思维转动 引领未来

Be INNOVATIVE, Lead The FUTURE

Jiangsu Swift Machinery Technology Co., Ltd

Xuzhuang Park Road, Xingren Town, Tongzhou District,
Nantong, Jiangsu, China.
Zip Code: 226371

T + 86-513-8622 2888
F + 86-513-8565 0761
E jsswift@126.com

www.jsswft.com

江苏思维福特机械科技股份有限公司

中国 / 江苏 / 南通
南通市通州区兴仁徐庄科技园

电话 + 86-513-8622 2888
传真 + 86-513-8565 0761
邮件 jsswift@126.com

SWIFT
思维福特

A SPECIALIST IN SPINDLE
Design & Manufacturing

专业主轴设计制造 »

www.jsswft.com

COMPANY PROFILE
公司简介

江苏思维福特机械科技股份有限公司，创立于 2011 年，专注于提供数控机床精密零组件解决方案。公司坐落于江苏省南通市通州区兴仁徐庄科技园，投资总额 7000 万元人民币，占地面积 16000 平方米。思维福特自成立以来先后获得国家高新技术企业、南通市思维福特数控机床精密部件工程技术研究中心、区两化融合试点企业以及民营科技企业等荣誉称号。公司拥有自主专利 26 项，通过 TS16949,ISO9001-2008 管理体系认证，2016 年 12 月已成功登陆新三板。

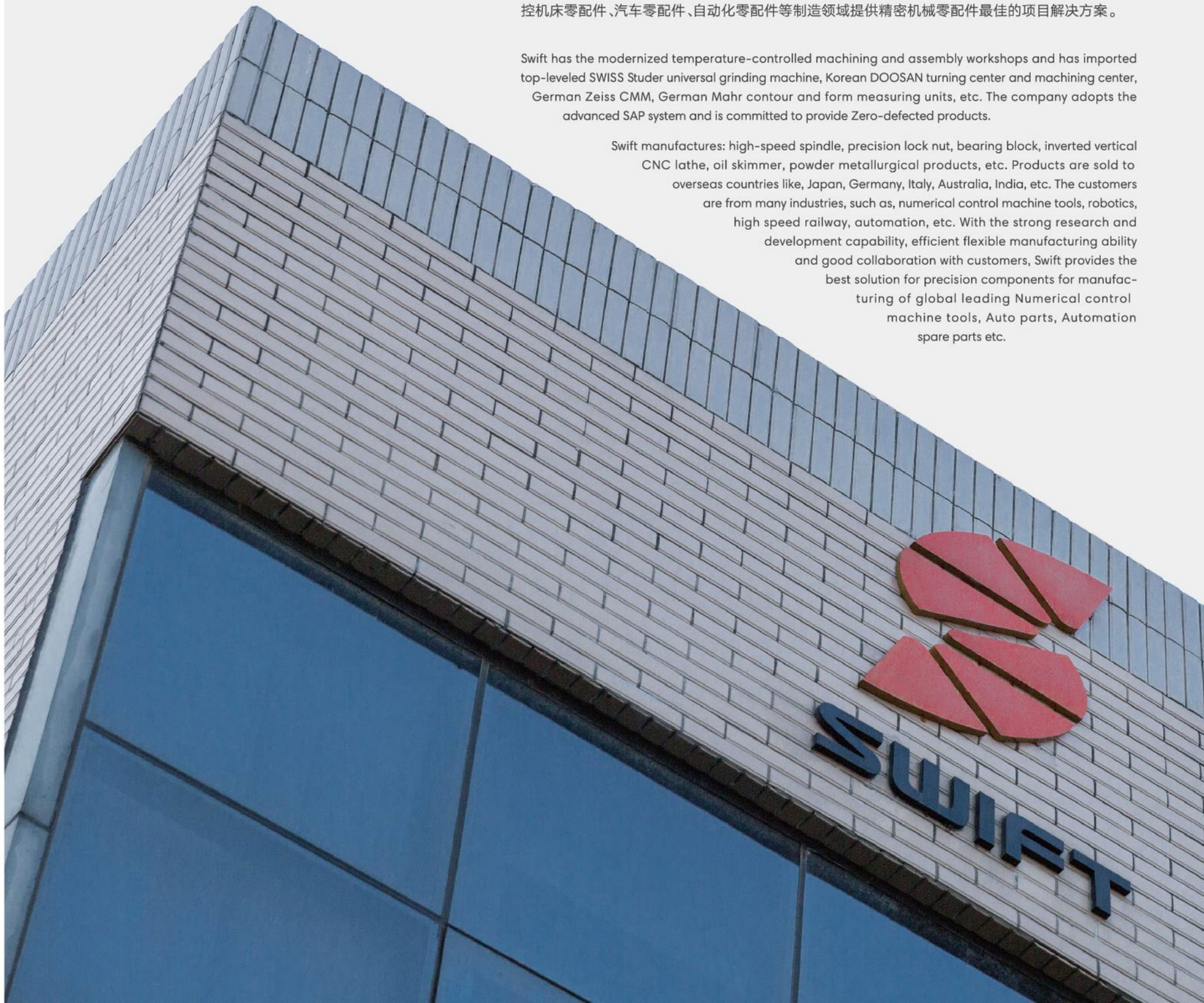
Established in 2011, Jiangsu Swift Machinery Technology Co., Ltd focuses on providing solutions for precision components for numerical control machine tools. Swift is located in Xuzhuang Technology Park, Tongzhou District, Nantong city, Jiangsu and covers an area of 16,000 square meters. Total investment is RMB70million. Since the establishment, Swift has obtained a number of honorable titles, such as, National New High-Technology Enterprise, Engineering and Technology Research Center for Precision Components for Numerical Control Machine Tools, Pilot Enterprise for Convergence of Informatization and Industrialization and Private Scientific and Technological Enterprise, etc. Swift owns 26 independent patents. The company has passed TS16949 and ISO9001-2008 and listed on National Equities Exchange and Quotations (also known as New Third Board) in December, 2016.

思维福特拥有现代化的恒温精密加工和装配车间，引进顶级瑞士 Studer 数控精密万能磨床、韩国斗山车削中心、加工中心，德国蔡司三坐标、德国马尔轮廓仪和形状测量仪等检测试验设备。公司采用先进的德国 SAP 管理系统，致力于追求产品的零缺陷。

公司自主产品有：高速主轴，精密锁紧螺母，轴承座，倒立车，浮油回收机，粉末冶金制品等。产品远销日本、德国、意大利、澳大利亚、印度等国家。涉及客户有数控机床、机器人、高铁、汽车、自动化等领域。丰富的高精密数控配件产品研发能力、高效的柔性制造能力和良好的客户协作能力，为全球领先的数控机床零配件、汽车零配件、自动化零配件等制造领域提供精密机械零配件最佳的项目解决方案。

Swift has the modernized temperature-controlled machining and assembly workshops and has imported top-leveled SWISS Studer universal grinding machine, Korean DOOSAN turning center and machining center, German Zeiss CMM, German Mahr contour and form measuring units, etc. The company adopts the advanced SAP system and is committed to provide Zero-defected products.

Swift manufactures: high-speed spindle, precision lock nut, bearing block, inverted vertical CNC lathe, oil skimmer, powder metallurgical products, etc. Products are sold to overseas countries like, Japan, Germany, Italy, Australia, India, etc. The customers are from many industries, such as, numerical control machine tools, robotics, high speed railway, automation, etc. With the strong research and development capability, efficient flexible manufacturing ability and good collaboration with customers, Swift provides the best solution for precision components for manufacturing of global leading Numerical control machine tools, Auto parts, Automation spare parts etc.



SWIFT - A SPECIALIST IN SPINDLE DESIGN & MANUFACTURING

专业主轴设计制造 »

江苏思维福特科技股份有限公司成立于2011年，本公司拥有优秀的经营团队，秉持“品质是价值与尊严的起点”为经营理念，坚持着“产品专业化满足客户需求”为公司的品质政策。更以“客户肯定为追求目标”为管理承诺。以追求企业业绩及成长：除整体营运稳定外，也是国内绩优厂商之一，亦为国际品质管理系统认证之专业主轴制造厂。

资深的工具机及主轴专业的设计经验、专业制造团队做后盾，购置精密机械设备、检测仪器及无尘洁净隔离组装厂房为基础，生产CNC车床主轴、铣床、精密复合加工中心机主轴等各系列精密主轴。并持续研究发展高速、高品质及具有代表性的产品，服务国内外工具机厂商，为客户提供优质的产品及专业的技术服务。

Jiangsu Swift Machinery Technology Co.,Ltd was established in 2001 with an putstanding business operation team.Under the company's concept of "Quality results from value & dignity", Swift insists on the company's quality policy of "With expertise product to fully meet customers' requirements".Moreover,with our management commitment of "Dedicated to customers' recognition" Swift always strives hard to pursue the enterprise perpetuity and growth.In addition to a stable business operation, wift is one of the excellent manufactures in Taiwan and an international quality certified spindle manufacturer.

At Swift, we have extensive experience in the design of machine tool an d spindle, and a highly skilled manufacturing team. We have heavily invested in various sophisticated machining equipment and inspection instruments. All Swift spindles are produced in a dust-free,clean and isolated assembly plant. We produce a wide range of precision spindles for CNC lathes,milling machines and complex type machining centres. We will continuosly develop high-speed, high-quality and custom spindles to serve the domestic and foreign machine tool manufacturers. We have a strong commitment to offer excellent products and technical service for our customers.

追求卓越 赢得尊敬

Committed To EXCELLENCE
With Customers' Respect

TECHNOLOGICAL INNOVATION
科技创新

在整个价值链中，我们运用科学和技术创新来发展和完善产品及服务。每天，数十名思维福特工程师和研究员都在致力于精密零组件技术的研发，为我们的客户、伙伴和零组件行业提供新的知识和更深入的了解。

作为一家以科技为核心的公司，思维福特始终依靠科技来解决发展中的各种问题和挑战。通过与研究机构以及其他领先企业的合作，思维福特不断创造新技术，并将其应用到精密零组件性能开发的解决方案中。

我们会不断寻找研发合作伙伴，以努力协助中国发展具备强大研发能力的精密机械领域。

In the whole value chain, Swift develops and improves our products and service through scientific and technological innovation. Everyday, tens of engineers are devoted to researching and developing technology of precision components and to provide updated knowledge and more in-depth understanding for our customers, partners and precision components industry.
As a company focuses on technology, Swift solves problems and deals with challenges depending on science. Through cooperation with research centers and other leading enterprises, Swift continuously creates new knowledge and apply this knowledge to the solution of developing precision components.
We will constantly looking for researching partners, so as to assist to develop and improve the whole precision machinery industry.

