



ZEGA露天一体式钻机

ZEGA Surface Integrated Drill Rig

- 产品列入国家火炬计划
• Listed in China National "Torch Program"
- 国家级高新技术企业
• National High Tech Enterprise
- 中国履带式露天钻机行业标准制定单位
• Industry Standard Maker of China Crawler Surface Drill Rig
- “国家专精特新小巨人”企业
• National Level Specialized and Innovative Little Giant Enterprise



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科技创新无限 志高掘进先锋
ZEGA,drilling pioneer for infinite scientific and technology innovation.



■ 浙江志高机械股份有限公司是一家从事系列空气压缩机和凿岩设备的研究开发、生产销售和应用服务的专业厂家。产品广泛应用于工业气源、各类矿山开采和工程项目建设。企业以技术开发为核心，秉承“重细节、求高效、铸品质、创未来”的行动纲领，以“科技创新无限，志高掘进先锋”为经营理念。放眼全球，用争创世界一流的信心为客户提供产品和服务，为推动行业技术进步和节能环保事业而努力前行！

■ Zhejiang Zhigao Machinery Co., Ltd. is a professional manufacturer engaged in the research and development, production, marketing and application services of full range of air compressors and rock drilling equipment. Products are widely used in industrial compressed air sources, various types of mining and civil engineering construction. With technological innovation as the core, Zhigao establishes its guiding principle of "emphasizing details, seeking efficiency, based on quality, and striving for the brighter future", and adheres to business philosophy of "continuous improvement and pursuit of perfection". Zhigao is serving the global market with world-class products to create value for customers and work hard to promote industry technological progress, energy conservation and environmental protection.

志存高远, 持之以恒!
Aim high and persevere!

21年累计 Accumulated over 21 years

Sales of drilling rigs (in units)
 销售凿岩钻机
26,500
 台

Sales of Air compressor (in units)
 销售空气压缩机
165,500
 台

Effective national patents
 国家有效专利
91
 项

精工制造

Precision manufacturing

志高机械**第一工业园**，坐落于百灵北路15号，占地面积14.7万m²，建筑面积达11.1万m²，负责各种凿岩设备、空气压缩机的研发及生产。Zhigao Machinery First Industrial Park is located at No. 15 Bailing North Road, covering an area of 147000 square meters and a building area of 111000 square meters. It's responsible for the research and development and production of various rock drilling equipment and air compressors.



WITH ABUNDANT CASE EXPERIENCE/

WE ENDEAVOR TO CONTINUOUSLY ENHANCE THE QUALITY OF OUR PRODUCTS AND SERVICES TO PROVIDE CUSTOMERS WITH MORE PROFESSIONAL EXPERIENCES.

借助丰富的案例经验

我们不断提升产品和服务质量
为客户带来更专业的体验



■ 作为中国钻机制造行业的领军企业, 志高机械从2003年8月成立以来, 一直致力于绿色矿山建设、建筑工程、新能源项目, 为保护人类自然环境, 提高资源开发和利用效率, 实现行业绿色长期可持续发展做积极贡献。

■ As a leading enterprise in China's drilling rig manufacturing industry, Zhigao Machinery has been committed to the construction of green mining projects, construction projects, and new energy projects since its establishment in August 2003. It has actively invested in research and development to protect the natural environment, improve resource development and utilization efficiency, and achieve green and long-term sustainable development in the industry.

我们的合作伙伴

Partners of ZEGA



D490A 俄罗斯·铁矿项目
D490A Russia Iron Ore Project



D470A 云南·磷矿项目
D470A Yunnan, Phosphate Ore Project



D460A 俄罗斯·采石场
D460A Russia, Quarry



D480A 四川·锂矿
D480A Sichuan, Lithium Ore



T640 沙特阿拉伯·建筑工程
T640 Saudi Arabia, Construction project



D435 几内亚·铁矿项目
D435 Guinea, Iron Ore Project



D535 印度尼西亚·采石场
D535 Indonesia, Quarry



D440A 老挝·煤矿
D440A Laos, Coal Mine



D450D 安徽·水泥厂
D450D Anhui, Cement



D545 埃塞俄比亚·公路建设
D545 Ethiopia, Road Construction

ZEGA露天钻机系列命名原则

ZEGA Surface Drill Naming Principle



第一位数字表示产品分类系列

The first digit represents the product category series

- 3** = 履带式分体潜孔钻机
Crawler Installed Separated DTH Drill
- 4** = 全自动一体式潜孔钻机
Auto Integrated DTH Drill
- 5** = 小型一体式钻机
Small Integrated Drilling Rig
- 6** = 全自动一体式顶锤钻机
Auto Integrated Tophammer Drill
- 7** = “预留”给新产品
"Reserved" for new products
- 8** = 全自动牙轮钻机
Auto Rotary Drill

志高机械国际标准产品系列
Zhigao Machinery International
Standard Product Series

ZEGA

字母表示凿岩方法 The letter stands the drilling method

- A** = 锚固 Anchor, 用首字母 **A** 表示;
- D** = 潜孔 Down the hole hammer, 用首字母 **D** 表示;
- P** = 光伏 Photovoltaic Panel Foundation, 用首字母 **P** 表示;
- R** = 牙轮 Rotary, 用首字母 **R** 表示;
- T** = 顶锤 Top hammer, 用首字母 **T** 表示;
- W** = 水井 Water Well, 用首字母 **W** 表示;

产品升级代际 The product upgrading principles are as follows::

- 第一代产品无后缀字母; The 1st generation of products has no suffix letters;
- 第二代产品后缀为“A”; The 2nd generation of products has suffix letters of “A”;
- 第三代产品后缀为“B”; The 3rd generation of products has suffix letters of “B”;
-
- 第五代产品后缀为“D”; 以此类推。

D480A

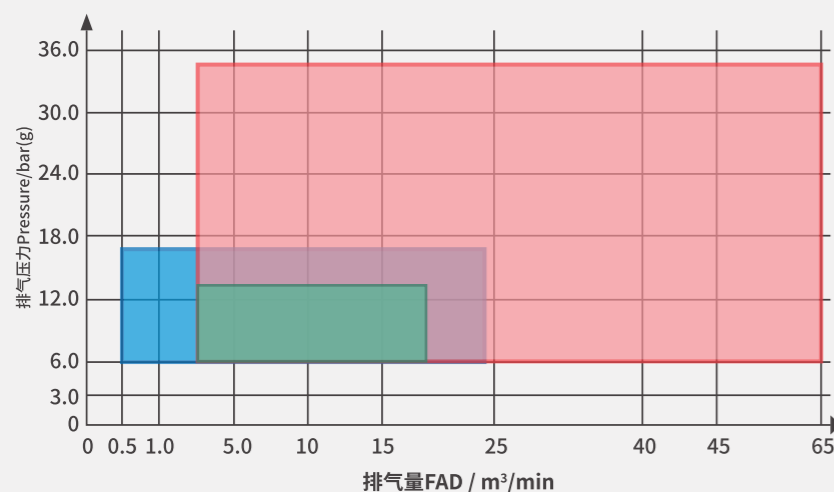
The 5th generation of products has suffix letters of “D”.

第二位和第三位数字表示: 最佳钻孔孔径的英寸值的10倍数
The 2nd and 3rd digits stand 10 times the inch value of the optimum hole diameter

“螺杆主机”100% 自主研发+生产

“Screw Air End” through 100% independent research and development

志高螺杆主机功能覆盖图 Screw air end capacity coverage



高效的螺杆转子型线

High-efficiency screw rotor profile

- 志高螺杆主机转子采用公司自主研发的转子型线, 相对传统型线, 其具有更合理的泄漏三角形、更短的接触线、更小的排气封闭容积, 转子加工性能优越, 使得压缩机具有卓越的容积效率及绝热效率。
- The self-developed rotor profile has a more reasonable leakage triangle, shorter contact line, and smaller discharge contained volume, and with better CNC machining characteristics, excellent volumetric efficiency and thermal insulation efficiency.



钻机的核心部件 —— 最优的加工制造保障

CORE COMPONENTS OF drill rig-with best manufacture process and fabrication technology.



进口加工中心
Imported processing center

- 壳体加工采用日本进口加工中心, 加工精度可达±0.005mm。
- Housing machining adopts machining center imported from Japan, the accuracy can reach ±0.005mm.



进口磨床
Imported grinder

- 转子加工采用德国KAPP、英国霍洛伊德磨床, 加工精度可达±0.001mm。
- The rotor machining adopts German KAPP and British Holroyd grinding machine, with the machining precision to be ±0.001mm.



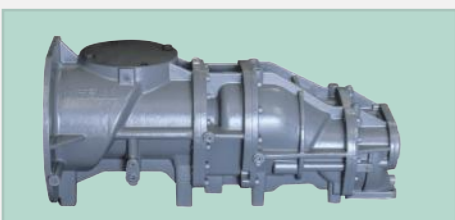
进口检测三坐标
Import inspection 3 coordinates

- 转子和壳体检测采用德国进口徕斯三坐标测量仪。
- The rotor and housing inspection adopts Leitz coordinate measuring instrument imported from Germany.



恒温无尘车间
Dust free constant temperature workshop

- 精湛的工艺流程和专用工装, 保证螺杆主机的装配质量。
- Thorough workmanship and specialized tooling ensure the assembly quality of the screw air end.



水平双级 Horizontal two-stage



单级压缩 Single stage

二级压缩 Two stage

安全可靠 Safe & reliable

■ 驾驶室: 满足 ROPS 防翻滚、FOPS 防砸认证的宽敞舒适的安全驾驶室,符合人体工程学要求的科学性和舒适性;座椅带气垫减震、位置可调;噪音低、开孔和钻孔视线好; Cab: A spacious and comfortable safe cab which is ROPS and FOPS approved, meets ergonomic requirements and delivers a scientific and comfortable driving experience; The seat with adjustable position is equipped with air-cushion shock absorption; Low noise and good visibility for drilling and collaring activities.

■ 防护栏杆: 车身顶部防滑贴、保护栏杆的设置,保障维护、检修人员的安全;同时钻臂也配备钻杆防跌落保护栏杆; Guardrail: The drill rig top is equipped with guardrail and anti-slip stickers ensuring the safety of maintenance and service personnel; Meanwhile, the drill boom is also equipped with guardrails against drill rod fall-prevention.

■ 遥控: 产品可选配近程遥控功能,操作者可在百米范围内灵活控制钻机作业,减少边坡开采或上下运输车辆时的风险。Remote control: The product can be optionally equipped with a short-range remote control function, allowing operators to flexibly control drilling operations within a range of 100 meters, reducing risks during highwall mining or while getting on/off transportation vehicles.

高效灵活 High Productivity and flexible

■ 单发动机: 单台动力同时驱动液压系统和螺杆主机运行,提高设备的空间利用率,同时可降低能源消耗及维护成本。Single engine: A single power unit simultaneously drives the operations of hydraulic system and screw air end, improving the space utilization of the equipment while reducing energy consumption and maintenance costs.

■ 长钻杆: 3、4、5、6、7、9、10.7米不同设备钻杆配置,最大程度减少换杆时间,提高产出效率。Long drill rod: drill rod configurations vary from 3m, 4m, 5m, 6m, 7m, 9m and 10.7m, maximumly reducing the time of rod changing and enhancing the productivity.

■ 多孔径: 功能范围内的重型加强设计,使得设备同时满足不同工况和不同孔径凿岩需求。Multi hole size: The heavy-duty reinforcement design within the functional range enables the equipment to simultaneously meet the rock drilling applications under different working conditions and with different hole size.

节能环保 Energy-saving and environment friendly

■ 集尘能力: 根据不同环保和客户需求,提供干式、湿式、干湿混合的集尘方案,满足最高环保需求。Dust collection capability: Based on different environmental conditions and customer needs, we provide such different solutions as dry dust collection, wet dust collection, and dry and wet mixed dust collection to meet the highest environmental requirements.

■ 高效主机: 优异的螺杆主机设计和制造能力,保证钻机获得更节能高效的高压空气动力。Efficient air end: Excellent design and manufacturing technology of screw air end ensures drill rigs to obtain more energy-efficient high-pressure air power.

