

# TAIYE-380-TH Split type pneumatic drill rig 分体式空气凿岩钻机

Redefine the pneumatic drill rig  
重新定义空气凿岩钻机



**泰业钻机**  
Taiye Drilling Machinery



**TAIYE-380-TH** is TaiYe industry according: "Low cost, high efficiency development and manufacturing a high performance split type pneumatic drill.

TAIYE-380-TH 是泰业钻机根据钻孔行业“低成本，高效率”的行业需求，研发制造的一款高性能分体式空气动能钻机。

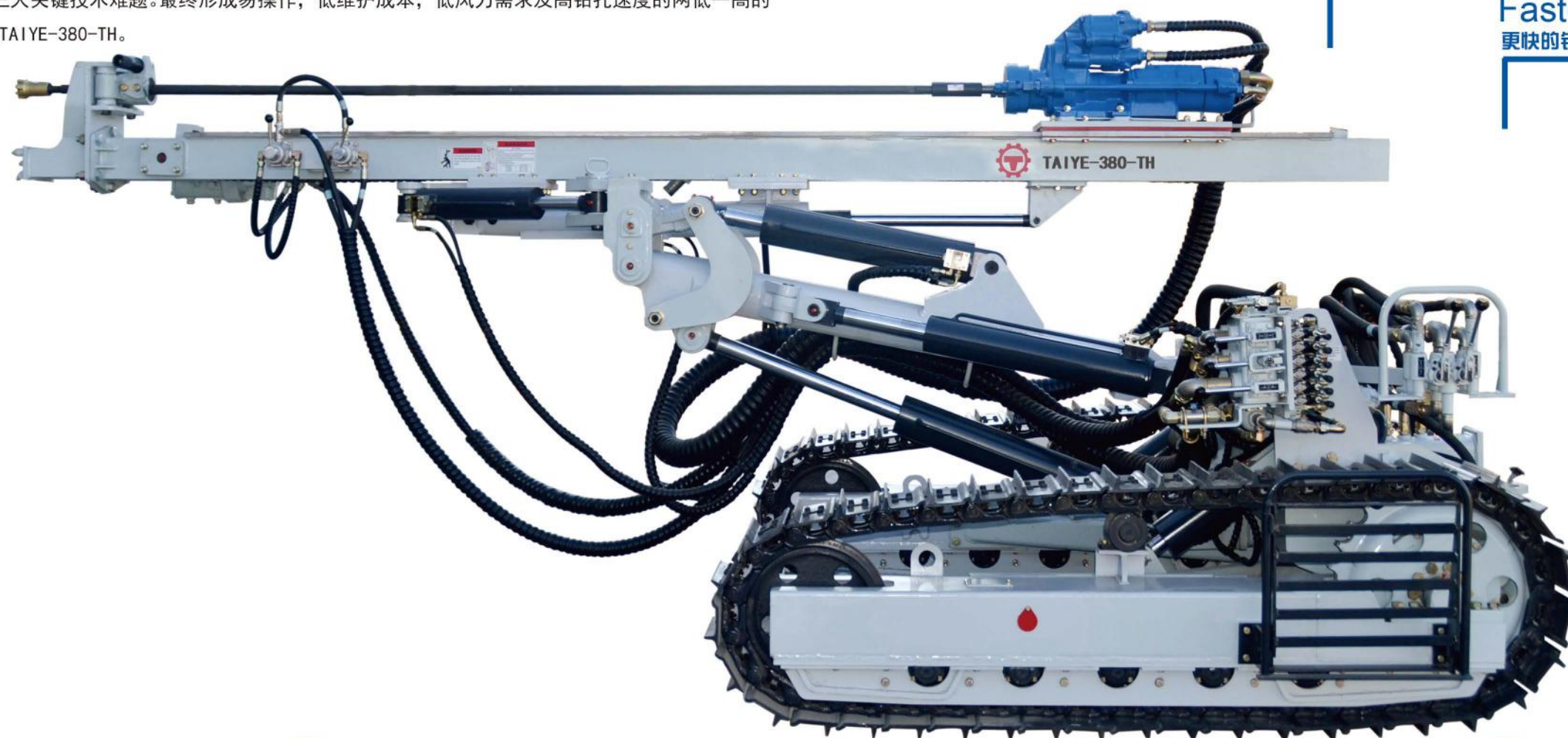
**TAIYE-380-TH** set the current small split type pneumatic drill it is the most advanced technology of D-T-H drill. A prototype by more than 3000 hours of damage type of experiment operation, experiment of four different geological environment, improved the more than 10 mechanical disadvantages. Finally solved "high failure rate, high air loss, high use cost" three key technical problems. Eventually form the easy operation, low maintenance cost, low wind demand and high drilling speed of TAIYE-380-TH.