TECHNOLOGY SPEED UP
THE DEVELOPMENT OF SWIFT

科技加速 思维腾飞

TECHNICAL TEAM
技术团队

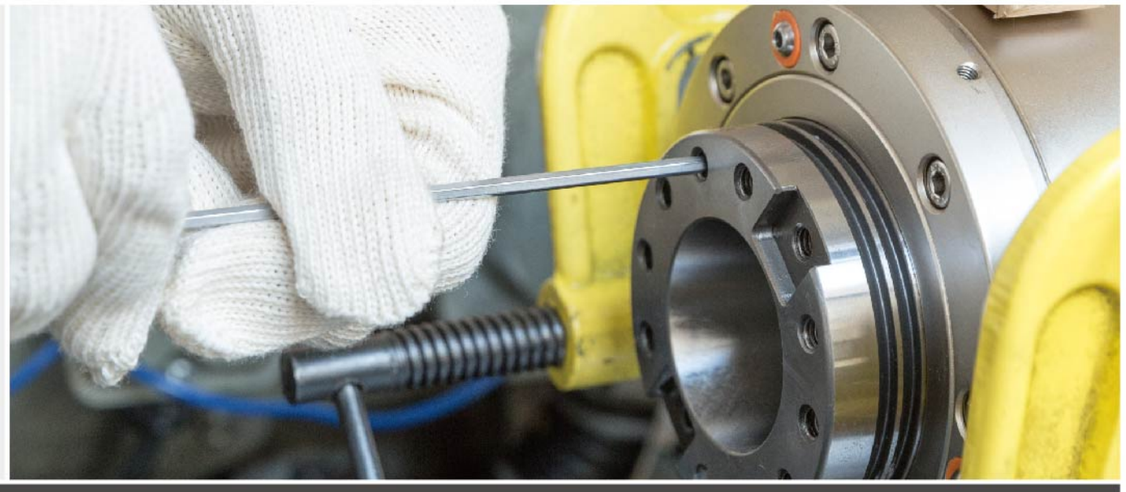
深作禎夫 Fukasaku Yoshio

日本籍，1976 年 4 月至 2017 年 6 月任日本精工株式会社（世界 500 强企业）技术工程师，在职期间，参与了 268 项产品组装开发，多次派往韩国和中国分公司进行产品组装和维修技能指导工作。

其带领的技术团队，拥有硕士 2 名，高级工程师 3 名。

Fukasaku Yoshio, Japanese national, worked as technical engineer in NSK from April 1976 to June 2017. During the occupation of his post, Fukasaku Yoshio participated in development of 286 products and was dispatched to instruct on the product assembly and maintenance in NSK branch companies in China and Korea.

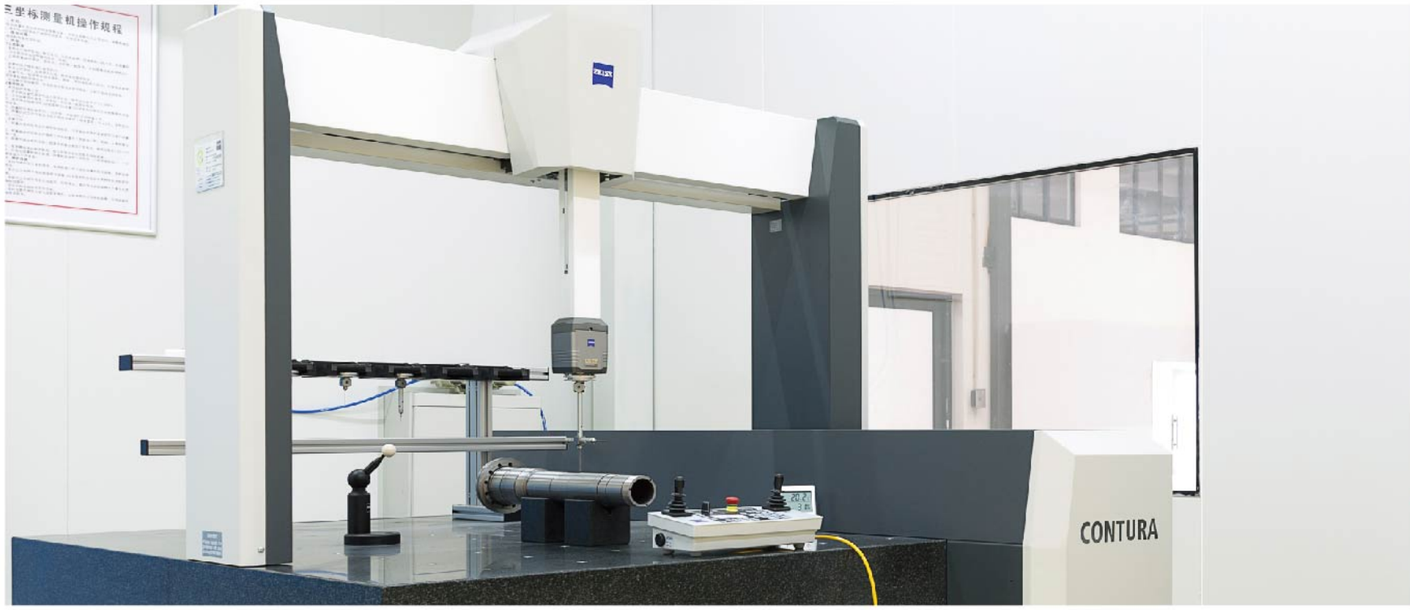
In the team he leads, two team members are with master' s degree and three are senior engineers.

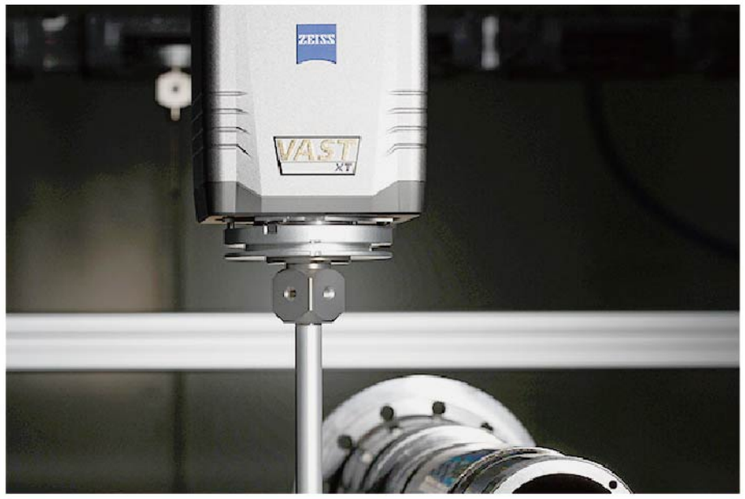


DETECTING
检测

思维福特拥有现代化的恒温精密加工和装配车间，德国蔡司三坐标、德国马尔轮廓仪和形状测量仪等检测试验设备。公司采用先进的德国SAP管理系统，致力于追求产品的零缺陷。

Swift has the modernized temperature-controlled machining and assembly workshops with German Zeiss CMM, German Mahr contour and form measuring units, etc. The company adopts the advanced SAP system and is committed to provide Zero-defected products.





德国・蔡司 三坐标 GERMANY Zeiss CMM

① 中国・影像型万能工具显微镜
CHINESE Universal Tool Microscope

② 德国・马尔 MMQ400-2形状测量仪
GERMANY Mahr Form Tester

③ 德国・马尔 XC20 ST750D轮廓仪
GERMANY Mahr Contour Measuring Units

MACHINERY
制造

引进顶级瑞士 Studer 数控精密万能磨床、
韩国斗山车削中心、加工中心。

Swift has imported top-leveled SWISS Studer universal grinding machine,
Korean DOOSAN turning center and machining center.

