



GENMA 

GENMA
GANTRY CRANES

杰马门式起重机

Our specialty
Your strength

专业之道 成就力量之美



We are committed to help customers through professional products to carry out material handling operations **more accurately, more efficiently and more safely.**

我们致力于通过专业的产品帮助客户 **更精准、更高效、更安全地** 进行物料搬运作业

Contents 目录

Category 产品分类	03
General Gantry Crane 通用门式起重机	05
Shipbuilding Gantry Crane 造船门式起重机	09
Semi Gantry Crane 半门式起重机	15
Why we choose GENMA Gantry Crane 为什么选择杰马门式起重机	19
Operation Environment of GENMA Gantry Crane 杰马门式起重机操作环境	21
Security of GENMA Gantry Crane 杰马门式起重机安全性	23
Main Customers 主要客户	25

Category

产品分类

G1 Shipyard/Container yard/Factory Solutions 船厂堆场工厂解决方案

① Gantry Crane 门式起重机

② Overhead Crane 桥式起重机

③ Portal Crane 门座式起重机

- General Gantry Crane
通用门式起重机
- Shipbuilding Gantry Crane
造船门式起重机
- Semi Gantry Crane
半门式起重机



GENMA Gantry Crane can conduct special operations with a variety of spreader.
杰马门式起重机，可配多种吊具进行特殊作业。

Spreader 吊具	Materials 物料
Hook 吊钩	General cargo and all kinds of irregular materials 杂货及各种不规则物料
Grab 抓斗	Coal, ore, grain, fertilizer etc. 煤、矿石、粮食、化肥等
Electromagnetic hanging beam 电磁挂梁	Steel plate 钢板



G2 Offshore Engineering Solutions 海洋工程解决方案

G3 Bulk Cargo Terminal Solutions 散料系统解决方案

General Gantry Crane 通用门式起重机

GENMA General Gantry Crane is mainly used for material handling and transportation in open pit warehouse, yard, railway station, factory, port and dock areas.

Single-girder type and double-girder type are two types of GENMA Gantry Crane, girder structure includes truss girder, box girder and the cellular beam etc.

杰马通用门式起重机主要用于露天仓库、料场、铁路货站、工厂、港口码头货区的物料装卸和搬运。

杰马通用门式起重机包含单主梁、双主梁两种主梁形式，主梁结构包括桁架梁、箱梁和蜂窝梁等。该设备由主梁、支腿（刚、柔）、小车、大车运行机构、电气设备等组成。小车分为单小车或双小车等。

Performance characteristics

性能特点

- Modular design of lifting mechanism and travelling mechanism, low failure rate, lightweight, and easy to maintain
- Sensitive fault detection system to ensure the smooth and reliable lifting process, and easy to troubleshoot
- Motors of lifting and travelling mechanism are famous brand with reliable quality, full frequency control and stable operation
- 起升机构、运行机构模块化设计，故障率低，自重轻，便于维护
- 灵敏的故障检测系统，确保吊装过程的平稳可靠，故障易排查
- 起升、行走电机采用著名品牌，质量可靠，全变频控制，运行平稳



