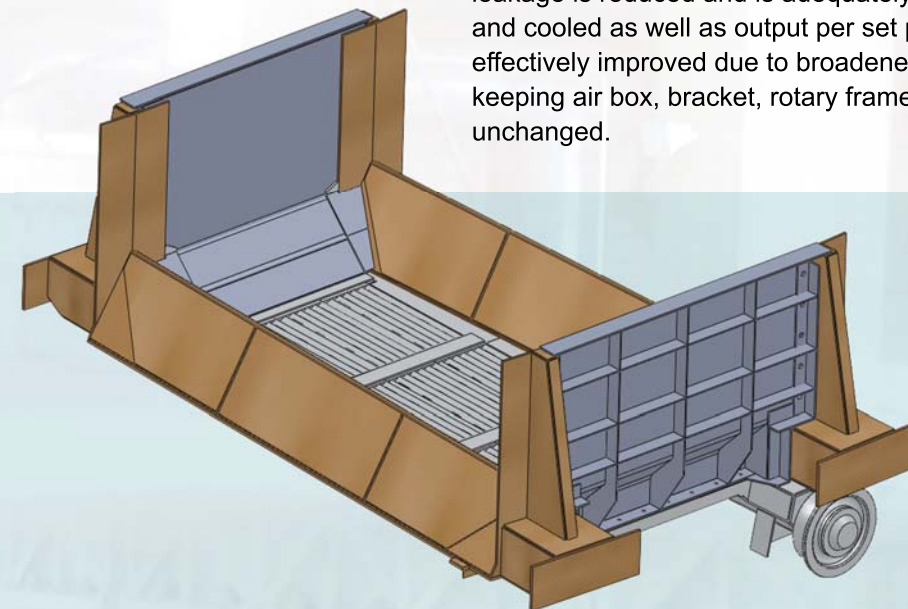
发明专利技术（专利号ZL200910083477.X）。

在保持环冷机的风箱、机架、回转框架和台车主体不变的前提下，加宽台车，提高环冷机的装载和运行效率，减少物料在通风冷却时的边缘漏风并加以充分利用，有效提高环冷机的台时产量。

### ★ Broadened pallet of annular cooler

(Invention patent, Patent No.ZL200910083477.X)

Loading and operating efficiency of annular cooler is improved, edge leakage is reduced and is adequately utilized when material is ventilated and cooled as well as output per set per hour for annular cooler is effectively improved due to broadened pallet under preconditions of keeping air box, bracket, rotary frame and pallet body of annular cooler unchanged.

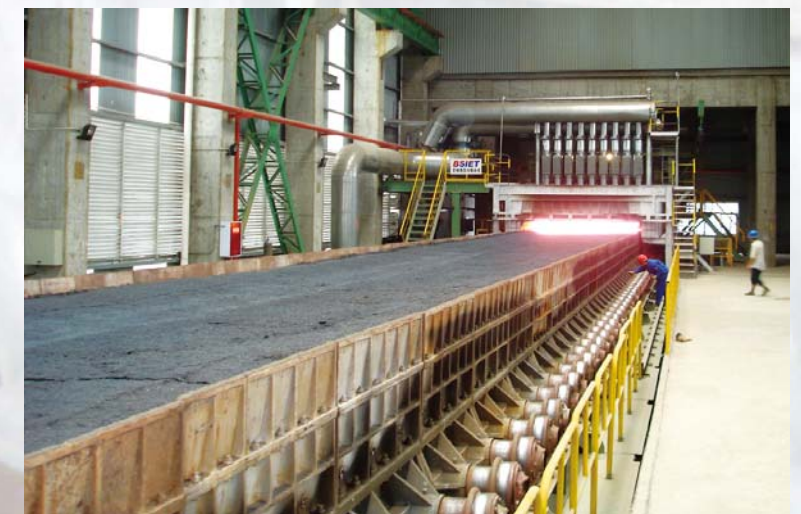


### ★ 国内最大规模的机上冷却烧结工艺和设备技术

承钢4#、5#、6#烧结机，主机为275m<sup>2</sup>机冷烧结机，其中有效烧结面积150m<sup>2</sup>，有效冷却面积125m<sup>2</sup>，正常烧结矿产量为195t/h。

### ★ The biggest scale of on-strand cooled sintering process and equipment in China

Main machine is 275m<sup>2</sup> strand-cooled sintering machine for Chenggang 4#, 5#, 6# sintering project, in which effective sintering area is 150m<sup>2</sup>, effective cooling area is 125m<sup>2</sup>, normal sinter ore output is 195t/h.