TAIYE-380-TH 集合了当下分体式空气凿岩钻机的最尖端技术，原型机通过超3000小时的破坏式的操作实验，4种不同地质环境的现场实验，改进了近10余项机械缺陷。解决了分体式空气动能钻机以往的“高故障率，高风耗，高使用成本”三大关键技术难题。最终形成易操作，低维护成本，低风力需求及高钻孔速度的两低一高的分体式空气动能钻机TAIYE-380-TH。

Lower maintenance costs  
更低的维护成本

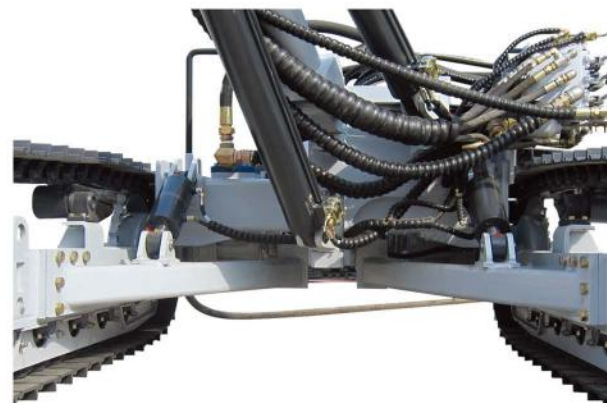
Smaller wind power demand  
更小的风力需求

Faster drilling speed  
更快的钻孔速度





## Powerful chassis 强劲底盘



The high-intensive running mechanism supplies the machine with power and durability. The driving wheel, leading wheel and the surface of track have been made specially anti-wear treatment. The driving is strong, well-adapted, Maintenance Free. The chassis can keep stable in the rough terrain when it is walking.

高强度的行走机构为整机提供了力量和耐久性，驱动轮、导向轮、支重轮及履带板表面都经过特殊耐磨处理，驱动强劲，适应性强，使设备在复杂地形中也能保持稳定的行走姿势。采取一次性机油润滑，免去使用中经常维护和保养的繁琐。

## Travelling mechanism Running creeper tread 行走机构与行走履带板



The one time/ two time walking gearbox adopts high quality steel and advanced heat treatment technics which is tough and wear-resisting. And it carry out to reduce noise by the way of exhausting and leading in body frame. The brake and walking valve connect the autobrake system. The moment we stop supplying power to walking motor, the machine is braking right now. The hand-pin type clutch of walking gearbox has been fixed position so that it is convenient to drag or walk on condition that the motor is not working. The creeper tread width is 310mm, it is the widest among the same other type, pedal design is scientific and reasonable, and it has a strong grip, keep the drilling more stable that achieved more lower ground pressure ratio.

行走减速箱各部件采用高合金钢及先进的热处理工艺，经久耐磨，使用排气引导的方法实施消音。行走阀联动的自动刹车系统，一旦停止给行走马达供气会瞬时刹车。行走减速箱上的手拨销式离合器经过定位，可使设备在无动力情况下转场拖移，节省设备吊装时间及费用。履带板的宽度为310mm，在不同的工况条件下可实现更高的接地比压。