韩国 · 斗山 数控车
Korean Doosan CNC Lathe

瑞士 · 斯图特超精磨床
SWITZERLAND Studer Ultra-precision Grinding Machine

韩国 · 斗山 车削中心
KOREAN Doosan CNC Turning Center

① 中国(台湾) · 外圆磨床
CHINESE External Grinding Machine

② 中国(台湾) · 内圆磨床
CHINESE Internal Grinding Machine

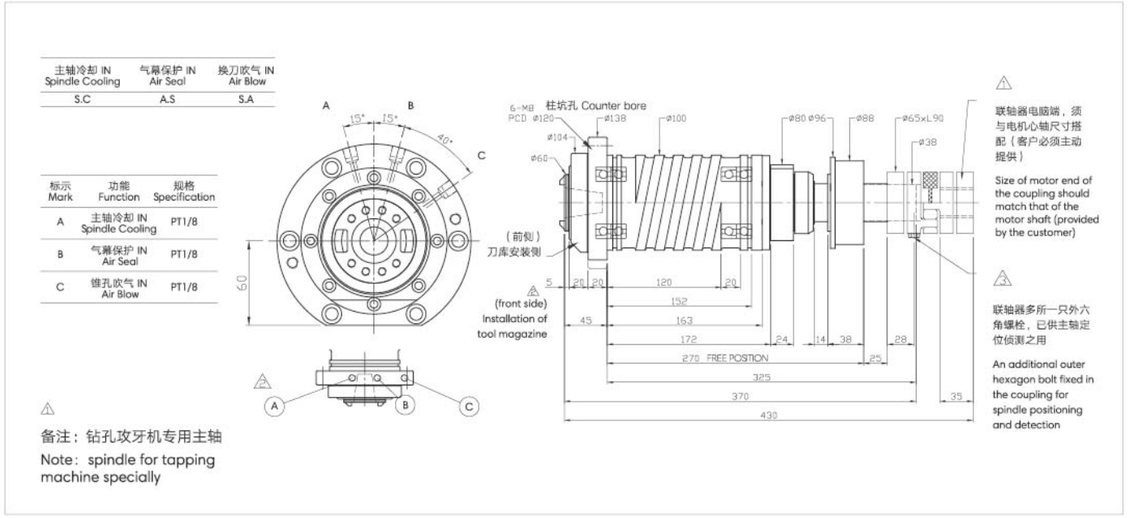
③ 中国 · 立车
CHINESE vertical lathe

Direct Drive Spindle 直结式主轴 >

Specifications of Direct-Drive Spindle For Milling Machine

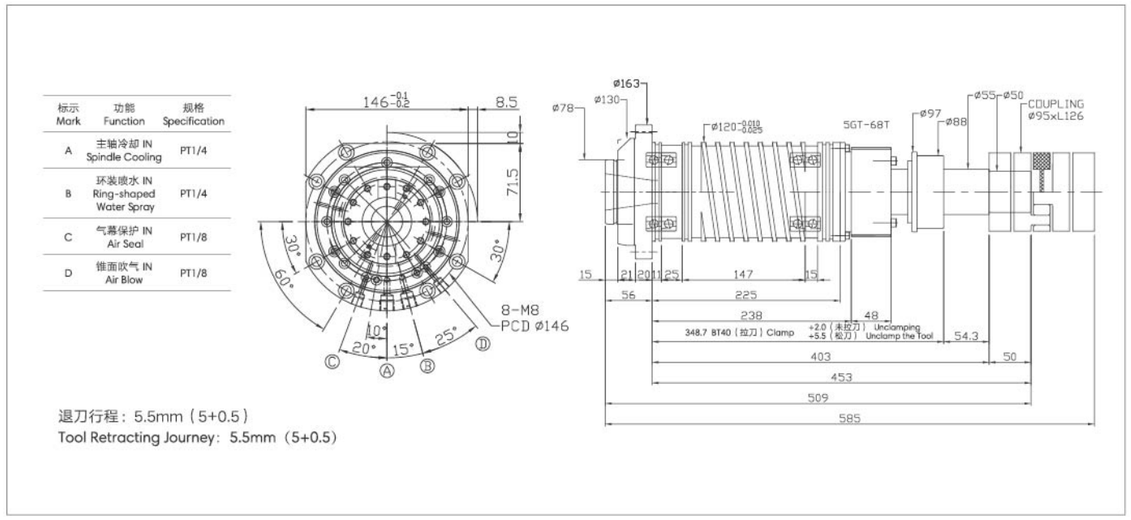
铣床-直结式主轴产品规格表

01



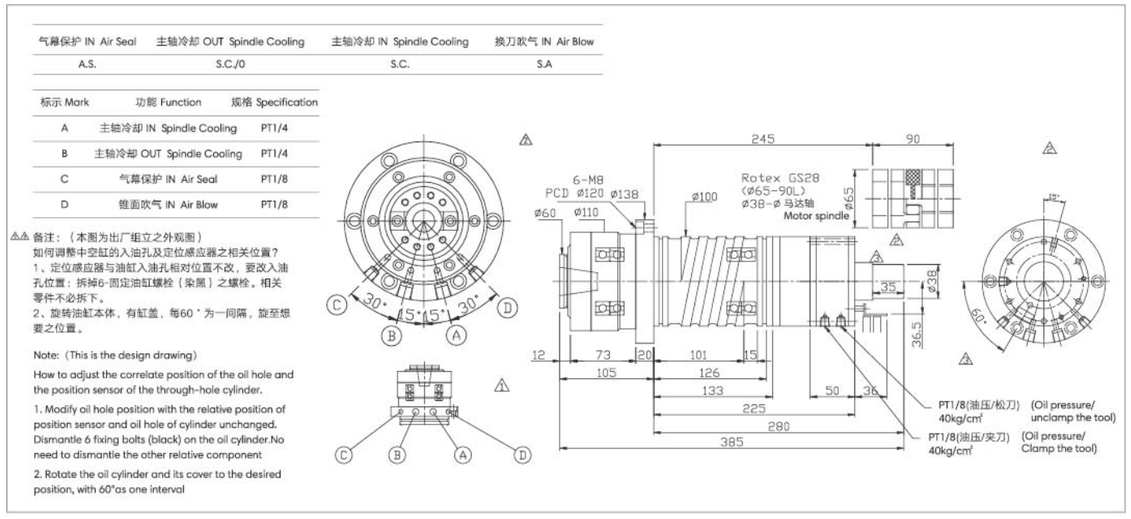
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Clamp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rise	轴端偏摆（300mm） Spindle End Deflection
TF3410E	10000	BT30	Φ45	70 Series 系列×2	70 Series系列×2	油脂 Grease	夹爪式 Gripper	330±30kg	G1	15°C	0.008
TF3412E	12000	BT30	Φ45	70 Series 系列×2	70 Series系列×2	油脂 Grease	夹爪式 Gripper	330±30kg	G1	15°C	0.008
TF3415E	15000	BT30	Φ45	70 Series 系列×2	70 Series系列×2	油脂 Grease	夹爪式 Gripper	330±30kg	G1	15°C	0.008

02



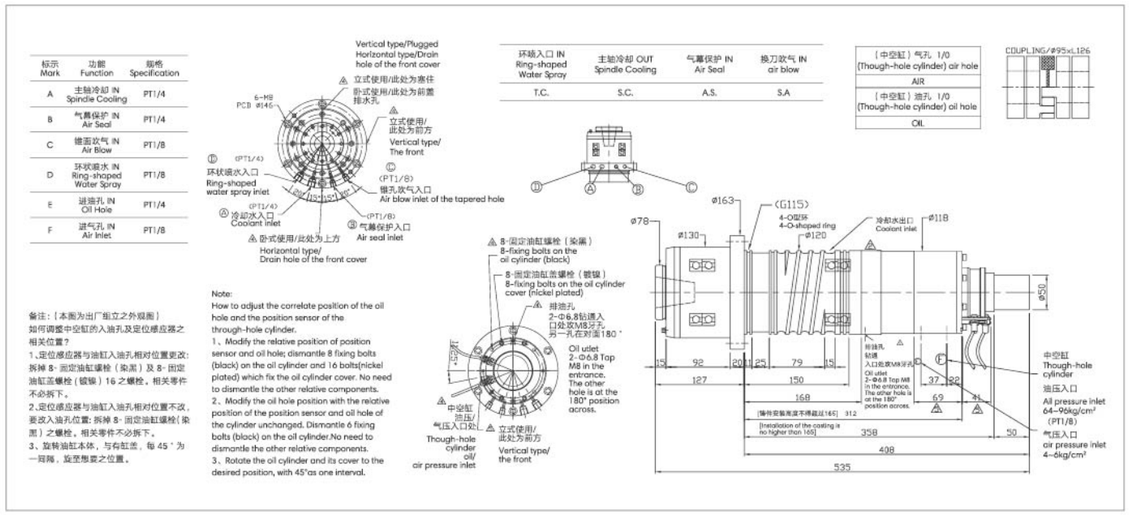
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Clamp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rise	轴端偏摆（300mm） Spindle End Deflection
WT4610E	10000	BT40	Φ60	70 Series系列×2	70 Series系列×2	油脂 Grease	夹爪式 Gripper	550±50kg	G1	15°C	0.008
WT4612E	12000	BT40	Φ60	70 Series系列×2	70 Series系列×2	油脂 Grease	夹爪式 Gripper	550±50kg	G1	15°C	0.008
WT4615E	15000	BT40	Φ60	70 Series系列×2	70 Series系列×2	油脂 Grease	夹爪式 Gripper	550±50kg	G1	15°C	0.008

03



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Clamp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rise	轴端偏摆（300mm） Spindle End Deflection
WD310ET	10000	BT30	Φ45	70 Series 系列×2	70 Series 系列×2	油脂 Grease	OTT	220±30kg	G1	15°C	0.008/250
WD312ET	12000	BT30	Φ45	70 Series 系列×2	70 Series 系列×2	油脂 Grease	OTT	220±30kg	G1	15°C	0.008/250
WD315ET	15000	BT30	Φ45	70 Series 系列×2	70 Series 系列×2	油脂 Grease	OTT	220±30kg	G1	15°C	0.008/250

04



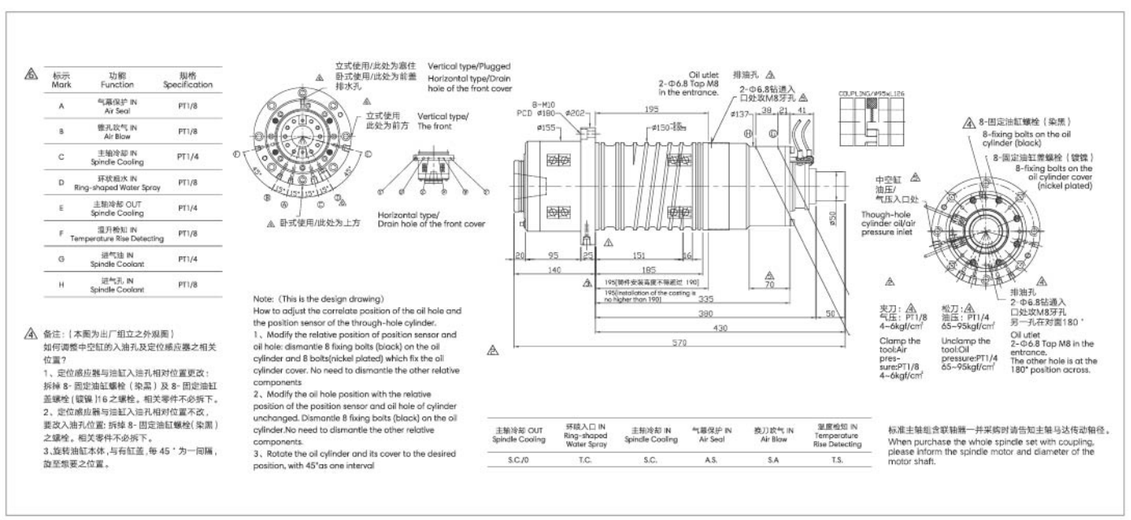
标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT1/4
B	气幕保护 IN Air Seal	PT1/4
C	锥面吹气 IN Air Blow	PT1/8
D	环状喷水 IN Ring-shaped Water Spray	PT1/8
E	进油孔 IN Oil Hole	PT1/4
F	进气孔 IN Air Inlet	PT1/8

环喷入口 IN Ring-shaped Water Spray	主轴冷却 OUT Spindle Cooling	气幕保护 IN Air Seal	换刀吹气 IN air blow
T.C.	S.C.	A.S.	S.A

（中空缸）气孔 1/0 (Though-hole cylinder) air hole
AIR
（中空缸）油孔 1/0 (Though-hole cylinder) oil hole
OIL

主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Clamp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rise	轴端偏摆（300mm） Spindle End Deflection
DS4610E	10000	BT40	Φ60	70 Series 系列×2	70 Series系列 ×2	油脂 Grease	夹爪式 Gripper	600±50kg	G1	15°C	0.008
DS4612E	12000	BT40	Φ60	70 Series 系列×2	70 Series系列×2	油脂 Grease	夹爪式 Gripper	600±50kg	G1	15°C	0.008
DS4615E	15000	BT40	Φ60	70 Series 系列×2	70 Series系列 ×2	油脂 Grease	夹爪式 Gripper	600±50kg	G1	15°C	0.008

05



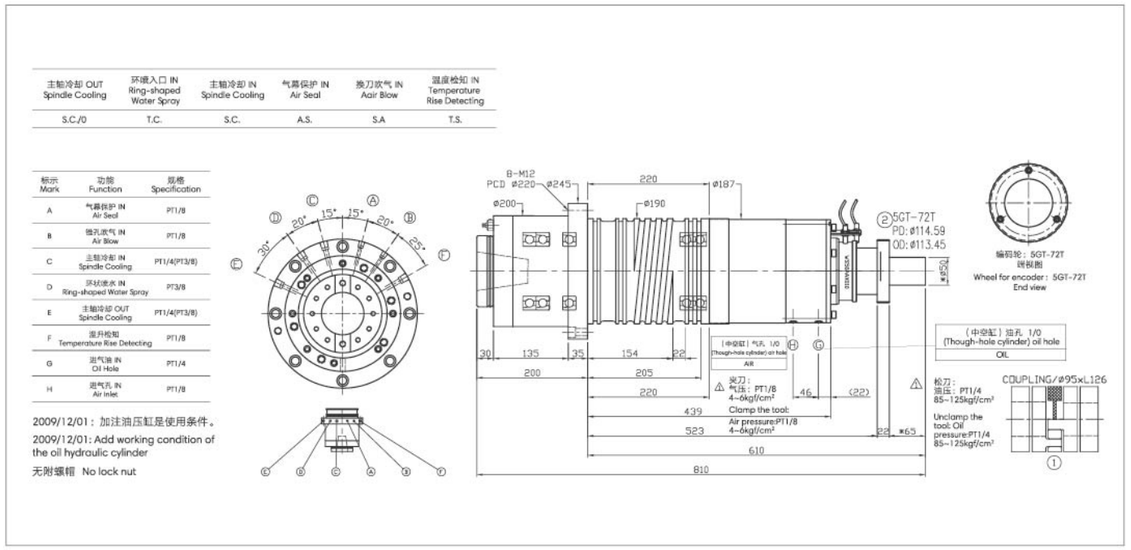
标示 Mark	功能 Function	规格 Specification
A	气幕保护 IN Air Seal	PT1/8
B	锥孔吹气 IN Air Blow	PT1/8
C	主轴冷却 IN Spindle Cooling	PT1/4
D	环状喷水 IN Ring-shaped Water Spray	PT1/8
E	主轴冷却 OUT Spindle Cooling	PT1/4
F	温升检知 IN Temperature Rise Detecting	PT1/8
G	进气油 IN Spindle Coolant	PT1/4
H	进气孔 IN Spindle Coolant	PT1/8

主轴冷却 OUT Spindle Cooling	环喷入口 IN Ring-shaped Water Spray	主轴冷却 IN Spindle Cooling	气幕保护 IN Air Seal	换刀吹气 IN Air Blow	温度检知 IN Temperature Rise Detecting
S.C./0	T.C.	S.C.	A.S.	S.A	T.S.

