

液压静力压桩机

Hydraulic Static Pile Driver





MODESTY,
SINCERITY AND
TO BE EXCELLENT

谦卑诚信、追求卓越





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ABOUT T-WORKS 关于天为



公司简介

Company Profile

长沙天为工程机械制造有限公司，创立于2005年，是一家专业研发、生产制造和销售液压静力压桩机、长螺旋钻机、圆盘造球机、液压打桩锤及其锤架等桩工机械的现代股份制民营企业。

天为机械一直广受国内外客户的欢迎，且作为桩机出口量居多的生产企业，其静力压桩机在多个国家连续保持较高的市场占有率，如新加坡、马来西亚、印度尼西亚、文莱、泰国、缅甸等等。

公司厂房面积超过22000m²，同时还有一大批先进技术人员和数控加工设备，加快推行了精益生产和6S管理，全球营销和售后服务网络也日渐完善。现在从设计、制造、销售和服务等各个环节，均可实现按需定制，菜单式生产以满足用户需求。公司主要负责人均来自国有企业、大型民营企业 and

外资企业，他们拥有严谨认真的思维，积累了十多年的桩工机械生产经验，并持续改进，不断创新，始终致力于打造中国桩工机械行业性价比高的品牌，产品已通过ISO9001:2000质量管理体系认证。





Changsha Tianwei Engineering Machinery Manufacturing Co, Ltd is a modern joint-stock private enterprise found in 2005, it is specialized in R&D and Manufacturing series of Hydraulic Static Pile Driver and other Piling machinery such as Bored Pile Drilling Rig, and Hydraulic Pile Hammer & Piling Frame, piling load testing machine etc.

As a large exporter for Hydraulic Static Pile Drivers in China, T-WORKS is well-known in domestic and abroad, and also holds big market share in Singapore, Malaysia, Indonesia, Myanmar, Ukraine, Thailand, Brunei, Vietnam, the Philippines, etc.

Bigger than 22000㎡ of workshop was put into

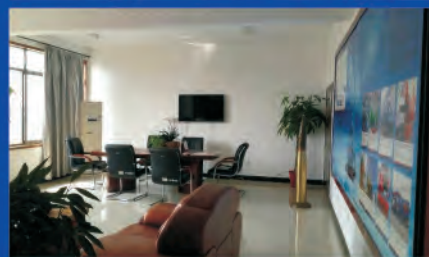
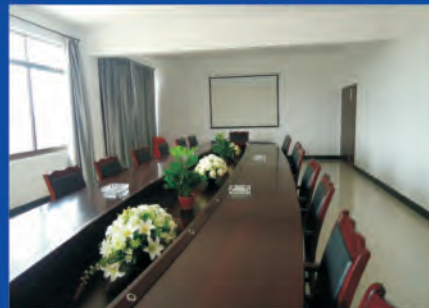
operation, Tianwei also has a group that are advanced engineers and CNC machines, Lean Production, 6S Management, as well as Global Marketing & After Sales Service. Nowadays we can meet different requirements of different construction worksites from design, manufacture, sale and service.

The leaders of Tianwei are from state-owned enterprises, large private enterprises and foreign enterprises, they have accumulated more than 10 years of rich experience in piling machinery works. Tianwei engineers have made continuous developments and innovations. Tianwei has got certification of ISO9001:2000.

企业文化

Corporate culture

- 公司秉承“谦卑、诚信、追求卓越”的企业精神和经营理念，愿服务于广大客户，成为客户的忠实朋友
- 不能只满足于提供质量可靠的产品，而且随时向客户提供优质、高效的服务
- 客户的价值和需求通过我们专业人员的努力都能提供优质的解决方案
- 沟通、专业的技能和高度灵活性为宗旨满足于市场的不断发展
- Our company follows the motto “Modesty, Sincerity and to be Excellent” , we are willing to serve all our customers and be good friends of them.
- At any time we provide not only products of reliable quality but also excellent and efficient service.
- By any way our professionals will work hard to find a good technical solution to satisfy the needs of customers.
- At any where we have the facilities to keep in touch with our customers, technical know-how and flexibility in designing machines and doing business so as to keep up with the development of market.



精益制造

Lean manufacturing

先进的生产加工设备

Advanced processing equipments



T-WORKS owns advanced equipments for guarantee of product quality and an experienced process technic team as the solid backing of lean manufacturing .