机上冷却  
On-strand cooling

### ★ 烧结机、环冷机密封结构设计优化

### ★ 料槽料位、点火温度在线自动控制技术

### ★ Design optimization of sealing structure for sintering machine and annular cooler

### ★ On-line automatic control for chute level and ignition temperature

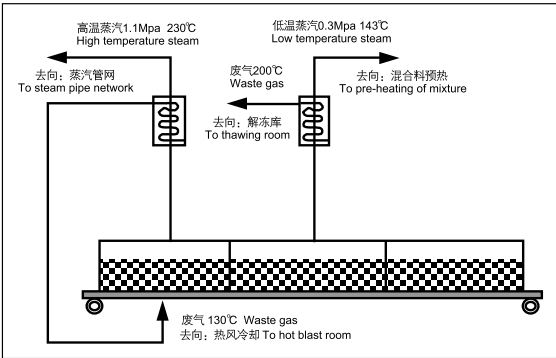


★ 烧结环冷机热风循环双压锅炉余热利用技术

采用热风循环工艺，设置双压余热锅炉，充分回收烟气的热量，节约能源，净化环境。改善冷空气直接冷却高温烧结矿所带来的影响烧结矿质量的现象，使热烧结矿经过一定温度的冷却风后逐渐冷却，提高烧结矿的质量。

★ Hot blast circulating double pressure boiler residue heat utilization for sintering annular cooler

Hot air circulating process is adopted, double-pressure residue heat boiler is provided and fume heat is sufficiently recycled, which save energy, clean environment and improve sinter quality affected by high temperature sinter cooled by cooling air directly. Hot sinter can be gradually cooled by cooling wind of proper temperature and sinter quality is improved.



余热利用流程图

Process flow chart for residual heat utilization



首钢京唐580m²环冷机余热利用设施  
Residue heat utilization facility for Shougang  
Jingtang 580m² annular cooler

★ 烧结余热发电技术

- ◎ 回收环冷机高温废气的热量用于发电。
- ◎ 采用双压锅炉，同时产生2.0Mpa的中压过热蒸汽和0.3Mpa的低压饱和汽，供补汽凝汽式汽轮机发电机组，将蒸汽的热能转化为机械能，驱动汽轮机带动发电机组发电，汽轮机出汽经凝汽器后凝结为水，由泵送入锅炉循环使用。
- ◎ 余热锅炉排出的150℃左右的废烟气经循环风机再返回环冷机作为冷却介质冷却烧结矿，提高废气温度。

★ Waste heat power generation for sintering

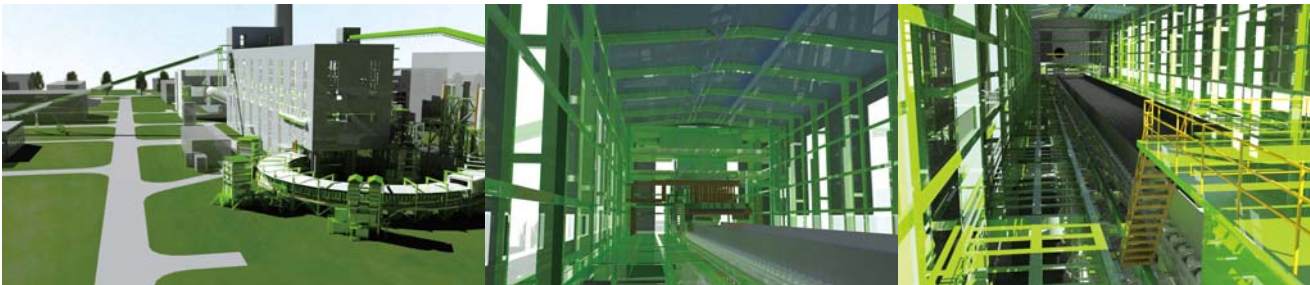
- ◎ The heat recovered from high temperature off gas of annular cooler is used for power generation.
- ◎ Double pressure boiler is adopted, at the same time, 2.0Mpa medium pressure superheat steam and 0.3Mpa low pressure saturated vapor are generated for complementing and condensing type steam turbine generator. Heat energy of steam is converted to mechanical energy, which will drive steam turbine so as to actuate generator set for power generation. Steam out of steam turbine will be condensed to water by condenser and pumped to boiler for recycle.
- ◎ Waste gas approx. 150°C discharged from residue boiler will be returned back to annular cooler by circulating fan as cooling medium for cooling sinter to improve temperature of waste gas.