标准主轴组含联轴器一并采购时请告知主轴马达传动轴径。
When purchase the whole spindle set with coupling, please inform the spindle motor and diameter of the motor shaft.

主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Clamp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rise	轴端偏摆（300mm） Spindle End Deflection
WD4710E	10000	BT40	Φ70	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	850±50kg	G1	15°C	0.008
WD4712E	12000	BT40	Φ70	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	850±50kg	G1	15°C	0.008
WD4715E	15000	BT40	Φ70	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	850±50kg	G1	15°C	0.008

06

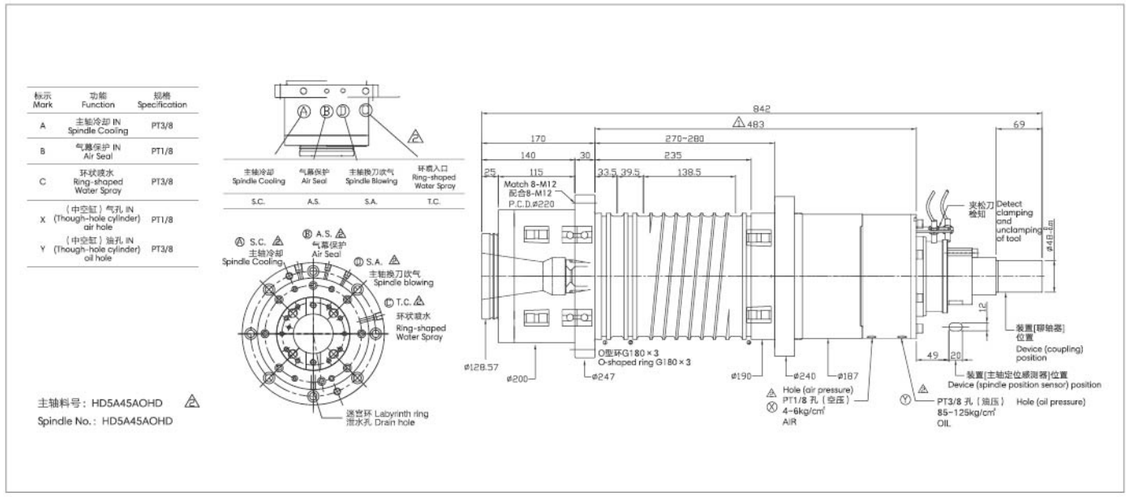


主轴冷却 OUT Spindle Cooling	环喷入口 IN Ring-shaped Water Spray	主轴冷却 IN Spindle Cooling	气幕保护 IN Air Seal	换刀吹气 IN Aair Blow	温度检知 IN Temperature Rise Detecting
S.C./0	T.C.	S.C.	A.S.	S.A	T.S.

标示 Mark	功能 Function	规格 Specification
A	气幕保护 IN Air Seal	PT1/8
B	锥孔吹气 IN Air Blow	PT1/8
C	主轴冷却 IN Spindle Cooling	PT1/4(PT3/8)
D	环状喷水 IN Ring-shaped Water Spray	PT3/8
E	主轴冷却 OUT Spindle Cooling	PT1/4(PT3/8)
F	温升检知 Temperature Rise Detecting	PT1/8
G	进气油 IN Oil Hole	PT1/4
H	进气孔 IN Air Inlet	PT1/8

主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Clamp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rise	轴端偏摆（300mm） Spindle End Deflection
DD5906ID	6000	BT50	Φ90	70 Series 系列×3	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	0.008
DD5908ID	8000	BT50	Φ90	70 Series 系列×3	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	0.008
DD5910ID	10000	BT50	Φ90	70 Series 系列×3	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	0.008

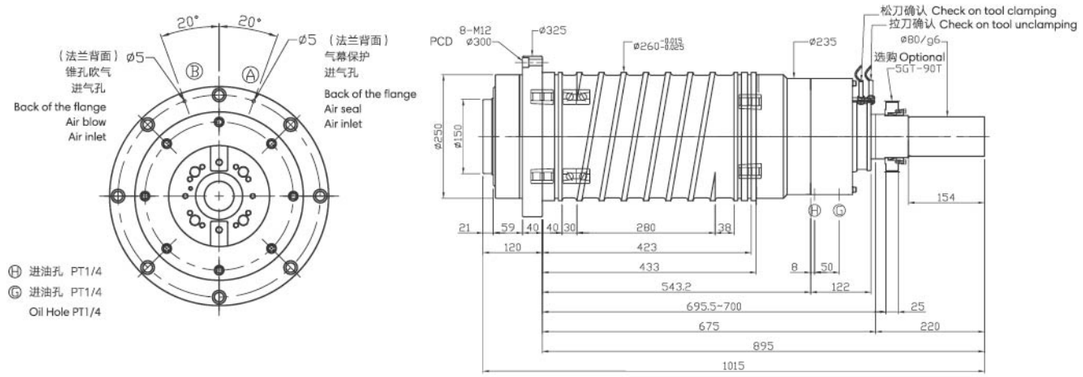
07



标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT3/8
B	气幕保护 IN Air Seal	PT1/8
C	环状喷水 Ring-shaped Water Spray	PT3/8
X	（中空缸）气孔 IN (Though-hole cylinder) air hole	PT1/8
Y	（中空缸）油孔 IN (Though-hole cylinder) oil hole	PT3/8

主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
HD5A45A	4500	BT50	Φ100	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	夹爪式 Gripper	2000±200kg	G1	15°C	0.008

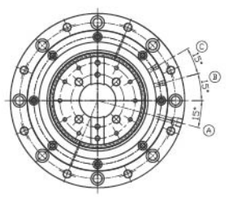
08

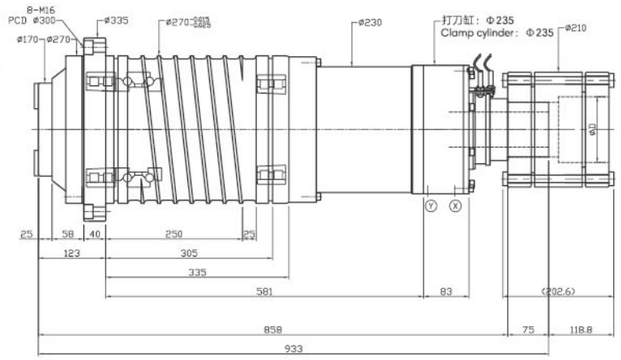


主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
WD5D25A	2500	BT50	Φ130	NN Series 系列×1 Thrust 止推×2	NN Series 系列	油脂 Grease	OTT	1750±50kg	G1	15°C	0.008

09

标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT3/8
B	气幕保护 IN Air Seal	PT1/8
C	锥孔吹气 IN Air Blow	PT1/8
X	油脂（松刀）IN Oil (tool clamping)	PT1/4
Y	油脂（拉刀）IN Oil (tool unclamping)	PT1/8





备注：
1、订购时，需要注明马连轴的直径。
2、此打刀用油压缸，可搭配增压器，则机台不用另外再备一组油压单元。
3、此型主轴，经过计算，可传达扭力 3,655N*M。

@45~65kgf/cm²；油缸出力5,300kgf
@4~6kgf/cm²

Note:
1、 diameter of motor shaft need to be stipulated when purchasing.
2、Oil hydraulic cylinder is used and can be used with booster. In this case, it is not necessary to prepare for another set of hydraulic unit.
3、Through calculation, this spindle model can transmit torque of3,655N*M .

Power of oil cylinder 5,300kgf

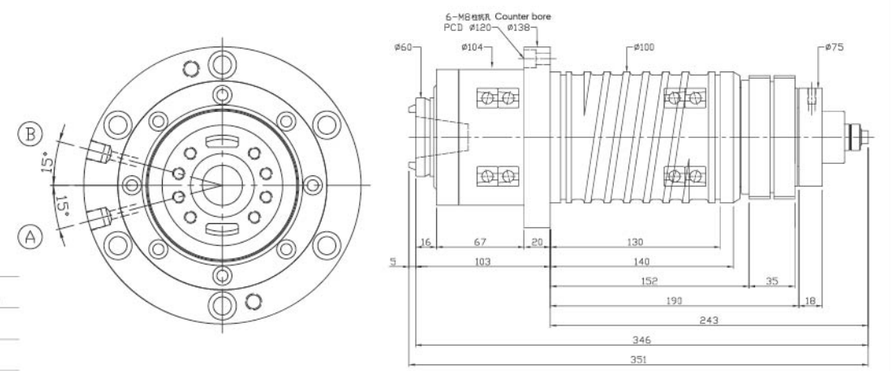
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
WD5E02A0	2000	BT50	Φ140	NN Series 系列×1 Thrust 止推×2	NN Series 系列	油脂 Grease	OTT	2400kgf±10%	G1	15°C	0.008

Belt Drive Spindle 皮带式主轴 >

Specifications of Belt-Drive Spindle For Milling Machine
铣床-皮带式主轴产品规格表

01

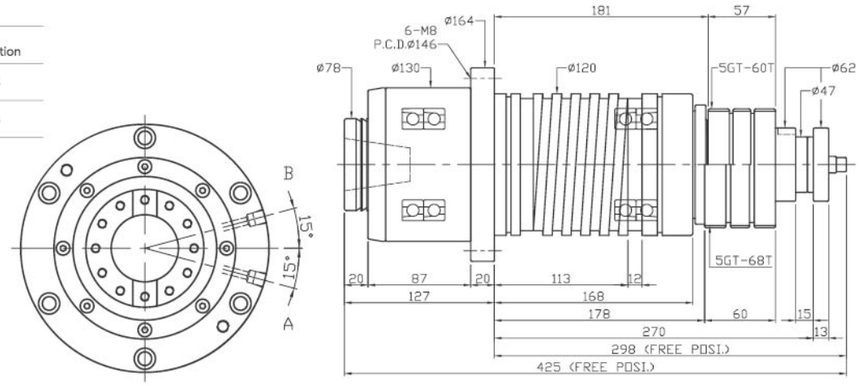
标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT1/8
B	气幕保护 IN Air Seal	PT1/8