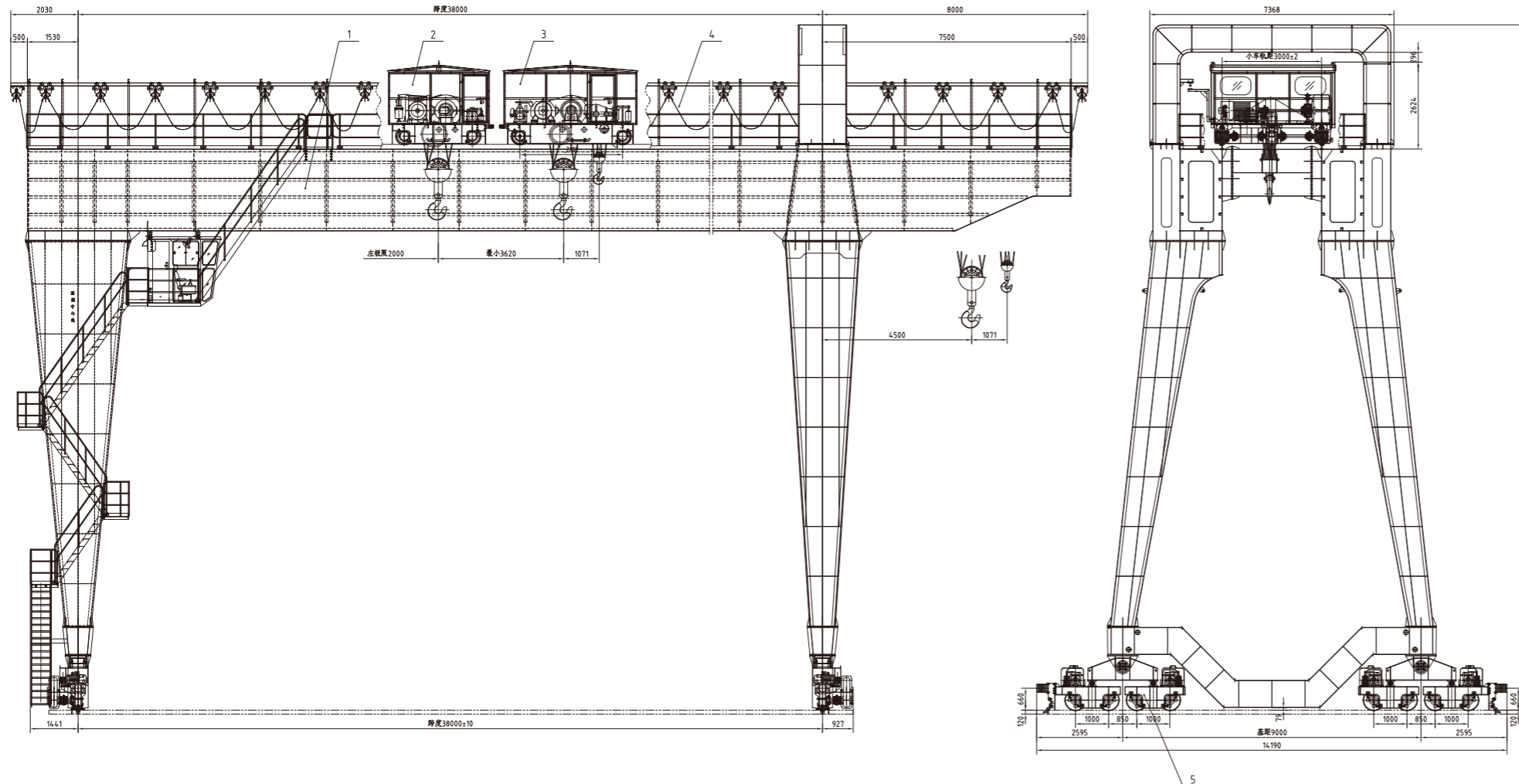
General Gantry Crane

通用门式起重机

Technical Characteristics

工艺特点

- High strength bolts are used to connect the main steel structure, which is convenient for transportation and installation
- Balance beam of travelling mechanism and bogies are whole machine processing, assembly of high precision
- The whole frame of the trolley is whole machine processing, the installation accuracy is high, and the failure rate is low
- 主要钢结构之间采用高强螺栓连接，便于运输安装
- 大车运行平衡梁和台车架整体机加工，装配精度高
- 小车轮架整体机加工，机构安装精度高，故障率低



Performance parameter

性能参数

Item 项目	Name of mechanism 机构名称	Lifting mechanism of main trolley 主小车起升机构	Lifting mechanism of auxiliary trolley 副小车起升机构	
		Main lifting 主起升	Main lifting 主起升	Auxiliary lifting 副起升
Lifting capacity 起重量 (t)		50	50	50
Lifting speed 起升速度 (m/min)		6.2	6.2	6.2
Work class 工作级别		M5	M5	M5
Max lifting height 最大起升高度 (m)		15	15	15
Total motor power 各机构电动机功率之和 (kW)		195		
Power 电源		Three phase AC 380V 50Hz 三相交流380V 50Hz		