■ 控制系统: 自敏感调节系统随时保证钻机在各种运行状态下的功率需要,同时在钻机辅助作业时消耗最低的能源。Control system: The self-sensitive adjustment system meets the power requirements of drill rigs in various operating states at all times, while consuming the lowest energy during auxiliary operations of drill rigs.

个性服务 Personalization

■ 远程控制: 操作员和设备管理者可轻松获取设备的运行数据,从而使设备的生产安排、维护保养更加轻松。Remote control: Operators and equipment managers can easily access operational data of the equipment, making production scheduling and maintenance easier.

■ 定制化: 可根据不同工况、环境以及法规等特殊需求,为客户提供各项定制设计。Customization: We can provide customized designs for customers based on different working conditions, environments, regulations and other special requirements.

■ 适应性: 针对极寒、热带沙漠、高原或高温等极端作业环境,配置对应方案,满足全球不同区域的需求。Adaptability: Offer corresponding solutions such as extreme cold climate kit, tropical desert kit, high altitude kit or high humidity kit for extreme working environments to meet the needs of different regions around the world.

最佳孔径范围 Optimal hole range: Φ 90-115 mm



ZEGA D535H



ZEGA T640/T645



ZEGA D435

最佳孔径范围 Optimal hole range: Φ 115-138 mm



ZEGA D545H



ZEGA D440A



ZEGA D450D

最佳孔径范围 Optimal hole range: Φ 138-152 mm



ZEGA D460A



ZEGA D470D/D470C

最佳孔径范围 Optimal hole range: Φ 152-203 mm



ZEGA D480A



ZEGA D490A



ZEGA R8100

最佳孔径范围 Optimal hole range:
牙轮 For Rotary Drill: Φ 149-270 mm
潜孔 For DTH Drill: Φ 149-300 mm

ZEGA D535H/D535TA

产品特点/Product Features

■ 本型特点: 螺杆主机超大配置, 适应 $\phi 90-115\text{mm}$ 最佳孔径的需求。其中凿岩 $\phi 90\text{mm}$ 孔径时发动机的转速为1450转, 最佳的经济转速可保证极低的燃油消耗; 轻便灵活的机型, 强劲的越野能力, 可适应狭小空间和原始地貌的作业; 可装入20尺集装箱, 降低运输成本。

■ Features of this model: This model are equipped with larger screw air end to meet the requirements of the optimum aperture of 90-115mm. When drilling with a hole diameter of 90 mm, the engine speed is 1450 RPM, and the optimal economic speed can ensure extremely low fuel consumption; It is light weight and flexible models with excellent off-road capabilities, capable of adapting to operations in narrow spaces and crude terrain conditions; It can fit into a 20-foot container, reducing transportation costs.

全系列产品特点 01

Features of the entire product series.NO.01



全系列产品配置康明斯、卡特、道依茨等国际品牌发动机, 同时有国二、国三、国四、欧五的选择, 满足全球用户的需求。

The entire product line is equipped with international brand engines such as Cummins, CAT and Deutz, with options for China National II, National III, and National IV, as well as Euro V to meet the needs of global users.

技术规格/Technical Specifications (“()”内为 ZEGA D535TA参数 The data inside “()” is parameters of ZEGA D535TA.)

发动机 Engine				螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	康明斯 Cummins	道依茨 DEUTZ	品牌 Manufacturer	ZEGA
型号 Model	6BTA5.9-C205	QSB5.9-C210-30	B5.9CS4 210C	TCD6.1L6	型号 Model	ZGCA117 II 2L-H
排放标准 Emission standards	国 II China II	国 III China III	国 IV China IV	欧 V EURO V	工作风压 Air working pressure	18 bar
额定功率 Rated power	153kW(210hp)2,000rpm	154kW(210hp)2,200rpm	154kW(210hp)2,200rpm	160kW(220hp)2,200rpm	排风量 Air flow FAD	12 m ³ / min
钻臂和推进梁 Boom & Feed				重量及尺寸 Weight & Dimensions		
推进方式 Feed type:	油缸+钢丝绳 Hydraulic cylinder + Rope		油缸+链条 Hydraulic cylinder- Chain		长度 Length	7,480 mm
推进器总长度 Feed length	6,100 (5,500) mm	最大推进力 Feed force max.	13 (10) kN		宽度 Width	2,300 mm
推进补偿 Feed extension	970 mm	最大推进速度 Feed rate max.	0.88 (0.8) m/s		高度 Height	2,750 mm
推进行程 Feed travel length	3,488 (3,680) mm	最大拉拔力 Pullup force max.	16.5 (22.5) kN		重量 Weight (不含选配件 w/o option)	8,630 (7,250) kg
功能参数 Functional Specifications				底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity : 7				最大行走速度 Traming speed.Max	3.2 km/h	
孔径范围 Hole range	$\Phi 90 - 127\text{ mm}$	冲击器 DTH hammer	3.5 "		最大爬坡能力 Max Gradeability	25°
钻杆直径 Drill pipe diameter	$\Phi 60\text{ mm}$	回转扭矩 Rotation torque	1,500 Nm		离地间隙 Carrier ground clearance	340 mm
钻杆长度 Drill pipe length	3,000 mm	回转速度 Rotation rpm	0-135 rpm		履带架摆动 Track frame oscillation angle	$\pm 10^\circ$
最大孔深 Hole depth.Max	21 m	燃油箱容量 Fuel tank capacity	250 L		最大驱动力 Traction force.Max	96 kN

适用工况/Working conditions



工程建设 Construction

- 公路 Highway
- 水电 Hydropower
- 机场 Airport
- 码头 Wharf

绿色矿山 Green Mining

- 水泥 Cement
- 煤矿 Coal mine
- 采石 Quarrying
- 铁矿 Iron mine

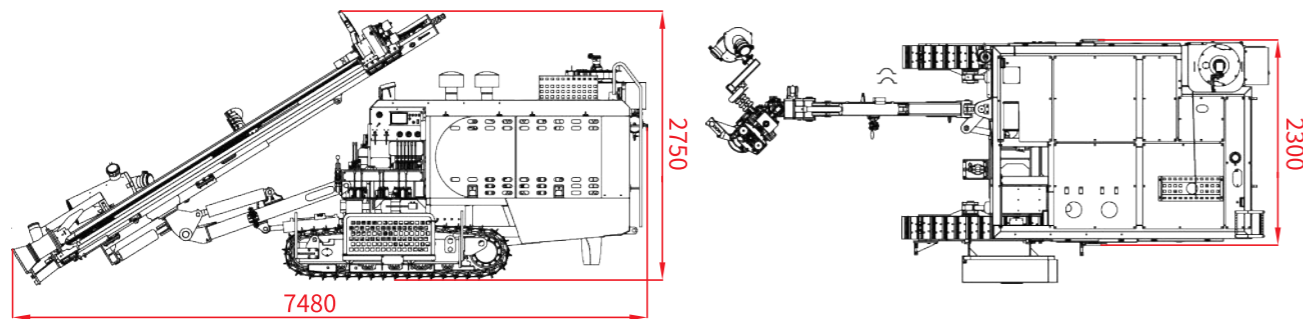
非爆破行业 Non-blasting Industry

- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 房地产 Real estate
- 边坡治理 Slope treatment

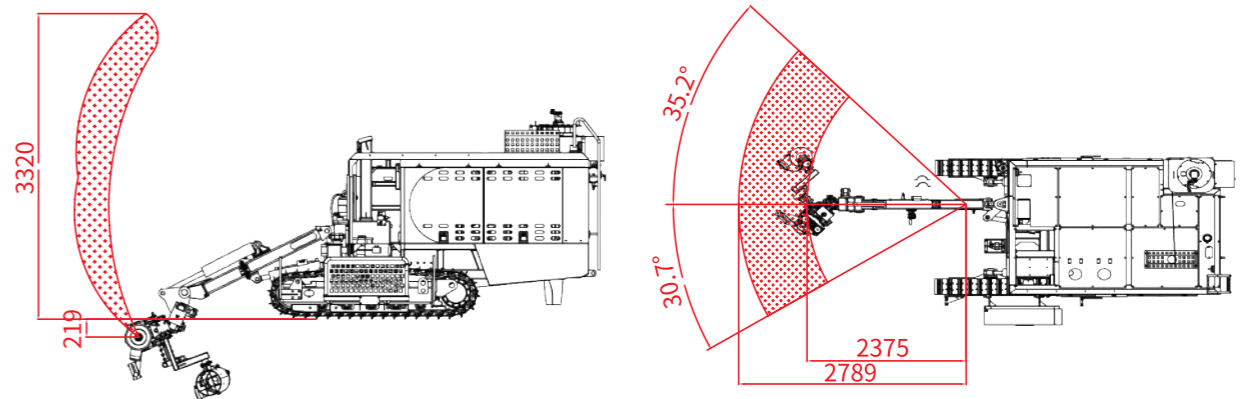
ZEGA D535H (换杆 Rod Changing)



ZEGA D535TA



D535TA运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA D545H/D545T

产品特点/Product Features

■ 本型特点:在保持高效低耗的前提下,满足 $\phi 115\text{mm}$ 、 $\phi 138\text{mm}$ 孔径的凿岩需求,体现出极高的性价比;在煤矿开采等软岩作业中更有高速回转推进方案选择,其在内蒙古的煤矿作业中实现了3米/分钟的凿岩速度。

■ Features of this model: While maintaining high efficiency and low consumption, it meets the rock drilling needs of hole diameters of 115mm and 138mm, showing a high cost performance; In soft rock operations such as coal mining, there are high-speed rotary feed solutions, achieving a rock drilling speed of 3m/min in coal mining operations in Inner Mongolia.

全系列产品特点 02

Features of the entire product series.NO.02



全系潜孔钻机采用能效比极佳的两级压缩主机,实现高风压凿岩,具有优异的燃油经济性表现,更加环保。

The entire series of DTH drill rigs use two-stage compression air ends with optimal energy efficiency ratios to achieve high air pressure rock drilling, which has excellent fuel economy performance and is more environment friendly.

ZEGA D545H

ZEGA D545T



技术规格/Technical Specifications (“()”内为 ZEGA D545T参数The data inside“()” is parameters of ZEGA D545T.)

发动机 Engine			螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	康明斯 Cummins	品牌 Manufacturer	ZEGA
型号 Model	6CTAC8.3-C260	QSB6.7-C260-33	B6.7CS4 260C	型号 Model	ZGCA117 II 2P2-H
排放标准 Emission standards	国 II China II	国 III China III	国 IV China IV	工作风压 Air working pressure	18 bar
额定功率 Rated power	194kW(260hp)2,200rpm	194kW(260hp)2,400rpm	194kW(260hp)2,200rpm	排风量 Air flow FAD	17 m ³ /min
钻臂和推进梁 Boom & Feed			重量及尺寸 Weight & Dimensions		
推进方式 Feed type:	油缸+钢丝绳 Hydraulic cylinder +Rope/油缸+链条 Hydraulic cylinder- Chain		长度 Length	9,000 mm	
推进器总长度 Feed length	6,100 (5,530) mm	最大推进力 Feed force max.	13 (15) kN	宽度 Width	2,360 mm
推进补偿 Feed extension	1,200 mm	最大推进速度 Feed rate max.	0.88 (0.8) m/s	高度 Height	3,000 mm
推进行程 Feed travel length	3,400 (3,880) mm	最大拉拔力 Pullup force max.	16.5 (42) kN	重量 Weight (不含选配件 w/o option)	10,000 (8,900) kg
功能参数 Functional Specifications			底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity :	7		最大行走速度 Traming speed.Max	3.3 km/h	
孔径范围 Hole range	$\phi 90 - 130$ ($\phi 90-138$) mm	冲击器 DTH hammer	3.5" / 4"	最大爬坡能力 Max Gradeability	25°
钻杆直径 Drill pipe diameter	$\phi 68 / 76$ ($\phi 76$) mm	回转扭矩 Rotation torque	1,900 (2,200) Nm	离地间隙 Carrier ground clearance	340 mm
钻杆长度 Drill pipe length	3,000 mm	回转速度 Rotation rpm	0-115 rpm	履带架摆动 Track frame oscillation angle	$\pm 10^\circ$
最大孔深 Hole depth.Max	24 m	燃油箱容量 Fuel tank capacity	300L	最大驱动力 Traction force.Max	119 kN