★ 烧结厂三维设计

专业的三维设计能力，可提供烧结厂各车间、设备及总图的三维设计图形。

★ 3-D design for sintering plant

Professional 3-D design capability provides 3-D design graphics of each shop, equipment and general layout of a sintering plant.



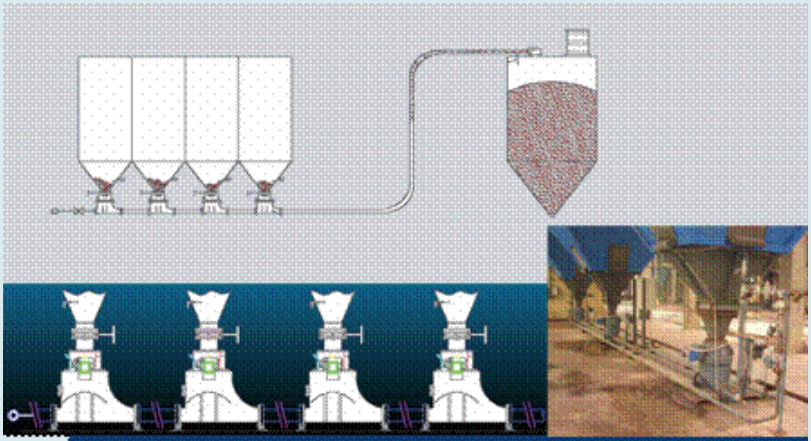
烧结厂三维设计 3-D design of sintering plant

环境保护及固体废物综合利用

Environmental Protection and Comprehensive Utilization of Solid Waste

环境保护与综合治理

- ◎ **固体废物**：全厂无固体废物外排，粉尘回收采用气体密相输送技术，全部返回配料使用。
- ◎ **液体废弃物**：全厂无生产废水排放，生活污水进行生化处理后排放。
- ◎ **气体排放**：根据物料种类、粉尘性质和工作制度划分除尘系统，采用高效除尘器，对扬尘点进行集中除尘，使岗位粉尘浓度 $\leq 8\text{mg}/\text{Nm}^3$ ，排放气体粉尘浓度 $\leq 30\text{mg}/\text{Nm}^3$ ，建设烟气脱硫设施。
- ◎ **噪声治理**：为减少噪声危害，选用低噪声设备，对风机等噪声源设备本体采取消声、隔声、减振措施，有效降低厂界噪声。



密相气体输灰技术的应用  
Dense-phase gas dust conveying application

Environmental Protection and Comprehensive Treatment

- ◎ **Solid waste**: No solid waste discharged from the whole plant, dust is collected through gas dense-phase conveying technology and all dust will be returned for proportioning.
- ◎ **Liquid waste**: No production waste water discharged from the whole plant, domestic sewage will be drained after biochemical treatment.
- ◎ **Gas emission**: Dust collection system will be divided based on material type, dust characteristics and work system. High-efficiency dust collectors will be adopted for central dedusting at dust-forming point and make dust density  $\leq 8\text{mg}/\text{Nm}^3$  at posts. The dust density will be  $\leq 30\text{mg}/\text{Nm}^3$  for air emission. Fume desulphurization facilities will be built.
- ◎ **Noise control**: Low noise equipment will be selected to reduce noise hazard. Noise elimination, insulation and vibration damping measures will be taken for fan and other noise source equipment to lower factory boundary noise in effect.





首钢水渣细磨工程  
Shougang granulated slag fine grinding project

## 废弃物综合利用 Comprehensive Utilization of Wastes

通过自主创新技术，充分利用钢铁生产工艺中所产生的含铁废料（轧钢皮、含铁尘泥、转炉污泥等）和其它固体废弃物（高炉水渣），生产矿渣微粉作为水泥添加剂或建筑材料等。  
Iron-containing waste residues (millscale, iron containing dust slime, converter sludge, etc.) from iron and steel production process and other solid wastes (BF granulated slag) will be fully utilized through independent innovational technology. The produced slag powder will be used as cement additive or building material, etc.