Item 项目	Name of mechanism 机构名称	Travelling mechanism 运行机构		
		Main trolley 主小车	Auxiliary trolley 副小车	Gantry travelling device 起重机运行机构
Span 轨距 (m)		3	3	38
Travelling speed 运行速度 (m/min)		38.5	38.5	37.7
Work class 工作级别		M5	M5	M5
Buffer stroke 缓冲行程 (mm)		94	94	240
Max wheel load 最大轮压 (kN)		180	180	225
Rail type 钢轨型号		P43	P43	QU70

Customized according to your actual needs
根据您的实际需求定制



Shipbuilding Gantry Crane

造船门式起重机

GENMA Shipbuilding Gantry Crane is professional for hoisting and turning operation of large and super large hull sections and generally installed in dock, berth, platform of the shipyard. Single-girder and double-girder are two types of the crane, the crane has upper and lower trolleys and the capacity is from 100t to 2500t.

杰马造船门式起重机专业用于大型和超大型船体的分段吊装及翻身作业，一般安装于船厂的船坞、船台、平台等地段。该设备分单主梁和双主梁两种形式，起重量从100t-2500t不等，具有上下两个小车，可按客户要求定制设计。

Performance characteristics

性能特点

- Trolley with encoder, makes lifting positioning precision.
 - PLC control, operation smoothly
 - Rigid leg is provided with an elevator and an emergency ramp
 - The drum of the main lifting mechanism adopts double-layer winding, and the rope winding mechanism is used to reduce the abrasion of the steel wire rope, and the positioning precision is high
 - Strong carrying capacity, big span, high lifting height and strong wind resistance
 - The finite element method is adopted to reduce the weight of the whole machine and reduce the operation cost
 - Automatic deviation correction, automatic positioning, lifting synchronization, electronic anti shake, lifting and falling, high level of automation and positioning
 - Self remote fault diagnosis system
- 小车安装编码器，吊装定位精准
 - PLC控制，机构动作平稳
 - 刚性支腿设有电梯和应急斜梯
 - 主起升机构卷筒采用双层卷绕，带排绳机构，减小钢丝绳磨损，定位精度高
 - 承载能力强，跨度大、起升度高、抗风能力强
 - 采用有限元计算，减轻整机重量，降低运营成本
 - 自动纠偏、自动定位、起升同步、电子防摇、起重防坠，自动化定位水平高
 - 自带远程故障诊断系统

Shipbuilding Gantry Crane

造船门式起重机

Process characteristics

工艺特点

- Power is supplied by chain, layout is compact and maintenance is easy
- Precision control of camber and stiffness of the main girder
- Balance beam of travelling mechanism and bogies are whole machine processing, assembly of high precision
- 拖链供电, 布局紧凑, 便于维护
- 主梁上拱度和刚腿预偏斜精确控制
- 大车运行平衡梁和台车架整体机加工, 装配精度高

Performance parameter

性能参数

Work class 起重机工作级别	A4	
Span+Base distance 跨度×基距 (m)	163×32	
Lifting range 起升范围 (m)	Above rail 轨上	76
	Under rail 轨下	13
Wheel load 起重机轮压 (kN)	Working 工作	750
Rail type 轨道型号	QU120	
Power 电源	AC 10kV 50Hz	

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Lifting capacity (Under hook) 起重能力 (吊钩以下)