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
KF34E10	10000	BT30	Φ45	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	250±30kg	G1	15°C	0.008/250	5GT-60T
KF34E12	12000	BT30	Φ45	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	250±30kg	G1	15°C	0.008/250	5GT-60T

02

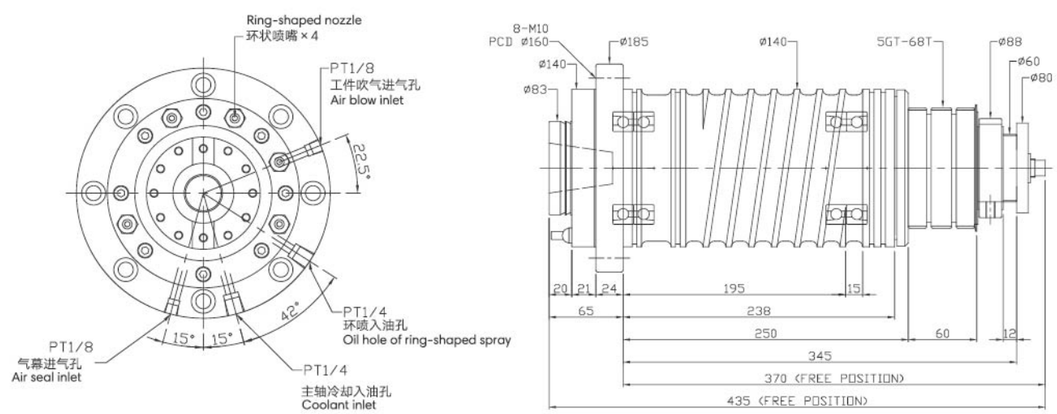
标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT1/8
B	气幕保护 IN Air Seal	PT1/8



Rotary Joint： [SM]GU2000v

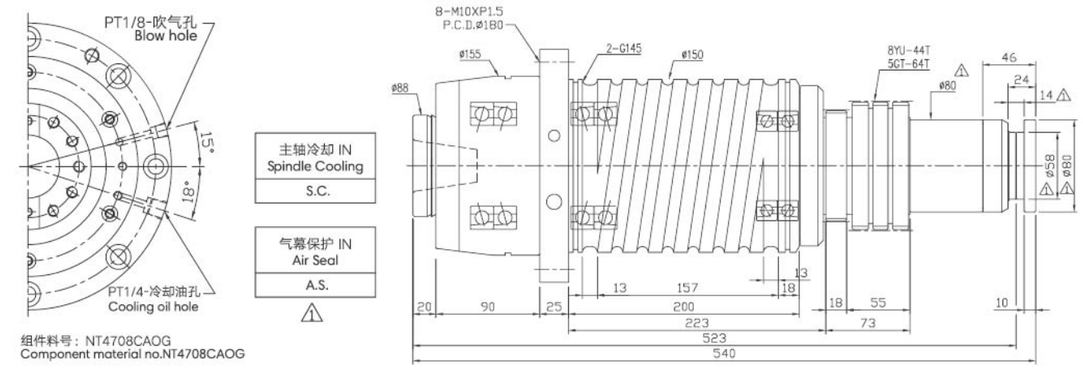
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
WS4608	10000	BT40	Φ60	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	600±50kg	G1	15°C	0.008	8YU-46T
WS4610	10000	BT40	Φ60	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	600±50kg	G1	15°C	0.008	5GT-68T
WS4612	12000	BT40	Φ60	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	600±50kg	G1	15°C	0.008	5GT-60T

03



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
TF46E08	8000	BT40	Φ65	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	700±50kg	G1	15°C	0.008	8YU-48T
TF46E10	10000	BT40	Φ65	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	700±50kg	G1	15°C	0.008	5GT-68T
TF46E12	12000	BT40	Φ65	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	700±50kg	G1	15°C	0.008	5GT-68T

04

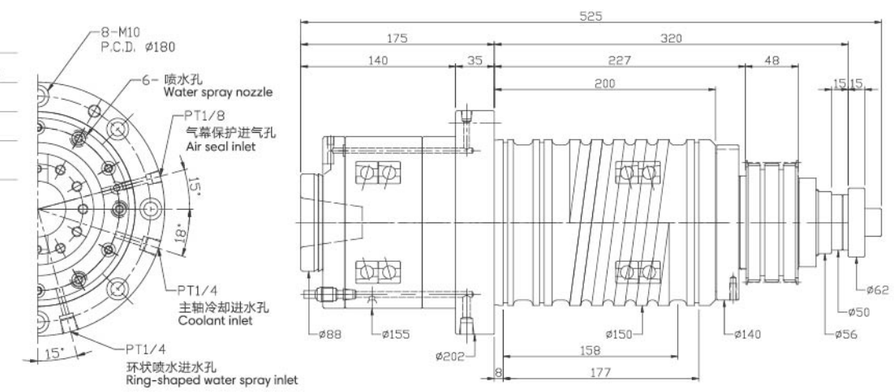


组件料号：NT4708CAOG
Component material no.NT4708CAOG

主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
NT406C	6000	BT40	Φ70	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	800±50kg	G1	15°C	0.008	8YU-44T
NT408C	8000	BT40	Φ70	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	800±50kg	G1	15°C	0.008	8YU-44T
NT410C	10000	BT40	Φ70	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	800±50kg	G1	15°C	0.008	5GT-64T
NT412C	12000	BT40	Φ70	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	800±50kg	G1	15°C	0.008	5GT-60T

05

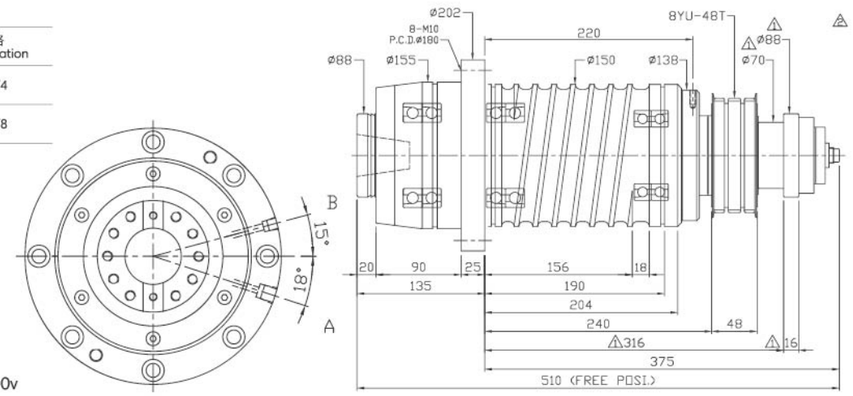
标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT1/4
B	气幕保护 IN Air Seal	PT1/8
C	环状喷水 IN Ring-shaped Water Spray	PT1/4



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
SR408E	8000	BT40	Φ70	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	800±50kg	G1	15°C	0.008	8YU-46T
SR410E	10000	BT40	Φ70	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	800±50kg	G1	15°C	0.008	5GT-68T
SR412E	12000	BT40	Φ70	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	800±50kg	G1	15°C	0.008	5GT-60T

06

标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT1/4
B	气幕保护 IN Air Seal	PT1/8

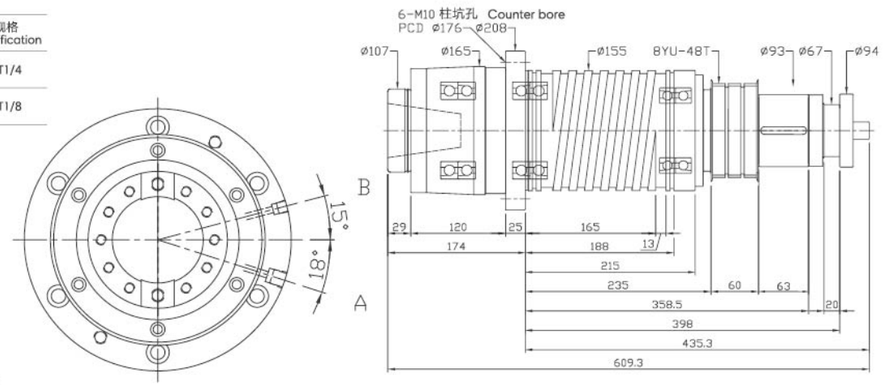


Rotary Joint： [SM]GU2000v

主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
WT4708C	8000	BT40	Φ70	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	850±50kg	G1	15°C	0.008	8YU-48T
WT4710C	10000	BT40	Φ70	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	850±50kg	G1	15°C	0.008	5GT-68T
WT4712C	12000	BT40	Φ70	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	850±50kg	G1	15°C	0.008	5GT-60T

07

标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT1/4
B	气幕保护 IN Air Seal	PT1/8



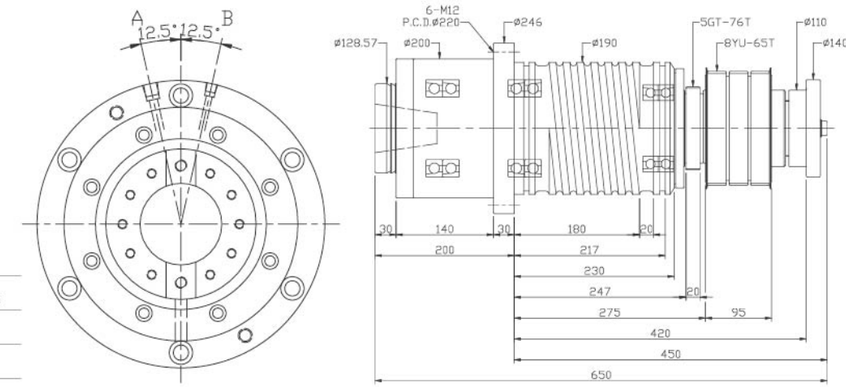
Ref:
ZS50GALH1A

组合料号 Material Number:
ZL5A45AOGT

主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
ZS58C6	6000	BT50	Φ80	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	1300±50kg	G1	15°C	0.010	8YU-48T
ZS58C8	8000	BT50	Φ80	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	1300±50kg	G1	15°C	0.010	8YU-48T

08

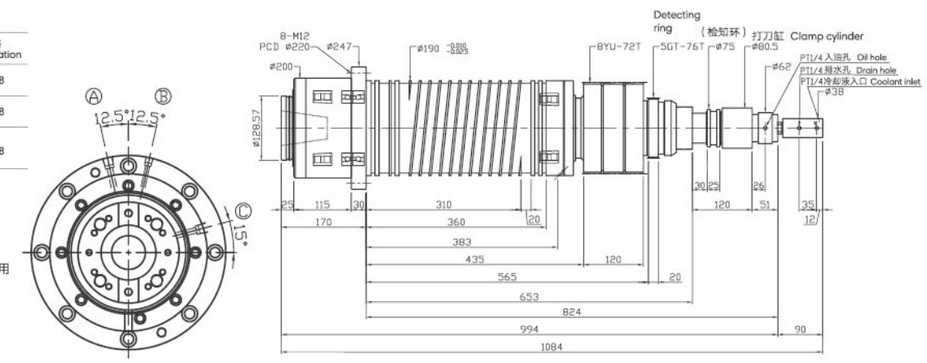
标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT1/4
B	气幕保护 IN Air Seal	PT1/8



