精密生产型车床
High precision and production lathe

我司产品
车床/车铣/多工位组合机床

OUR PRODUCTS
Lathe/Turning-milling center/rotary transfer machine

70-CF / 70Mi-CF
高精度普通车床
High Precision conventional Lathes

102N-CF / 102Mi-CF
高精度普通车床
High Precision conventional Lathes

102N-VM-CF
高精度普通车床
High Precision conventional Lathe

302
高精度数控车床
High Precision CNC lathe

225-CNC
高精度数控车床
High Precision CNC lathe

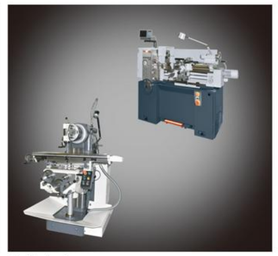
125-CCN
高精度数控车床
High Precision CNC lathe

180-CCN
高精度数控车床
High Precision CNC lathe

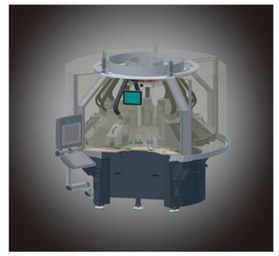
202 TG
车磨复合中心
Hard turning and grinding

632 - Y
高精度车削中心
High precision and production turning center

942 / 965-Y
高精度车削中心
High precision and production turning center



翻修车床
Overhauling



S19-15V
数控多工位组合机床
CNC rotary transfer machines

自动化解决方案
Automation solution

Votre partenaire / Ihr Partner / Your partner

微信公众号

肖布林机床（无锡）有限公司 | 江苏省无锡市惠山区堰联路88号
Schaublin Machines Co.,Ltd | No 88 Yanlian Road, Huishan District , Wuxi City , Jiangsu Province
Chinese Website: www.schaublincnc.com.cn
瑞士工厂地址：Rue Nomlieutant 1 | 2735 Bévilard, Switzerland | Swiss Website: www.smsa.ch

842-Y
865-Y

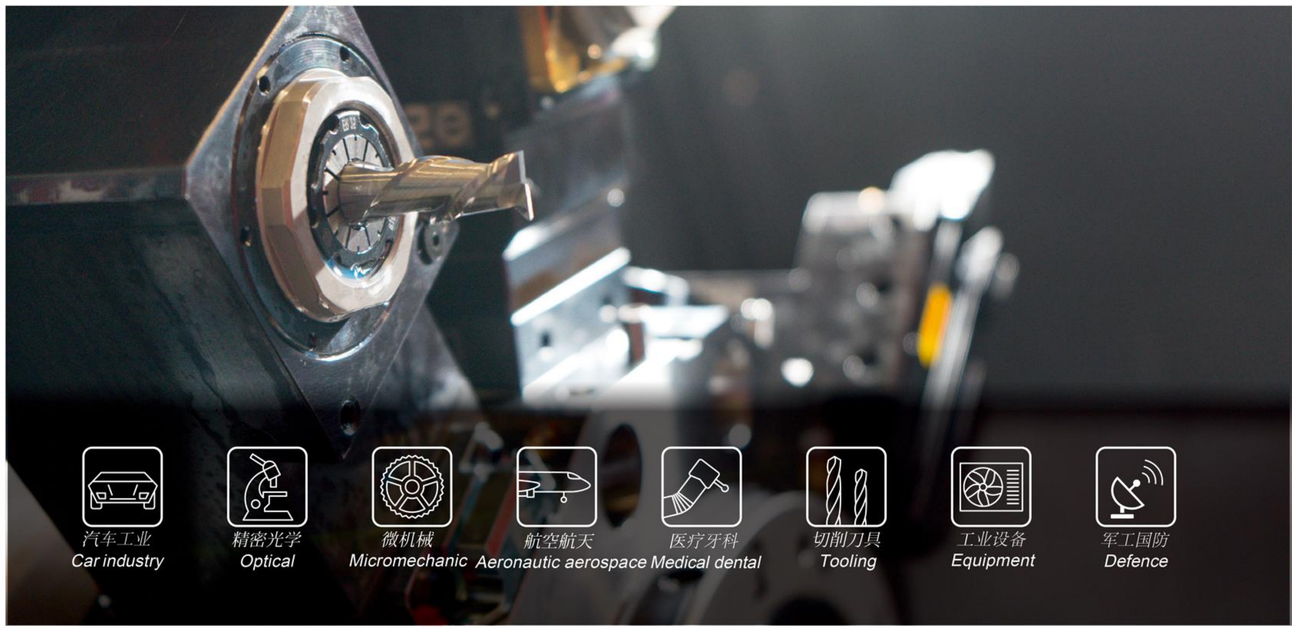
性能卓越的生产型精密车铣复合机床

High precision and production lathe with exceptional characteristics

SCHAUBLIN MACHINES SA

SWISS DESIGN & CHINA MADE

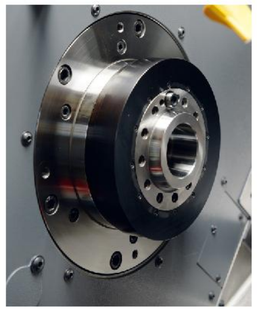
SCHAUBLIN MACHINES SA
www.smsa.ch



High precision and production lathe
高精度生产型车床
8系列
TECHNOLOGIE | TECHNOLOGIE | TECHNOLOGY

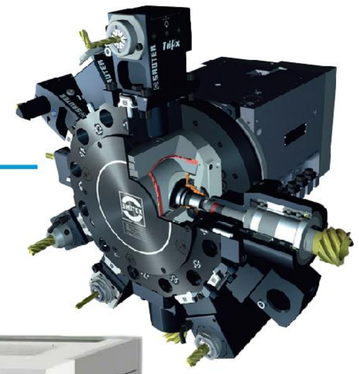
The high-precision main spindle delivers exceptional torque and outstanding performance. The optional sub-spindle enables complete part finishing while ensuring perfect coaxiality.