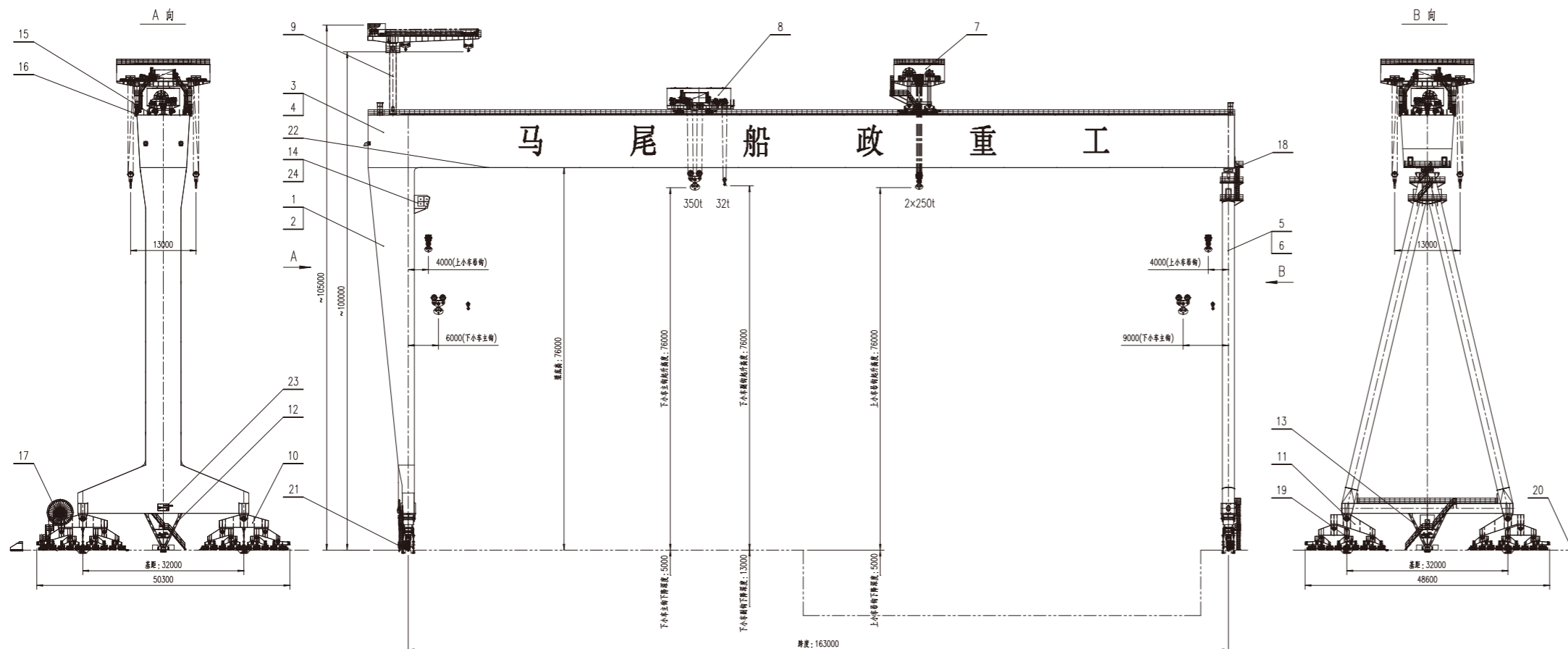
Rated lifting capacity of upper trolley 上小车额定起重量 (t)	2×250
Rated lifting capacity of lower trolley 下小车两钩偏载载荷 (t)	≤80
Partial load of two hooks of lower trolley 下小车额定起重量 (t)	350/32
Rated turning over capacity of the whole machine 整机额定翻身重量 (t)	500
Rated lifting capacity of the whole machine 整机额定抬吊重量 (t)	700

Speed 机构速度

Speed of travelling mechanism 大车运行速度 (m/min)	Rated 额定	3~30
Speed of upper and lower trolleys 上下小车运行速度 (m/min)	Rated 额定	3~30
Lifting speed of upper trolley 上小车起升速度 (m/min)	Rated 额定	0.3~3
	≤100 loading ≤100荷载	0.3~6
Lifting speed of lower trolley 上小车主起升速度 (m/min)	Rated 额定	0.3~3
	≤140 loading ≤140荷载	0.3~6
Auxiliary lifting speed of upper trolley 上小车副起升速度 (m/min)	Rated 额定	1~10
	≤12 loading ≤12荷载	1~20

Maintenance Crane 维修起重机

Work class 工作级别	A2		
Rated lifting capacity 额定起重量 (t)	10	8	6
Work range 工作幅度 (m)	2.5~10	2.5~12	2.5~15
Lifting height 起升高度 (m)	100		
Lifting speed 起升速度 (m/min)	10		
Luffing speed 变幅速度 (m/min)	10		
Slewing speed 旋转速度 (r.p.m)	0.5		





We are proficient in shipbuilding gantry cranes
我们精通于造船门式起重机

"GENMA" brand whose parent company has rich experience in shipbuilding. Therefore, we know what kind of shipbuilding gantry crane is suitable for modern shipyard.