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
NT5906C	6000	BT50	Φ90	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	0.008	8YU-65T
NT5908C	8000	BT50	Φ90	70 Series 系列×4	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	0.008	8YU-65T

09

标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT3/8
B	气幕保护 IN Air Seal	PT1/8
C	环状喷水 IN Ring-shaped Water Spray	PT3/8



ref：ZS50GAH1A
立式龙门式综合加工机车专用

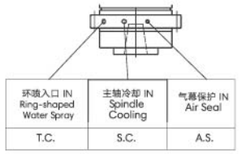
Special for vertical gantry type machining center

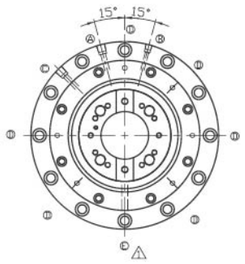
组件料号：ZL5A45AOGT

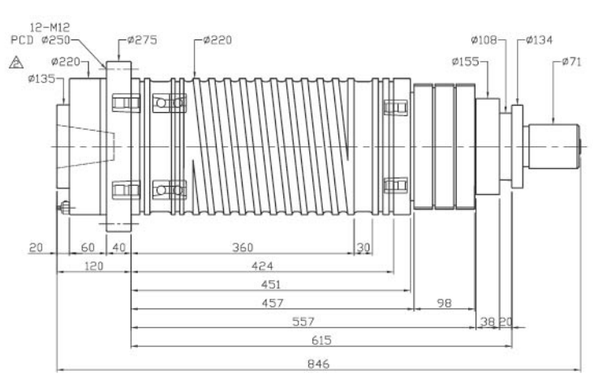
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
ZL5A450A	4500	BT50	Φ100	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	OTT	1750±10kg	G1	15°C	0.008

10

标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT1/4
B	气幕保护 IN Air Seal	PT1/8
C	环喷入口 IN Ring-shaped Water Spray	PT3/8
D	环喷出口 OUT Ring-shaped Water Spray	6-Φ4
E	排水口 OUT Drain hole	2-Φ8.5







⚠ 备注：
1、此主轴为卧式专用，前盖下方有 2-Φ8.5 的排水孔。
2、目前此主轴搭配有环喷功能。

Note：
1、Note: this spindle is special for horizontal type and there is 2-&8.5 drain hole under the front cover.
2、Currently, this spindle is equipped with function of ring-shaped water spray.

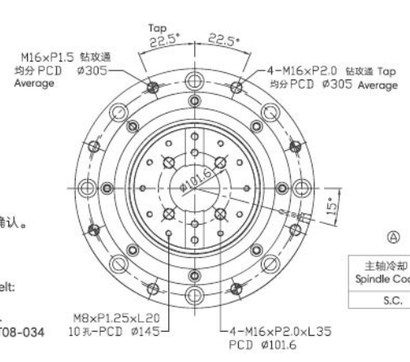
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection	传送皮带规格 Specifications of Drive Belt
ZS5103A	3000	BT50	Φ100	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	OTT	1750±50kg	G1	15°C	0.008	8YU-80T

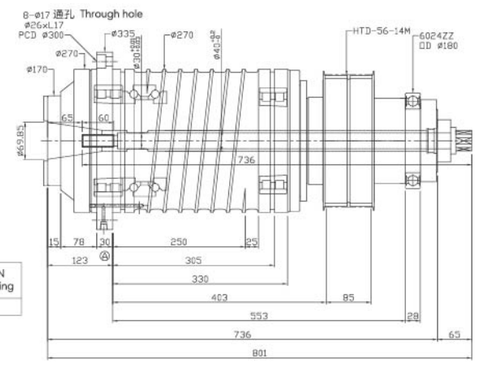
11

Ⓐ 进油孔 PT3/8
Oil hole PT3/8

备注：
1、主轴皮带轮规格：
HTD-56-14M-85W
2008/12/09 客户的传真稿所确认。
2、产品合同：PQHT08-034

Note：
1、Specifications of spindle belt:
HTD-56-14M-85W
2008/12/09 confirmed by fax.
2、Production contract: PQHT08-034

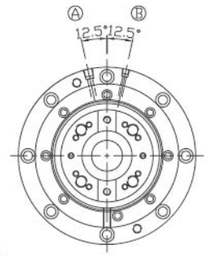




主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
HT625A	2000	BT50	Φ140	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	夹爪式 Gripper	2200±50KG	G1	15°C	0.010

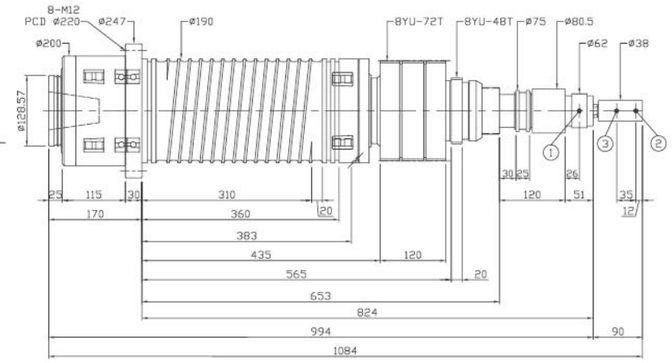
12

标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Cooling	PT3/8
B	气幕保护 IN Air Seal	PT1/8



拉刀机械操作说明：
1、PT1/4；松刀油压入口；至少 60bar。
2、PT1/4；冷却液 / 进入口；最大 100bar。
3、PT1/4；排水孔 / 进气孔；（干燥空气，2bar）

Operation instruction for the tool clamping system:
1、PT1/4；Oil pressure inlet for tool unclamping；minimum 60bar.
2、PT1/4；Coolant / inlet；maximum 100bar.
3、PT1/4；Drain hole/air inlet；（dry air，2bar）



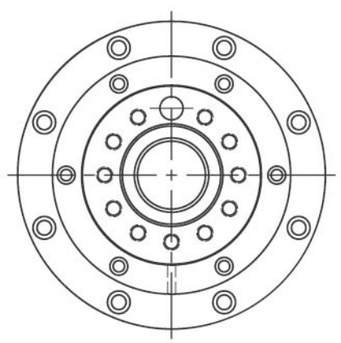
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
ZS5045G	4500	BT50	Φ100	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	0.008

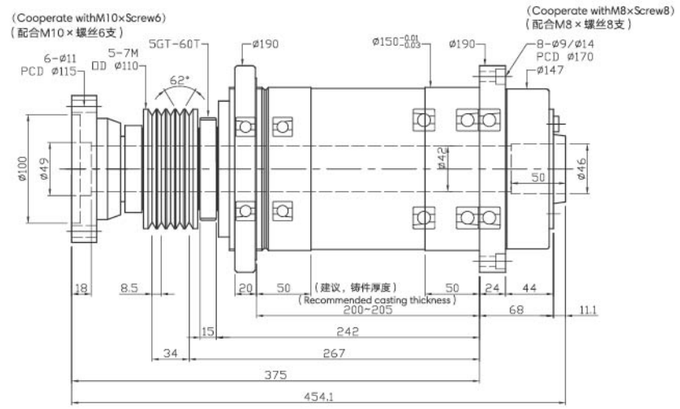
Spindle For Lathe 车床主轴 >

Specifications of Spindle For Lathe

车床-主轴产品规格表

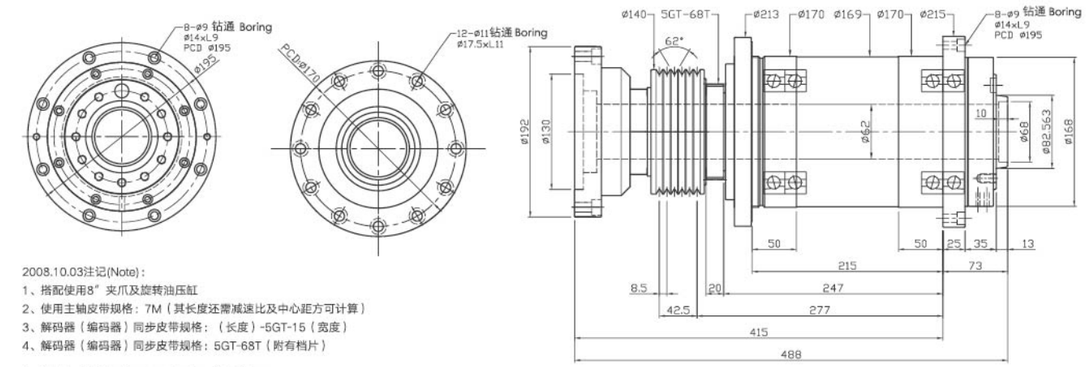
01





主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴规格 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	动平衡 Dynamic Balancing	轴端回转精度 Rotation Precision of The Spindle End	温升 Temperature Rise
WL0460H	6000	A2-4	Φ70	70 Series 系列×3	70 Series 系列×2	油脂 Grease	G1	0.003	15°C
WL0480H	8000	A2-4	Φ70	70 Series 系列×3	70 Series 系列×2	油脂 Grease	G1	0.003	15°C

02



2008.10.03注记(Note)：

1、搭配使用8" 夹爪及旋转油压缸

2、使用主轴皮带规格：7M（其长度还需减速比及中心距方可计算）

3、解码器（编码器）同步皮带规格：（长度）-5GT-15（宽度）

4、解码器（编码器）同步皮带规格：5GT-68T（附有档片）

1、Match with 8" gripper and rotary oil cylinder

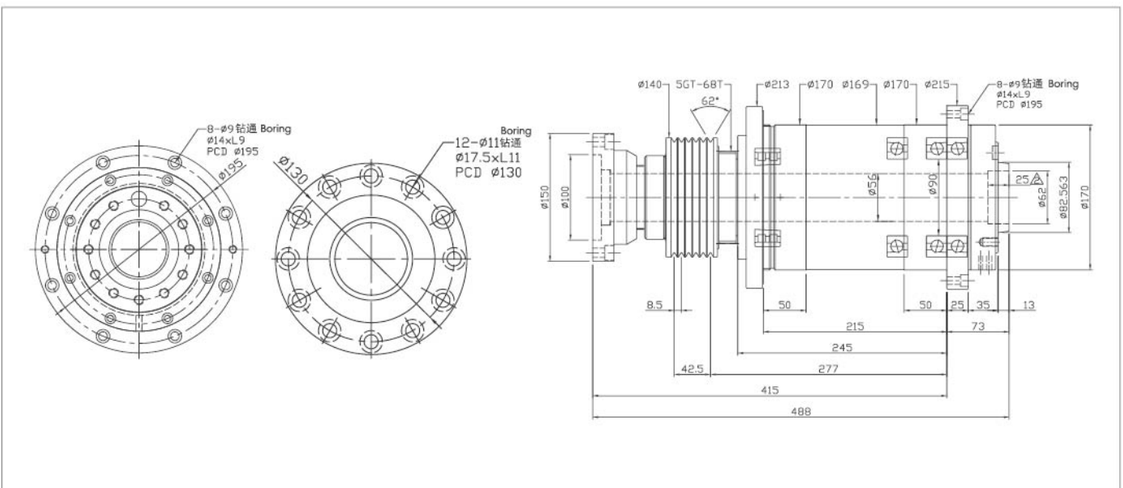
2、Belt specification: 7M (its length is calculated according to reduction ratio and center distance)