高精密主轴具有大扭矩和高性能的特点。副主轴(可选配)的加入使得加工工件具有完美的同轴度。



The high-precision radial revolver VDI30 and revolver BMT55 can be used both for main spindle and sub-spindle operations. The 12 revolver stations are driven by different motors designed for speeds from 6000rpm to 12000rpm.

高精度 VDI30动力刀塔/高精度BMT55动力刀塔适用于主轴/副主轴双模式同步加工，12 工位刀塔可根据不同驱动电机，最高转速实现 6000-12.000 转/分钟。

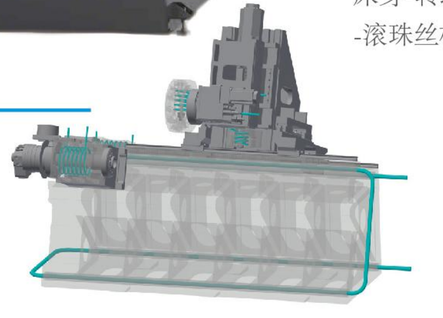


We cooperate with partners renowned all over the world. Fanuc offers ultra-performance systems tailored to the specific requirements.

我们与享誉世界的知名企业FANUC进行合作，为您的需求量身定制出超一流的数控系统。

Precision is enhanced with an integrated thermal stabilization system. The preheating time and the machine deformation are considerably reduced. An active cooler regulates the temperature of the following components: Cast iron base-Revolver (s)-Spindle(s)- Axis motor supports - Fixed ball screw bearings -Ball screw nuts -Hydraulic assembly.

通过集成式热稳定系统提升加工精度。预热时间与机器变形显著降低。冷却系统调节以下部件的温度: 铸铁床身-转塔刀架-主轴-轴电机支架-固定端滚珠丝杠轴承-滚珠丝杠螺母-液压组件。



8系列 精密生产型车床
High precision and production lathe

出色的精度

适合各种复杂应用的完美高精度机床，也适用于硬车削

OUTSTANDING PRECISION

The perfect high-precision machine for complex applications, also suitable for hard turning

我们的机床结构刚性好，并可以根据您的需求进行修改以满足您的具体使用领域。副主轴和尾座可供选用。

Our machines are manufactured around a rigid structure, and can be modified to suit your specific area of use. A counter spindle and tailstock are available as options as well as a 3-axis turret.

我们的使命是满足您对速度与效率的要求并与您一起开发新的应用领域。我们的专家可以满足您的高难度的需求。

Our mission is to meet your demands for speed and efficiency, and to work with you to develop new applications. Our experts can rise to your challenges.

Discover our videos

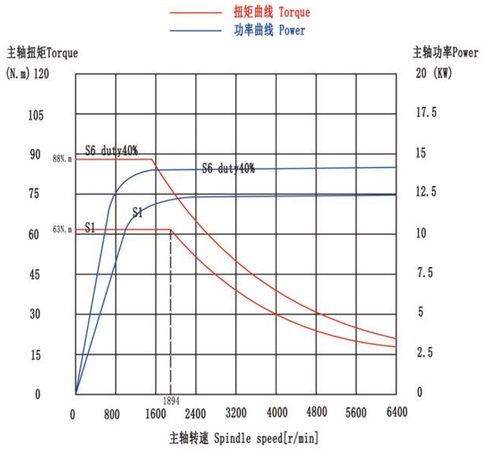
我们与全世界著名制造商合作。 Fanuc为客户提供量身定制的超性能系统的具体要求。

We cooperate with partners renowned all over the world. Fanuc offers ultra-performance systems tailored to the specific requirements.

我们机床主轴具有独特的高精度特点以及独特的功率扭矩特性。我们机床的标准主轴的几何精度确保优于0.5 μ m。副主轴(可选配)使得加工工件具有完美的同轴度。

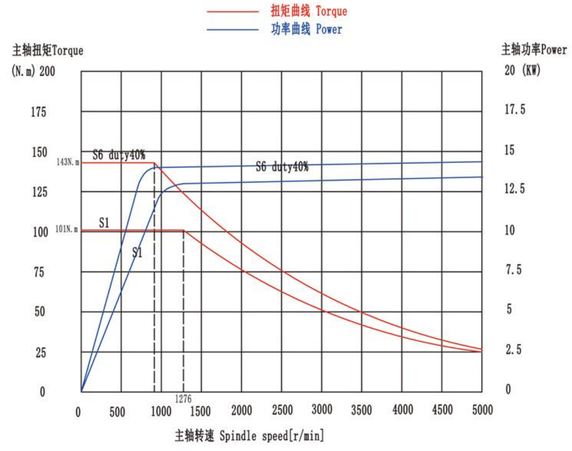
The main spindle features unique high precision, power, and torque characteristics. Our standard main spindles guarantee geometric accuracy better than 0.5 µm. The optional sub-spindle ensures perfect coaxiality for machined work-pieces.