首秦水渣细磨工程  
Shouqin granulated slag fine grinding project



典型工程 Typical Projects

首钢京唐2 × 550m²烧结工程  
2 × 550m² sintering, Shougang Jingtang



规模 2 × 550m²烧结机, 2 × 580m²环冷机  
投产日期 2009年2月 / 2009年12月  
特点 采用厚料层烧结、专家系统等多项先进技术, 工艺流程短捷顺畅, 总图布置紧凑合理, 有效降低工程投资和生产运营成本  
奖项 国家优质工程金质奖、冶金行业全国优秀工程设计一等奖、冶金科技进步一等奖、北京科技进步二等奖、中国企业新纪录

Scale 2 × 550m² sintering machine, 2 × 580m² annular cooler  
Start-up date Feb., 2009 / Dec., 2009  
Feature Adopting many advanced technologies such as thick bed sintering, expert system, etc., short and smooth process flow, compact and reasonable general layout are applied to reduce project investment and production operation cost  
Honor Golden Medal of National Quality Project; 1<sup>st</sup> Prize of National Excellent Engineering Design in Metallurgical Industry; 1<sup>st</sup> Prize of Metallurgical Science and Technology; 2<sup>nd</sup> Prize of Beijing Science and Technology; New Record of Chinese Enterprises



承钢2#、3#360m²烧结工程  
2# / 3# 360m² sintering, Chengde Iron and Steel Co.

规模 360m²烧结机, 415m²环冷机  
投产日期 2008年7月 / 2009年2月  
特点 原料为钒钛磁铁精矿, 工艺先进、流程紧凑、工期短、指标优异  
奖项 冶金行业全国优秀工程总承包二等奖

Scale 360m² sintering machine, 415m² annular cooler  
Start-up date Jul., 2008 / Feb., 2009  
Feature Vanadium titanium magnetite concentrate as raw material, advanced process, compact flow, short construction period, excellent indexes  
Honor 2<sup>nd</sup> Prize of National Excellent EPC Project in Metallurgic Industry





首秦2 × 150m<sup>2</sup>烧结工程  
2 × 150m<sup>2</sup> sintering, Shouqin



规模	2 × 150m <sup>2</sup> 烧结机, 2 × 170m <sup>2</sup> 环冷机
投产日期	2004年5月
特点	集约型烧结工艺系统, 有效降低能耗, 减少污染并大幅降低建设和生产成本, 被誉为“花园式工厂”
奖项	冶金行业全国优秀工程设计一等奖、冶金科技进步一等奖
Scale	2 × 150m <sup>2</sup> sintering machine, 2 × 170m <sup>2</sup> annular cooler
Start-up date	May, 2004
Feature	Intensive type sintering process system, effectively lowering energy consumption, reducing pollution and remarkably decreasing building and production cost. It is praised as “garden type plant”
Honor	1 <sup>st</sup> Prize of National Excellent Engineering Design in Metallurgical Industry; 1 <sup>st</sup> Prize of Metallurgical Science and Technology



宣钢360m<sup>2</sup>烧结工程  
360m<sup>2</sup> sintering, Xuanhua Iron and Steel Group

规模	360m <sup>2</sup> 烧结机, 450m <sup>2</sup> 环冷机
投产日期	2010年4月
特点	和预留设施合理连接, 工艺先进、流程紧凑、工期短、指标优异
奖项	冶金行业全国优秀工程设计二等奖; 冶金行业全国优秀工程总承包二等奖
Scale	360m <sup>2</sup> sintering machine, 450m <sup>2</sup> annular cooler
Start-up date	Apr., 2010
Feature	Connected to the reserved facilities in a good way, advanced process, compact flow, short construction period, excellent indexes
Honor	2 <sup>nd</sup> Prize of National Excellent Engineering Design in Metallurgical Industry; 2 <sup>nd</sup> Prize of National Excellent EPC Project in Metallurgical Industry