HYDRAULIC STATIC PILE DRIVER

液压静力压桩机



产品概述

Brief Introduction

天为液压静力压桩机产品特点：无噪音，无污染，无振动，施工效率高（八小时可达500至1000米），成桩质量好，在打桩行业有广泛的应用。有从60吨到1260吨的不同选择，适合不同的条件下不同客户的各种需求。还能根据客户需要进行定制。

应用范围：静压机能打各种混凝土预制管桩，方桩，H型桩。

适用场地

- 1.黏土层、软土层、沙层。
- 2.有噪音限制的城市地区。
- 3.有振动限制的地区。如靠近旧建筑、有精密仪器的建筑、地铁、天桥等地区。

T-WORKS brand of Hydraulic Static Pile Driver, features with no noise, no vibration, no pollution, high piling efficiency & excellent quality(500~1000m per 8 hours),it has wide application in jacking in concrete spun pile, square plie, H pile, and other precast piles at the site of:

- 1.Clay, soft soil, sand layer, etc.
- 2.Noise regulated urban area.
- 3.Vibration regulated areas, such as near old buildings, precision instrument buildings, subway, overpass and so on. ZYC series of the HSPD ranges from 60 to 1260 tons that can suit different foundation conditions and customers; meanwhile, we can provide special design for customer' s requirement.



产品介绍

Product Introduction

公司可生产从60到1260吨近40种规格型号的ZYC系列液压静力压桩机，用户可在此范围内任意选择。或者根据用户的其它需求开发适合您的产品。

We are able to produce nearly 40 ZYC models of Static Pile Drivers from 60 tons to 1260 tons at the customers' own choice, or make a new model according to the customers' requirements.

每种吨位的桩机按有无边角桩机构可分为三种机型供您选择：

Each tonnage is classified into the following three models:

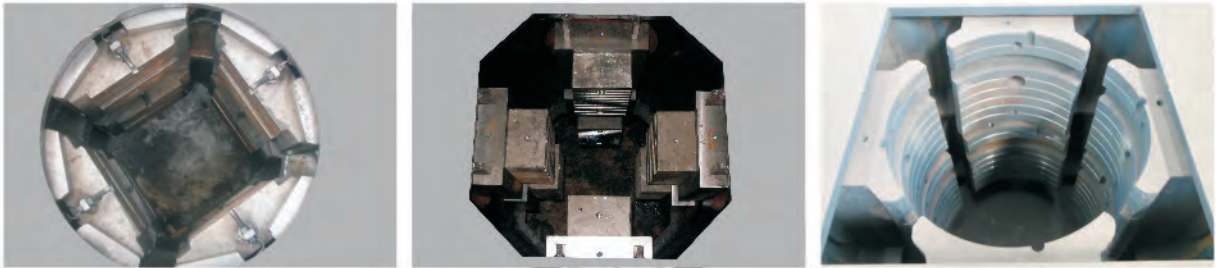
- ◆ 具有压边、角桩功能的机型。
- ◆ 不具有压边角桩功能的机型。
- ◆ 预留边角桩机构连接装置，以后可添加边角桩机构的机型。
- ◆ with the function of side piling and corner piling.
- ◆ without the function of side piling and corner piling.
- ◆ with a connecting system for adding side piling and/or corner piling mechanism if necessary.





每种型号的机型均可适合方桩、厚壁管桩、薄壁管桩、或者其它异型钢桩，只须更换不同的夹桩钳口。

Each model of pile drivers can work with a variety of piles, square piles, thick-walled round piles, thin-walled round piles or other shape of steel piles with different mechanism to hold piles.



三种不同的边桩型式也给客户提供了更多实用性，帮助客户解决众多实际问题：比如挂式边桩及插入式边桩均可近距离打边桩，且运输时可以拆卸，减小了运输重量及机身长度：

- ◆ 固定边桩 ◆ 挂式边桩 ◆ 插入式边桩

Three types of side piling mechanism give more practicality and availability for customers which also can solve many practical problems, for example: it is much close to the wall for side piling with attachable side piling mechanism or inserted side piling mechanism, and it can reduce the weight and length for main body during transportation:

- ◆ Fixed side piling mechanism
- ◆ Attachable side piling mechanism
- ◆ Inserted side piling mechanism



根据不同施工要求，天为静压桩机划分为以下几个系列

According to different construction requirements, T-WORKS hydraulic static pile driver is divided into the following series:

标准机型系列 T-WORKS standard configurations machine



主要特征为插入式支腿，固定边桩.