A2-5主轴功率扭矩图
Spindle power and torque



主轴型号Spindle model：肖布林A2-5电主轴

A2-6主轴功率扭矩图
Spindle power and torque

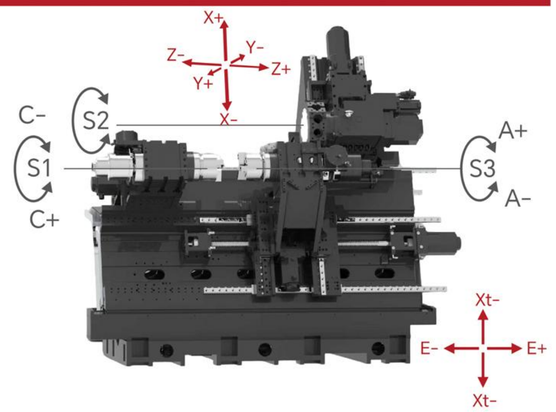


主轴型号Spindle model：肖布林A2-6电主轴

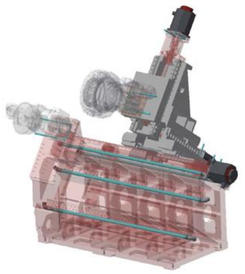
结构 - Structure

可选配 副主轴，副主轴 可实现E轴/Xt轴联动功能，在进行主轴零件加工时可实现副轴零件随动加工功能，提高加工效率。

The subspindle supports E-axis and Xt-axis interpolation, enabling follow-up machining of the part on the subspindle while the main spindle is machining its part, thereby improving processing efficiency.



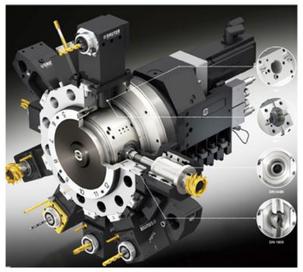
热量稳定系统 - Thermal stabilization



我们设备充分考虑了预热时间和设备本身的热胀冷缩，并设计了独特的热量稳定系统。
激活冷却循环来保持以下部件的热量稳定：
铸铁基座 - 塔座 - 各个进给轴 - 主轴 - 顶针 - 液压系统

The preheating time and the machine expansion are considerably reduced thanks to the thermal stabilization system. Active cooling circuit extracts heat accumulating in following elements: - Cast iron base - Turret (revolver) - All driving axes - Main spindle - Counter-spindle - Hydraulic unit

刀塔- TURRET



Compact design	紧凑型设计
saving 25%installation space	节省25%安装空间
Max speed :6000rpm/12,000rpm	最高转速:6000转/分/12000转/分
Interface:VDI &BMT	接口类型:VDI&BMT
12T:option(24T)	12刀位:可选(24刀位)
Dry running is possible	支持干式运行
Low Noise	低噪音

铣削刀塔:
BMT刀塔采用4个螺栓对刀座进行固定，可以加强对刀具的固定强力切削中也可以发挥出卓越的性能并且可使用旋转刀具加工高附加值产品。

Mill Turret:The BMT turret secures the tool holder with four bolts, enhancing the clamping force on the tool. It ensures excellent performance even during heavy-duty cutting operations and enables the use of rotary tools for machining high-value-added products.

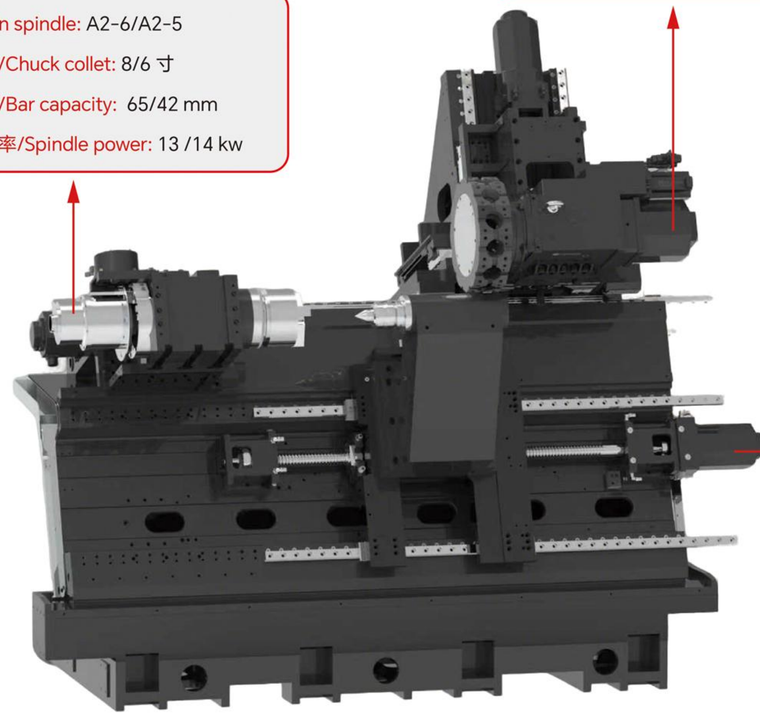
8系列 | 精密生产型车床
High precision and production lathe