"杰马"品牌所属母公司具备丰富的造船经验，因此，我们更加知道什么样的造船门式起重机适合现代化的船厂。



Semi Gantry Crane 半门式起重机

Many GENMA Semi Gantry Cranes are used in workshops and stock yards for handling and transportation. One is supported by workshop and travel on the rail through end girder, while another end is supported by leg and travel on the ground rail.

杰马半门式起重机主要用于车间、堆场、料场的装卸搬运。一端依托厂房，通过端梁行走于承轨梁的轨道上，另一端带有支腿，行走于地面轨道。分单梁和双梁两种型式。

Performance characteristics 性能特点

- Simpler structure, lighter self weight, lower wheel pressure, which represent development trends of overhead and gantry cranes
- Gantry × traveling mechanism are driven separately to prevent gantry from going off the track
- Slide line of trolley and button box are unifiedly arranged on the slide line holder, and equipped with button box which can slide along main girder
- 结构简约，自重轻，轮压小，体现了桥门机轻量化的发展趋势
- 大车x运行机构采用分别驱动方式，防止大车走偏
- 小车滑线及手电门线统一布置在滑线架上，手电门可在主梁范围内滑动

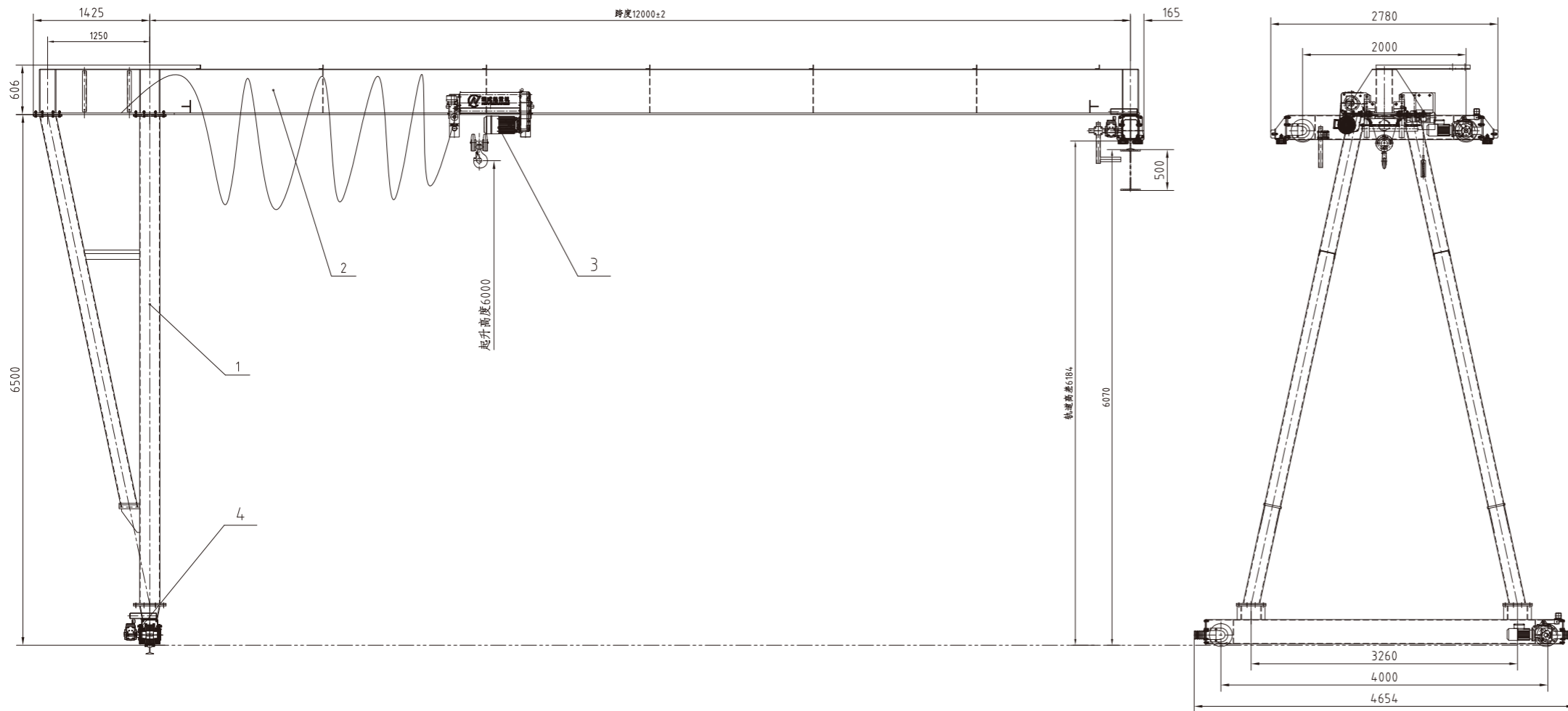
Technical Characteristics 工艺特点

- Main steel structures are connected by high strength bolt for easy transportation and installation
- End girder and sill beam are machines as whole to assure high precision of fabrication
- 主要钢结构之间用高强螺栓连接，便于运输安装
- 端梁及下横梁整体机加工，装配精度高



Semi Gantry Crane

半门式起重机



Performance parameter 性能参数

Load 载荷 (t)	5
Span 跨度 (m)	12
Lifting height 起升高度 (m)	6
Hoisting speed 起吊速度 (m/min)	5/0.83 2-speed 5/0.83 双速
Traversing speed 小车运行速度 (m/min)	5-20 Stepless 5-20 无极变速
Travelling speed 小车运行速度 (m/min)	24.1 Stepless 24.1 无极变速
Power supply 电源	380V / 48V / 50Hz
Crane group 起重机工作级别	A3
Hoist machinery group 起升机构工作级别	M5
Bridge travel group 小车运行机构工作级别	M5
Supply power 装机功率 (kW)	6.95

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Why we Choose GENMA Gantry Crane

为什么选择杰马门式起重机

Challenges 挑战

GENMA's Solutions 杰马解决方案

<p>Light weight (take 800-ton crane for example) 自重轻 (以800t为例)</p>	<p>Traditional gantry crane is heavier, generally weight of a crane itself is over 5000 tons, which leave harsh requirements for infrastructure 传统门式机较为笨重, 一般自重超过5000t, 对基建要求较高</p>	<p>GENMA crane apply finite element design to confine its weight within 4000 tons, which directly save your cost in infrastructure. 采用有限元设计, 自重不高于4000t, 降低基建成本</p>	
<p>Wind resistant 抗风性强</p>	<p>Practically gantry cranes are operated outdoor, so they are influenced by surroundings. Traditional gantry cranes are vulnerable to wind, and from time to time gantry cranes are reported to be blown down by wind. 门式机一般运行于室外, 受环境影响较大。传统门式机抗风性差, 被台风刮倒现象屡见报端</p>	<p>GENMA crane is well-adapted to surroundings. It can stand any wind of and under scale 13, so owners in coastal regions no need to worry about your cranes in typhoon season. 环境适应性强, 非工作状态下抗风达13级以上。沿海地区的台风季再也不用担心门式机被刮倒了</p>	