## Carrier roller 托链轮

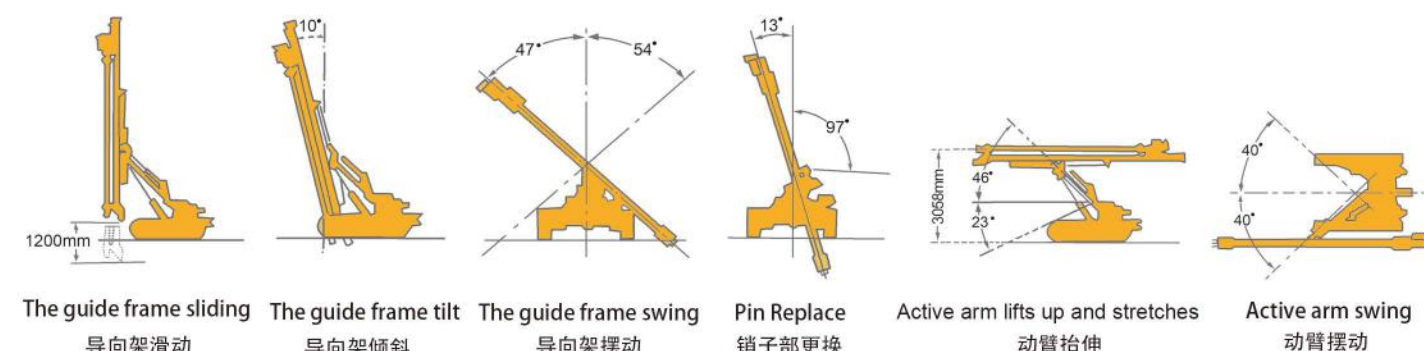


Carrier roller forged wheel body, the overall high strength, long service life. Induction-hardened rim even in harsh operating conditions nor crack is not broken. Unique sealing solution can ensure the best seal. Large spindle and sleeve design make it capable of carrying high-intensity operations overweight load.

托链轮采用锻造轮体，整体强度高，使用寿命长。经过感应淬火的轮缘即使在苛刻的作业条件下也不裂不碎。独特的密封方案可以保证最好的密封效果。大尺寸主轴和轴套设计使其在高强度运作中能够承载超重负荷。

## Active arm drilling schematic drawing

动臂钻孔工作示意图



## Swing arm mechanism 全新机械臂



It is the new construction for mechanical arm, parallelogram design principle, sturdy and durable, equipped with 5 coupling mechanism and hydrocylinder, expand the direction of drill hole and operating range. In additions, heavy construction lengthens sliding frame, manganese -steel sliding rail fitting with roller design slider can bear large torque, resist deformation, prolong the life of slider and sliding frame.

全新结构的机械臂机构，通过五个联接机构和液压油缸，扩大了钻孔方向和作业范围。加长滑架，锰钢滑轨与多组式滚轮设计滑板相配合，可承受大扭矩，抵抗变形，延长滑架的使用寿命。

## Pneumatic rock drill 气动凿岩机



The pneumatic rock drill which is imported from abroad adopts modern idea of the design technology of rock drill. Compared with the same type product structure, it is reasonable, the stability is stronger, the parts are durable. In additions, it has high drilling efficiency, the economic effect is better. The drilling quality, environmental influence, safety aspects has improved sinificantly.

气动凿岩机为国外原装进口，它采用了现代凿岩机的设计技术理念，与同类型产品比较结构合理，稳定性强，零件坚固耐用，打孔效率高，经济效果好，在钻孔质量、环境影响、安全性等方面也有显著提高。

## Feed mechanism 推进机构



Feed mechanism used piston pneumatic motor combined with aluminum alloy material of the reducer that make the worm gear and worm bite higher precision, lifting force up to 15000 N. Reducer light quality, heat dissipation faster, use persistent, out of shape not easily, and has the self-locking function that to ensure the safety of construction.

推进机构使用活塞式气动马达结合铝合金材质的减速箱体使蜗轮蜗杆咬合精度更高，提升力达到15000N。减速箱质量轻，散热快，使用持久不易变形，并具有自锁功能，确保施工的安全性。

## Walking balance system 行走平衡系统

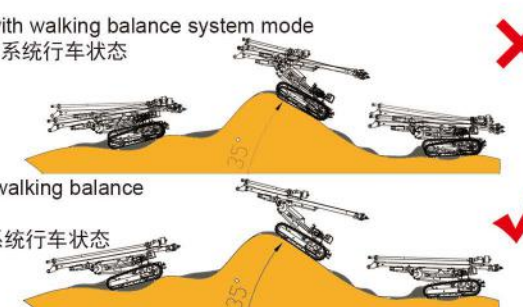
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The device adopts strong pneumatic motor. The vehicle frame equipped with high body clearance from the ground and car body oscillating system can make the crawler up and down in the range of 13°.