适用工况/Working conditions



工程建设 Construction

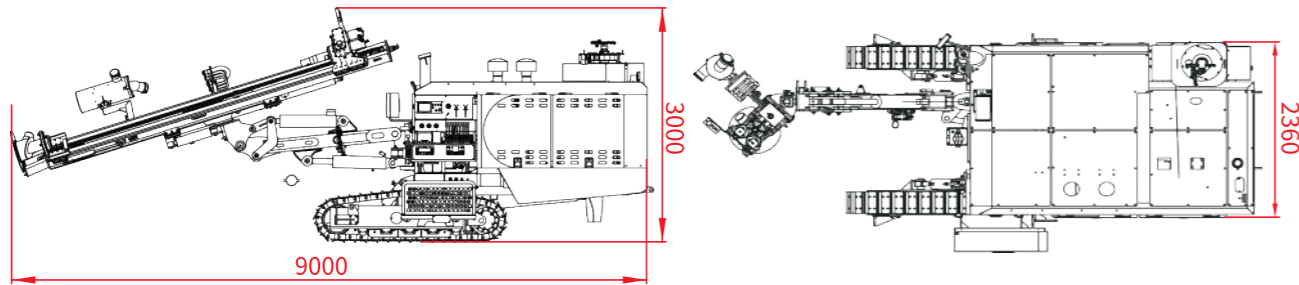
- 公路 Highway
- 水电 Hydropower
- 机场 Airport
- 码头 Wharf

绿色矿山 Green Mining

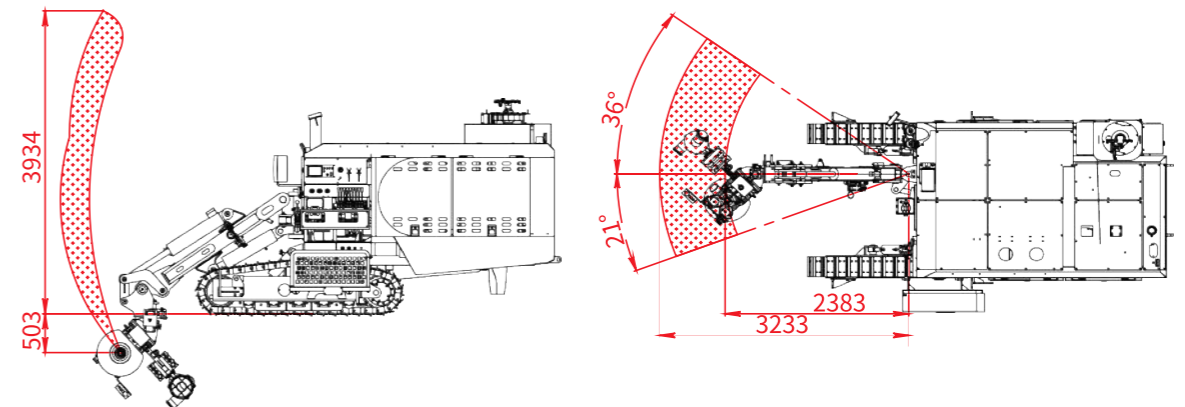
- 水泥 Cement
- 煤矿 Coal mine
- 采石 Quarrying
- 铁矿 Iron mine

非爆破行业 Non-blasting Industry

- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 房地产 Real estate
- 边坡治理 Slope treatment



D545T 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA T640/T645

产品特点/Product Features

■ 本型特点:分别配置志高自主研发生产的20kW、25kW高频高压全液压凿岩机,同时折叠臂和超强越野设计使得该系列顶锤钻机在中小孔径领域具有更高的凿岩效率。

■ Features: ZEGA T640 and T645 drill rigs are respectively equipped with a 20kW and a 25kW high-frequency high-pressure full-hydraulic rock drills that are independently developed and manufactured by ZHIGAO. Besides, the folding booms and high-performance off-road design promote the efficiency in drilling small and medium-sized holes.



全系列产品特点 03

Features of the entire product series.NO.03



冷暖空调驾驶室符合人体工程学,视野开阔、安全舒适,满足ROPS/FOPS双认证。

The ROPS and FOPS certified air-conditioning with cooling and heating functions, conforms to principles of ergonomics, providing a broaden view, safe and comfortable experience for the operator.

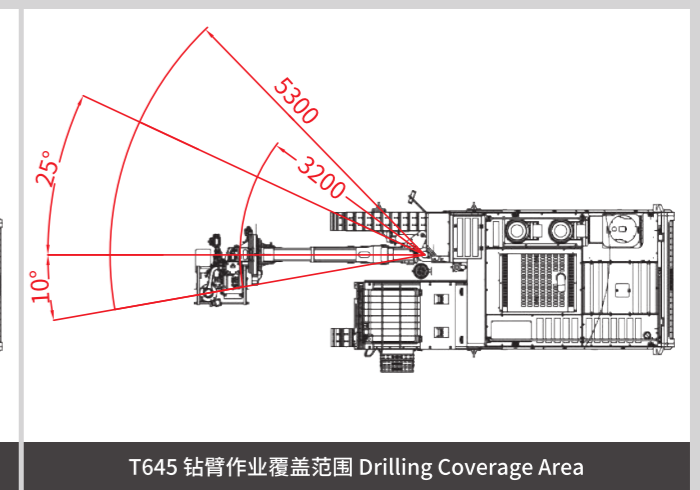
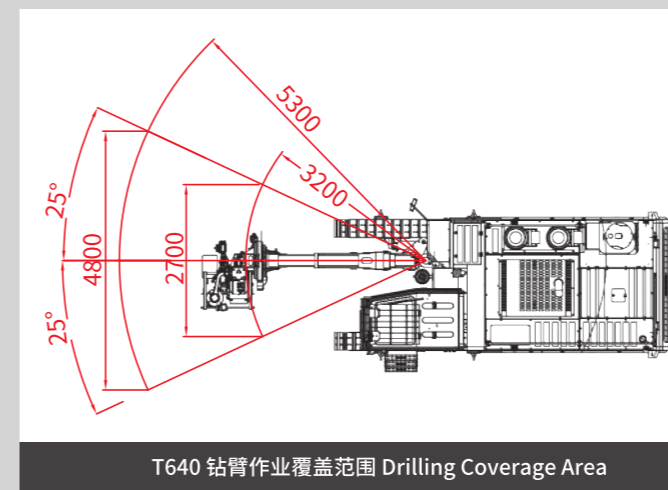
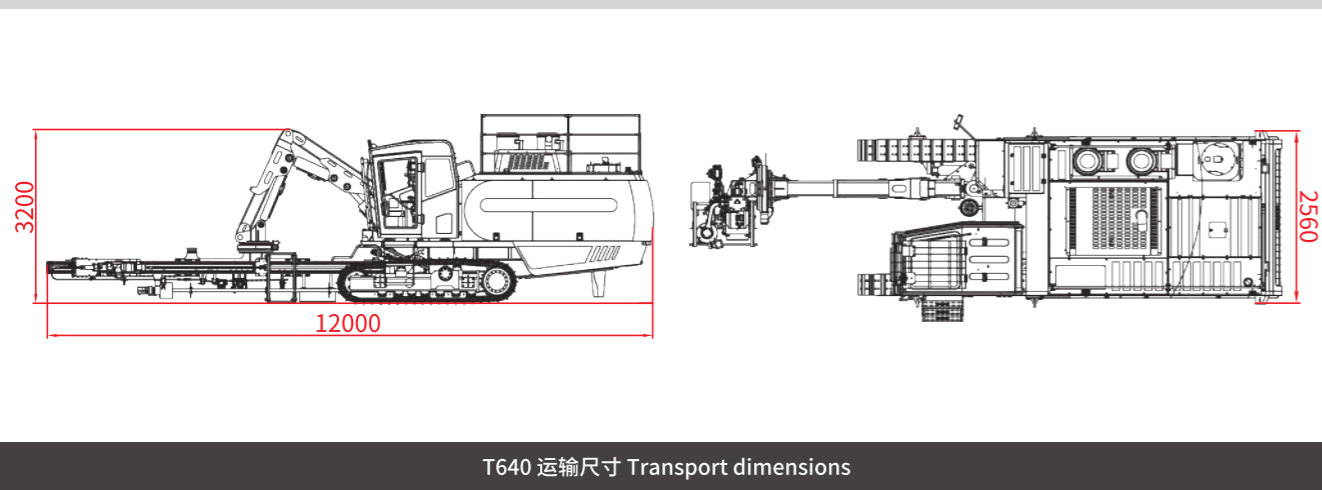
技术规格/Technical Specifications (“()”内为 ZEGA T645 参数The data inside“()” is parameters of ZEGA T645.)

发动机 Engine				螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	康明斯 Cummins	道依茨 DEUTZ	品牌 Manufacturer	ZEGA
型号 Model	QSC8.3-C240-30	B6.7CS4 240C	B6.7	TCD7.8L6	型号 Model	ZGAA138 II
排放标准 Emission standards	国III China III	国IV China IV	欧V EURO V	欧V EURO V	工作风压 Air working pressure	10 bar
额定功率 Rated power	179kW(240hp)2,200rpm	177kW(240hp)2,200rpm	194kW(260hp)2,500rpm	200kW(270hp)2,500rpm	排风量 Air flow FAD	10 m ³ / min
钻臂和推进梁 Boom & Feed				重量及尺寸 Weight & Dimensions		
推进方式 Feed type: 油缸+钢丝绳 Hydraulic cylinder +Rope				长度 Length	12,000 mm	
推进器总长度 Feed length	7,320 (7,520) mm	最大推进力 Feed force max.	20 kN	宽度 Width	2,550 mm	
推进补偿 Feed extension	1,200 mm	最大推进速度 Feed rate max.	0.9 m/s	高度 Height	3,200 mm	
推进行程 Feed travel length	4,420 mm	最大拉力 Pull up force max.	20 kN	重量 Weight (不含选配件 w/o option)	14,500 kg	
功能参数 Functional Specifications				底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity: 6+1(自动换杆 Auto rod changer)				最大行走速度 Traming speed.Max	3.6 km/h	
孔径范围 Hole range	Φ76 - 115 mm	配套凿岩机 Rock drill	ZY-104HE (ZY-105H)	最大爬坡能力 Max Gradeability	25°	
钻杆直径 Drill pipe diameter	Φ38/45/51 (Φ45/51) mm	冲击功率 Percussion power	20 (25) kW	离地间隙 Carrier ground clearance	380 mm	
钻杆长度 Drill pipe length	3,660 mm	每分钟冲击次数 Percussion per minute	2,600~3,600 (2,520~3,000)	履带架摆动 Track frame oscillation angle	±10°	
最大孔深 Hole depth.Max	25 m	回转扭矩 Rotation torque	1,180 Nm	最大驱动力 Traction force.Max	138 kN	
燃油箱容量 Fuel tank capacity	440 L	回转速度 Rotation rpm	0-135 r/min			

适用工况/Working conditions



- 工程建设 Construction
 - 公路 Highway
 - 机场 Airport
 - 水电 Hydropower
 - 码头 Wharf
- 绿色矿山 Green Mining
 - 水泥 Cement
 - 采石 Quarrying
- 非爆破行业 Non-blasting Industry
 - 煤矿 Coal mine
 - 铁矿 Iron mine
 - 光伏 Photovoltaic
 - 房地产 Real estate
 - 水井地热 Well geothermal
 - 边坡治理 Slope treatment



ZEGA D435

产品特点/Product Features

■ 本型特点: 配有可折叠钻臂360°旋转机构, 在满足矿山凿岩的同时, 可适应边坡和特殊工况的施工要求。

■ Features: Equipped with 360°rotating mechanism of foldable booms, ZEGA D435 not only satisfies the demands for mining, but also fits for construction requirements of side slopes and special working conditions.



全系列产品特点 04

Features of the entire product series.NO.04



双速行走马达和±10°的调平油缸设计, 保证钻机在平坦地带的高速移动和原始地貌的机动越野。

The dual-speed tramping motor and the oscillation cylinder of -10°to +10°oscillation angle ensure stable and smooth high-speed movement on flat areas and off-road performance on pristine landform.