<p>High accuracy 精准度高</p>	<p>Splicing and erection of large structures take lots of time and energy, especially for high and huge gantry crane of long span and distant operator's cabin, whose large structures can take straight one day to complete splicing. 大型结构的拼接、合拢作业极为耗时耗力。特别是大型门式机高度高、跨度大, 驾驶室离吊具距离远, 往往一次超大型结构件的拼接工作要持续一天</p>	<p>GENMA crane applies full frequency control of speed + PLC (Programmable Logic Controller) system, equipped with deviation rectify device. Whole machine possesses functions of automatic deviation rectify, auto position, hoisting synchronization, electrical anti-swing etc. Each large structure can save 70% of time in positioning, which increase erection efficiency. 采用全变频调速+PLC控制系统, 配备纠偏装置。整机具备自动纠偏、自动定位、起升同步、电子防摇等功能, 大型结构件单次定位省时70%, 提高吊装效率</p>	
<p>Low energy consumption 能耗低级</p>	<p>Gantry crane uses more power with the increase of hoisted weight, especially for the large gantry crane, whose power consumption takes a significant part of enterprise cost 门式机随着起重量的提升, 用电量随之增加, 尤其是大型门式机, 每年的能耗费用已成为企业成本负担的重要部分</p>	<p>Energy-saving electrical system plan in addition to light self weight allow GENMA Crane to save more than 30% energy than other cranes of same rated power and hoisted weight, and saved energy can light up 200 electric lamps in your office building for one year 电气系统采用节能方案, 加之整机自重轻, 使得同功率、同起重量下的杰马产品节能30%以上, 每年省出电量能供您的办公大楼200盏电灯使用一年。</p>	
<p>High degree of automation 自动化程度高</p>	<p>Control system of traditional gantry crane has low degree of automation, so operators were forced to be always at top concentration and left more tired after extended operation 传统门式机控制系统智能化程度低, 操作人员必须时刻集中注意力, 长期作业增加驾驶员疲劳度</p>	<p>GENMA's high degree of automation and easy operation can set your operators free from complaints for operating difficulties. 自动化程度高, 操作便捷, 您的行车驾驶员再也不会抱怨产品难操作了</p>	
<p>Convenient maintenance 产品维护便利</p>	<p>Because of unreasonable design and/or lack of professional training for operators, traditional gantry crane goes out of order from time to time for small malfunctions. It takes time for each maintenance, which holds up production and increases maintenance costs 由于传统门式机设计不合理, 加之未能对驾驶人员进行系统的培训, 导致产品小故障频发, 每次维护时间长, 影响生产, 并且维护成本高</p>	<p>GENMA crane applies modular design to lower failure rate for the whole machine; the machine is equipped with remote failure diagnosis and failure alarm system to timely detect possible malfunctions; and maintenance is convenient and does not impact the production. Probably, once your operator back from lunch, the GENMA gantry crane completes its maintenance. 采用模块化设计, 整机故障率低; 整机自带远程故障诊断和故障报警系统, 能及时发现机器可能出现的故障; 产品维护便捷, 不影响生产。也许您的行车驾驶员吃完午餐回来, 杰马门式机已维护完毕</p>	