结构 - Structure

865-Y / 842-Y

- 上刀塔/Upper turret: VDI /BMT
- 刀位数/Station: 12 Tools
- 动力刀具规格/Driven tools: ER32/ER25
- 动力电机/Driven power: 4.5/ 5.5 kw

- 主轴/Main spindle: A2-6/A2-5
- 卡盘筒夹/Chuck collet: 8/6 寸
- 棒料直径/Bar capacity: 65/42 mm
- 主电机功率/Spindle power: 13 /14 kw



- MT-4伺服编程尾座/Servo programming tailstock
- 选配/Optional：
  副轴/Sub spindle: A2-5
  卡盘筒夹/Chuck collet: 6 寸
  棒料直径/Bar capacity: 42 mm
  主电机功率/Spindle power: 12/14 kw

FLEXIBILITY • LONGEVITY • HIGH PRECISION • SPECIALITIES

动力刮齿-Power skiving

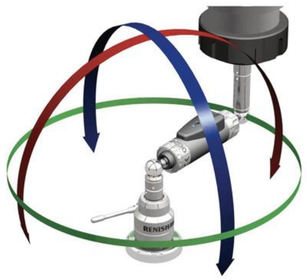
动力刮齿刀具可使加工齿轮在单独操作时减少加工时间，提高生产效率。

Power skiving tools allow the machining of gears on parts in a single operation to reduce production time.

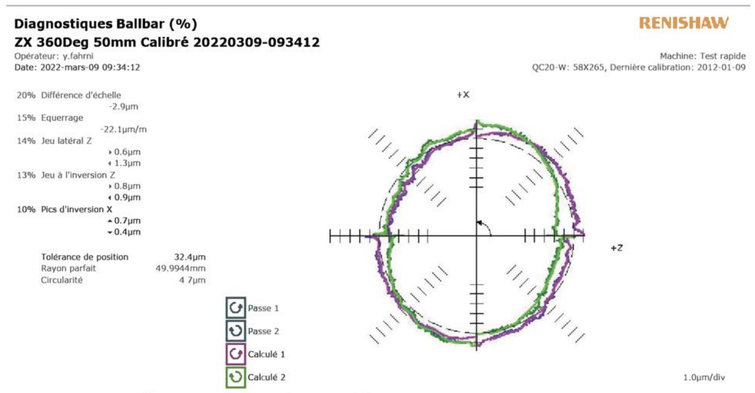
球型测头-Ballbar test

球型测头保证了轴向补差5 μm的圆度。

The ballbar test guarantees a circularity of 5 µm in interpolation of the axes.