适用型号ZYC220-ZYC1260

Featured with fixed side piling mechanism and inserted supporting legs(Adopt models from ZYC220-ZYC1260)

紧凑机型系列 T-WORKS compact size machine

油缸收支腿或摆动支腿，转场快捷，无需拆卸支腿.

适用型号ZYC80-ZYC460

Featured with retracted or foldable supporting legs (Lifting legs can be retracted by telescopic cylinder automatically or folded to the platform, no extra disassemble work needed during machine's transportation between job-site. adopt models from ZYC80-ZYC460)



多边桩标准机型（3个边桩，适用于狭小施工空间，适用型号ZYC80-ZYC260）

Featured with multiple side piling mechanisms(Photo shows machine with 3 side piling mechanisms, special design for narrow construction spaces.Adopt models from ZYC80-ZYC260)

产品主要特点

Main Products Features



行走轨轮及钳口均采用锻件，大大提高使用寿命，质量保证远远超过铸钢件

All roller wheels and clamping jaws are forged which be more wear-resistant compared with casting steel.



夹桩箱导向轮采用偏心轮设计，可调整间隙，保证桩的垂直度

The guide wheel of the clamping box is designed with an eccentric wheel, which can adjust the gap to ensure the verticality of the pile.



倒置支腿油缸可使支腿油缸承受更大的径向力，大大提高油缸使用寿命

Inverted cylinders as a supporting leg which allow it to withstand greater radial forces and greatly increase cylinder



六个压桩油缸 Adopting Six piling cylinders

天为大吨位压桩机采用6个压桩油缸，利用差动液压技术，大幅提高了压桩速度，提升了桩机效率

T-WORKS large-tonnage machine adopts six piling cylinders, which will accelerate the construction speed and improve machine's efficiency.



吊机底下放配重设计使配重分配更加合理，达到压桩力最大化

The counterweight design under the crane makes the weight distribution more reasonable and maximizes the pile force.



吊机整体设计更加合理，主臂加长，强度更高

The overall design of the crane is more reasonable, with longer main boom and higher strength.

Easy to transport

精益求精 运输方便



◆ 拆装、运输、维修方便

本产品通过精益求精的设计、十几年的逐步改进，每一个零部件都充分考虑了其拆装、运输、维修的方便性。

例如本产品长短船连接和布置形式比其它厂家的桩机拆装、运输要方便的多，特别是伸缩腿设计专利可以给客户节约大量的运输及吊装成本。

例如主机驾驶室能够从中打开的设计，使桩机在运输时吊臂能从主机驾驶室穿过；边桩机构能够拆下等设计，使桩机的运输长度大大缩短，同时单件的运输重量大大减轻。

◆ Easy to disassemble, transport and repair

Since we have constantly improved our design of pile drivers for more than 10 years, every part of the machine is easy to be taken apart, which provides convenience in transportation and maintenance.

Take the driver's cab for example; it can be opened at the middle so that the lifting arm of the crane can pass through it during transportation. Besides, the side piling mechanism can be taken off so as to reduce the length of machine to be shipped and greatly reduce the weight of separated units in transportation.

Compared with the pile drivers made by other companies, ours are more convenient to be taken apart and shipped as the connection and lay out of the long boat and the short boat are different, especially the design for retractable legs as a important patent can save much cost during transportation and lifting cost for customers.



Flexibility in Designing

一机多能 人性设计



◆ 一机多能化

本系统产品把顶压、抱压很好地接合在一起，使之成为一种既可顶压又可抱压，或抱压、顶压可同时使用的一种多功能液压静力压桩机。

◆ Multi-function

Our products are multi-function static hydraulic pile drivers with embracing pile driving, top-pressing pile driving or both at the same time because they are well combined with each other.

本系列产品具备压边桩和角桩的能力，边、角桩压桩能力比其它的厂家大，可达到中桩的60%以上。

桩型适应广，不但适应方桩、管桩以及其它一些异型钢桩，并且不管是薄壁混凝土管桩还是厚壁混凝土管桩都能够适用。

◆ 系统化，特大型化

本公司先后开发了压桩能力从60吨到1260吨等14个型号，而且每个型号按功能的不同又可分为4种规格，最大吨位达到了1260吨。

◆ Systemization and Maximization

Our company has developed 14 models of pile drivers with the capacity of 60 tons to 1260 tons and each model is classified into 4 kinds according to its function with the maximum tonnage of 1260.