Operation Environment of GENMA Gantry Crane 杰马门式起重机操作环境

- Spacious all-closed operator's cabin designed based on ergonomics, and equipped with air conditioner, which vastly reduce the fatigue of operators
- Vision from operator's cabin is adequately broad, equipped with large-sized monitor screen, intercoms and monitoring system, which enable operators to know the working condition of crane
- Operating equipments are of high automation and easy control to increase efficiency
- Optionally equipped with button box or remote controller, and equipped with hand control cable to slide along slide line holder within the range of main girder
- 按人机工程设计的全天候封闭驾驶室，配备空调，宽敞舒适，大大降低疲劳度
- 驾驶室视野开阔，配备大尺寸监视屏、对讲机和摄像监控系统，操作人员完全掌握起重机工作状态
- 驾驶设备智能化程度高，操作便捷，提升工作效率
- 选配手电门控制或遥控器控制，手操线可沿滑线架在主梁范围内滑动





Security of GENMA Gantry Crane

杰马门式起重机安全性

- Equipped with anemoscope, height limiter, lightning rod and overload limiter
- Rail clamp is equipped to gantry walking mechanism for storm anchoring
- Audible and visual alarm is equipped to gantry walking mechanism
- Three sets of gantry walking deviation rectify systems are provided to prevent wheels of gantry from gnawing the rail
- Rigid leg and flexible leg are bumper to avoid collide with hoisted item
- Anti-rollover device and stowage pin are provided to upper and lower trolleys
- Equipped with special shockproof high definition monitoring system to record real-time working condition and increase efficiency
- 配备风速仪、高度限制器、避雷针、超载限制器
- 大车运行机构处设置夹轨器，用于风暴锚定
- 大车运行机构设置声光报警器
- 配置三套大车运行纠偏系统，避免大车车轮啃轨
- 刚柔支腿设防被吊物品碰撞装置
- 上小车设防倾翻装置，上、下小车设锚定装置
- 特种防震型高清监控系统，实时观察并记录工作状态，缩短作业时间