3、Synchronous belt of the encoder: (length)-5gt-15(width)

4、Synchronous belt of the encoder: 5GT-68T(washer is attached)

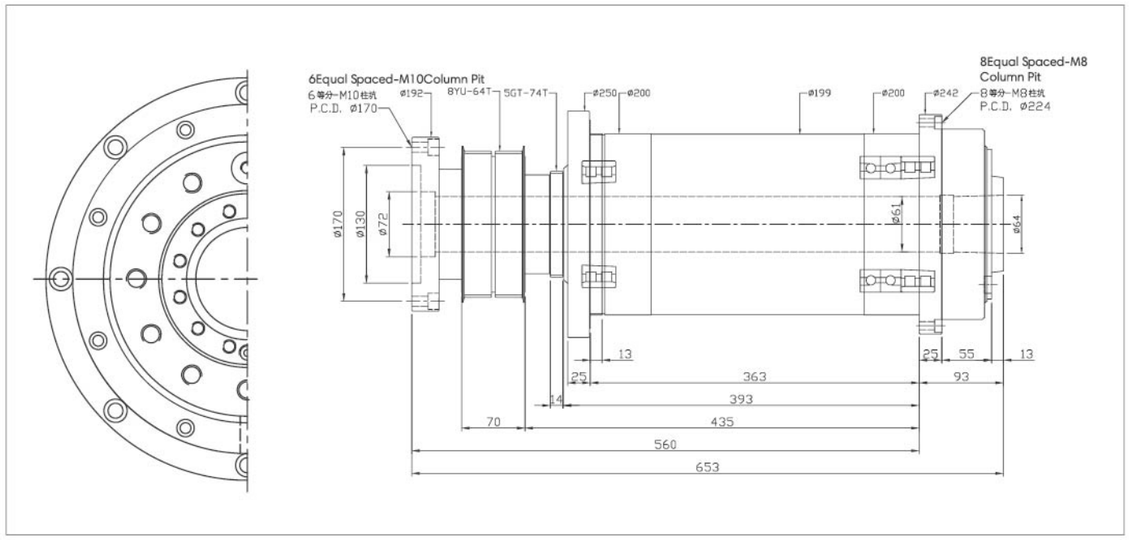
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴规格 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	动平衡 Dynamic Balancing	轴端回转精度 Rotation Precision of The Spindle End	温升 Temperature Rise
KJ0560DG	6000	A2-5	Φ90	70 Series 系列×2	70 Series 系列×2	油脂 Grease	G1	0.003	15°C
KJ0555DG	8000	A2-5	Φ90	70 Series 系列×2	70 Series 系列×2	油脂 Grease	G1	0.003	15°C

03



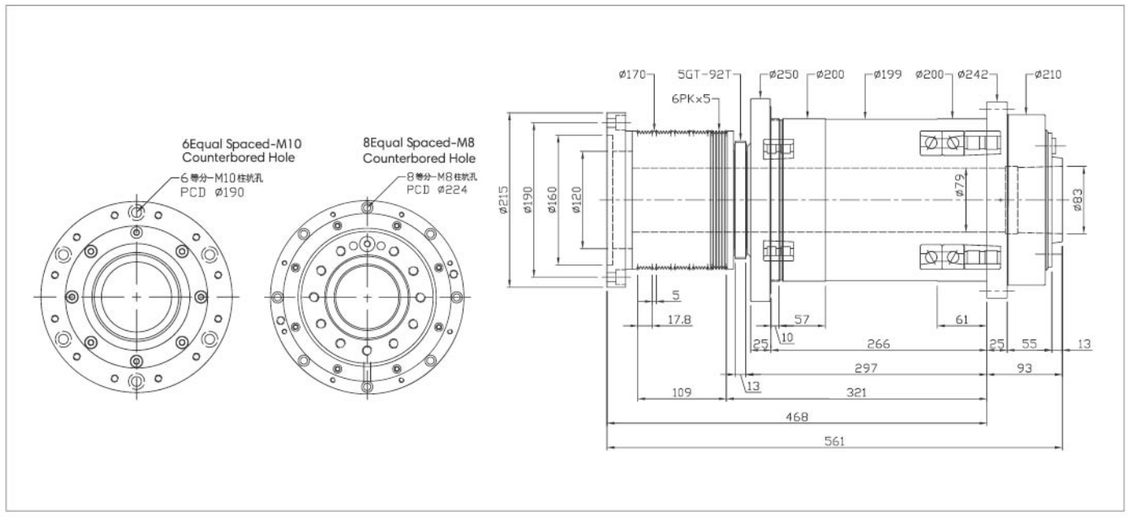
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴规格 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	动平衡 Dynamic Balancing	轴端回转精度 Rotation Precision of The Spindle End	温升 Temperature Rise
KJ205BG	6000	A2-5	Φ90	70 Series 系列×3	NN Series 系列	油脂 Grease	G1	0.003	15°C

04



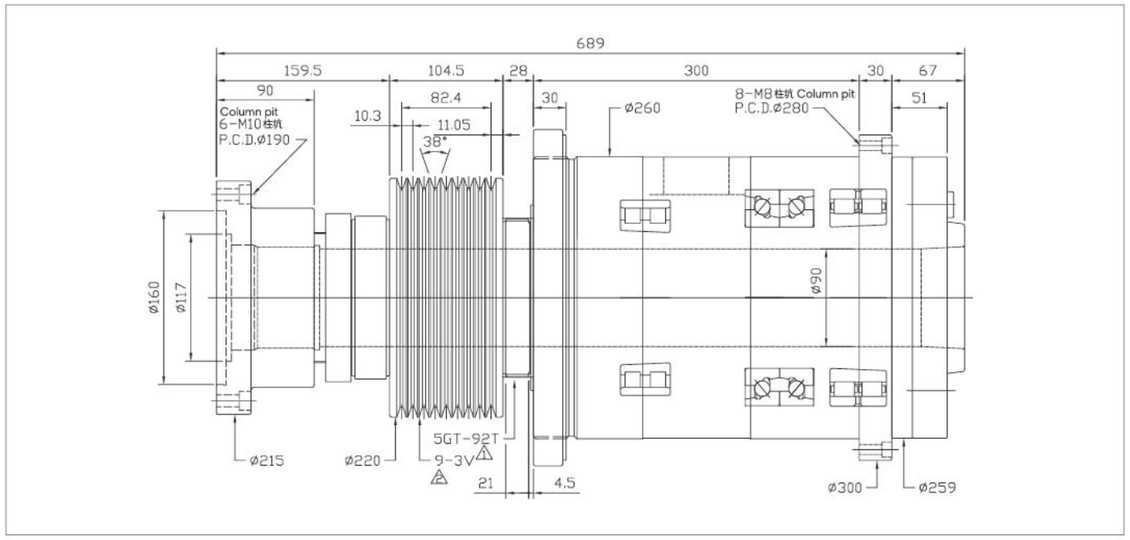
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴规格 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	动平衡 Dynamic Balancing	轴端回转精度 Rotation Precision of The Spindle End	温升 Temperature Rise
SR0650A	4200	A2-6	Φ100	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	G1	0.005	20°C

05



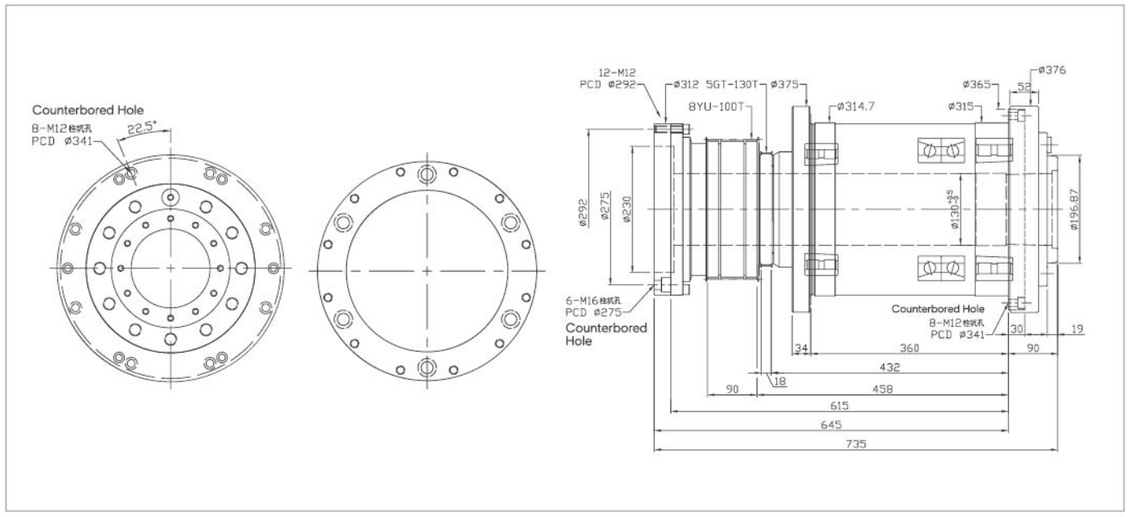
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴规格 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	动平衡 Dynamic Balancing	轴端回转精度 Rotation Precision of The Spindle End	温升 Temperature Rise	主轴内孔锥度 Taper of spindle bore
TF206A	4000	A2-6	Φ110	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	G1	0.005	15°C	1/20

06



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴规格 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	动平衡 Dynamic Balancing	轴端回转精度 Rotation Precision of The Spindle End	温升 Temperature Rise
WI0830A	3000	A2-8	Φ130	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	G1	0.005	20°C

07



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴规格 Taper Hole	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	动平衡 Dynamic Balancing	轴端回转精度 Rotation Precision of The Spindle End	温升 Temperature Rise	主轴内孔锥度 Taper of spindle bore
TF1125A	2500	A2-11	Φ170	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	G1	0.005	15°C	1/20

Gear-Drive Spindle 齿轮式主轴 >

Specifications of Gear-Drive Spindle For Milling Machine

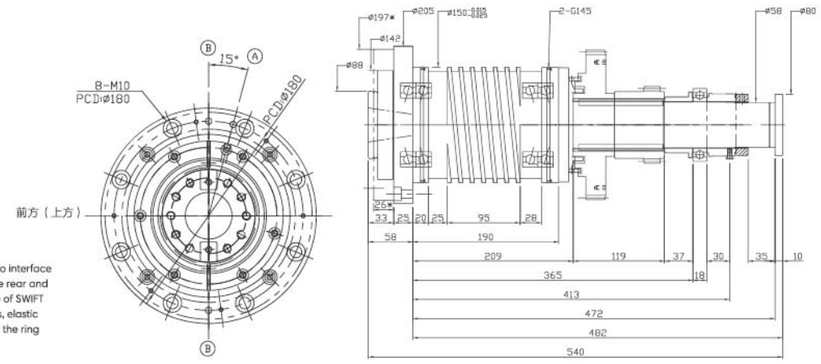
铣床-齿轮式主轴产品规格表

01

标示 Mark	功能 Function	规格 Specification
A	气幕保护 IN Spindle Coolant	Φ6
B	环喷入口 IN Spindle Coolant	2-Φ6

