

# 太重(天津)滨海重型机械有限公司

TZ ( TIANJIN ) BINHAI HEAVY MACHINERY CO., LTD



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官方网站



微信公众号

产品宣传册

2000+ 种

30000+ 台/套

服务国家重点建设项目

2000+ types  
 30000+ sets  
 used for China key projects

460+ 项

中国 / 世界第一

460+  
 National & international No.1s



1950 年

公司成立  
 Since 1950

493 万m<sup>2</sup>

公司面积  
 Total area of 4.93 million  
 square meters

10000+ 人

在岗员工  
 10000+ employees

500+ 亿

总资产  
 Total assets of RMB  
 50+ billion

## 集团简介 INTRODUCTION

太原重型机械集团有限公司（简称太重集团），始建于1950年，是新中国自行设计建造的第一座重型机械制造企业。主要成员单位包括太原重工股份有限公司、太原重型机械集团煤机有限公司、太重集团榆次液压工业有限公司等。公司拥有国家级技术中心和国家重点实验室，先后获得国家级发明奖4项、国家级成果奖26项、国家科技进步奖23项，创造了460多项中国和世界第一，为国家的建设、改革和发展做出了重要贡献，被誉为“国民经济的开路先锋”。

作为国内最重要的重型装备研发与制造基地之一，太重集团具有一流的装备制造水平和研发创新能力，是全国“创新型企业20强”之一，主要服务于轨道交通、矿山、冶金、煤炭、新能源、海洋工程、航天等领域，产品涵盖了铁路装备、露天矿和井工矿采掘输送设备、冶金设备、风力发电设备、工程机械、化工装备等，拥有设备成套和工程总承包能力，产品已出口到全球50多个国家和地区。

Taiyuan Heavy Machinery Group Co., Ltd (referred to as “TZCO”), founded in 1950, has been the first self-designed-and-built heavy machinery manufacturer since 1949. It is composed of Taiyuan Heavy Industry Co., Ltd, Taiyuan Heavy Machinery Group Coal Machinery Co., Ltd, Taiyuan Heavy Machinery Group Yuci Hydraulic Industry Co., Ltd etc. It has one nationally recognized technology center and one state key laboratory. In addition to four national prizes for new inventions, 26 national achievement prizes, and 23 national scientific progress prizes, It has made over 460 No.1 technology achievements in China and the world at large. It is known as “Trailbreaker for National Economy” for its important contributions to the national reform and development.

As one of the most important bases of R&D and manufacturing for heavy manufacturing in China. TZCO is one of the “Top 20 Innovative Enterprises” in China, with first-class equipment manufacturing, R&D and innovation capabilities. Its products are widely used in fields like rail transit, mining, metallurgical, coal, new energy, marine engineering, and aerospace. The products include railway equipment, equipment for open pit and underground mining and transportation, metallurgical equipment, wind power equipment, construction machinery and chemical equipment. Capable of providing complete equipment sets and EPC solutions, it has exported products to more than 50 countries and regions.





## 公司简介 COMPANY PROFILE

太重(天津)滨海重型机械有限公司(简称“滨海公司”)是太原重工股份有限公司全资子公司,成立于2008年,位于天津港保税区,占地面积100万平方米。滨海公司主营海洋装备、港机设备、锻压设备、化工产品和港口服务,拥有重型加工装备和装配厂房、万吨级出运滑道、可停靠5万吨级船舶的海岸线和装卸能力达1400吨货物的重件码头。

“十四五”时期,滨海公司将聚焦蓝色经济,重点培育海上风电装备、海上施工装备、港口机械等系列产品,对锻压设备、化工产品等传统产品实施智能化升级,打造公司核心竞争力。对码头实现资源优化配置,打造成为山西省对外开放的专业出海口。

As a wholly-owned subsidiary of Taiyuan Heavy Industry Co., Ltd (TYHI), TZ (Tianjin) Binhai Heavy Machinery Co., Ltd (TZBH), was established in 2008. It sits in Tianjin Port Free Trade Zone, covering one million square meters. Its main businesses include offshore equipment, port machinery, pressing and forging equipment, coal chemical equipment and port logistical services. It has heavy processing equipment and assembly workshops, roll-ways for loading with capacity of over 10000 tons, a shoreline for berthing of DWT 50000t ships and heavy-duty berth with lifting capacity of 1400 t.

During the “14th Five-Year Plan” period, it will focus on the blue economy and cultivate series of products like offshore wind turbines, offshore construction equipment and port machinery. It will improve its core competitiveness following intelligent upgrades to traditional products such as forging and pressing equipment, and coal chemical products,. It aims to build into a professional platform to go global through better allocation of its port resources .



# 装备简介 EQUIPMENT PROFILE

太重滨海公司配备数控切割、数控镗洗、数控加工中心、热处理、铸造、焊接、预处理、零部件加工装配、喷砂涂装、起吊设备、分段运输车等先进的专业化设备，可满足公司海洋装备、港机设备、锻压设备和化工产品的生产和加工需要。

Its advanced and specialized facilities ,such as CNC cutting, CNC boring and milling, CNC machining center, heat-treatment, forging, welding, pre-treatment, part machining and assembly, shot blasting and painting, lifting, and blocks transportation, can meet the needs of production and processing for offshore equipment, port machinery, forging and pressing equipment and coal chemical products.



520吨门式起重机 520t goliath crane



德国科堡8×60米数控双龙门镗铣床  
 German Waldrich Coburg 8x60 CNC bridge type milling machine



意大利帕马的φ260毫米双立柱落地镗铣床  
 Italy PAMA φ260mm CNC floor type milling machine



40t-85m港口吊机  
 40t-85m portal harbor crane



100吨动力平板运输车  
 100t flat trailer



320吨动力平板运输车  
 320t flat trailer



## 研发能力 R & D CAPABILITIES



滨海技术中心，是集团公司“1+6”大技术中心协同发展的重要组成部分，依托太原本部技术中心这一国家级企业技术中心和天津市海洋优势而组建，是涉海特色明显的分中心。2013年通过天津市企业技术中心认定，主要承担公司海洋装备、港机设备、锻压设备、化工产品的研发设计工作。

滨海技术中心近年来申报国家专利140余项，发表论文90余篇，承担天津市科技项目10余项，以深厚的技术实力为公司的新产品研发设计和传统产品技术升级提供支撑。

As an important part of “1+6” technology development strategy , TZBH technical center has been an marine-related sub-center , relying on the national-class Taiyuan technical center and marine strengths of Tianjin city. Approved by Tianjin Enterprise Technical Center in 2013, it engages with R & D of offshore equipment, port machinery, forging and pressing equipment and coal chemical products.

TZBH technical center has applied for more than 140 national patents, published more than 90 papers, and undertook more than ten Tianjin scientific and technology projects. It supports R & D of new products and technological upgrades with its strong technology capacity.