source : Renishaw

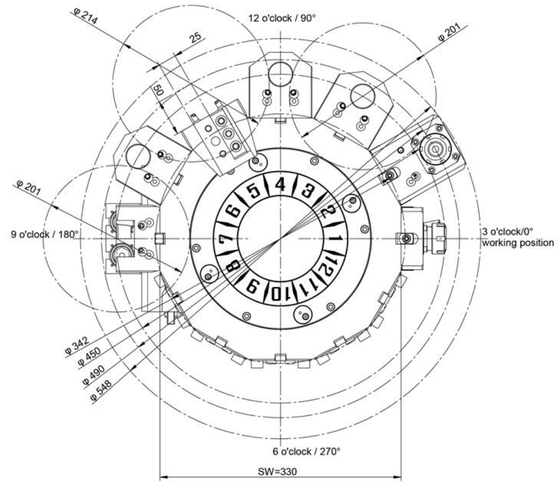


test results on the machine

8系列 | 精密生产型车床
High precision and production lathe

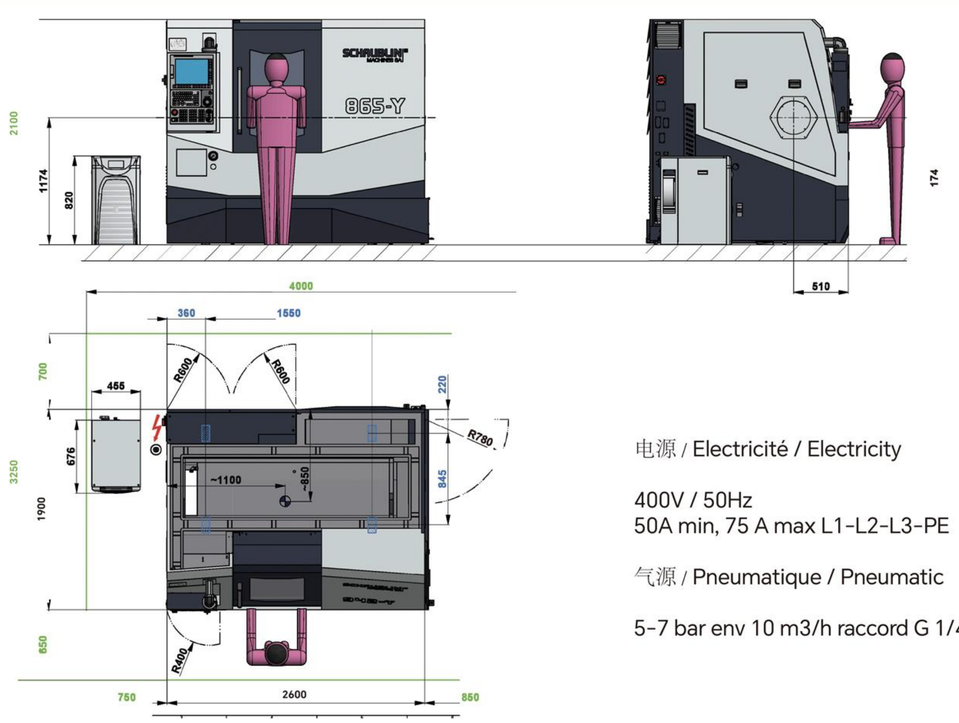
8列加工范围 - 8 series work range

上刀塔 Upper Turret



8 系列刀塔布局图

8系列安装尺寸 - 8 series implementation



电源 / Electricité / Electricity

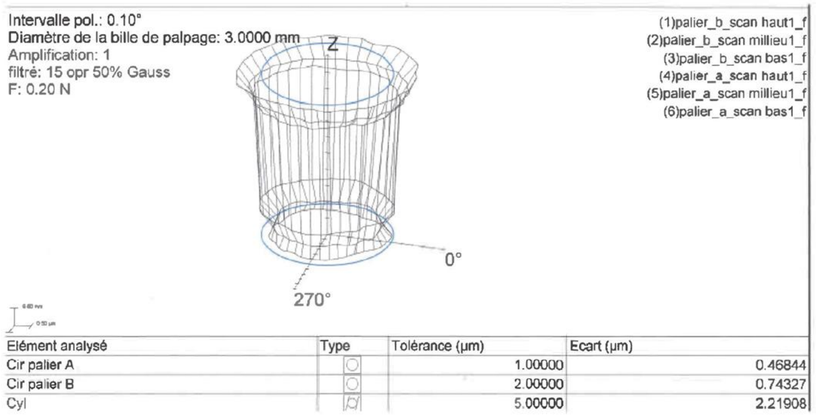
400V / 50Hz
50A min, 75 A max L1-L2-L3-PE

气源 / Pneumatique / Pneumatic

5-7 bar env 10 m3/h raccord G 1/4”

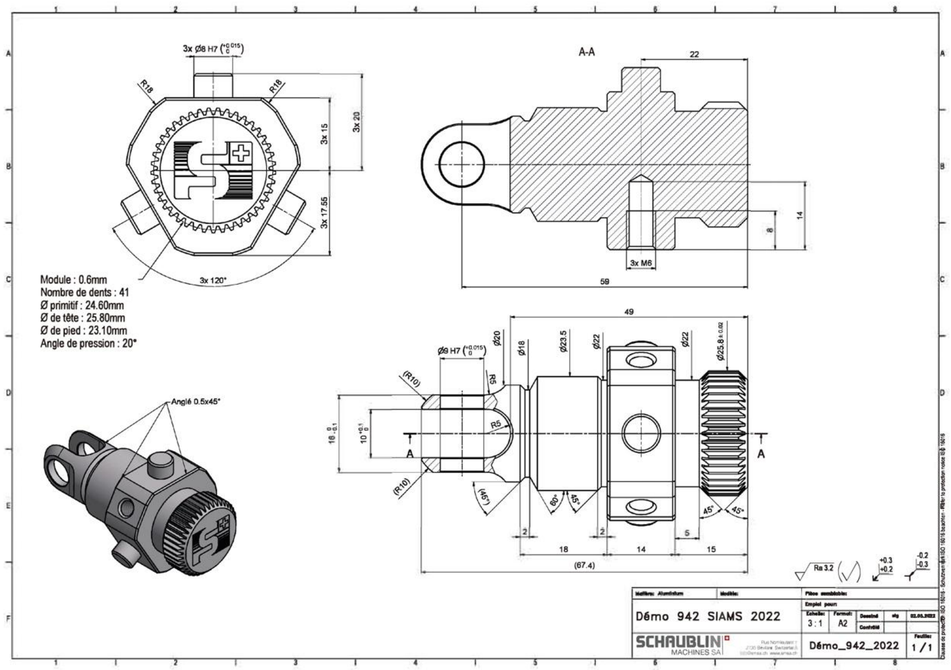
FLEXIBILITY • LONGEVITY • HIGH PRECISION • SPECIALITIES

圆度检测 - Circularity test

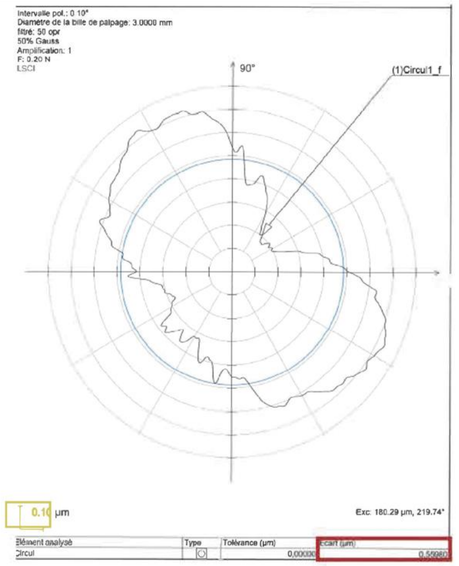


Elément analysé	Type	Tolérance (µm)	Ecart (µm)
Cir palier A	○	1.00000	0.46844
Cir palier B	○	2.00000	0.74327
Cyl	⌭	5.00000	2.21908