◆ 人性化设计

公司顺应着国际工程机械的发展潮流，加大技术含量，着力于人性化设计，使产品成为集机、电、液、电子为一体的高科技的载体。

比如应用户的要求，吊机加装力矩限位器、行程保护装置，压桩吨位数显装置等深受用户的喜爱。

◆ Flexibility in Designing

To keep up with the development in the engineering machinery of the world, we will integrate all useful high technologies from machine-building, electricity, hydromechanics and electronics into our products and meet different individual needs of our customers.

For example, we can, if any customer requires, install a position-controller for the crane, and a digital screen showing the tonnage of piling force, etc.

Our products have bigger capacity of side piling and corner piling than those of other companies, and the power of side or corner piling reaches 60% of the middle piling.

Our pile drivers can work with a variety of piles, square piles or round piles or other shape of steel piles, no matter thin-walled round concrete piles or thick-walled ones.



液压静力压桩主要技术参数

Main Technical Specifications of HSPD

参数 Parameter		型号 Model	ZYC 80	ZYC 100	ZYC 120	ZYC 150	ZYC 180
额定压桩力 Rated piling pressure(10KN)			80	100	120	150	180
压桩速度 Piling speed (m/min)	高速 Fast		4.5	6.5	6.5	6.3	1.5
	低速 Low		2.2	3.0	3.0	2.7	2.2
一次压桩行程 Piling Stroke(m)			1.6	1.6	1.6	1.6	1.5
一次行走距离 Pace(m)	纵向 Longitudinal		1.5	1.5	1.5	1.5	1.5
	横向 Horizontal		0.4	0.4	0.4	0.4	0.4
行走转动角度 Steering angle(°)			15	15	15	15	15
升降行程 Rise stroke(m)			1.25	1.45	1.45	1.45	1.45
适应最大方桩 Max square pile(mm)			300	350	350	400	400
适应最大圆桩 Max round pile(mm)			300	400	400	400	400
边桩距离 Side piling space(m)			0.4	0.4	0.4	0.4	0.4
角桩距离 Corner piling space(m)			0.8	0.8	0.8	0.8	0.8
吊机起重量 Lifting crane(t)			5	8	8	8	8
吊桩长度 Max. Hoisting pile length(m)			9	12	12	12	12
功率 Power(KW)	压桩 Piling engine		18.5	37	37	37	60
	起重 Crane engine		11	22	22	22	22
主要尺寸 Main dimension (m)	工作长 Working length		5.4	6.7	9.1	9.45	9.45
	工作宽 Working width		3.9	4.2	4.7	4.7	4.7
	运输高 Transportation height		2.0	2.7	2.9	2.9	2.9
总重量 Total weight (t)			80	100	120	150	180

型号编制说明

Description of
Model Number

此表格型号所标注参数为我司标准机型配置，另可根据客户要求特殊定制，如伸缩支腿，插入式边桩，挂式边桩，预留边桩等

The parameters marked on this chart are presenting our standard model configuration, and can be customized according to customer requirements, such as telescopic legs, inserted side piling, attachable side piling, and reserved side piling space, etc.

多个专利技术

A PLURALITY
OF PATENT

倒置安装的支腿油缸设计，避免了油缸活塞杆的径向受力，使支腿油缸的使用寿命大大延长。

The design of inverted cylinder as a supporting leg which avoids the radial force on the piston extends the life-time Of the cylinder.

夹桩箱导向轮采用偏心轮设计，可以调整间隙，保证桩的垂直度,不易烂桩

The guide wheel of the clamping box is designed with an eccentric wheel, which can adjust the gap to ensure the verticality of the pile.

►注：所有参数作为参考值与实际值可能有所不同，本公司保留修改权，修改后不再另行通知。

Note: The below value is for reference only, Changsha Tianwei Engineering Machinery Manufacturing Co., Ltd reserves the right to make changes in the published specifications without prior notice.