## 检验及检测能力 INSPECTION & TESTING CAPACITY

公司理化中心是专门的检测计量机构，具有无损检测、工业化学分析、金相检测分析、力学性能试验、试样制备等先进的检测手段。

公司共有各类计量器具514台，涉及长度学、热学、电学、力学、化学、测量学等专业，其中A类计量器具7台，B类计量器具306台，C类计量器具201台。

As an professional organ for inspection and testing. TZBH Physical and Chemical Center is capable of NDT, industrial chemical analysis, metallographic analysis, mechanical performance testing and sample preparation.

It has a total of 514 measuring instruments of various types, including those for length, heat, electricity, mechanics, chemistry, and surveying. Among them, seven units are Class-A measuring instrument, 306 units are Class-B and 201 units are Class-C.



NI500型金属摆锤冲击试验机  
NI500 Metal pendulum  
impact testing machine



DM6000M 全自动智能金相显微镜  
Leica DM6000



WAW-600型微机控制电液  
伺服万能试验机  
WAW-600 Servo Hydraulic Universal  
Testing Machine (Dual space)



UTM5105X型微机控制电子  
万能试验机  
UTM5105X Floor-Standing  
Electromechanical Universal  
Testing Machine



CS3400扫描电子显微镜  
CS3400 Scanning Electron Microscope

## 资质认证

# QUALIFICATIONS AND CERTIFICATIONS

公司获得的资质覆盖广泛，先后取得了质量管理体系ISO9001证书，ABS环境管理体系和职业健康安全管理体系证书、安全生产标准化证书、海洋石油工程专业承包贰级证书、钢结构工程专业承包叁级证书、防水防腐保温工程专业承包贰级证书、特种设备生产许可证（压力容器设计）、特种设备设计许可证（压力管道）、特种设备制造许可证（压力容器）、特种设备生产许可证（起重设备制造）、特种设备制造许可证（门座式起重机）、ASME U/U2证书等。

TZBH has obtained a wide range of certificates, including those for ISO9001 quality management system, ABS environmental management system, ABS occupational health and safety management system, work safety standardization, professional contracting of offshore petroleum engineering (level-2), professional contracting of steel structure engineering (level-3), professional contracting of water-proof and anti-corrosion engineering (level-2), production license of special equipment (pressure vessel design), design license of special equipment (pressure piping), manufacture license of special equipment (pressure vessel), production license of special equipment (lifting equipment manufacture), manufacture license of special equipment (portal harbor crane), and ASME U / U2 certificate .





# 海洋装备领域 OFFSHORE EQUIPMENT

## 建立内陆与海洋的纽带， 拓展“蓝色经济”发展新空间

### Creating Inland and Offshore Connection & Broadening Blue Economy for Further Development

公司可为海上风电建设用户提供升压站、换流站、导管架基础、中大型起重船、自升式风电安装平台(船)、风电钢桩、运维船等装备。

可为海上油气开发用户提供钻井平台、修井平台、生活平台、平台模块、隔水套管、海底管线等装备，自主设计建设的400英尺自升式钻井平台已投入使用。可满足ABS(美国船级社)、DNV(挪威船级社)、CCS(中国船级社)等国际主流船级社的技术标准。

可为用户提供40t门座起重机、65t岸边集装箱起重机等产品。

Main products for offshore wind power include booster stations, conversion stations, jacket foundations, offshore crane vessels, wind-turbine installation vessels, steel piles, and operation and maintenance vessels.

Main products for offshore oil & gas field include jack-up drilling rig, work-over rig, lift boat, module, conductor tube, and sub-sea pipeline. Self-developed TZ Jack-up drilling rig with the water depth of 400FT has been put into operation. It can meet the technical standards of ABS (American Classification Society), DNV (Norway Classification Society), CCS (China Classification Society) and other international societies.

Main products for port machinery include 40t portal harbor crane and 65t-ship-to-shore container crane.

## 海工装备

### OFFSHORE EQUIPMENT

- 海洋钻井平台  
Offshore Jack-up Drilling Rig
- 多功能辅助平台  
Multi-functional Lift Boat
- 风电安装平台(船)  
Wind-turbine Installation Vessel
- 海上风电升压站  
Offshore Booster Station
- 风电导管架基础、隔水套管及海底管道  
Jacket Foundation, Conductor Tube and Subsea Pipeline
- 风电钢桩  
Wind-turbine Steel Piles
- 嵌岩钻机  
Embedded Drilling Machine
- 单点系泊系统  
Single Point Mooring System

## 港口机械

### PORT MACHINERY

- 岸边集装箱起重机  
Ship-to-shore Container Crane (STS)
- 门座式起重机  
Portal Harbor Crane
- 装船机  
Ship Loader
- 卸船机  
Ship Unloader
- 轨道式集装箱起重机  
Rail Mounted Container Gantry Crane (RMG)
- 轮胎式集装箱起重机  
Rubber Type Container Gantry Crane (RTG)
- 造船门机  
Goliath Crane
- 堆取料机  
Stacker-Reclaimer



# 海上风电升压站 Offshore Booster Station

## 产品概述 Product Overview

公司可承建各种规格升压站/换流站及其配套导管架/钢桩/浮式基础系统。同时可承建海上升压站配套的风电场监控、人员生活、维修起重机等其他附属系统。

TZBH can undertake the construction of booster station or converter station of various specifications and its supporting systems (jacket/steel pile/ floating foundation) .Besides, it can construct the supporting system for offshore booster station, such as wind farm monitoring, personnel life module,and maintenance cranes.



## 性能特点 Performance Features

### 智能化

通过先进智能化手段实现无人值守，提高设备运行质量。通过一系列监控系统实现升压站无人化运行，可在海上风电场陆上监控中心实现全流程监控及控制。除日常检修外，无需人员长期驻守工作，减少海上风电场运营成本。另可选配搭载无人机等新型智能化装备，预留智能化接口，满足未来可能的智能化系统提升改造。

### 质量可靠

通过先进设计及施工质量保证，确保产品满足服役期要求。配套元器件全部选用国内外知名品牌，保证产品每个环节的可靠性；产品自身质量可靠运行稳定，搭载监控系统实时监控产品运行情况，方便提早制定检修预案，减少停工停产可能性。

### 节约成本

通过在设计及施工阶段的先进手段，实现轻型化，缩短项目建设周期，减少项目直接投资，节约项目总投资。通过可靠的质量及智能化系统，节约风场运维成本，提高项目投资回报率。

### Intellectualization

The booster station can be unattended by advanced intelligent means to improve operation . And monitoring and control of the whole process can be realized in the onshore monitoring center of the offshore wind farm, making the booster station unmanned . In addition to routine maintenance, it reduces the operation cost of offshore wind farm without need for long-term personnel on duty. Moreover, new intelligent equipment such as UAV can be added and additional intelligent interface is reserved for further upgrading and transformation.