技术规格/Technical Specifications

发动机 Engine			螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	康明斯 Cummins	品牌 Manufacturer	ZEGA
型号 Model	6CTAC8.3-C260	QSB6.7-C260-33/ QSC8.3-C260-30	B6.7CS4 260C	型号 Model	ZGDD160III-H
排放标准 Emission standards	国 II China II	国 III China III	国 IV China IV	工作压力 Air working pressure	20 bar
额定功率 Rated power	194kW(260hp)2,200rpm	194 kW(260hp)2,400 rpm	194kW(210hp)2,200rpm	排风量 Air flow FAD	16 m ³ / min
钻臂和推进梁 Boom & Feed			重量及尺寸 Weight & Dimensions		
推进方式 Feed type: 马达+链条 Hydraulic motor + Chain			长度 Length	11,300 mm	
推进器总长度 Feed length	7,475 mm	最大推进力 Feed force max.	18 kN	宽度 Width	2,550 mm
推进补偿 Feed extension	1,200 mm	最大推进速度 Feed rate max.	0.88 m/s	高度 Height	3,100 mm
推进行程 Feed travel length	4,585 mm	最大拉拔力 Pull up force max.	24.8 kN	重量 Weight (不含选配件 w/o option)	14,800 kg
功能参数 Functional Specifications			底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity: 7			最大行走速度 Tramping speed.Max	3.1 km/h	
孔径范围 Hole range	Φ90 - 138 mm	冲击器 DTH hammer	3.5" / 4"	最大爬坡能力 Max Gradeability	25°
钻杆直径 Drill pipe diameter	Φ68 / 76 mm	回转扭矩 Rotation torque	2,800 Nm	离地间隙 Carrier ground clearance	385 mm
钻杆长度 Drill pipe length	4,000 mm	回转速度 Rotation rpm	0-110 rpm	履带架摆动 Track frame oscillation angle	±10°
最大孔深 Hole depth.Max	28 m	燃油箱容量 Fuel tank capacity	340 L	最大驱动力 Traction force.Max	165 kN

适用工况/Working conditions



工程建设 Construction



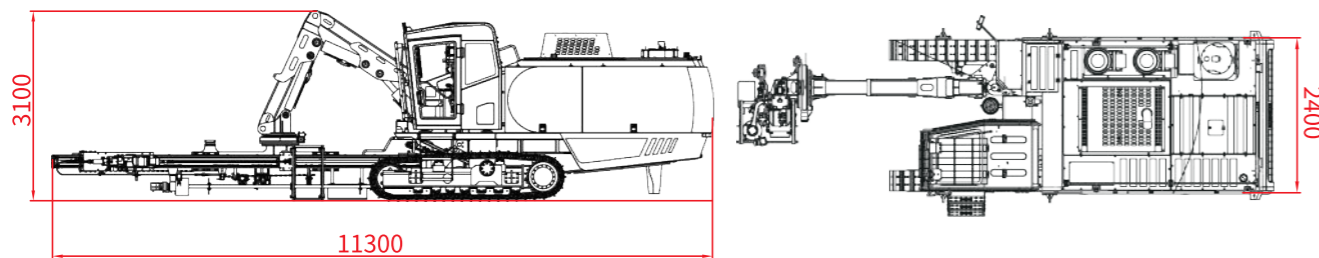
绿色矿山 Green Mining



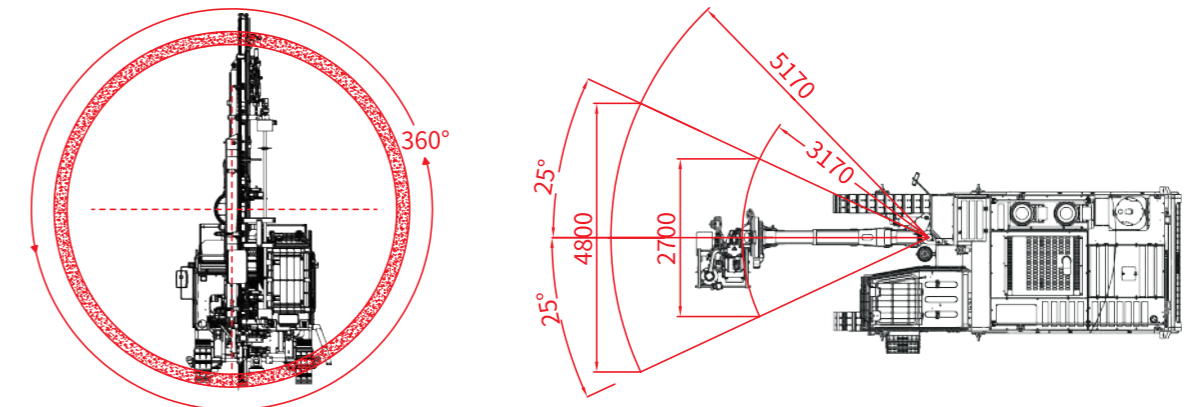
非爆破行业 Non-blasting Industry



- 公路 Highway
- 水电 Hydropower
- 水泥 Cement
- 煤矿 Coal mine
- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 机场 Airport
- 码头 Wharf
- 采石 Quarrying
- 铁矿 Iron mine
- 房地产 Real estate
- 边坡治理 Slope treatment



D435 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA D440A

产品特点/Product Features

■ 本型特点:在保证效率和可靠性的基础上,本机型具有极佳的环境适应能力、超高的产品性价比,是替代分体钻机最好的选择。

■ Features: In addition to high efficiency and reliability, ZEGA D440A is characterized by outstanding adaptive capacity to environment and super-high value with competitive price, therefore it can be considered as an optimum choice to replace separated drill rigs.



全系列产品特点 05

Features of the entire product series.NO.05



加大配置的空气过滤器、油滤过滤器,保障发动机、螺杆主机、油泵等功能部件长效运行;可根据实际需求,在前端加装前置预滤器来应对更恶劣的环境。

The enlarged air filter and oil filter guarantee the long service life of such functional components as the engine, the screw air end and oil pumps; In line with actual working conditions, an additional pre-separator at the front end can be assembled to satisfy the requirements of a more demanding environment.

技术规格/Technical Specifications

发动机 Engine			螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	康明斯 Cummins	品牌 Manufacturer	ZEGA
型号 Model	6CTAC8.3-C260	QSC8.3-C260-30	B6.7CS4 260C	型号 Model	ZGDD160III
排放标准 Emission standards	国 II China II	国 III China III	国 IV China IV	工作风压 Air working pressure	20 bar
额定功率 Rated power	194kW(260hp)2,000rpm	194kW(260hp)2,000rpm	194kW(260hp)2,000rpm	排风量 Air flow FAD	16 m ³ / min
钻臂和推进梁 Boom & Feed			重量及尺寸 Weight & Dimensions		
推进方式 Feed type: 马达+链条 Hydraulic motor + Chain			长度 Length	9,980 mm	
推进器总长度 Feed length	7,475 mm	最大推进力 Feed force max.	18 kN	宽度 Width	2,480 mm
推进补偿 Feed extension	1,200 mm	最大推进速度 Feed rate max.	0.85 m/s	高度 Height	3,200 mm
推进行程 Feed travel length	4,585 mm	最大拉拔力 Pull up force max.	24.8 kN	重量 Weight (不含选配件 w/o option)	14,800 kg
功能参数 Functional Specifications			底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity: 6+1			最大行走速度 Trammng speed.Max	3.0 km/h	
孔径范围 Hole range	Φ90 - 138 mm	冲击器 DTH hammer	4"/3.5"	最大爬坡能力 Max Gradeability	25°
钻杆直径 Drill pipe diameter	Φ76/68 mm	回转扭矩 Rotation torque	2,800 Nm	离地间隙 Carrier ground clearance	450 mm
钻杆长度 Drill pipe length	4,000 mm	回转速度 Rotation rpm	0-110 rpm	履带架摆动 Track frame oscillation angle	±10°
最大孔深 Hole depth.Max	28 m	燃油箱容量 Fuel tank capacity	480 L	最大驱动力 Traction force.Max	115.4 kN

适用工况/Working conditions

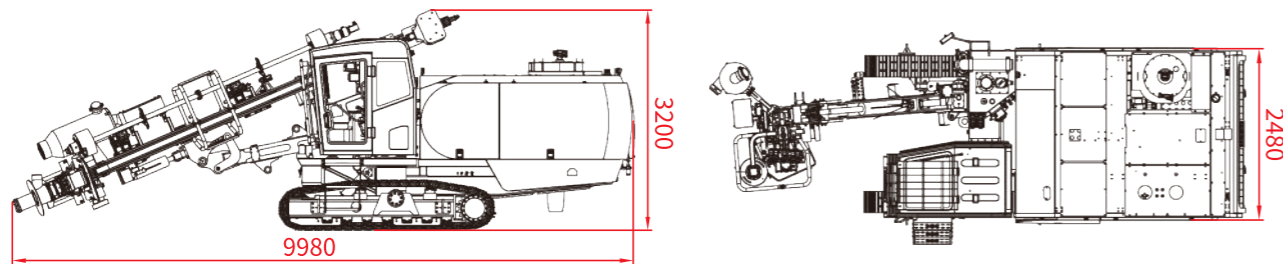


工程建设 Construction

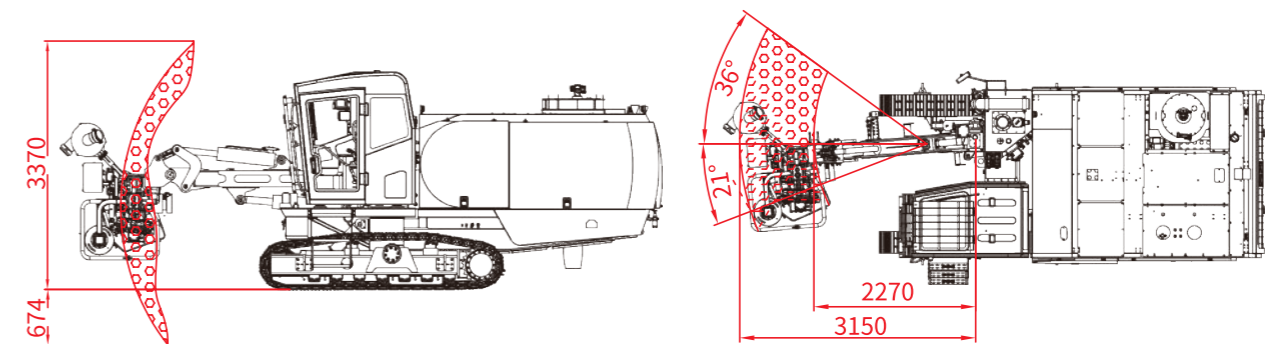
绿色矿山 Green Mining

非爆破行业 Non-blasting Industry

- 公路 Highway
- 水电 Hydropower
- 水泥 Cement
- 煤矿 Coal mine
- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 机场 Airport
- 码头 Wharf
- 采石 Quarrying
- 铁矿 Iron mine
- 房地产 Real estate
- 边坡治理 Slope treatment



D440A 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA D450D

产品特点/Product Features

■ 本型特点:作为中型矿采的主力机型,硬岩 $\phi 138\text{mm}$ 孔径作业时可保持20bar的凿岩压力,不论是产量或单位进尺油耗,都在同档产品中名列前茅。

■ Features: As a predominant drill rig in medium-sized mining, the working pressure can be maintained at 20bar when drilling holes of $\phi 138\text{mm}$ on hard rocks. No matter in terms of output or oil consumption per foot, ZEGA D450D ranks among the best.



全系列产品特点 06

Features of the entire product series. NO.06



高强度铝合金推进梁及不锈钢防护套;产品导向性、稳定性极佳,可实现高精度钻孔;油缸+钢丝绳式或马达+链条与跟管器组成的推进系统,可实现快慢推进提升。

Equipped with a high-strength aluminium alloy feed beam and a stainless steel protective cover; The distinguished guidance quality and stability contribute to the achievement of high-precision drilling; The feeding system consists of hydraulic cylinder + steel wire rope or motor + chain and hose follower, realizing feeding in fast or slow speed.