ZYC	ZYC	ZYC	ZYC	ZYC	ZYC	ZYC	ZYC	ZYC	ZYC	ZYC	ZYC
80	220	260	300	360	460	600	680	860	960	1060	1260
80	220	260	300	360	460	600	680	860	960	1060	1260
1	8.7	7.2	7.2	7.8	9.0	7.9	9.0	9.0	9.8	8.0	7.4
7	2.3	1.8	1.8	1.8	2.4	1.9	1.9	1.4	1.6	1.5	1.3
9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
5	2.4	3.3	3.3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
4	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
5	15	15	15	11	11	11	11	11	11	11	11
45	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2
00	500	500	550	550	550	550	550	550	650	650	650
00	500	500	600	600	600	600	600	600	800	800	1000
4	0.5	0.5	0.9	1.25	1.25	1.4	1.4	1.6	1.6	1.7	1.8
8	1.0	1.0	1.8	2.5	2.5	2.8	2.8	3.2	3.2	3.4	3.6
8	8	12	12	16	20	20	25	25	25	35	35
2	12	14	14	15	16	16	17	17	17	18	18
0	60	60	60	74	111	111	111	148	148	164	180
2	22	30	30	30	30	30	37	37	37	37	37
45	9.9	11	12	12.7	13.0	14.1	14.7	15.0	16.0	16.9	17.0
8	5.6	6.0	6.2	7.2	7.5	8.12	8.3	8.6	8.8	9.3	9.9
9	3.0	3.0	3.1	3.15	3.25	3.3	3.3	3.35	3.35	3.4	3.4
80	220	260	300	360	460	600	680	860	960	1060	1260



CONSTRUCTION APPLICATIONS

施工应用



▲ ZYC360B-CB在荷兰施工
ZYC360B-CB working in Netherland



▲ ZYC240BD-B在乌克兰施工
ZYC240BD-B working in Ukraine



▲ ZYC800B-B在新加坡施工
ZYC800B-B working in Singapore



▲ ZYC460B-CB1在菲律宾施工
ZYC460B-CB1 working in Philippines



▲ ZYC800B-B在上海施工
ZYC800B-B working in Shanghai



▲ ZYC1060B-B1在广东施工
ZYC1060B-B1 working in Guangdong



▲ ZYC960B在山东施工
ZYC960B working in Shandong



▲ ZYC800B-B1 在安徽施工
ZYC800B-B1 working in Anhui



▲ ZYC960B在广西施工
ZYC960B working in Guangxi

CUSTOMER SERVICE

客户服务



量身定做 客户为本

Designing and manufacturing to the order of customers' interests first

- ◆ 一切为了客户
- ◆ 服务是天为产品的延伸和价值的体现，天为推行零距离服务策略，建立了24小时客户服务中心，快速反应、全面贴近市场
- ◆ Do everything we could for our customers
- ◆ Keeping in mind the principle that service is an indispensable part of our products and Embodiment of the value of them, Changsha Tianwei Engineering Machinery Manufacturing Co., Ltd has set up a 24-hour Service Center providing quick and good service on the site to Our customers to ensure the normal operation of our products.

服务承诺

Our Promise for Service

- ◆ 为用户培训操作、维护和施工人员
- ◆ 答复用户的各种咨询
- ◆ 履行产品质量责任，及时为用户提供安装、调试、维修等现场技术服务
- ◆ 接到故障通知及时派人排除故障
- ◆ 建立用户档案，跟踪产品使用情况，征求用户意见，寻求与用户之间的最佳配合
- ◆ To train operating, maintenance and construction people for our customers.
- ◆ Always be ready to answer technical questions concerned from our customers.
- ◆ Be responsible for the quality of our products and provide technical service of installing, making adjustment and testing and maintenance on the site in time.
- ◆ To send technicians to the worksite at short notice to solve problems or fix breakdowns.
- ◆ Keep a record of our customers and be informed of the working performance of our products and the feedback and suggestions of our customers so as to make a good Cooperation with them.

营销网点

SALES NETWORK

► 海外市场 Overseas

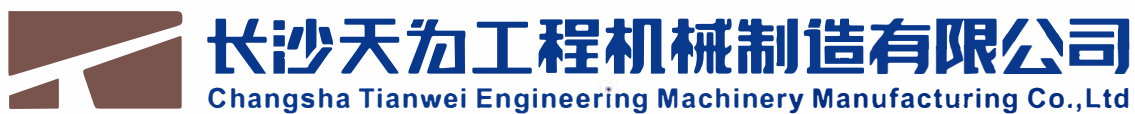
马来西亚 Malaysia 新加坡 Singapore
缅甸 Myanmar 印度尼西亚 Indonesia
乌克兰 Ukraine ...

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