### Reliable Quality

The product can meet service requirements during the whole service period through advanced design and reliable construction quality. All the supporting components are well-known brands at home and abroad to ensure the reliability; The product is reliable in quality and stable in operation. It is equipped with monitoring system to realize real-time monitoring of the operation, which is convenient to formulate maintenance plan in advance and reduce the possibility of shutdown.

### Cost Saving

Advanced design and construction make the weight lightened, which contribute to shorten the project construction period, reduce the direct investment and save the total investment of the project. The operation and maintenance costs of the wind farm can be saved through reliable quality and intelligent system, thus improving project returns on investment.

## 技术参数 Technical Parameters

规格 Specifications	外形尺寸 Dimension	重量 (吨) Weight (ton)
300MW	40m × 40m × 21m	3700
245MW	40m × 40m × 17m	2700



# 风电安装平台(船)

## Wind-turbine Installation Vessel

### 产品概述

#### Product Overview

公司研发的新一代自航自升式海上风电安装平台(船),主要用于海上风电安装,最大起重能力为1500t,满足5MW-8MW风机分体和整体安装。兼具自升式平台和浮式起重船的优点,专门为海上风机安装而设计与建造的船舶,具有一定的航速和操纵性,可以一次性运载更多的风机,减少对港口的依赖,配备专门用于风机安装的大型吊机和打桩设备,可以在较恶劣的海况天气下工作,且安装速度较快。

The new generation of self-propelled jack-up platform (ship) developed by the company is mainly used for offshore wind power installation, with a maximum lifting capacity of 1500t, meeting the requirements for split and overall installation of 5mw-8mw wind turbine. Combining the advantages of jack-up platform and floating crane, vessels are specially designed with certain speed and maneuverability for offshore wind turbine installation. It can carry more turbines at one time and reduce dependence on the port. The platform has the heavy-duty crane and piling equipment used for wind turbine installation, ensuring efficient installation in harsh sea conditions.

### 性能特点

#### Performance Features

##### 拥有自主知识产权

拥有自主知识产权,借鉴国内外同类产品的先进经验,精心设计而成。达到国内同类产品的领先水平,与国外同类产品有一定的竞争力

##### 可自航,无需拖船

本平台配有推进系统和动力定位系统,具有一定的航速和操纵性,可自航至码头或施工场地,不需要拖航。

##### 搭载设备能力强

主吊机采用绕桩式,不占用甲板面积,可以多搭载设备。从而能够运输更多的设备,减少从路上港口到海上工作地点之间的往返次数,从而缩短安装时间。

Independent intellectual property rights  
 With independent intellectual property rights, it is elaborately designed by drawing on advanced experience of similar products at home and abroad. Taking a lead among domestic similar products, its products are competitive in global market.

Self-propelled without tug  
 As the vessel is equipped with propulsion system and dynamic positioning system, it can sail to the wharf or construction site without towing.

Strong ability to carry equipment  
 As the main crane sits around the leg without occupying the deck area, it can carry more equipment, reduce round trips from port to offshore platform, and shorten installation time.

### 技术参数

#### Technical Parameters

平台型号 Vessel Model	TZ30m-650t	TZ40m-1000t	TZ50m-1500t
最大工作水深(m) Max. operating water depth	30m	40m	50m
主吊类型 Main crane type	绕桩式全回转 Full rotation around piles	绕桩式全回转 Full rotation around piles	绕桩式全回转 Full rotation around piles
主吊起吊能力(t) Lifting capacity of main crane	650	1000	1500
辅吊起吊能力(t) Lifting capacity of auxiliary crane	50	250	50
升降系统类型 Lifting system type	液压插销升降 Hydraulic bolt lifting	液压插销升降 Hydraulic bolt lifting	齿轮齿条 Gear rack
升降速度(m/min) Lifting speed	0.4	0.4	1
桩腿结构 Leg structure	圆桩式 Round pile type	圆桩式 Round pile type	桁架式 Truss type
航速(kn) Speed	5	5	5
安装方式 Installation method	分体式 Split type	叶轮式 Impeller type	兔耳式 Rabbit ear
打桩架 Piling frame	无 No	有 Available	无 No
搭载能力 Carrying capacity	3套5MW 3 sets of 5MW	2套5MW或1套7MW 2 sets of 5MW or 1 set of 7MW	3套5MW或2套8MW 3 sets of 5MW or 2 sets of 8MW



### 技术参数

#### Technical Parameters

船长 length	船宽 width	最大起吊高度 Maximum lifting height	最大起重量 Maximum lifting weight
168m	51.8m	168m	4600T

# 门座式起重机 Portal Harbor Crane

## 产品概述 Product Overview

公司设计制造的门座起重机包括:四连杆门座起重机、单臂架门座起重机、固定的带斗门机。可以通过滚装发运的方式整机向用户供货。

TZBH is capable of designing and manufacturing various types of portal harbor cranes, including double-boom, single-boom, and fixed kangaroo cranes. The whole cranes could be delivered to customer by roll on / off shipping in full erected condition.



## 性能特点 Performance Features

### 起吊方式灵活

起升机构在吊钩、抓斗两用,可分别采用两套起升绞车,结构简单,起升可靠。

### 整机安全可靠

工作机构依据不同要求装设不同形式制动器,同时还安装了一系列行程限制器和安全装置。

### 前港后厂、整机发运

产品安装调试完毕,不需拆车,直接滚装上船发运,保障产品到用户码头下船接电就能使用。

### Flexible Lifting

Two sets of lifting mechanism are applicable separately when lifting and grab things, The structure is simple and reliable.

### Safe & Reliable

Crane is designed with variable brakes according to different requirements, meanwhile a series of limit switches and safety devices are also installed

### Port before factory and full erected shipping

Roll-on shipped on the vessel in full-erected condition after complete commissioning ,cranes are ready for operation upon unloading at customer' s site.