技术规格/Technical Specifications

发动机 Engine			螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	康明斯 Cummins	品牌 Manufacturer	ZEGA
型号 Model	6LTA A8.9-C360	QSL8.9-C360-30	L9CS4 360C	型号 Model	ZGDD160III
排放标准 Emission standards	国 II China II	国 III China III	国 IV China IV	工作风压 Air working pressure	21 bar
额定功率 Rated power	264kW(360hp)2,000rpm	264kW(360hp)1,900rpm	264kW(360hp)1,900rpm	排风量 Air flow FAD	21.5 m ³ / min
钻臂和推进梁 Boom & Feed			重量及尺寸 Weight & Dimensions		
推进方式 Feed type: 马达+链条 Hydraulic motor + Chain				长度 Length	11,200 mm
推进器总长度 Feed length	8,570 mm	最大推进力 Feed force max.	18 kN	宽度 Width	2,480 mm
推进补偿 Feed extension	1,200 mm	最大推进速度 Feed rate max.	0.85 m/s	高度 Height	3,200 mm
推进行程 Feed travel length	5,300 mm	最大拉力 Pull up force max.	31 kN	重量 Weight (不含选配件 w/o option)	15,500 kg
功能参数 Functional Specifications			底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity: 4+1			最大行走速度 Trammng speed.Max	3.0 km/h	
孔径范围 Hole range	$\Phi 115 - 152\text{ mm}$	冲击器 DTH hammer	5"/4"	最大爬坡能力 Max Gradeability	25°
钻杆直径 Drill pipe diameter	$\Phi 89 / 76\text{ mm}$	回转扭矩 Rotation torque	4,000 Nm	离地间隙 Carrier ground clearance	450 mm
钻杆长度 Drill pipe length	5,000 mm	回转速度 Rotation rpm	0-105 rpm	履带架摆动 Track frame oscillation angle	$\pm 10^\circ$
最大孔深 Hole depth.Max	25 m	燃油箱容量 Fuel tank capacity	480 L	最大驱动力 Traction force.Max	115.4 kN

适用工况/Working conditions



工程建设 Construction



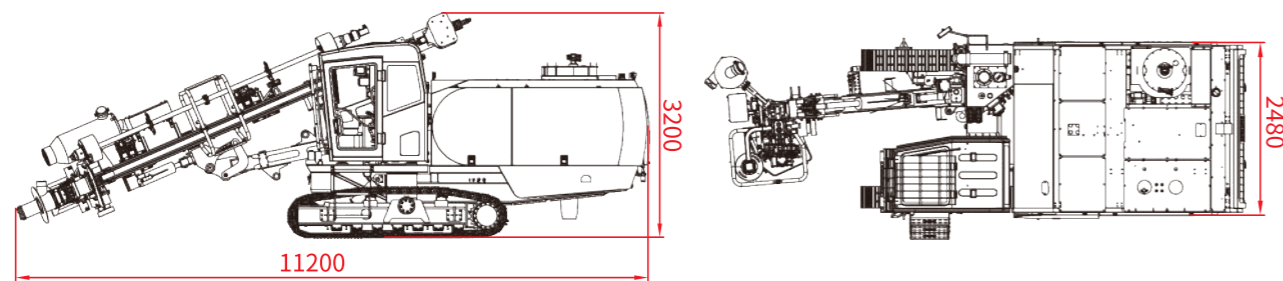
绿色矿山 Green Mining



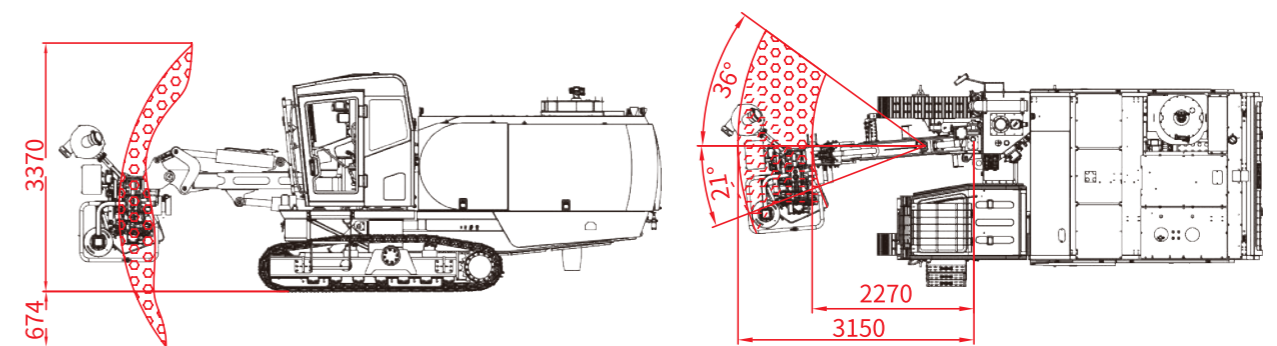
非爆破行业 Non-blasting Industry



- 公路 Highway
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- 水泥 Cement
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- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 机场 Airport
- 码头 Wharf
- 采石 Quarrying
- 铁矿 Iron mine
- 房地产 Real estate
- 边坡治理 Slope treatment



D450D 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA D460A

产品特点/Product Features

■ 本型特点: 重型设计使得本产品不论在水泥还是煤炭、采矿等行业都具有傲人的业绩, 数百台设备已出口到十多个国家。

■ Features: The heavy-duty design enables ZEGA D460A to have a proud performance in cement, coal, mining and other industries. Hundreds of ZEGA D460A drill rigs manufactured by ZHIGAO have been exported to more than ten countries.



全系列产品特点 07

Features of the entire product series.NO.07



液压马达或油缸带动大功率回转头和专利设计的消振器组合, 能轻松应对卡钎, 延长回转头及钻具的使用寿命。

A combination of the hydraulic motor or high-power rotary head driven by the hydraulic cylinder and the patented absorber, greatly lowers the possibility of jamming and prolongs the service life of the rotary head and drilling tools.

技术规格/Technical Specifications

发动机 Engine			螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	康明斯 Cummins	品牌 Manufacturer	ZEGA
型号 Model	6LTA8.9-C360	QSL8.9-C360-30	L9CS4-400C	型号 Model	ZGDB 160III
排放标准 Emission standards	国 II China II	国 III China III	国 IV China IV	工作风压 Air working pressure	21 bar
额定功率 Rated power	264kW(360hp)2,000rpm	264kW(360hp)1,900rpm	294kW(400hp)1,900rpm	排风量 Air flow FAD	22.5 m ³ / min
钻臂和推进梁 Boom & Feed			重量及尺寸 Weight & Dimensions		
推进方式 Feed type: 马达+链条 Hydraulic motor + Chain (油缸+钢丝绳 Hydraulic cylinder +Rope)			长度 Length	11,550 mm	
推进器总长度 Feed length	10,500 (9,000) mm	最大推进力 Feed force max.	40 (34.5) kN	宽度 Width	2,700 mm
推进补偿 Feed extension	1,300 mm	最大推进速度 Feed rate max.	0.9 (0.88) m/s	高度 Height	3,560 mm
推进行程 Feed travel length	6,600 mm	最大拉力 Pull up force max.	50 (67.6) kN	重量 Weight (不含选配件 w/o option)	22,000 kg
功能参数 Functional Specifications			底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity: 6+1			最大行走速度 Trammng speed.Max	3.0 km/h	
孔径范围 Hole range	Φ115 - 152 mm	冲击器 DTH hammer	5" / 4"	最大爬坡能力 Max Gradeability	25°
钻杆直径 Drill pipe diameter	Φ102 mm	回转扭矩 Rotation torque	4,435 Nm	离地间隙 Carrier ground clearance	420 mm
钻杆长度 Drill pipe length	6,000 / 5,000 / 7,000 mm	回转速度 Rotation rpm	0-105 rpm	履带架摆动 Track frame oscillation angle	±10°
最大孔深 Hole depth.Max	42 m	燃油箱容量 Fuel tank capacity	750 L	最大驱动力 Traction force.Max	156.2 kN

适用工况/Working conditions



工程建设 Construction

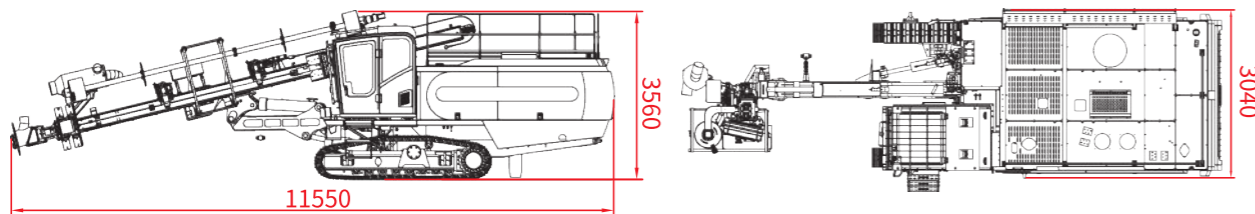
- 公路 Highway
- 水电 Hydropower
- 机场 Airport
- 码头 Wharf

绿色矿山 Green Mining

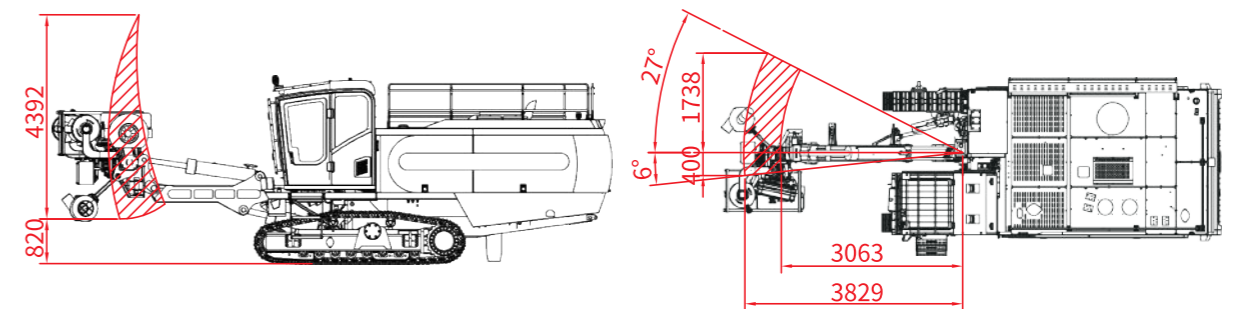
- 水泥 Cement
- 煤矿 Coal mine
- 采石 Quarrying
- 铁矿 Iron mine

非爆破行业 Non-blasting Industry

- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 房地产 Real estate
- 边坡治理 Slope treatment



D460A 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA D470C/470D

产品特点/Product Features

■ 本型特点:最长7米钻杆的选择,让产品更加高效,具有超过10年的市场应用验证,对标国际一流品牌,广受用户好评。

■ Features: The choice of up to 7-meter drill pipe greatly enhance the drilling efficiency. Benchmarking against world-class brands, ZEGA D470C/470D has over 10-year market application and has been highly praised by users.



全系列产品特点 08

Features of the entire product series.NO.08



特有的高效干式集尘系统,超大过滤面积;更有成熟的湿式除尘技术选择;干湿混合集尘技术解决了钻机开孔阶段的扬尘,符合最高等级的环保要求。

The special-designed efficient dry type dust collection system has a large filtration area; Equipped with an optional mature wet type dust collection system; A combination of dry and wet types dust collection system solves the problem of flying dust during hole collaring, meeting the highest level of environmental protection requirements.