四川德胜集团240m<sup>2</sup>烧结工程  
240m<sup>2</sup> sintering, Sichuan Desheng Group

规模	240m <sup>2</sup> 烧结机, 280m <sup>2</sup> 环冷机
投产日期	2010年9月
特点	原料为钒钛磁铁精矿, 工艺先进、流程紧凑、工期短、指标优异
奖项	冶金行业全国优秀工程总承包一等奖
Scale	240m <sup>2</sup> sintering machine, 280m <sup>2</sup> annular cooler
Start-up date	Sep. , 2010
Feature	Vanadium titanium magnetite concentrate as raw material, advanced process, compact flow, short construction period, excellent indexes
Honor	1 <sup>st</sup> Prize of National Excellent EPC Project in Metallurgic Industry





工程业绩 Performance Reference

序号 No.	用户名称 User Name	项目地点 Location	生产规模 Scale	投产时间 Start-up Time	服务方式 Scope of Work	备注 Notes
1	宣化钢铁集团 Xuanhua Iron and Steel Group	中国 河北 Hebei, China	1×360m <sup>2</sup>	建设中 Under construction	设计 Engineering	
2	首矿大昌金属材料公司 Shoukuang Dachang Co.	中国 安徽 Anhui, China	2×240m <sup>2</sup>	建设中 Under construction	设计 Engineering	
3	云南德胜集团 Yunnan Desheng Group	中国 云南 Yunnan, China	2×360m <sup>2</sup>	建设中 Under construction	总承包 EPC	
4	首钢通钢通化公司 Shougang Tonggang Tonghua Co.	中国 吉林 Jilin, China	1×360m <sup>2</sup>	建设中 Under construction	设计 Engineering	
5	海威钢铁公司 Haiwei Iron and Steel Co.	中国 山西 Shanxi, China	1×198m <sup>2</sup>	2013.1	总承包 EPC	
6	四川德胜集团 Sichuan Desheng Group	中国 四川 Sichuan, China	1×240m <sup>2</sup>	2010.9	总承包 EPC	冶金行业全国优秀工程总承包一等奖 1 <sup>st</sup> Prize of National Excellent EPC Project
7	宣化钢铁集团 Xuanhua Iron and Steel Group	中国 河北 Hebei, China	1×360m <sup>2</sup>	2010.4	总承包 EPC	冶金行业全国优秀工程设计二等奖；冶金行业全国优秀工程总承包二等奖 2 <sup>nd</sup> Prize of National Excellent Engineering Design; 2 <sup>nd</sup> Prize of National Excellent EPC Project
8	布山公司 Bhushan Co.	印度 India	1×177m <sup>2</sup>	2010.3	设计 Engineering	
9	LBSB公司 LBSB Co.	马来西亚 Malaysia	1×360m <sup>2</sup>	设计完成 Design finished	总承包 EPC	
			1×265m <sup>2</sup>	初步设计 Basic design	总承包 EPC	
10	首钢京唐钢铁公司（2#烧结机） Shougang Jingtang Iron and Steel Co. (2# sintering machine)	中国 河北 Hebei, China	1×550m <sup>2</sup>	2009.12	设计 Engineering	冶金行业全国优秀工程设计一等奖；冶金科技进步一等奖；北京科技进步二等奖 1 <sup>st</sup> Prize of National Excellent Engineering Design; 1 <sup>st</sup> Prize of Metallurgical Science and Technology; 2 <sup>nd</sup> Prize of Beijing Science and Technology
11	首钢京唐钢铁公司（1#烧结机） Shougang Jingtang Iron and Steel Co. (1# sintering machine)	中国 河北 Hebei, China	1×550m <sup>2</sup>	2009.2	设计 Engineering	国家优质工程金质奖；冶金行业全国优秀工程设计一等奖；冶金科技进步一等奖；北京科技进步二等奖 Golden Medal of National Quality Project; 1 <sup>st</sup> Prize of National Excellent Engineering Design; 1 <sup>st</sup> Prize of Metallurgical Science and Technology; 2 <sup>nd</sup> Prize of Beijing Science and Technology