## 技术参数 Technical Parameters

门座式起重机 Portal Crane							
起重量 Lifting Capacity	t	吊钩 Lifting Hook		16/25	25/40	40	60 80
		抓斗 Grab		16	25	25	
幅度 Radius	m	Rmax		30/22	35/25	37	40
		Rmin		9.5	12	12	11
起升高度 Lifting Height	m	轨上 (H 轨上 ) AboveRail Top	吊钩 Lifting Hook	22	28	28	45
			抓斗 Grab	15	20	20	
		轨下 (H 轨下 )Below Rail Top		15	18	18	8
起升速度 Hoisting Speed	m/min			50/25	60/30	55	Q ≥ 40t1~8 Q ≥ 40t1~15
变幅速度 Luffing Speed	m/min			50	52/45	45	15
回转速度 Slewing Speed	r/min			1.5	1.5	1.2	0.3
运行速度 Traveling Speed	m/min			25	27	30	30
轨距 Track Centres	m	s		10.5	10.5	12	12
基矩 WheelBase	m	B		10.5	10.5	12	13
尾部旋转半径 Tail Turning Radius	m			8	8.5	8.5	10.5
门架净空高度 Clear Height of Portal	m	H 净		6	6.5	6.5	8
最大轮压 Max.Wheel Load	kN			250	350	350	280
电源 PowerSupply				380V50Hz		AC6000V 50HZ	AC10000V 50HZ



# 岸边集装箱起重机

## Ship-to-shore container crane (STS)

### 产品概述

#### Product Overview

可设计制造单梁型、双梁型、双起升、桁架型等不同起重量的专用起重机。可以同时起吊一个或多个集装箱，起重量从40吨到65吨。



40t岸边集装箱桥式起重机

TZBH is capable of designing and manufacturing various container cranes of different lifting capacities, including single-boom, double-boom, twin-hoist and truss boom STS. One or more containers ranging from 40 to 65 tons can be lifted once.

### 性能特点

#### Performance Features

##### 效率、安全可靠

可采用高效的集装箱吊具，以及高可靠性的减摇装置，提高工作效率，同时有效减少吊具及集装箱的摆动时间及幅度，安全可靠。

##### 整机安全可靠

工作机构依据不同要求装设不同形式制动器，同时还安装了一系列行程限制器和安全装置。

##### 前港后厂、整机发运

产品安装调试完毕，不需拆车，可直接滚装上船发运，保障产品到用户码头下船接电就能使用。

##### Efficient and Reliable

Efficient spreader and reliable anti-sway device have improved efficiency, reduced swing time and made operation safe and reliable.

##### Safe & Reliable

Variable brakes are equipped according to different requirements, as well as a series of limit switches and safety devices.

##### Port before factory, full erected shipping

Roll-on shipped on the vessel in full-erected condition after complete commissioning, cranes are ready for operation upon unloading at customer's site.

### 技术参数

#### Technical Parameters

岸边集装箱起重机 Ship-to-shore container crane						
基本参数 Basic parameters	额定起重量 (t) Rated lifting capacity		65	40.5	80	120
	吊钩下起重量 (t) Lifting capacity under hook		78	50	100	80
	总起升高度 (m) Total lifting height	轨面以上 Above rail	40	40	40	42
		轨面以下 Below rail	18	17	20	18
	最大轮压 (kN) Max.wheel load	工作 Operation	520	310	1140	770
		非工作 Non-Operation	600	360	1350	950
	大车车轮数 (个) Number of wheels		40	32	40	40
	门框内宽 (m) Clear inside width between legs		≥ 18.3	≥ 18.3	≥ 18.3	≥ 18.3
	门框联系梁净高 (m) middle beam clearance height		>14.6	>12.5	>14.6	>14.6
	两缓冲器距 (m) Distance between gantry bumpers		≤ 27	27	28	27
	前伸距 (m) Out reach		55	38	68	65
	后伸距 (m) Back reach		15	12	23	20
	轨距 (m) Rail distance		30	21	30	30
	小车运行方式 Type of trolley		牵引式 Pull-rope	牵引式 Pull-rope	牵引式 Pull-rope	牵引式 Pull-rope
大梁形式 Type of boom		双箱型梁 Twin boom	双箱型梁 Twin boom	双箱型梁 Twin boom	双箱型梁 Twin boom	
速度参数 Speed(m/mi)	起升速度 Hoisting speed	满载 Full load	50	70	90	80
		空载 Empty load	120	160	180	180
	小车速度 Trolley travel speed		210	160	240	240
	大车速度 Gantry travel speed		45	45	60	45
单程俯仰时间 (分) Boom luffing time (single way)		<6min	<5min	<6min	<6min	

# 造船门机 Galiath Crane

## 产品概述 Product Overview

造船门机起重量一般为100~2000吨;最大跨度达190米,可用于大型结构件的吊装、翻转作业。  
 采用静定系统,一侧为刚性支腿,一侧为通过铰接与桥架构成柔性支腿。避免外载荷引发的侧推力,同时补偿桥架在温度作用下的纵向变形。

TZBH's goliath crane lifting capacity is about 100 ~ 2000 tons; With a maximum span of 190 meters, it can be used for lifting and turning over of large structural parts.  
 Statically indeterminate system is adopted with one rigid leg and a flexible leg formed by articulated and bridge frame. It can avoid the lateral thrust caused by external load and compensate the longitudinal deformation of the bridge under the effect of temperature.



## 性能特点 Performance Features

### 控制精度高

设有0.1~0.5米/分的微动速度,便于合拢、对接等作业的精确吊运。

### 整机安全可靠

工作机构依据不同要求装设不同形式制动器,同时还安装了一系列行程限制器和安全装置。

### High control precision

0.1 ~ 0.5 m/min fretting speed ensures precise lifting for docking and other operations .

### Safe & Reliable

Variable brakes are equipped according to different requirements, as well as a series of limit switches and safety devices.

## 技术参数 Technical Parameters

造船门机 Galiath Crane						
项目 Item	单位 Unit	150t-82m	200t-94m	320t-122m	800t-160m	
额定翻身重量 Rated Weight of Turnover	t	150	200	320	800	
跨距 Span	m	82	94	122	160	
基距 Axle Base	m	20	24	30	35	
上小车 Upper Trolley	起重能力 Capacity	t	2x75	2x100	2x160	2x440
	起升速度 Hoisting Speed	m/min	0.2-5-8-10	0.2-5-10	0.15-6	0-8-20
	行走速度 Traveling Speed	m/min	1-25	0.6-20-30	0.3-30	0-40
下小车 Lower Trolley	起重能力 Capacity	t	主 Main 120/ 副 Auxiliary 20	主 Main 150/ 副 Auxiliary 30	主 Main 200/ 副 Auxiliary 20	主 Main 450/ 副 Auxiliary 30
	起升速度 Hoisting Speed	m/min	主 Main 0.2-5-8-10/ 副 Auxiliary 18	主 Main 0.2-5-10/ 副 Auxiliary 0.2-10	主 Main 0.15-6/ 副 Auxiliary 0.2-20	主 Main 0-8-20/ 副 Auxiliary 16-32
	行走速度 Traveling Speed	m/min	1-25	0.6-20-30	0.3-30	0-40
起升高度 Lifting Height	上小车 Upper Trolley	m				轨上 Above Rail Top 73/ 轨下 Below Rail Top 16
	下车主 Lower Trolley Main	m	轨上 Above Rail Top 58/ 轨下 Below Rail Top 12.5	轨上 Above Rail Top 60/ 轨下 Below Rail Top 6	轨上 Above Rail Top 75/ 轨下 Below Rail Top 9	轨上 Above Rail Top 75/ 轨下 Below Rail Top 13.3
	下小车副 Lower Trolley Auxiliary	m				轨上 Above Rail Top 76/ 轨下 Below Rail Top 13.3
行走速度 Traveling Speed	m/min	1-30	0.6-30	0.4-30	0-45	
轮压 Wheel Load	kN	≤ 420	≤ 520	≤ 750	≤ 750	
自重 Weight	t	1066	1520	2980	4000	
装机容量 Total Power	kW	650	790	1110	3500	
电源 Power Supply	\	AC10kV50Hz	AC10kV50Hz	AC6kV50Hz	AC10kV50Hz	