技术规格/Technical Specifications

发动机 Engine			螺杆空压机 Screw Compressor	
品牌 Manufacturer	卡特彼勒 Caterpillar (D470C)	康明斯 Cummins (D470D)	康明斯 Cummins (D470D)	品牌 Manufacturer ZEGA
型号 Model	C11	QSM11	L9CS4-430C	型号 Model ZGDA 184III
排放标准 Emission standards	国III China III		国IV China IV	工作风压 Air working pressure 24 bar
额定功率 Rated power	287kW(385hp)1,800rpm	306kW(415hp)1,800rpm	316kW(430hp)1,900rpm	排风量 Air flow FAD 21 m ³ / min
钻臂和推进梁 Boom & Feed			重量及尺寸 Weight & Dimensions	
(")"内为油缸+钢丝绳参数 The data inside "()" are parameters of drill rigs with "Hydraulic cylinder +Rope".)				
推进方式 Feed type:	马达+链条 Hydraulic motor + Chain (油缸+钢丝绳 Hydraulic cylinder +Rope)			长度 Length 11,560 mm
推进器总长度 Feed length	10,500 (10,000) mm	最大推进力 Feed force max.	40 (34.5) kN	宽度 Width 2,700 mm
推进补偿 Feed extension	1,300 mm	最大推进速度 Feed rate max.	0.9 (0.88) m/s	高度 Height 3,560 mm
推进行程 Feed travel length	6,600 mm	最大拉拔力 Pull up force max.	50 (67.6) kN	重量 Weight (不含选配件 w/o option) 23,500 kg
功能参数 Functional Specifications			底盘 Chassis	
储杆仓储杆数 Drill pipe handling capacity: 4+1			最大行走速度 Trammng speed.Max	3.0 km/h
孔径范围 Hole range	Φ138 - 165 mm	冲击器 DTH hammer	5" / 6"	最大爬坡能力 Max Gradeability 25°
钻杆直径 Drill pipe diameter	Φ114 / 102 mm	回转扭矩 Rotation torque	5,600 Nm	离地间隙 Carrier ground clearance 420 mm
钻杆长度 Drill pipe length	6,000 / 5,000 / 7,000 mm	回转速度 Rotation rpm	0-80 rpm	履带架摆动 Track frame oscillation angle ±10°
最大孔深 Hole depth.Max	35 m	燃油箱容量 Fuel tank capacity	750 L	最大驱动力 Traction force.Max 156.2 kN

适用工况/Working conditions

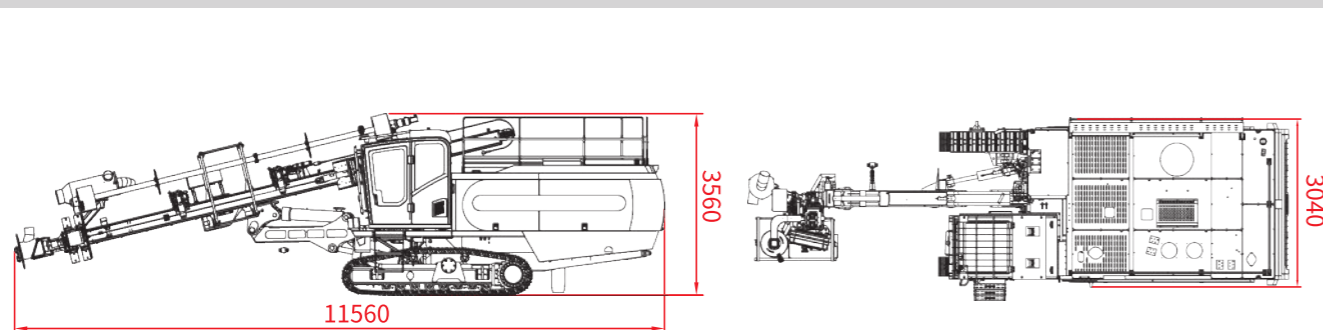


工程建设 Construction

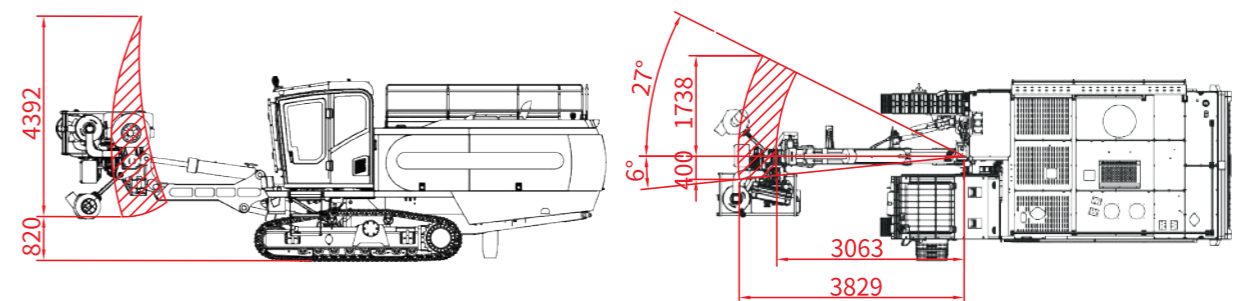
绿色矿山 Green Mining

非爆破行业 Non-blasting Industry

- 公路 Highway
- 水电 Hydropower
- 水泥 Cement
- 煤矿 Coal mine
- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 机场 Airport
- 码头 Wharf
- 采石 Quarrying
- 铁矿 Iron mine
- 房地产 Real estate
- 边坡治理 Slope treatment



D470C/D470D 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA D480A

产品特点/Product Features

■ 本型特点:大功率动力总成产出的强劲动力,使钻机最大在 $\phi 203\text{mm}$ 孔径内成功应用,同时能保证产品的稳定可靠性,获众多用户大量采购。

■ Features: ZEGA D480A's powerful powerpack makes it successfully applied in the maximum blasthole diameter of $\phi 203\text{mm}$, and its drilling operation is smooth and reliable, which has been recognized by many users in global open-pit mines and quarries, and purchased in large quantities.



全系列产品特点 09

Features of the entire product series. NO.09



电液操作系统,调整操作极为方便;智能多控制器及CAN通讯的应用可实时监控钻机运行状态;

全方位自动保护和保养提示功能。

Electro-hydraulic operating system, which is very convenient for adjustment and operation; The adoption of intelligent multi-function controller and CAN communication realizes real-time monitoring of drilling operating conditions; All-round automatic protection and maintenance reminder function.

技术规格/Technical Specifications

发动机 Engine			螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	品牌 Manufacturer	ZEGA	
型号 Model	QSZ13	M14CS4IV41C	型号 Model	ZGDA 184III	
排放标准 Emission standards	国III China III	国IV China IV	工作风压 Air working pressure	25 bar	
额定功率 Rated power	410kW(552hp)1,900rpm	412kW(552hp)2,100rpm	排风量 Air flow FAD	33 m ³ / min	
钻臂和推进梁 Boom & Feed			重量及尺寸 Weight & Dimensions		
推进方式 Feed type: 马达+链条 Hydraulic motor + Chain (油缸+钢丝绳 Hydraulic cylinder +Rope)			长度 Length	12,560 mm	
推进器总长度 Feed length	11,500 (11,000) mm	最大推进力 Feed force max.	40 (34.5) kN	宽度 Width	2,700 mm
推进补偿 Feed extension	1,300 mm	最大推进速度 Feed rate max.	0.9 (0.88) m/s	高度 Height	3,560 mm
推进行程 Feed travel length	7,600 mm	最大拉拔力 Pull up force max.	50 (67.6) kN	重量 Weight (不含选配件 w/o option)	25,000 kg
功能参数 Functional Specifications			底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity: 4+1			最大行走速度 Trammng speed.Max	3.0 km/h	
孔径范围 Hole range	$\phi 138 - 203$ mm	冲击器 DTH hammer	6" / 7"	最大爬坡能力 Max Gradeability	25°
钻杆直径 Drill pipe diameter	$\phi 114 / 102 / 127$ mm	回转扭矩 Rotation torque	5,600 Nm	离地间隙 Carrier ground clearance	420 mm
钻杆长度 Drill pipe length	7,000 / 6,000 mm	回转速度 Rotation rpm	0-80 rpm	履带架摆动 Track frame oscillation angle	$\pm 10^\circ$
最大孔深 Hole depth.Max	35 m	燃油箱容量 Fuel tank capacity	1000 L	最大驱动力 Traction force.Max	156.2 kN

适用工况/Working conditions



工程建设 Construction



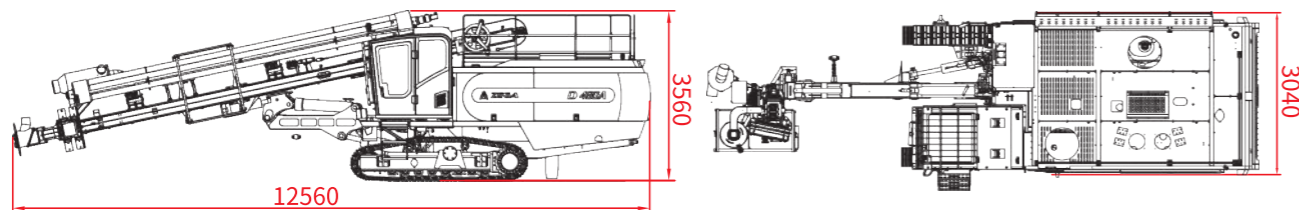
绿色矿山 Green Mining



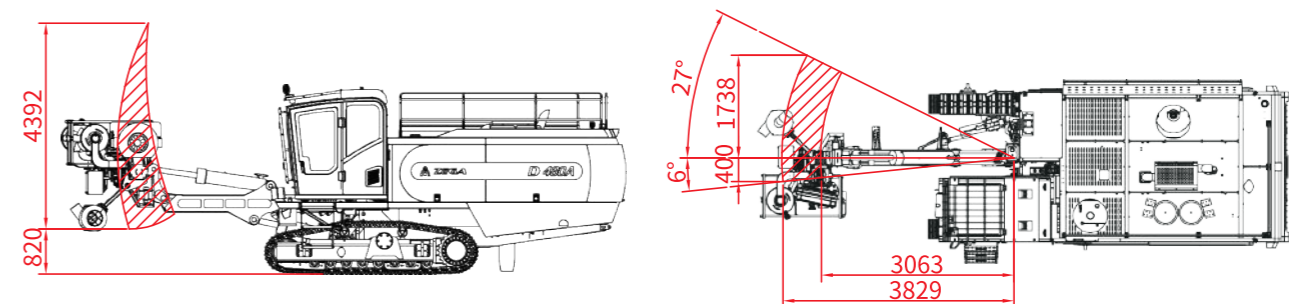
非爆破行业 Non-blasting Industry



- 公路 Highway
- 水电 Hydropower
- 水泥 Cement
- 煤矿 Coal mine
- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 机场 Airport
- 码头 Wharf
- 采石 Quarrying
- 铁矿 Iron mine
- 房地产 Real estate
- 边坡治理 Slope treatment



D480A 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA D480RC 反循环勘探钻机

ZEGA D480RC Reverse-Circulation Sampling Drill Rig

产品特点/Product Features

■ 本型特点:反循环钻探是一种经济高效的勘探方式,通过提取高品质的矿石样本,有效规划采矿和采石作业。反循环钻探不仅避免了交叉污染,而且能在短时间内采集到大量样本,进行深入分析后可快速得出与矿床相关的可靠信息,有助于选择适当的钻探和爆破位置,在更大程度上提高了矿石回收率和每吨收益率,并能减小对环境的影响。

■ Features: Reverse Circulation Sampling Exploration is a cost-effective approach to geological exploration that enables efficient planning of mining and quarrying operations through high-quality sampling. Reverse circulation drilling not only avoids or reduces dilution caused by ore and waste rock mixing, but also provides a large number of samples in a short period of time, and in-depth analysis can quickly derive reliable geological information related to the deposit, which helps to select appropriate drilling and blasting boundaries, maximizes ore recovery and yield per ton, and reduces environmental impact.

■ RC支座为多角度钻架,可满足各种复杂工况;The RC frame is a multi-angle drill stand, which can meet various complex working conditions;

■ 独立遥控控制系统,可远距离对反循环装置进行精确控制,使操作人员远离粉尘、碎屑及其他危险。The independent remote control system can accurately control the reverse circulation device from a distance, so that the operator can keep away from dust, debris and other hazards.



全系列产品特点 10

Features of the entire product series. NO.10



系列产品根据用户需要,可增加高海拔、高温、高寒、自动润滑、自动灭火、后支腿等功能配置。

To meet customer demands, the series products are designed with various options: high altitude, high ambient temperature, extremely cold areas, automatic lubrication system, automatic fire extinguishing system, hydraulic rear support leg and other functions.