Main Customers

主要客户



Customer 客户	Product 产品
VALE of Brazil 巴西淡水河谷 (VALE)	MG25/5t-83.93m General Gantry Crane MG25/5t-83.93m通用门式起重机
Shandong Penglai Jinglu Shipyard Co., Ltd. 山东蓬莱中柏京鲁船业有限公司	MEC1000-168 Shipbuilding Gantry Crane MEC1000-168造船门式起重机
Jiangsu New Hantong Ship Heavy Industry Co., Ltd. 江苏新韩通船舶重工有限公司	ME800-180 Shipbuilding Gantry Crane ME800-180造船门式起重机
Zhejiang Zengzhou Shipbuilding Co., Ltd. 浙江增洲造船有限公司	MU800(2X350+400/50)-180-83 Shipbuilding Gantry Crane MU800(2X350+400/50)-180-83造船门式起重机
Fujian Mawei Shipbuilding Ltd. 福建省马尾船政重工有限公司	ME700-128.5-66 Shipbuilding Gantry Crane ME700-128.5-66造船门式起重机
Taizhou Kouan Shipbuilding Co., Ltd 泰州口岸船舶有限公司	MEC700(2X250+350/32)-163 A4 Shipbuilding Gantry Crane MEC700(2X250+350/32)-163 A4造船门式起重机
Nantong Blue Island Offshore Co., Ltd. 南通蓝岛海洋工程有限公司	MEC500-52 Shipbuilding Gantry Crane MEC500-52造船门式起重机
Nantong Dongxin Shipbuilding Industry Co., Ltd. 南通东鑫船舶重工有限公司	ME330(2*150+160/30)-106 Shipbuilding Gantry Crane ME330(2*150+160/30)-106造船门式起重机
Jiangsu Zhongzhou Ocean Engineering Equipment Co., Ltd. 江苏中舟海洋工程装备有限公司	MEC2x150+200/20-71 Shipbuilding Gantry Crane MEC2x150+200/20-71造船门式起重机
Nantong Gangzha Ship Manufacturing Co., Ltd. 南通港闸船舶制造有限公司	MEC2x100+150/20-43 A6 Shipbuilding Gantry Crane MEC2x100+150/20-43 A6造船门式起重机
Yangzhou Kaisheng Energy Co., Ltd. 扬州凯盛能源有限公司	ME100+52/20x41.72 General Gantry Crane ME100+52/20x41.72通用门式起重机
China Pile (Nantong) Co., Ltd. 国鼎 (南通) 管桩有限公司	MG50/10-32-35 A5 General Gantry Crane MG50/10-32-35 A5通用门式起重机
Nantong Hongfeng Mechanical & Electrical Co., Ltd. 南通弘峰机电有限公司	MG50-30 A5 Shipbuilding Gantry Crane MG50-30 A5造船门式起重机
Shanghai Railway Bureau 上海铁路局上海动车客段	ME32+16/5 Double Trolleys Hook Gantry Crane ME32+16/5双小车吊钩门式起重机
Jiangsu Huiji Galvanization Steel Tube Co., Ltd. 江苏汇利镀锌钢管有限公司	16/5 C Single Girder Gantry Crane 16/5 C型单主梁门式起重机
Daoda Marine Heavy Industry Co., Ltd. 启东通达重工有限公司	MDE10+5-23 A5 Gantry Crane MDE10+5-23 A5 大车变频门式起重机
Nantong Hong Kam Metal Materials Treatment Co., Ltd. 南通鸿锦金属材料处理有限公司	MEB (5+5) Double-Girder Electrical Hoist and Hook Semi Gantry Crane MEB (5+5) 双梁电动葫芦吊钩半门式起重机
Honghua Offshore Oil & Gas Equipment (Jiangsu) Co., Ltd. 宏华海洋油气装备 (江苏) 有限公司	MGB3 Single Girder Semi Gantry Crane MGB3单梁半门式起重机
Zhenjiang NMF-Marine Ship's Equipment Co., Ltd. 镇江诺伊费德船用设备有限公司	MC20-35-12 A5 Magnet Gantry Crane MC20-35-12 A5电磁挂梁门式起重机
Jiangsu Ruiji-Greatec Oil & Gas Projects Co., Ltd. 江苏瑞吉格泰油气工程有限公司	MDG20/5-22 A5 Single Girder Gantry Crane MDG20/5-22 A5单主梁门式起重机
	MC10-18-3.5 A6 Rotating Electromagnetic Hanging Double-Girder Gantry Crane MC10-18-3.5 A6旋转电磁挂梁双梁门式起重机
	MHB15t Semi Gantry Crane MHB15t半门式起重机





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