## 化工领域 Chemical Industry

### 产品涵盖

Products

#### ● 石油化工产品

Product scope: Products in petrochemical industry

#### ● 煤化工产品

Products in coal chemical industry

#### ● 生物质化工产品

Products in biomass chemical industry

#### ● 盐化工产品

Products in salt chemical industry

#### ● 海水淡化设备

Products in sea water desalination

### 打造核心装备，助推产业转型升级

Building core equipment and promoting the transform and upgrading of chemical industry

公司是我国大型压力容器、大型合成反应器、大型氧化器、大型换热器等设备的制造基地，可为石油化工、煤化工、生物质化工、盐化工、海水淡化等行业提供核心压力容器及工程成套服务，承制了近万台套大型超限及特殊材料关键核心设备。

As a major manufacturer for large pressure vessels, synthesis reactors, oxidizers, and heat converters, it is capable of contracting for petrochemical industry, coal chemical industry, biomass chemical industry, salt chemical industry, and sea water desalination. It has delivered nearly ten thousand sets of oversized equipment made of rare material.

## 碎煤加压气化炉 Crushed Coal Pressurized Gasifier(CCPG)

### 产品概述 Product Overview

碎煤加压气化炉作为一种固定床煤气化炉，广泛地应用到煤制合成氨、甲醇、二甲醚、合成油以及煤制天然气领域。

CCPG is a fixed bed gasifier used commonly for conversion from coal to synthetic ammonia, methanol, dimethyl ether, cogasin as well as natural gas.



### 性能特点 Performance Features

#### 原料适应性强

除强粘结性煤外其他煤炭资源均可作为气化原料，特别是低阶煤、高灰熔点、高灰分、高硫的“三高”劣质煤的气化

#### 煤炭综合利用率高

可实现煤炭资源的有效梯级利用，副产多种高附加值化工产品，尤其是产品气中甲烷含量较高，大大提高资源的综合利用率

#### 操作稳定，技术成熟

气化过程中原煤和气化剂分别从上、下部进入，逆向接触气化，反应时间较长，操作工况温和，能够有效适应后续系统工况变化的需求。

#### Strong adaptability of sources

In addition to strongly caking coal, other coal could be used, especially low-rank coal and low-grade coal with high ash fusion temperature, high ash and high sulphur content.

#### High utilization rate of coal

It makes the best of coal in all processes and delivers several high value-added side products. In particular, the gas contains large amount of methane which greatly improves the comprehensive utilization rate of resources.

#### Smooth operation and approved technology

As coal and gasifying agent are fed separately from top and bottom entries for reverse contact and gasification, it results in a longer time reaction and mild operation condition. The process can effectively meet the subsequent changes of working condition.

### 技术参数 Technical Parameters

操作压力 operation pressure : 3.0~6.0MPa

气化炉内径 ID of gasifier furnace : 2.6~5.0m

单台产气量 gas volume / unit: 15000~130000Nm<sup>3</sup>/h

有效气组分 effective gas component (CO+H<sub>2</sub>+CH<sub>4</sub>) ≥ 65%



# BGL 气化炉 BGL Gasifier

## 产品概述 Product Overview

BGL 气化炉作为一种固定床液态排渣煤气化炉，对原料煤要求低，除强粘结性煤外，其余煤种都可以气化，具有极高的碳转化率。广泛地应用到煤制合成氨、甲醇、二甲醚、合成油以及煤制天然气领域。

BGL gasifier, a fixed-bed furnace for liquid slag removal, has low requirement on coal sources. In addition to strongly caking coal, other coals could be used and the carbon conversion rate is high. It is widely used in the conversion from coal to synthetic ammonia, methanol, dimethyl ether, cogasin as well as natural gas.

## 性能特点 Performance Features

### 排渣技术先进

采用液态排渣技术，大大降低了固定床气化装置废水、废渣的处理难度，有效提高能源率用率，是现在煤化工技术中较为先进的一种。

### 煤炭综合利用率高

该炉型可实现煤炭资源的有效梯级利用，副产多种高附加值化工产品，尤其是产品气中甲烷含量较高，大大提高资源的综合利用率

### 操作稳定、技术成熟

气化过程中原煤和气化剂分别从上、下部进入，逆向接触气化，反应时间较长，操作工况温和，能够有效适应后续系统工况变化的需求。

▶▶▶▶ Cutting edge technology for slag removal  
 The advanced liquid slag removal technology can efficiently facilitate treatment of waste water and slag in the fixed bed to improve utilization rate.

▶▶▶▶ High utilization rate of coal  
 It makes the best of coal in all processes and delivers several high value-added side products. In particular, the gas contains large amount of methane which greatly improves the comprehensive utilization rate of resources.

▶▶▶▶ Smooth operation and approved technology  
 As coal and gasifying agent are fed separately from top and bottom entries for reverse contact and gasification, it results in a longer time reaction and mild operation condition. The process can effectively meet the subsequent changes of working condition.

## 技术参数 Technical Parameters

操作压力 Operation Pressure: 3.0~4.0MPa
气化炉内径 Gasifier ID: 2.6~3.8m
单台产气量 gas volume / unit : 15000~65000Nm <sup>3</sup> /h
有效气组分 effective gas component (CO+H <sub>2</sub> +CH <sub>4</sub> ) ≥ 65%



# 其他大型压力容器 Other large pressure vessels

## 产品概述 Product Overview

变换炉、合成塔、DMO反应器、再生器、反应器、丙烯塔、极冷水塔等大型压力容器。主要用于煤化工、石油化工各装置中核心压力容器。

Large pressure vessels like Inverter, Synthetic Tower, DMO Reactor, Regenerator, Reactor, Propylene Tower, Extreme Cold Water Tower, etc. are mainly used in coal chemical and petrochemical industrial installation.

## 性能特点 Performance Features

### 质量可靠

公司拥有优异的焊接工艺和质量保证体系，选用国内大型知名钢厂、锻件厂等供货商的优质产品。

### 大直径、大吨位

公司拥有充足的露天和海上舾装场地、出运泊位和重件码头，前厂后港的天然优势，是华北地区大直径、大吨位压力容的制造基地之一。

### 口碑好

设备装置运行稳定，得到用户一致好评。



### Reliable quality

Quality products are guaranteed by excellent welding workmanship, well established quality assurance system as well as steel plates and forgings from well-known vendors.