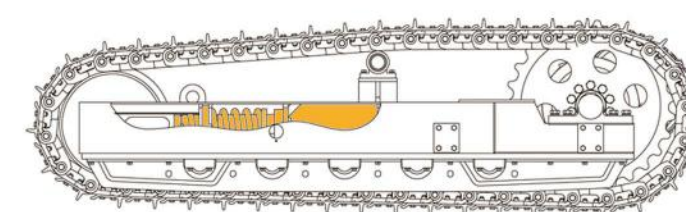
车架配备了高车体离地间隙和车体浮动系统，可使履带在13°范围内上下起伏。

Not equipped with walking balance system mode  
无配备行走平衡系统行车状态

Equipped with walking balance system mode  
配备行走平衡系统行车状态



apron wheel inside structure  
履带内部结构剖析图







### Operating valve assembly

全新的中控液压系统

According to the integrated console of ergonomic design, make the hydraulic actuator and drilling system together to optimize operability and working efficiency. The machine equipped with folding dismantling –pedal can meet operator's need.

根据人机工程学设计的集成式操控台，将液压执行机构，钻进系统等集中于一处以优化操作性和作业效率。机身装有可折叠的拆卸式操作踏板，满足单人操作的要求。



### Running operating valve 行走操作阀

Running operating valve adopt 90 ° swivel, in order to effectively avoid clamping pressure accident when air compressor machine is being towed. For safe operation , the rear of the body or the flank of the operator pedal is a right working place.

行走操作阀采用90° 旋转式，为避免牵引空压机时可能发生的夹压事故，可在机体后方或侧面的操作员踏板上进行安全操作。



### Atomized lubricator 油雾器

Increase the capacity of the atomized lubricator, the working efficiency is greatly improved.

加大容量的油雾器，使工作效率大大提高。



### Hydraulic hose 液压胶管

Layout and arrangement of hose is in order, mounted securely, and it is also equipped with hose protecting bush which is high wear resistance, aging resistance and corrosion resistance, it can be more effectively to prevent hose from damage.