应用案例 - Example of applications



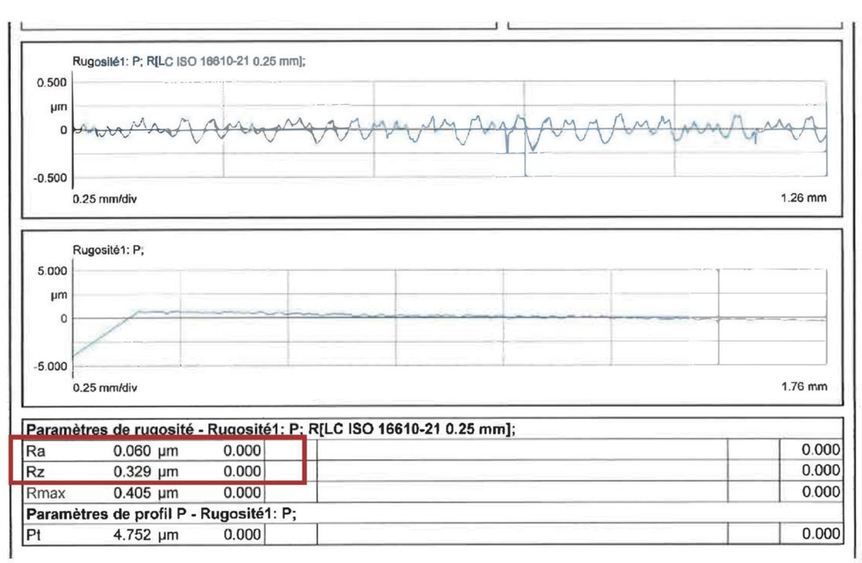
动力刮齿-Power skiving



On this demonstration piece, the following processes were used:
turning
interpolation by milling on the Y-Z plane
diamond turning on the face and diameter
engraving of logos
gearing by Power Skiving

在这个演示件上，使用了以下流程:
1.旋转
2.在Y-Z平面上用铣削补差
3.在端面和径向上用金刚石
刀具车削
4.雕刻商标
5.用动力刮齿工艺加工齿轮

球型测头-Ballbar test



Paramètres de rugosité - Rugosité1: P; R[LC ISO 16610-21 0.25 mm];						
Ra	0.060 µm	0.000				0.000
Rz	0.329 µm	0.000				0.000
Rmax	0.405 µm	0.000				0.000
Paramètres de profil P - Rugosité1: P;						
Pt	4.752 µm	0.000				0.000

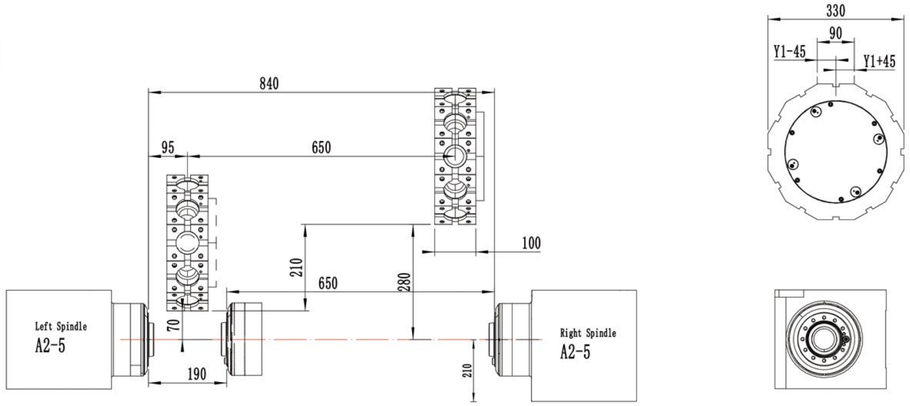
8系列参数/8 series machine specifications		842-Y	865-Y
加工范围	Capacities		
床身最大回转直径	Max swivel diameter of the bed	550 mm	550 mm
最大加工直径	Maximal turning diameter	340 mm	340 mm
最大车削长度	Maximal turning length	650 mm	620 mm
两卡盘之间最大距离（副轴选配）	Max.distance between chucks	650 mm	620 mm
两主轴之间最大距离（副轴选配）	Max.distance between spindle noses	840 mm	828 mm
标准卡盘尺寸	StandardChuck Size	6/6 inch	8/6 inch
控制系统	System		
FANUC/SIEMENS	FANUC/SIEMENS	OITF & 31i/828D&ONE	OITF & 31i/828D&ONE
主轴	Spindle		
ISO标准的主轴头	ISO spindle nose	A2-5	A2-6
主轴最高转速	Spindle Max speed	6000	5000
C轴电机	Motor with C axis	Integrated	Integrated
连续／间歇功率	Power continuous/intemmittent	12/14 kW	13/14 kW
连续／间歇扭矩	Continuous/intermittent torque	60/85 Nm	100/140 Nm
C轴编程增量	Programmable increment,C-axis	0.0001°	0.0001°
通孔直径	Maximum throughbore diameter	51 mm	73mm
液压轴向可调节式夹紧力S1	Adjustable axial clamping force S1 hydraulic	5-35 [bar]	5-35 [bar]
		180-2580[daN]	430-5500 [daN]
标准棒料直径	Max bar capacity	42mm	65mm
副主轴（选装）	Counter-Spindle (Option)		
ISO标准的主轴头	ISO spindle nose	A2-5	A2-5
主轴转速	Spindle speed	6000	6000
C轴电机	Motor with C axis	Integrated	Integrated
连续／间歇功率	Power continuous/intermittent	12/14 kW	12/14 kW
连续／间歇扭矩	Torque continuous/intermittent	60/85 Nm	60/85 Nm
C轴编程增量	Programmable increment,C-axis	0.0001°	0.0001°
通孔直径	Maximum throughbore diameter	51 mm	51 mm
气动轴向可调节式夹紧力S1	Adjustable axial clamping force S1 pneumatic	1.5-5[bar]	1.5-5[bar]
		250-1120 [daN]	250-1120 [daN]
标准棒料直径	Max bar capacity	42mm	42mm