### Larger diameter and heavier weight

As one of manufacturing bases for larger diameter and heavier pressure vessels in north China, TZBH also boasts manufacturing facilities, factory near the port, offshore fitting berth, transportation berth and heavy parts wharf.

### Good reputation

Stable operation win good comments from customers

## 技术参数 Technical Parameters

材质: 碳钢、不锈钢、复合板、合金钢、低温钢 Material: carbon steel, stainless steel, clad plate, alloy steel, low temperature steel
压力 pressure : 0~35MPa
直径 Diameter: 目前承制最大直径 15.8m Maximum diameter: 15.8m
高度 Height: 目前承制最大高度 120m Maximum height: 120m
重量 Weight: 目前承制最大单台重量 1500 吨 Maximum weight 1500 ton



## 金属成型领域 Metal Forming

### 产品涵盖

Products

- 铝合金挤压机生产线

Production line of extrusion press for aluminum alloy

- 铜挤压机生产线

Production line for Copper extrusion press

- 炭素挤压机

Carbon extrusion press

- 快速自由锻液压机及操作机

High speed free forging hydraulic press and manipulator

- 热模锻压机

Hot die forging press

- 其他成型专用液压机

Other hydraulic press

### 助力用户发展的高效智能解决方案

Efficient and intelligent solutions for customers' growth.

公司是中国历史悠久的锻压设备供应商，可为用户提供各类金属挤压和锻造成型设备，为用户提供高效智能的整体解决方案。

挤压机已形成8MN至360MN规格系列产品，代表了世界先进的技术水平。

锻造压机已形成10MN至350MN规格系列产品，广泛应用于铁路、汽车、航空航天、造船、冶金等行业。

TZBH has a long history of supplying forging and extrusion presses in China. We can provide customers with efficient and intelligent solutions as a supplier of all kinds of metal extrusion and forging equipment.

It has developed a series of extruders with specifications from 8MN to 360MN, representing the world's advanced technical level.

A series of forging presses with specifications of 10MN to 350mn are widely used in railway, automobile, aerospace, shipbuilding, and metallurgy industries.

锻压专业主持参与制(修)订9项国家和行业标准;《卧式挤压机油泵电机结构型式与参数》、《锻压设备电控产品选型手册》、《有色金属单、双动卧式挤压机质量控制》等95项企业标准,有着高于国家和行业标准的具体的操作方法和量化指标。公司产品可满足美国UL、俄罗斯EAC、欧盟CE等国家和地区标准。同时为了提升中国锻压行业水平,积极推动中国标准与国际先进标准接轨,让中国锻压产品迈入世界先进行列。

It has led and participated in the making (revising) nine national and industrial standards for forging industry. It has also formulated 95 enterprise standards, such as "Structural Types and Parameters of Oil Pump Motors of Horizontal Extrusion Machine", "Selection Manual of Electric Control Products for Forging Equipment", "Quality Control of Single and Double Horizontal Extrusion Machine for Nonferrous Metals". Its specific operation methods and quantitative indexes are higher than national and industrial standards. Its products has met national and regional standards of UL, EAC and CE. It aims to improve China's forging industry, promote the integration of Chinese standards with international advanced ones, and make China's forging products into the world's advanced ranks.

### 主要执行标准 Main executive standards

- |               |   |
|---------------|---|
| 1. GB/T3766   | 液压系统通用技术条件<br>General rules relating to Hydraulic systems           |
| 2. GB/T 10923 | 锻压机械精度检验通则<br>Test code of accuracy for metal-forming machine       |
| 3. GB/T 10923 | 锻压机械精度检验通则<br>Test code of accuracy for metal-forming machine       |
| 4. JB/T 3818  | 液压机技术条件<br>Hydraulic press - Technical requirement                  |
| 5. JB/T 5000  | 重型机械通用技术条件<br>The heavy mechanical general techniques and standards |



## 铝挤压机 Aluminum extrusion press

### 产品概述 Product Overview

公司向国内外铝加工行业提供各类中大型铝挤压机240余台套，约占国内市场份额80%，10余台套大型铝挤压机出口国外。可提供铝合金挤压成套设备，包括：单动铝挤压机、双动铝挤压机、反向铝挤压机、短行程前上料铝挤压机及其机后成套设备。

TZBH has provided more than 240 sets of medium and large aluminum extrusion press of different types for aluminum processing industry both in China and abroad while dominating about 80% of domestic market. Over 10 sets of large aluminum extrusion presses have been exported to other countries. It can supply whole set of aluminum alloy extrusion including single-action aluminum extrusion presses, double-action aluminum extrusion presses, indirect aluminum extrusion presses, short-stroke and front-loading aluminum extrusion presses and supporting equipment.

### 主要机型 Main models

8MN ~ 360MN 单双动正反向铝挤压机

8MN ~ 360MN single-action & double-action direct & indirect aluminum extrusion press

### 功能用途 Functions

铝合金挤压成套设备用于铝合金管材、棒材、型材的挤压生产，挤压的产品广泛应用于航空航天、交通运输、能源化工、民用建筑等领域。

Aluminum alloy extrusion is used for production of tubing, bars and profiles, while the extruded products are widely used in fields such as aviation, spaceflight, energy, chemical engineering and civil construction.



### 优势特色 Advantages

预应力组合框架结构，提高了压机的结构强度和整体刚度，有利于保证挤压制品的质量。

短行程结构，框架具有更高刚度；减少液压油使用量，提高了速度控制与压力控制精度；缩短非挤压辅助时间。

精确自动测锭长的推锭装置与可伸缩的自适应高效供锭器，挤压筒和挤压杆的回程距离可以依据实际锭长进行控制，最大限度的节约非挤压时间。

采用固定挤压垫片，取消了垫片循环系统，减少了无功作业时间，降低了生产线的功率消耗，提高了生产率，可以使挤压垫片保持相对恒定的温度，有利于挤压状态下的坯锭变形。

The prestress combination frame increases structural strength and overall stiffness of the extrusion press, thus ensuring product quality .

Short-stroke structure makes the frame much stronger; it decreases the consumption of hydraulic oil, increases the accuracy of speed control and pressure control; and it shortens the dead cycle time.

High efficient auxiliary machine: the automatic length-measure billet pusher and telescopic self-adapting billet loader both ensure efficient and orderly material supply. The return distance of container and stem can be controlled according to actual billet length maximum , thus reducing the dead cycle time.

By using a fixed dummy block, the extrusion press gets rid of the block circulation system and reduces the non-working operation time, thereby cutting down the power consumption and increasing the production efficiency. The dummy block can be kept at a relatively constant temperature and benefits the billet extrusion.