备注(Note)：
1、齿轮由客户自备，客户思维福特提供之界面设计齿轮。
2、后方外观与大富精械所提供之结构有所差异，是为了采用惟隆标准组件而所变动。
3、此组拉刀弹簧，弹片在退刀时，其弹片弹力为：1300kgf。
4、加装环喷环尺寸部分，加注：[*]。

1、The customer needs to design gear according to interface provided by SWIFT 2、Appearance difference of the rear and of that provided by Datong machinery is for the use of SWIFT standard components 3、When retracting the tools, elastic force of the spring is 4、Add * on the dimension for the ring of the ring-shaped water spray

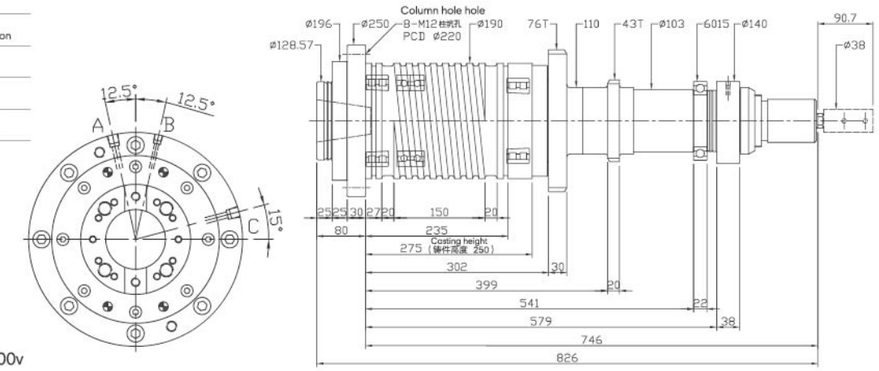


主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
DT4708EA	8000	BT40	Φ70	70 Series 系列×2	70 Series 系列×2	油脂 Grease	夹爪式 Gripper	850±50kg	G1	15°C	0.008

02

标示 Mark	功能 Function	规格 Specification
A	主轴冷却 IN Spindle Coolant	PT1/4
B	气幕保护 IN Spindle Coolant	PT1/8
C	环喷入水 Spindle Coolant	PT3/8

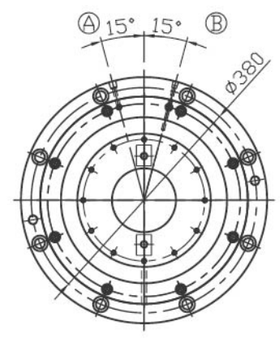
Rotary Joint : [SM]GU2000v

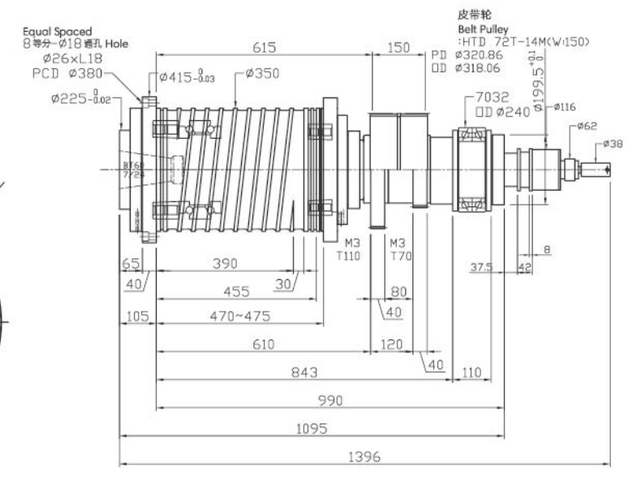


主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
ZS50G45	4500	BT50	Φ100	NN Series 系列×1 Thrust 止推×2	NN Series 系列×1	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	0.008

03

Ⓑ 进气孔 PT1/8 Air Hole PT1/8
Ⓐ 进油孔 PT3/8 Oil Hole PT3/8



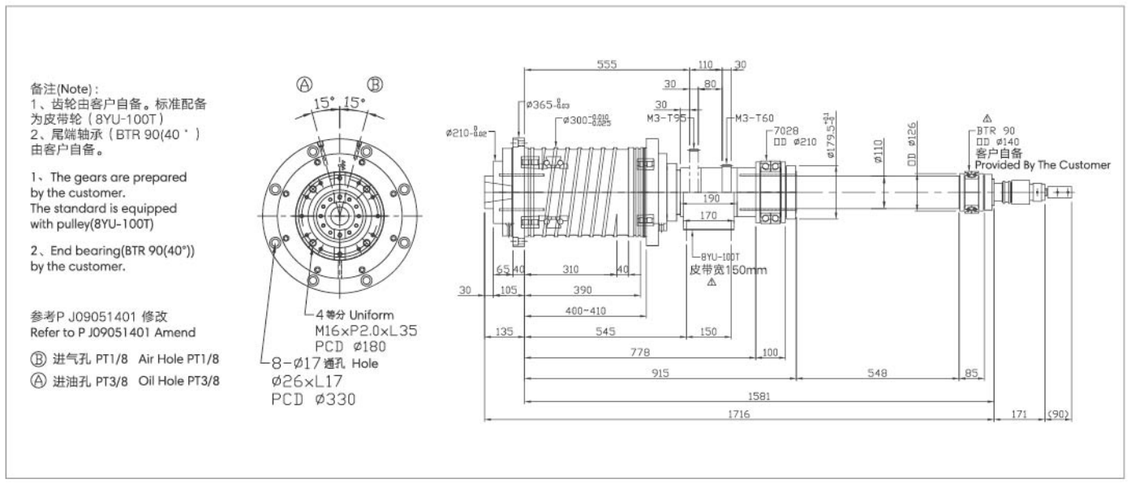


主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（400mm） Spindle End Deflection
WL6IAT	2000	BT60	Φ180	NN3036K Thrust 止推×2	NN3034K	油脂 Grease	倍力中出型	5500KG±50%	G1	15°C	0.020

Extensible Horizontal Boring Spindle
伸臂式（走心式）主轴 >

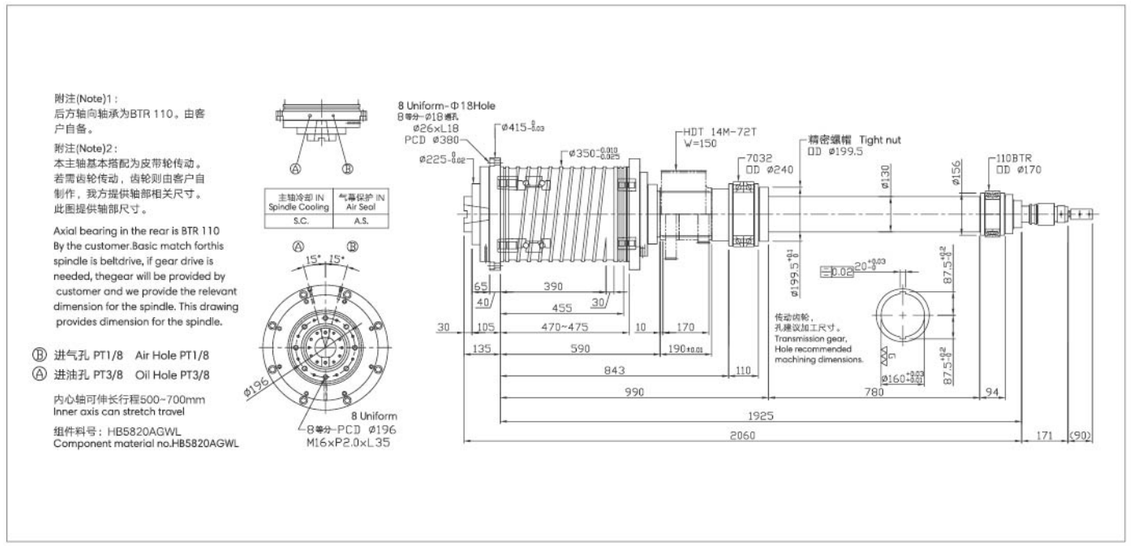
Specifications of Gear-Drive Spindle For Milling Machine
卧式搪铣床-主轴产品规格表

01



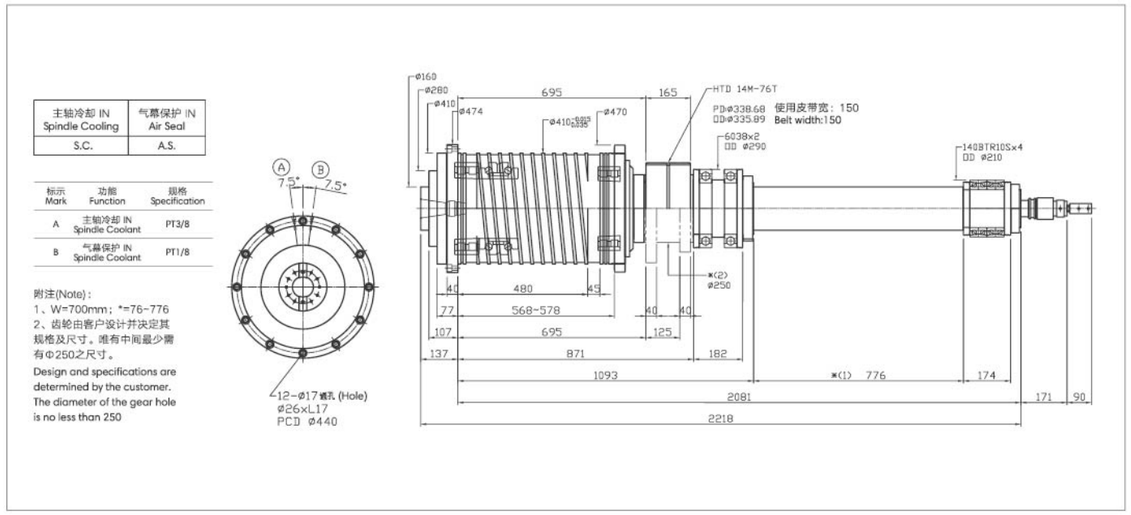
主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
HB5625A	2500	BT50	Φ160	NN3032K Thrust 止推×2	NN3030K	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	0.008

02



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
HB5820A	2000	BT50	Φ180	NN3036K Thrust 止推×2	NN3034K	油脂 Grease	夹爪式 Gripper	1750±50kg	G1	15°C	~

03



主轴型式 Spindle Model	主轴转速(RPM) Rotary Speed	主轴锥孔 Spindle Taper	前轴承内径 Front Bearing ID	前轴承型式 Front Bearing Style	后轴承型式 Rear Bearing Style	润滑方式 Lubrication	拉刀方式 Camp By	拉刀力 Clamping Force	动平衡 Dynamic Balancing	温升 Temperature Rse	轴端偏摆（300mm） Spindle End Deflection
HB5B10A	1000	BT50	Φ220	NN3044K Thrust 止推×2	NN3040K	油脂 Grease	夹爪式 Gripper	2400±50kg	G1	15°C	0.008