8系列参数/8 series machine specifications		842-Y	865-Y
上刀塔	Upper Turret		
动力伺服刀塔	Driven turret	VDI30/BMT55 上刀塔 /Upper turret	VDI30/BMT55 上刀塔 /Upper turret
刀柄数量（全动力刀座）	Number of tool stations (all driven)	12	12
刀盘直径	Tool disc diameter	330mm	330mm
最大镗杆直径	Max boring bar diameter	40mm	40 mm
最大刀具截面	Maximum tool size	25x25 mm	25x25 mm
连续／间歇功率	Power continuous/intermittent	4.5 kW/5.5 kW	4.5 kW/5.5 kW
动力刀最大扭矩	Max torque of the rotating tools	54 Nm	54 Nm
动力刀最大转速	Max speed driven tools	6000/12000（可选配）	6000/12000 Rpm (可选配)
邻位换刀时间	Indexing time 1 pos.	<0.5s	<0.5s
一体式冷却和双向回转分度	Integrated cooling and indexing in both direction		
上刀塔行程	Upper Turret Slide		
X轴横向行程（半径）	Transverse stroke (diameter), X,X2-axis	210mm	210mm
X轴可编程增量（半径）	Programmable increment,X,X2-axis (diameter)	0.0001 mm	0.0001 mm
Z轴纵向行程	Longitudinal stroke, Z-axis	650 mm	650 mm
Z轴可编程增量	Programmable increment,Z-axis	0.0001 mm	0.0001 mm
Y轴纵向行程	Longitudinal stroke,Y-axis	±45 mm	±45 mm
Y轴可编程增量	Programmable increment,Y-axis	0.0001 mm	0.0001 mm
X,Y和Z轴快速进给	Rapid feed,X-,Y-and Z-axe	18/10/30 mm/min	18/10/30 mm/min
尾座	Tailstock		
尾座锥套	Tailstock taper	MT-4	MT-4
E轴（尾座）最大移动行程	E aixs Stroke	600 mm	600 mm
伺服尾座电机功率	Servo tailstock motor power	1.8Kw	1.8Kw
冷却液水箱	Tank with coolant		
液箱容积	Tank capacity	200(L)	200(L)
泵压力	Pressure of watering pump	28(L/min) @10 bar	28(L/min) @ 10 bar
尺寸和重量	Dimensions and weight		
机床净重	Approximate net weight of the machine	6000 Kg	6000 Kg
长x宽x高（mm）	Overall dimensions Lx D x H	2600x1900x2100 [mm]	2600x1900x2100 [mm]

备注：系统参数以FANUC为参照数据，仅供参考，根据客户特殊要求的系统数据以技术文件为准。

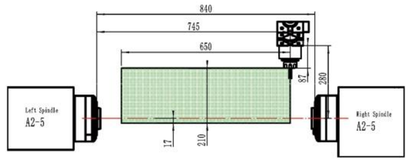
842行程图

842 Travel Diagram

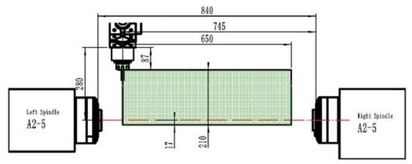


（选配 option:Xt axis ）

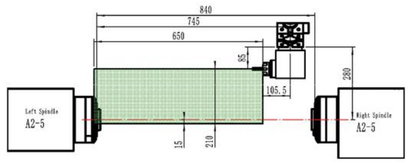
主轴径向动刀头加工行程 Spindle - Radial Live Tool Travel



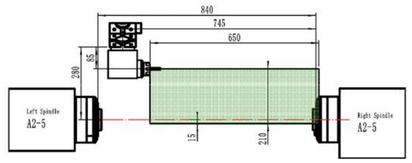
副轴径向动刀头加工行程 Spindle - Radial Live Tool Travel



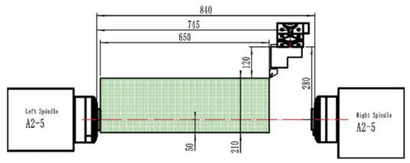
主轴转向动刀头加工行程 Spindle - Axial Live Tool Travel



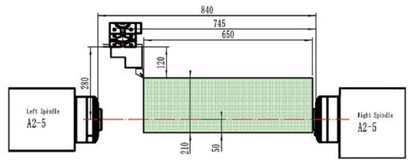
副轴转向动刀头加工行程 Sub Spindle - Axial Live Tool Travel