技术规格/Technical Specifications

发动机 Engine		螺杆空压机 Screw Compressor		
品牌 Manufacturer	康明斯 Cummins	康明斯 Cummins	品牌 Manufacturer	ZEGA
型号 Model	QSZ13	M14CS4IV41C	型号 Model	ZGDA 184III
排放标准 Emission standards	国III China III	国IV China IV	工作风压 Air working pressure	25 bar
额定功率 Rated power	410kW(552hp)1,900rpm	412kW(552hp)2,100rpm	排风量 Air flow FAD	33 m ³ / min
钻臂和推进梁 Boom & Feed		重量及尺寸 Weight & Dimensions		
推进方式 Feed type: 马达+链条 Hydraulic motor + Chain (油缸+钢丝绳 Hydraulic cylinder +Rope)		长度 Length	13,200 mm	
推进器总长度 Feed length	11,500 (11,000) mm	宽度 Width	3,000 mm	
推进补偿 Feed extension	1,300 mm	高度 Height	3,610 mm	
推进行程 Feed travel length	7,600 mm	重量 Weight (不含选配件 w/o option)	27,000 kg	
功能参数 Functional Specifications		底盘 Chassis		
储杆仓储杆数 Drill pipe handling capacity: 6+1		最大行走速度 Trammig speed.Max	3.0 km/h	
孔径范围 Hole range	Φ120 - 150 mm	最大爬坡能力 Max Gradeability	25°	
钻杆直径 Drill pipe diameter	Φ102 mm	离地间隙 Carrier ground clearance	420 mm	
钻杆长度 Drill pipe length	6,000 mm	履带架摆动 Track frame oscillation angle	±10°	
最大孔深 Hole depth.Max	42 m	最大驱动力 Traction force.Max	156.2 kN	

适用工况/Working conditions

反循环钻进是初始勘探、矿体开发和品位控制的首选方法。广泛应用于露天矿品位控制、分散性矿体的勘探(如金矿)、大孔径的取样(如金刚石)等。

Reverse circulation sampling is preferred for initial exploration, orebody development and grade control. It is widely used in open-pit ore grade control, exploration of dispersed ore bodies (such as gold mines), sampling of large drilling holes (such as diamond mines), etc

工程建设 Construction

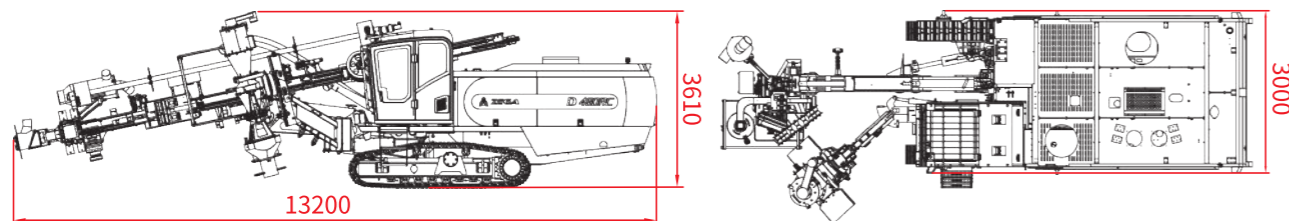
- 公路 Highway
- 机场 Airport
- 水电 Hydropower
- 码头 Wharf

绿色矿山 Green Mining

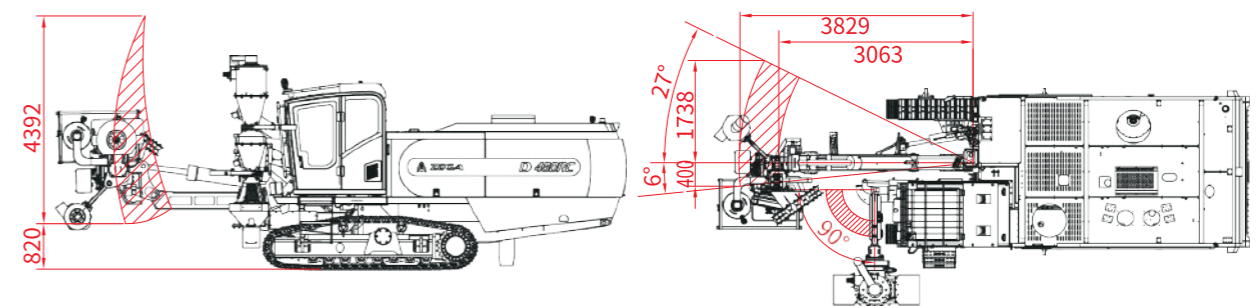
- 水泥 Cement
- 采石 Quarrying
- 煤矿 Coal mine
- 铁矿 Iron mine

非爆破行业 Non-blasting Industry

- 光伏 Photovoltaic
- 房地产 Real estate
- 水井地热 Well geothermal
- 边坡治理 Slope treatment



D480RC 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA D490A

产品特点/Product Features

■ 本型特点: 双臂双梁及38吨的机重, 大功率发动机和9m钻杆配置, 使得本机具备凿岩孔径超过 $\phi 200\text{mm}$ 的特点, 对标塔式钻机, 具有良好的灵活优势, 钻臂上端配有钻具起吊液压绞盘。

■ Powerful Structure and High Performance: with a unique double-boom and dual-feed beam design and the overall weight of 38 tons, a high-power engine and 9m long drill pipe configuration, the ZEGA D490A has the ability to drill holes with a diameter of more than $\phi 200\text{mm}$, which has a good flexibility advantage compared to tower drilling rigs, and a jib boom and hydraulic winch are installed on the top of the feed beam for safe handling of drilling tools.



全系列产品特点 11

Features of the entire product series.NO.11



多款机型具备近程遥控作业功能选项, 消除陡坡生产时人员的安全隐患, 同时满足区域法律要求, 更有摄像监控和车身照明等人性化设计。

Many models offer the option of remote control within line-of-sight distance, eliminating safety hazards when drilling on steep slopes or loading and unloading trailers, meeting the requirements of certain regional regulations, and providing user-friendly designs such as camera monitoring and rig body lighting.

技术规格/Technical Specifications

发动机 Engine				螺杆空压机 Screw Compressor	
品牌 Manufacturer	康明斯 Cummins			品牌 Manufacturer	ZEGA
型号 Model	QSM15-77C			型号 Model	ZGDA 184III
排放标准 Emission standards	国III China III			工作风压 Air working pressure	25 bar
额定功率 Rated power	563kW(765hp)2,000rpm			排风量 Air flow FAD	38 m ³ / min
钻臂和推进梁 Boom & Feed				重量及尺寸 Weight & Dimensions	
推进方式 Feed type: 马达+链条 Hydraulic motor + Chain				长度 Length	14,400 mm
推进器总长度 Feed length	14,400 mm	最大推进力 Feed force max.	75 kN	宽度 Width	3,254 mm
推进补偿 Feed extension	1,300 mm	最大推进速度 Feed rate max.	0.83 m/s	高度 Height	3,724 mm
推进行程 Feed travel length	9,674 mm	最大拉拔力 Pull up force max.	75 kN	重量 Weight (不含选配件 w/o option)	38,940 kg
功能参数 Functional Specifications				底盘 Chassis	
储杆仓储杆数 Drill pipe handling capacity: 2+1				最大行走速度 Tramping speed.Max	2.5 km/h
孔径范围 Hole range	$\phi 190 - 220 \text{ mm}$	冲击器 DTH hammer	8" / 7"	最大爬坡能力 Max Gradeability	25°
钻杆直径 Drill pipe diameter	$\phi 140 / 127 \text{ mm}$	回转扭矩 Rotation torque	6,500 Nm	离地间隙 Carrier ground clearance	470 mm
钻杆长度 Drill pipe length	9,000 mm	回转速度 Rotation rpm	0-70 rpm	履带架摆动 Track frame oscillation angle	$\pm 8^\circ$
最大孔深 Hole depth.Max	27 m	燃油箱容量 Fuel tank capacity	1300 L	最大驱动力 Traction force.Max	220 kN

适用工况/Working conditions



工程建筑 Construction

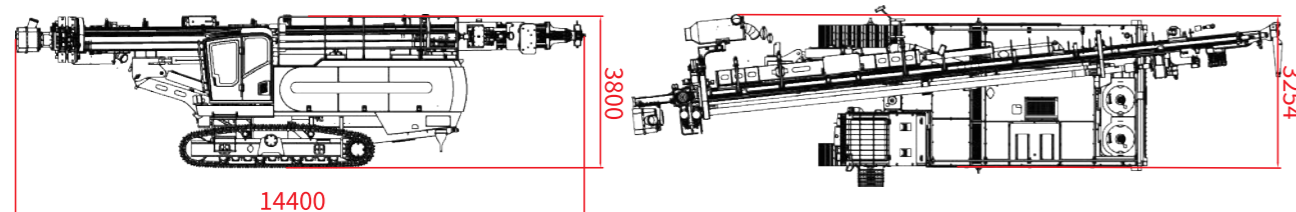
- 公路 Highway
- 铁路 Railway
- 机场 Airport
- 码头 Wharf

绿色矿山 Green Mining

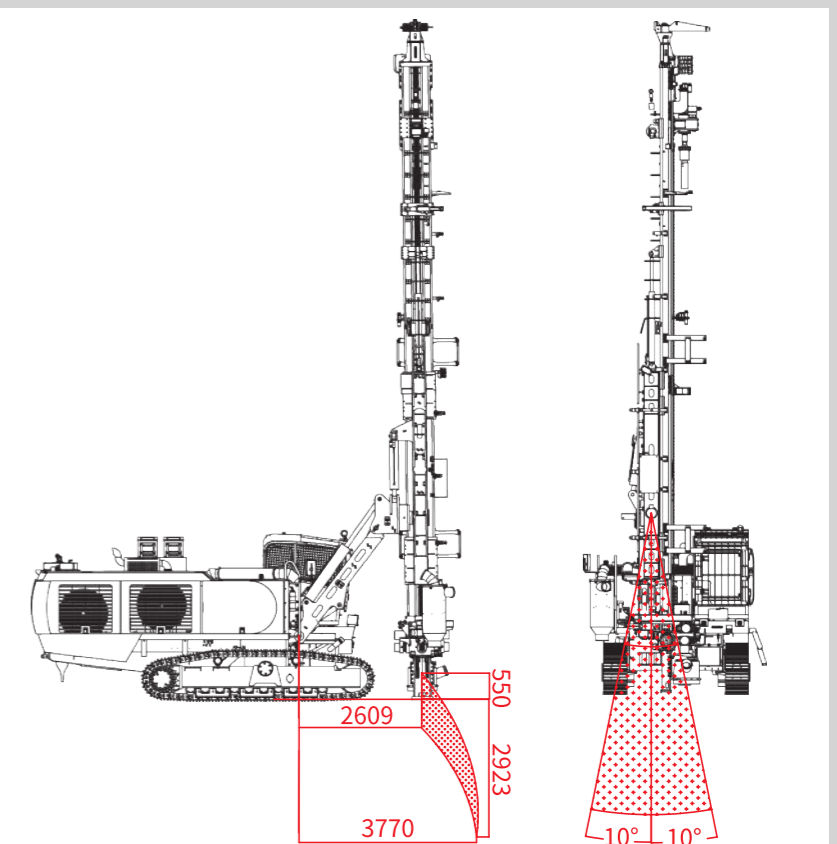
- 水泥 Cement
- 煤矿 Coal mine
- 采石 Quarrying
- 铁矿 Iron mine
- 大型露天矿 big scale surface mine

非爆破行业 Non-blasting Industry

- 光伏 Photovoltaic
- 水井地热 Well geothermal
- 房地产 Real estate
- 边坡治理 Slope treatment



D490A 运输尺寸 Transport dimensions



钻臂作业覆盖范围 Drilling Coverage Area

ZEGA R8100H/R8100L

产品特点/Product Features

■ 本型特点: ZEGA R8100系列钻机设计采用牙轮/潜孔两种钻进方式, 满足直径Φ149-270 mm孔径的钻孔需求, 并配置10.7米钻杆, 最大孔穿孔深度至62.5米。

■ ZEGA R8100 series drilling rigs are designed with two drilling methods: rotary and down-the-hole hammer, to meet the drilling requirements of Φ149-270 mm diameter, and are equipped with 10.7 meters long drill pipe with a maximum hole depth of 62.5 meters.