12	承德钢铁公司（2#烧结机） Chengde Iron and Steel Co. (2# sintering machine)	中国 河北 Hebei, China	1×360m <sup>2</sup>	2009.2	总承包 EPC	冶金行业全国优秀工程总承包二等奖 2 <sup>nd</sup> Prize of National Excellent EPC Project
13	昆明钢铁公司 Kunming Iron and Steel Co.	中国 云南 Yunnan, China	1×300m <sup>2</sup>	2008.8	总承包 EPC	冶金行业全国优秀工程总承包三等奖 3 <sup>rd</sup> Prize of National Excellent EPC Project
14	承德钢铁公司（3#烧结机） Chengde Iron and Steel Co. (3# sintering machine)	中国 河北 Hebei, China	1×360m <sup>2</sup>	2008.7	总承包 EPC	冶金行业全国优秀工程总承包二等奖 2 <sup>nd</sup> Prize of National Excellent EPC Project
15	首钢矿业公司（1#烧结机） Shougang Mining Co. (1# sintering machine)	中国 河北 Hebei, China	1×360m <sup>2</sup>	2008.5	设计 Engineering	冶金行业全国优秀工程设计二等奖 2 <sup>nd</sup> Prize of National Excellent Engineering Design
16	承德钢铁公司（1#烧结机） Chengde Iron and Steel Co. (1# sintering machine)	中国 河北 Hebei, China	1×360m <sup>2</sup>	2006.12	总承包 EPC	
17	承德钢铁公司（6#烧结机） Chengde Iron and Steel Co. (6# sintering machine)	中国 河北 Hebei, China	1×275m <sup>2</sup> (机上冷却 on-strand cooled)	2005.5	总承包 EPC	
18	首钢集团 Shougang Group	中国 北京 Beijing, China	1×171m <sup>2</sup> (机上冷却 on-strand cooled)	2005.2	设计 Engineering	
19	承德钢铁公司（5#烧结机） Chengde Iron and Steel Co. (5# sintering machine)	中国 河北 Hebei, China	1×275m <sup>2</sup> (机上冷却 on-strand cooled)	2004.12	总承包 EPC	
20	淮安钢铁公司 Huainan Iron and Steel Co.	中国 江苏 Jiangsu, China	1×144m <sup>2</sup>	2004.8	设计 Engineering	
21	首秦公司 Shouqin Co.	中国 河北 Hebei, China	2×150m <sup>2</sup>	2004.5	设计 Engineering	冶金行业全国优秀工程设计一等奖；冶金科技进步一等奖 1 <sup>st</sup> Prize of National Excellent Engineering Design; 1 <sup>st</sup> Prize of Metallurgical Science and Technology
22	承德钢铁公司（4#烧结机） Chengde Iron and Steel Co. (4# sintering machine)	中国 河北 Hebei, China	1×275m <sup>2</sup> (机上冷却 on-strand cooled)	2003.9	总承包 EPC	全国工程总承包铜钥匙奖；冶金行业优秀工程总承包奖；冶金行业部级优秀工程设计三等奖 Bronze Key Prize of National Excellent EPC Project; National Excellent EPC Project; 3 <sup>rd</sup> Prize of National Excellent Engineering Design
23	新余钢铁公司 Xinyu Iron and Steel Co.	中国 江西 Jiangxi, China	1×115m <sup>2</sup>	2001.3	总承包 EPC	
24	SJK钢铁公司 SJK Iron and Steel Co.	印度 India	1×100m <sup>2</sup> (机上冷却 on-strand cooled)	1997	设计 Engineering	
25	朝鲜金策公司 Kinzer Co.	朝鲜 North Korea	1×142m <sup>2</sup> (机上冷却 on-strand cooled)	1994	设计 Engineering	
26	首钢矿业公司 Shougang Mining Co.	中国 河北 Hebei, China	6×198m <sup>2</sup> (机上冷却 on-strand cooled)	1992/1993	设计 Engineering	
27	首钢集团 Shougang Group	中国 北京 Beijing, China	5×171m <sup>2</sup> (机上冷却 on-strand cooled)	1986	设计 Engineering	北京市优秀设计二等奖；中国企业新纪录 2 <sup>nd</sup> Prize of Beijing Excellent Engineering Design; New Record of Chinese Enterprises
			3×150m <sup>2</sup> (机上冷却 on-strand cooled)			