## 技术参数 Technical Parameters

型号 (单位: MN) Model (unit: MN)																
单动或双动铝挤压机: Single or Double-action aluminum extrusion press:	8	12.5	16.3	25	27.5	36	45	50	55	60	75	90	100	110	150	225
反向铝挤压机: Indirect aluminum extrusion press:	8	12.5	16.3	25	27.5	36	45	50	55	60	75	85	90	100		

## 获奖情况 Awards

- ▶▶▶▶ “16MN双动铝挤压机”获机械部科技进步一等奖。
- ▶▶▶▶ “新型双动短行程铝挤压机研制”获中国机械工业科学技术奖二等奖。
- ▶▶▶▶ “75MN短行程节能型铝合金挤压机”获山西省科学技术奖二等奖、两项国家发明专利。
- ▶▶▶▶ “110MN卧式双动短行程铝挤压机研制”获山西省科技进步二等奖。
- ▶▶▶▶ “225MN重型卧式铝挤压机成套设备关键技术研发及工程应用”获中国工程机械学会科技进步一等奖。
- ▶▶▶▶ 负责起草“单双卧式铝挤压机”国家机械行业标准(JB/T 12228-2015)。
- ▶▶▶▶ 16MN double-action aluminum extrusion press won the 1st class reward of National Scientific and Technological Progress Award.
- ▶▶▶▶ New double-action short stroke aluminum extrusion press got the 2nd prize in National Scientific and Technological Award.
- ▶▶▶▶ 75MN short stroke energy-saving aluminum alloy extrusion press won the 2nd prize of Shanxi Province Scientific and Technological Award and two national invention patents.
- ▶▶▶▶ 110MN horizontal double-action short stroke aluminum extrusion press won the 2nd prize of Shanxi Province Scientific and Technological Advance Award.
- ▶▶▶▶ “Key technology research and development and engineering application of 225MN heavy horizontal aluminum extrusion” won the first prize of China Society of Construction Machinery Science and Technology Progress.
- ▶▶▶▶ TZBH is responsible for draft of the national machinery industry standard of “single-action & double-action horizontal aluminum extrusion press”.  
(JB/T 12228-2015)

## 铜挤压机 Copper extrusion press

### 产品概述 Product Overview

公司可提供铜合金挤压成套设备, 包括: 单动铜挤压机、双动铜挤压机、反向铜挤压机及机后成套设备。

Whole set of copper alloy extrusions is available, including single-action copper extrusion press, double-action copper extrusion press, indirect copper extrusion presses and supporting equipment.



### 主要机型 Main models

8MN ~ 75MN单双动正反向铜挤压机;  
8MN ~ 75MN single-action & double-action direct & indirect copper extrusion press

### 功能用途 Functions

铜合金挤压成套设备用于铜及铜合金的管材、棒材、线材的挤压生产。  
Whole set of copper alloy extrusion are used for production of tubing, bars and wire rod of copper and copper alloy.

### 技术参数 Technical Parameters

型号 (单位: MN) Model (unit: MN)						
单动铜挤压机 Single-action copper extrusion press	8	12.5	16.3	25	33	40
双动铜挤压机 Double-action copper extrusion press	8	12.5	16.3	25	31.5	40
反向铜挤压机 Indirect copper extrusion press	8	12.5	16.3	25	33	40



## 炭素挤压机 Carbon extrusion press

### 产品概述 Product Overview

公司可提供炭素挤压成套设备, 包括: 立捣卧挤式、卧捣卧挤式炭素挤压机及其成套设备。其中, 12.5MN炭素挤压机出口巴基斯坦。



TZBH can supply whole set of carbon extrusion press, including vertical-ram & horizontal-extrusion presses and horizontal-ram & horizontal-extrusion presses. 12.5MN carbon extrusion presses are exported to Pakistan.

### 主要机型 Main models

卧捣卧挤式炭素挤压机: 20MN、35MN、41MN、60MN

Horizontal-ram & horizontal-extrusion press: 20MN、35MN、41MN、60MN

立捣卧挤式炭素挤压机: 12.5MN/25MN、20MN/35MN、41MN/30MN、30MN/50MN

Vertical-ram & horizontal-extrusion press: 12.5MN/25MN、20MN/35MN、41MN/30MN、30MN/50MN

### 功能用途 Functions

炭素挤压成套设备用于碳素石墨电极的挤压生产, 挤压的电极产品主要应用于电解铝、炼钢等领域。

Carbon Extrusion Press is used for production of carbon graphite electrode. The graphite electrode is widely utilized in the field of electrolytic aluminum and steel making.

型号 (单位: MN) Model (unit: MN)				
卧捣卧挤炭素压机 Horizontal-ram & horizontal-extrusion press	25	35	41	60
立捣卧挤炭素压机 Vertical-ram & horizontal-extrusion press	15/25	20/35	41/30	30/50

## 快速自由锻造液压机和全液压轨道式锻造操作机 Fast-speed open-die forging hydraulic press and full hydraulic rail-bound manipulator

### 产品概述 Product Overview

公司可设计制造四柱预应力组合框架式和双柱斜置预应力组合框架式两种结构形式, 配套430kN、600kN、1000kN、1800kN和2500kN等规格的全液压轨道式锻造操作机。实现了自由锻造压机的结构、传动方式、控制技术和整机性能的创新, 从根本上改善了锻造车间的劳动环境和条件, 操作维护方便、生产效率高, 使用成本低。

TZBH can design and manufacture two types of high-speed open die forging hydraulic presses — double-column oblique type and four-column prestressed combined type — which can be equipped with 430KN, 600KN, 1000KN, 1800KN and 2500KN hydraulic rail-bound manipulator. Innovations of the structure, transmission mode, control technology and the whole machine performance of the open die forging press have improved the working environment and conditions of forging workshops. They are known for convenient operation and maintenance, high production efficiency and low costs.

### 主要机型 Main models

10MN ~ 125MN自由锻造液压机及其配套全液压轨道式操作机

10MN ~ 125MN open die forging hydraulic press and rail-bound manipulator

### 功能用途 Functions

快速自由锻造液压机及全液压轨道式操作机成套设备, 用于黑色及有色金属的轴类、环类、筒类、饼类、方坯类以及其它类锻件的快速自由锻造生产。相对于传统的自由锻造设备, 具有速度快、精度高、节能环保、自动化程度高等诸多优点。锻造产品广泛应用于核电、能源、石油化工、航空航天、船舶、军工等领域。

Fast-speed open-die forging hydraulic press and fully hydraulic rail-bound manipulator is used for manufacture of ferrous and nonferrous rolls, shafts, spindles with different shapes, like cylinders, discs, and rings. Compared with traditional open-die forging hydraulic presses, our products enjoy faster operation speed, more accuracy, more energy-efficiency; they are environment-friendly and more automatic. Forging products are widely used in nuclear power, energy, petrochemical, aerospace, ship building, military and other fields.