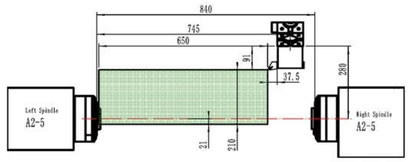
主轴外圆刀加工行程 Spindle - OD Turning Tool Travel



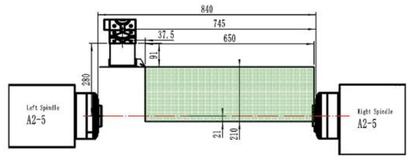
副轴外圆刀加工行程 Sub Spindle - OD Turning Tool Travel



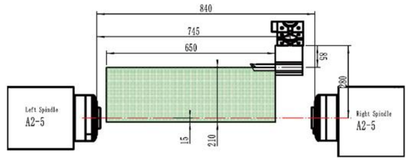
主轴端面刀加工行程 Spindle - Facing Tool Travel



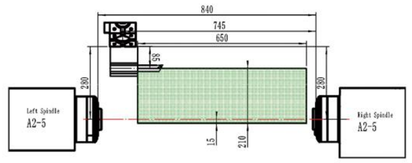
副轴端面刀加工行程 Sub Spindle - Facing Tool Travel



主轴镗孔刀加工行程 Spindle - Boring Tool Travel

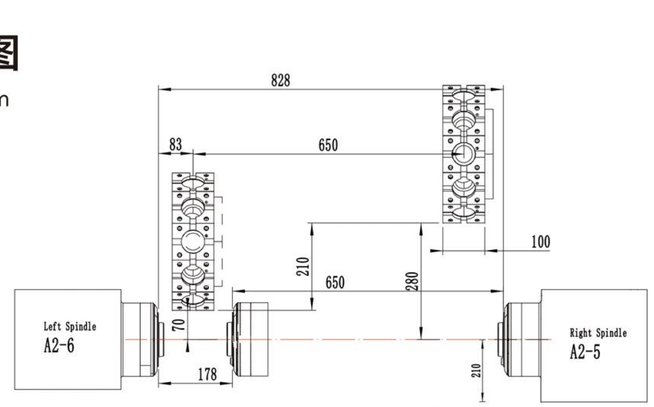


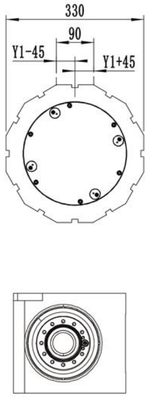
副轴镗孔刀加工行程 Sub Spindle - Boring Tool Travel



865行程图

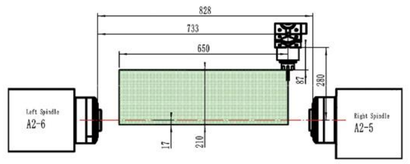
865 Travel Diagram



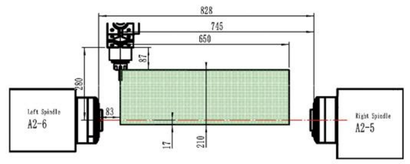


（选配 option:Xt axis ）

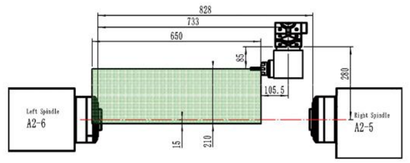
主轴径向动刀头加工行程 Spindle - Radial Live Tool Travel



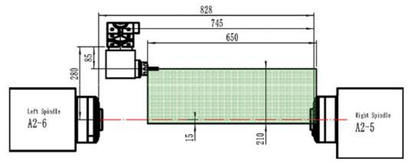
副轴径向动刀头加工行程 Spindle - Radial Live Tool Travel



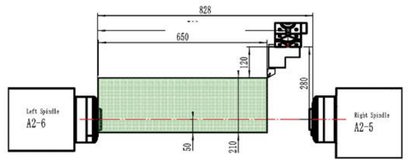
主轴转向动刀头加工行程 Spindle - Axial Live Tool Travel



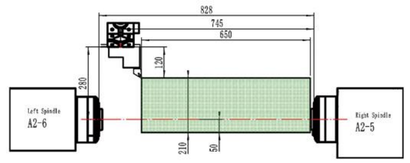
副轴转向动刀头加工行程 Sub Spindle - Axial Live Tool Travel



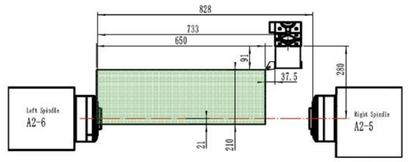
主轴外圆刀加工行程 Spindle - OD Turning Tool Travel



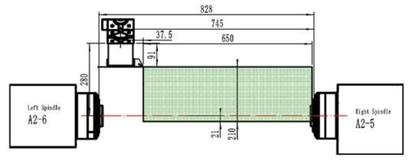
副轴外圆刀加工行程 Sub Spindle - OD Turning Tool Travel



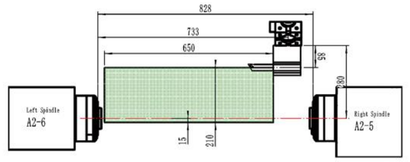
主轴端面刀加工行程 Spindle - Facing Tool Travel



副轴端面刀加工行程 Sub Spindle - Facing Tool Travel



主轴镗孔刀加工行程 Spindle - Boring Tool Travel



副轴镗孔刀加工行程 Sub Spindle - Boring Tool Travel