牙轮钻机标配先进功能

Rotary Drill rig configured advanced functions as below

- 推进器定位和行走回落位置检测互锁功能
 - 4方位视频影像显示
 - 自动反吹空滤
 - 支腿位置报警功能
 - 车身水平角度显示和行走超范围报警提示
 - 推进器打孔角度显示+未回落行走报警提示
 - 环境温度检测和显示
 - 风速检测和报警
 - 自动润滑
 - 风防卡系统
 - 孔深测量和显示控制
- Drill mast positioning and tramping and lowering position detection interlock functions
 - 4-zone split-screen video display
 - Automatic compressed air back-flush cleaning air filter
 - Leveling jack position indication and alarm
 - Rig body Inclination angle display and tramping out-of-range alarm/prompt
 - Drill mast drill angle display + when not lowered tramping alarm/prompt
 - Ambient temperature detection and alarm
 - Wind speed detection and alarm
 - Automatic lubrication
 - Pneumatic anti-jam system
 - Hole depth measurement and display control

技术规格/Technical Specifications

发动机 Engine		类型 Type		潜孔(R8100H)	牙轮(R8100L)	
品牌 Manufacturer	康明斯 Cummins 卡特彼勒 CAT	螺杆空压机 Screw Compressor	品牌 Manufacturer	ZEGA	ZEGA	
型号 Model	QSK19-C800 CATC 18		型号 Model	ZGDA 225 III	ZGDA 225 III	
排放标准 Emission standards	国III China III 国III China III		工作压力 Air working pressure	24 bar	8 bar	
额定功率 Rated power	597kW(800hp)1,800rpm 571kW(770hp)2,100rpm		排风量 Air flow FAD	43 m ³ / min	54 m ³ / min	
功能参数 Functional Specifications						
储杆仓储杆数 Drill pipe handling capacity:	5+1		钻臂和推进梁 Boom & Feed	推进方式 Feed type: 油缸+钢丝绳 Hydraulic cylinder +Rope		
孔径范围 Hole range	Φ149 - 270 mm			推进器总长度 Feed length	14,672 mm	14,672 mm
钻杆直径 Drill pipe diameter	Φ178 / 159 / 140 mm			推进行程 Feed travel length	1,2059 mm	1,2059 mm
钻杆长度 Drill pipe length	10,700 mm			最大推进力 Feed force max.	270 kN	340 kN
最大孔深 Hole depth.Max	62.5 m		最大推进速度 Feed rate max.	0.81 m/s	0.81 m/s	
冲击器 DTH hammer	10"		最大拉拔力 Pull up force max.	93.8 kN	125 kN	
回转扭矩 Rotation torque	11,800 Nm		重量及尺寸 Weight & Dimensions			
回转速度 Rotation rpm	0-160 rpm		长度 Length	15,600 mm		
燃油箱容量 Fuel tank capacity	2,700 L		宽度 Width	5,443 mm		
			高度 Height	5,962 mm		
			重量 Weight (不含选配件 w/o option):	60,000 kg		
底盘 Chassis						
最大行走速度 Tramping speed.Max	2.0 km/h		履带架摆动 Track frame oscillation angle	两边各5°, 总计10°		
最大爬坡能力 Max Gradeability	20°		最大驱动力 Traction force.Max	156.2 kN		
离地间隙 Carrier ground clearance	326 mm					

适用工况/Working conditions



工程建筑 Construction

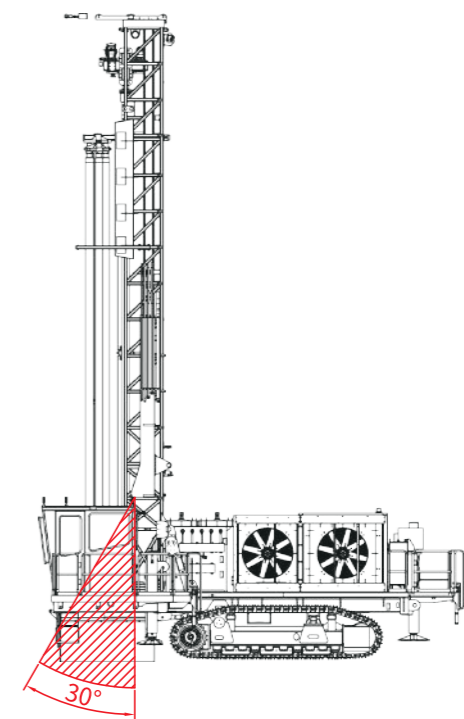
- 公路 Highway 铁路 Railway
- 机场 Airport 码头 Wharf

绿色矿山 Green Mining

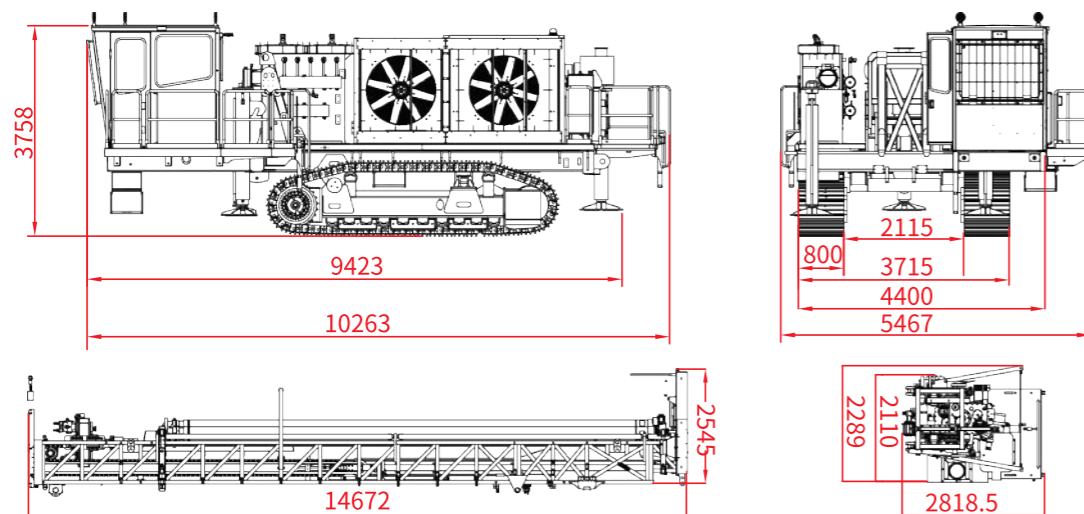
- 水泥 Cement 煤矿 Coal mine
- 采石 Quarrying 铁矿 Iron mine
- 大型露天矿 big scale surface mine

非爆破行业 Non-blasting Industry

- 光伏 Photovoltaic 水井地热 Well geothermal
- 房地产 Real estate 边坡治理 Slope treatment



钻臂作业覆盖范围 Drilling Coverage Area



R8100 运输尺寸 Transport dimensions

ZEGA露天一体钻机选配清单

Optional List of ZEGA Surface Integrated Drill Rig

“✓”代表 means “是 exist”

选选项 Optional	型号 Model	D535H	D535TA	D545H	D545T	T640	T645	D435	D440A	D450D	D460A	D470C	D470D	D480A	D480RC	D490A	R8100
A型浮动头 (≤3500N·m) A-type floating-sub		✓	✓	✓	✓	✓	✓	✓	✓	✓							
B型浮动头 (≥3500N·m) B-type floating-sub											✓	✓	✓	✓	✓	✓	✓
发动机缸套预热系统物料包 Engine water jacket preheating system kit		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
冷却系统低温配置物料包 Cooling system low temperature kit		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
油浴式空滤物料包 Oil-bath air filter package		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
反吹空滤物料包 Reverse-flow cleaning air filter kit		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
机身外壳顶部防护栏 Drill body top protection guardrail						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
孔深仪物料包 Hole depth measurement kit						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
干湿混合除尘系统物料包 Dry dust collection and water-mist dust removal combined kit						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
纯湿式除尘系统 Water-mist dust removal system		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
自动灭火系统 Automatic fire extinguishing system						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
近程遥控系统 Line-of-sight distance remote control system											✓	✓	✓	✓	✓	✓	✓
高原物料包 High altitude kit		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
驾驶室摄像头功能物料包 Cab video monitoring display and camera system kit						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
自动集中润滑系统 Automatic centralized lubrication system						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
液压后支腿 Hydraulic rear support leg						✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
车身区域警示灯 Drill body shape indicator light										✓	✓	✓	✓	✓	✓	✓	✓

我们为客户持续供应可靠的零配件 同时也致力于为用户提供一流的售后服务

We continue to provide customers with reliable spare parts, we also committed to providing first-class after-sales service.

- 我们的售后服务团队和代理商保持长期稳定的紧密合作, 打造志高掘进全球服务支持体系, 保障客户在产能持续增长的同时, 降低维修及保养成本。
- Our after-sales service team and agents maintain long-term and stable close cooperation, creating a global service support system for Zhigao Tunnelling, ensuring that customers can continuously increase production capacity while reducing repair and maintenance costs.

备件手册 SPARE PARTS MANUAL

- 所有产品均提供符合国际要求和客户定制需求的备件手册, 以及不同阶段的保养维护清单, 以确保用户采购的设备稳定运行。
- All products are supplied with spare parts manuals that meet international standards and are tailored to customers, as well as maintenance kits at different stages to ensure the smooth and reliable operation of the equipment.

正品零件 GENUINE PARTS

- 志高公司客户应使用正宗厂家配件和各种油品以确保机器寿命和使用性能, 并保证机器长期平稳运转;
- Customers should always use authentic or factory approved parts and oils to ensure the life and performance, and the long lasting smooth running of the machine;



钻车服务工作站 SERVICE STATION

- 我们可为用户提供钻车服务工作站, 该服务站运输便捷、配套完善, 让用户享受“矿山及工程设备维护维修、应急配件储备”等一站式服务。
- We can provide users with mobile service workstations, which are convenient in transportation and complete in supporting facilities, allowing users to enjoy one-stop services such as "maintenance and repair of mining and construction equipment, emergency parts reserve".



服务 SERVICE

“不仅在深度, 更在维度!”

Not only in depth, but also in dimensions

服务协议 SERVICE AGREEMENT

志高掘进有不同的协议供客户选择:

Different service plans for customers to choose from:

- a) 年度服务协议(ASC)
志高的服务人员将按照服务计划, 定期拜访用户, 作检测和服务。
- b) 全程服务和保养协议(FMC)
志高的服务人员将按照固定的保养服务小时, 及时拜访用户, 作检测和服务。
- c) 现场服务合同(SSC)
志高的专业服务工程师将在现场长期跟踪服务, 客户还可以按照实际需求挑选服务方案和时间周期。

- a) Annual Service Agreement (ASC)
Zhigao service engineers will visit the users regularly for routine check and service according to the service plan.
- b) Full Service and Maintenance Agreement (FMC)
Zhigao service engineers will visit the users regularly for inspection and service according to the maintenance service hours.
- c) Site Service Contract (SSC)
Zhigao professional service engineers will provide service on site for a long period of time, and customers can also select service plans and time periods according to actual needs.

质保服务 QUALITY ASSURANCE SERVICES

我们提供符合国际行业标准的质保服务;

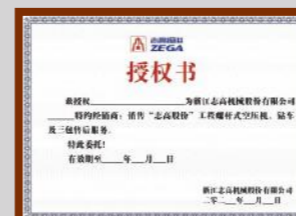
We provide quality assurance services that meet international industry standards;

同时, 我们正谋求开展高于行业标准的“质保期延长”计划: 树立行业标杆, 提升品牌实力!

At the same time, we are seeking to carry out a "warranty period extension" plan that exceeds industry standards: establish industry benchmarks, and enhance brand strength!

品牌授权 licensing

我们给予具备客户服务能力且满足考核条件的代理商正式授权, 并颁发授权证书。
We grant authorization to eligible agents and issue corresponding authorization letters and certificates.



Parts Accessories & Services

配件与服务