## 性能特点 Performance Features

### 双柱预应力组合框架结构

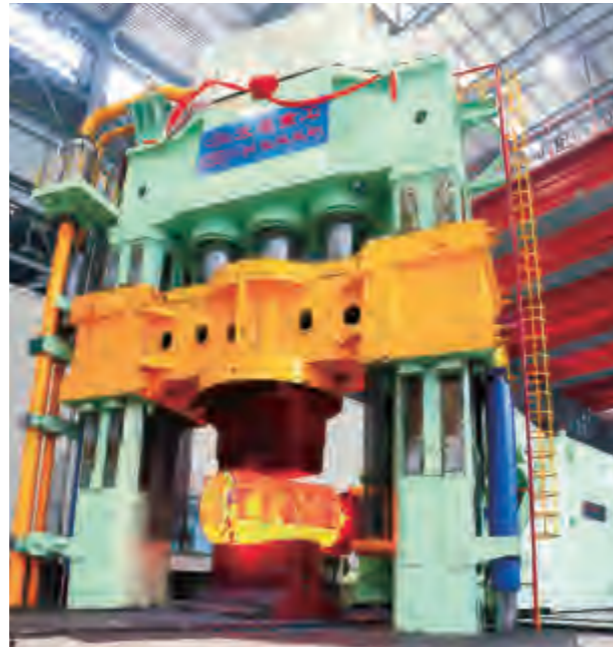
双柱预应力组合框架结构及变张力多拉杆预紧技术，增加了液压机的整体刚性、稳定性和抗疲劳强度，提高了机架的抗疲劳寿命，偏心锻造范围提高一倍

### 较高行程速度和锻造频次

采用压力和位置双闭环控制系统，实现了精确速度与位置控制；减少了火次，降低了能耗，提高了锻件尺寸精度和材料利用率

### 锻造尺寸精度控制

开发了大惯量载荷、高精度位置控制系统，使得热态锻件的厚度尺寸偏差小于  $\pm 1\text{mm}$



### Double-column prestressed frame structure

A double-column prestress frame structure and multi-bar pretension technology have improved the machine's toughness, stability and anti-fatigue capacity. Besides, eccentric forging range has doubled.

### Higher stroke speed and forging frequency

With pressure and close-loop control system, the hydraulic forging press controls precisely over speed and position and reduces the processing time, thereby cutting the energy consumption and improving the forging precision and material utility.

### Forging dimensional accuracy control

Large inertia loading and high-precision position control system have reduced thickness error of forging to less than  $\pm 1\text{mm}$ .

## 技术参数 Technical Parameters

型号 (单位: MN) Model (unit: MN)							
双柱斜置式预应力组合框架式 Double-column oblique type	35	45	63	80	125	180	200
四柱预应力组合框架式 Four-column type	35	45	70	80	125	180	
全液压轨道式锻造操作机 Full hydraulic rail-bound manipulator	430	600	1000	1800	2500		

## 热模锻压机 Hot die forging press



## 产品概述 Product Overview

公司可设计制造20MN~200MN热模锻压机

TZBH can design and manufacture 20MN~200MN hot die forging press.

## 功能用途 Functions

热模锻压机主要用于轴对称有色金属热模锻成形。

Hot die forging press is mainly used for forming of axisymmetric nonferrous metals.



## 港口服务 Port services

### 码头简介 Introduction

公司拥有自己的码头，位于天津临港综合保税区，是临港综保区规划内唯一已投产码头。码头包含海岸线、吊装设备及仓储场地，可提供全方位港口服务。

作为山西省出海口，公司将积极融入山西省一体化联动发展，完善山西省“岸、港、网”，助力山西省打造对外开放新高地，同时服务京津冀一体化、环渤海经济区以及雄安新区发展。

TZ port, located in Tianjin Port Comprehensive Bonded Zone, is the only port that has been put into operation. With the coastline, lifting equipment and storage yard, the port can provide all-round port services.

With the port to going outside, TZBH will actively involved into the integrated development of Shanxi Province, and boost development of “shore, port and network”. It will help Shanxi province build a new highland of opening up, and serve the development of coordinated development for the Beijing-Tianjin-Hebei region, Bohai Rim Economic Zone and Xiong'an New Area.

### 码头设施 Facilities

太重码头作为天津港临港码头群体的组成部分，辐射了北京、河北、山西、内蒙等内陆腹地，承担内外贸的大件设备装卸；以及内外贸的件杂货装卸、仓储业务。包括但不限于：清洁散货（化肥、工业盐等白货）；内外贸钢材、吨袋、纸浆、设备等件杂货；50000吨级以下船舶的靠泊舾装维修等。

As a part of Tianjin ports, TZ port serves Hebei, Shanxi, Inner Mongolia and other inland hinterland, and undertakes the loading and unloading of large equipment and commodities, as well as warehousing business. The business includes but not limited to: clean bulk cargo (chemical fertilizer, industrial salt, etc.); steel for domestic and foreign trade, ton bags, pulp, equipment and other items; Berthing, outfitting and maintenance of ships below 50000 tons.



#### 大件设备装卸/存储。

太重码头滚装能力30000t；桥机起吊能力700t；门机单机起吊40t；门机双车起吊60吨；滑道承载20吨/平米（核实下重量）

可承担各种重量的大件设备出运、中转、接卸、存储。

#### 原材料装卸/存储。

太重码头拥有拉链库5500平米，连锁块场地存储区100000平米，承载6吨/平米；未硬化场地150000平米。主要包括苫盖/露天钢材等原材料的装、卸、存储，中转。

#### 靠泊/舾装/维修。

太重码头水域面积20万平米，拥有四个50000吨泊位，1个10000吨重件泊位，可承担50000吨级船舶以下船舶的靠泊/舾装/维修，人员更换。

#### Large equipment loading/unloading/storage

TZ port has roll-on or roll-off shipment capacity of 30000 tons. The lifting capacity of bridge crane is 700 tons. The lifting capacity of gantry crane is 40 tons. The lifting capacity of gantry crane with double car is 60 tons. The bearing capacity of outfitting slide is 20 ton/m<sup>2</sup>.

TZ can undertake all kinds of heavy equipment shipment, transfer, loading, unloading, and storage.

#### Materials loading/unloading/storage

TZ port has 5500 m<sup>2</sup> of zipper warehouse, 100000 m<sup>2</sup> of chain block storage area with storage capacity of 6 ton/m<sup>2</sup>, and 150000 m<sup>2</sup> of un-hardened land.

The main business includes loading, unloading, storage and transfer of materials such as covering/open-air steel.

#### Berthing/outfitting/maintenance

The water area of TZ port is 200000 m<sup>2</sup>, including four 50000t berths and one 10000t heavy cargo berth. We can undertake the Berthing/outfitting/ maintenance of ships below 50000 tons and personnel shifts.