



端面内胀坡口机

Transverse Internal Expanding Groove Machine

坡口机头可实现功能 Functions of beveled head



内胀式液压紧机构：高精度同心胀紧系统，胀紧力强劲，可更换胀紧模块实现跨管径胀紧定心。

采用大口径、大流量、低压力的特点，防止产生液压蠕动，保证液压系统的稳定性、耐用性。

Concentric expansion system with high precision, the distending force is strong. Can realize the distending and centre of pipe diameter by replacing distending module. Adopts the features of large diameter, large flow and low pressure, prevent hydraulic crawling, ensure stability and durability of hydraulic system.



胀块采用滚轮结构，每个胀块配有4组高强度滚轮，防止安装过程中对管道内壁的划伤。

单缸同轴异步胀紧，配置多点滚轴胀紧块，在胀紧过程中自动校正坡口机与管道同轴，保证坡口精度。

The expansion block adopts the roller structure, every expansion block is equipped with four sets of high-strength roller. Prevent scratches to the inner wall of the pipeline during the installation process. single cylinder coaxial asynchronous expansion, equipped with multi-point roller expansion block, automat correction makes the beveling machine coaxial with pipe, ensure accuracy of beveling.



双油路供给，旋转切削与进给、胀紧采用独立油路设计，推进机构与切削机构相互独立，互不干涉。

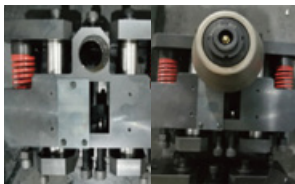
Supply with double oil circuit, adopts independent oil circuit design in rotary cutting, feeding and distending. Propulsion and cutting institution is mutual independence and non-interference.



坡口机旋转盘采用双马达驱动，内齿圈传动设计，传动受力均匀，扭力强劲，切削稳定。

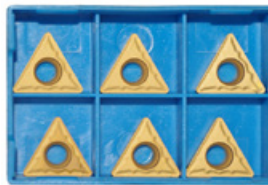
Rotary disk adopts the design of double motor drive and inner gear ring drive, uniform driving stress, strong power, cutting stability.

刀架可实现功能 Functions of tool rest



刀架采用双弹簧垂直浮动设计，导向机构采用双导柱模式，坡口稳定，可实现大壁厚管道稳定加工，精度高，寿命长，易维护。

The tool holder adopts vertical floating design with double springs. The guide mechanism adopts the model with double guide pillar. It can realize stable processing of large thickness pipelines, easy to maintain.



合金刀片采用三刃面结构，有效增加使用寿命；刀片切削线速度 110m/min，切削厚度 0.2-1.0mm。

Alloy knife adopts the three-sided edge structure, effectively increase service life. The linear speed of the blade cutting 110m/min, cutting thickness 0.2-1.0mm.



刀杆采用计算机辅助设计；分为单刀刀杆和复合刀杆；单刀刀杆：0°，5°，22°，37.5°，45°，75°复合刀杆：0°，-5°，22°双刀

The knife bridge adopts the computer aided design. it is divided into single tool bar and compound tool bar. Single tool bar: 0°, 5°, 22°, 37.5°, 45°, 75° Compound tool bar: 0°-5°, 22°double

端面内胀坡口机参数 Performance

型号 Model number	PK12-18	PK20-26	PK32-42	PK40-48	PK48-56
重量 weight	890Kg	1500Kg	2900Kg	3200kg	3800Kg
外形尺寸 size	2150×1200×1500mm	2270×1100×1100mm	3200×2000×1700mm	3200×1300×1600mm	3400×2100×2300mm
适用管径 Suitable diameter	323-457mm	508-660mm	813-1066 mm	1016-1219mm	1219-1422mm
适用壁厚 Suitable thickness	≤ 31.75mm			≤ 36mm	
进给方式 Feed method	液压轴向进给 Hydraulic axial feed				
主轴转速 Spindle speed	0~60 r/min				
适用材质 Suitable material	X60、X65、X70、X80 等管线钢, 各种碳钢、不锈钢、合金钢等材质, 其他金属材料。 X60、X65、X70、X80 and other pipeline steel, carbon steel, alloy steel, stainless steel and other materials.				
胀紧形式 Expansion modal	内定心式液压胀紧机构: 定心准确, 胀紧力大, 安全可靠 Internal centering type hydraulic expansion mechanism: accurate centering, large expansion force, safe and reliable.				
坡口形式 Bevel type	I 型, V 型, U 型, 复合型, 内镗坡口 I, V, U, compound, internal boring and beveling				
坡口精度 Bevel accuracy	直线误差 ±0.1mm Straight line error ±0.1mm	角度误差 ±0.1° Angle error ±0.1°	粗糙度 Ra 2.5 Roughness Ra 2.5		
坡口效率 Bevel efficiency	少于 2 分钟 Less than two minutes				
切削线速度 Cutting linear speed	105m/min				
进给量 Feed amount	0.2-0.6mm/r				
操作系统 Operating system	胀紧 / 松开、快进 / 快退、工进、工进调整 Swelling/Loosen, Fast-forward/Rewind, Adjustment of work progress and work withdrawal				
工作压力 Working pressure	胀紧压力: 5MPa, 切削压力: 0-10MPa Swelling pressure: 5MPa, Cutting pressure: 0-10MPa				
液压站 Hydraulic press station	静音式柴油动力液压站 / 开架式柴油动力液压站 Silent diesel-powered hydraulic station/Open shelves diesel powered hydraulic station				

现场施工 Photos of Site Construction



该设备为 PK42, 开放式液压站 108kw, 坡口: 双 V 复合坡口。

The equipment pk42, open hydraulic station 108k, beveling: composite bevel of double V



该设备为 PK48, 坡口 22.5° 配套挖掘机直接使用, 提高设备使用效率。

The equipment pk48, beveling 22.5, direct use of accessory excavator, improve the using efficiency of equipment.



该设备为 PK18, 静音式柴油动力液压站 24kw, 坡口: 双 V 复合坡口。

The equipment pk18, silent diesel Power, hydraulic station 24kw, beveling: composite bevel of double V



该设备为 PK56, 开放式柴油动力液压站 108kw, 壁厚 18.4mm、27.5mm, 坡口时间为 5 分钟 / 道口。

The equipment pk56, open diesel power, wall thickness: 18.4mm, 27.5mm, groove time: five minutes/crossing