油管分布排列整齐，安装牢固，另安装有高耐磨、抗老化、抗腐蚀性胶管护套，更能有效的对软管外表面进行保护。

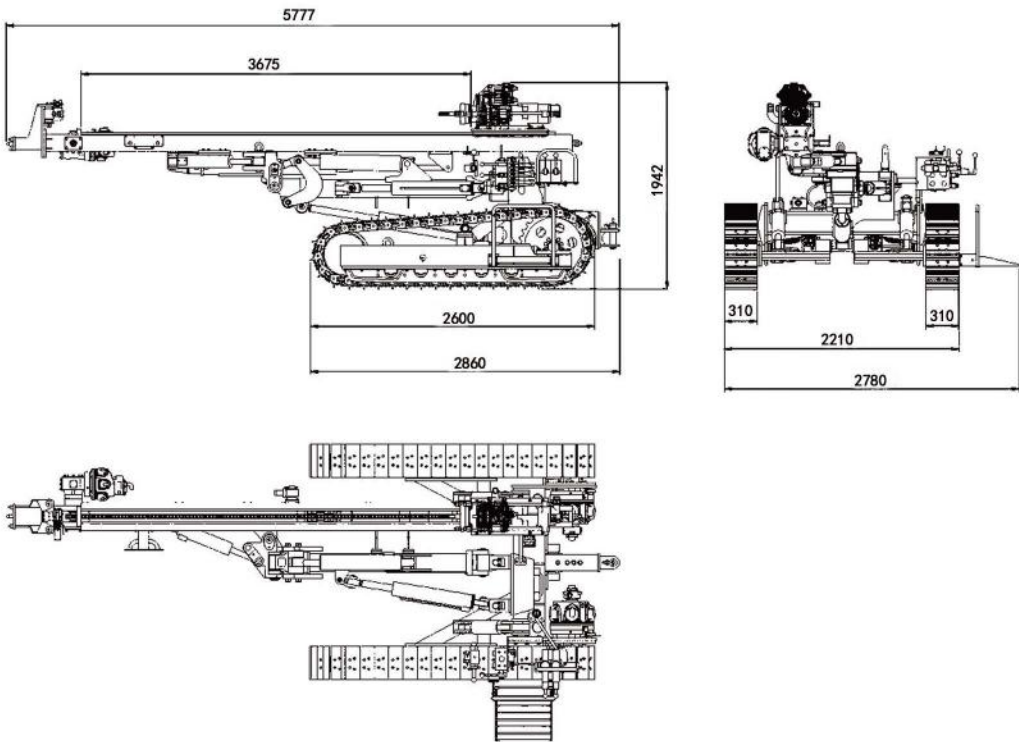


### Hydraulic pump station 液压泵站

The device chooses imported pump from Italy, flow uniform, run smoothly, working pressure and volume are high, can meet the pressure and flow of hydraulic system at high pressure. The imported hydraulic adjusting unit which adjust the pressure the device need can get best results when the device is working.

选用意大利进口油泵，流量均匀、运转平稳、工作压力高，进口的液压调节装置，调节设备所需压力，使设备在运行过程中达到最佳效果。

### Specification 设备规格



### Technical parameters 技术参数

型号		TAIYE-380-TH分体式空气凿岩钻机	
Whole dimension	5777 mm	Rotary torque	365N.m
全长		回转扭矩	
Whole width (including the pedal)	2360 mm	Feeding motor power	3.8 kW
全宽 (含操纵踏板)		进给马达功率	
Whole width (excluding the pedal)	2210 mm	Hydraulic pump pressure	14.7 MPa
全宽 (不含操纵踏板)		液压泵压力	
Whole height (drilling boom down)	1942 mm	Hydraulic tank capacity	Max. 55L
全高 (主臂降下姿势)		液压油箱容量	
whole length of sliding frame	Max. 5450 mm	Air consumption	16 / 0.55Mpa m3/min
滑架全长		空气消耗量	
Track shoe length	2600 mm	actual air volumes	Max. 1.0 MPa
履带全长		最大使用风压	
The length of track to ground	1885 mm	Air amount	15-25m3/min
履带接地全长		建议空气量	
Track shoe width	310 mm	Hose connecting to port	Rc 2 in.
履带宽		软管连接端口	
Minimum grade clearance	250 mm	Drilling X rod	T38, T45 X 3, 050mm/3660mm
最小离地间隙		杆直径 X 杆长	
weight	5400 kg	Interior lubricant	20L
质量		油雾器容量	
travelling speed	0~3.5 km/h	Length of drilling boom	1912 mm
行走速度		钻臂长度	
Travel motor power	8.8 kW x 2	Pushing length	3980 mm
行走马达功率		推进长度	
Grade ability	35°	Maximal pushing forward	11 kN
爬坡能力		最大推进力	
Swing angle	13°	Sliding frame swing	left左47°、right右54°
摆动角度		滑架摆动角度	
Impact energy	234J	Drilling boom pitching	up上46°、down下23°
冲击功		钻臂俯仰角度	
Shock frequency	1673/min	Drilling boom swing	left左40°、right右40°
冲击频率		钻臂摆动角度	
Rotating speed	0-380r/min		
回转速度			



## 服务文化

### One goal 一个目标

Let the customer more satisfied  
让客户更满意

### One purpose 一个宗旨

The customer is supreme,  
openness basing on sincerity  
客户至上，诚信为本

### One concept 一个理念

Achievement value, grow  
together with customers  
成就价值，与客户共同成长

### One strategy—项策略

To provide clients with  
professional, All-round  
one-stop integrated service  
为客户提供专业化，多方位的一站  
式整体服务

## 服务内容

Before sales service:

According to the five dimensions to consulting customer requirements, Taiye drill machine company makes major effective equipment purchase plan for the customer.

售前服务:

泰业钻机根据五大维度来咨询客户需求，为客户制作专业有效的设备购置方案。

After sales service:

Taiye drill machine company supplies free installation guide, onsite training ,start the machine and debugging service. Our company that set up after-sales service team and Technology department and spare parts warehouse department of high-speed information communication channels ensures solve user's problem in time ( Chinese only).

售后服务:

泰业钻机为用户提供免费的安装指导、现场技术培训、开机和调试服务。公司建立了售后服务团队与技术部，配件仓储部的高速信息沟通渠道，保障用户问题得到及时的解决（仅限中国）。

Taiye Sunshine Service  
泰业钻机阳光服务

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