# 原料场工程与技术

## Stockyard Engineering and Technology

首钢国际工程公司拥有大型原料场及综合料场的设计与工程总承包能力，能够为客户提供原料来料堆放处理及供应生产的最优化方案，物料流程顺畅合理，便于组织生产。先后为国内外客户提供近十项大型料场的设计、生产完善及总承包工程。

在长期的工程实践中，首钢国际工程公司通过自主研发与集成创新，熟练掌握了物料处理系统中原料、燃料的卸车（船）、输送、堆取、混匀、配料、物料防堵、破碎和筛分等关键技术；以及长距离、大运量胶带机的动力分析、设备设计和控制技术。

BSIET has the abilities of design and general project contract for large stockyard and comprehensive stockyard and can provide customers with optimized program for incoming raw material piling and production provision. Production organization is simple thanks to smooth and reasonable material flow. It has successively provided design, production perfecting and general project contract of about ten large stockyards for customers at home and abroad.

In long term engineering practice, BSIET, through independent research and development, has well mastered the key technologies in material handling system such as unloading, conveying, stacking and reclaiming, blending, proportioning of raw material and fuel, material blocking proof, crushing and screening; as well as kinetic analysis, equipment design and control technology for long distance and large volume belt conveyor.



首钢迁钢大型综合料场  
Shougang Qiangang large comprehensive stockyard



首钢迁钢大型封闭式煤料场  
Shougang Qiangang large closed type coal stockyard





淮钢100万t/a钢配套综合料场  
Huaigang 1MTPA steel matching comprehensive stockyard



建设中的印度JSW公司1000万t/a钢配套综合原料场  
Indian JSW 10MTPA steel matching comprehensive stockyard , under construction



工程业绩 Performance Reference

序号 No.	项目名称 Project Designation	服务方式 Scope	投产时间 Start-up time
1	伊朗MK公司2×250万t/a球团料场 2×2.5MTPA pelletizing stockyard, MK Co.,Iran	总承包 EPC	建设中 Under construction
2	首贵特钢公司200万t/a钢综合料场 2.0MTPA steel matching comprehensive stockyard, Shougui Special Steel Co.	设计 Engineering	建设中 Under construction
3	首矿大昌金属材料公司300万t/a钢综合料场 3.0MTPA steel matching comprehensive stockyard, Shoukuang Dachang Co.	设计 Engineering	建设中 Under construction
4	威远钢铁公司140万t/a焦化煤料场 1.4MTPA coking matching coal stockyard, Weiyuan Iron & Steel Co.	总承包 EPC	2012
5	威远钢铁公司200万t/a球团料场 2.0MTPA pelletizing stockyard, Weiyuan Iron & Steel Co.	总承包 EPC	2012
6	云南德胜钢铁公司220万t/a钢综合料场 2.2MTPA steel matching comprehensive stockyard, Yunnan Desheng Co.	总承包 EPC	2011
7	唐钢青龙炉料公司200万t/a球团料场 2.0MTPA pelletizing stockyard, Tanggang Qinggang	总承包 EPC	2010
8	首秦龙汇200万t/a球团料场 2.0MTPA pelletizing stockyard, Shouqin Longhui	总承包 EPC	2009
9	首钢京唐钢铁公司1000万t/a钢综合料场 10.0MTPA steel matching comprehensive stockyard, Shougang Jingtang Co.	设计 Engineering	2009

序号 No.	项目名称 Project Designation	服务方式 Scope	投产时间 Start-up time
10	首钢矿业公司360m²、6×198m²烧结料场 360m²、6×198m² sintering stockyard, Shougang Mining Co.	设计 Engineering	2009
11	昆明钢铁公司340万t/a钢综合料场（改造） 3.4MTPA steel matching comprehensive stockyard, Kunming Iron & Steel Co. (revamping)	设计 Engineering	2008
12	印度JSW公司1000万t/a钢综合原料场 10.0MTPA steel matching comprehensive stockyard, Indian JSW Co.	设计、设备供货 EP	2007
13	首钢迁钢800万t/a钢综合料场 8.0MTPA steel matching comprehensive stockyard, Shougang Qiangang	设计 Engineering	2005 (2009年扩建 Extension in 2009)
14	迁安中化煤化工公司330万t/a焦化煤料场 3.3MTPA coking matching coal stockyard, Qian'an Zhonghua Coal Coking Co.	设计 Engineering	2004
15	霍州中冶焦化公司60万t/a焦化煤料场 0.6MTPA coking matching coal stockyard, Huozhou, Zhongye Coking Co.	设计 Engineering	2003
16	首秦240万t/a钢综合料场 2.4MTPA steel matching comprehensive stockyard, Shouqin	设计 Engineering	2003
17	淮钢100万t/a钢综合料场 1.0MTPA steel matching comprehensive stockyard, Huaigang	设计 Engineering	2003