



GRINDING SOLUTIONS

磨削方案



公司的航空领域



量身定制

THE FUTURE IS TAILOR-MADE

Eng. Walter D. Pizzolato



## 量身定制 Tailor-made

### 航空零件磨削解决方案产业

超过40年的高精度机械工程经验，已经使AZ公司在世界上销售超过3000台磨床。AZ公司的使命是为客户的项目需求进行设计机床，为客户解决复杂的特殊的工件磨削问题。

**AZ AEROSPACE** 公司的航空零件生产线是为航空业设计制造一系列的专用磨床。用于航天零部件如起落架和涡轮主轴的加工。

### GRINDING SOLUTIONS FOR AEROSPACE INDUSTRY

40 years of experience in high precision mechanical engineering has allowed AZ to sell more than 3,000 grinding machines around the world. The AZ mission is to project and design machines on customers needing and solve particular grinding problems of complex workpiece form.

**AZ AEROSPACE** line is a range of special grinding machines for the aerospace industry. AZ machines are special projects for mechanical aerospace components as landing gears and turbo spindles.



> 何为专业就是标准

> WHERE SPECIAL IS STANDARD



# 制造质量

## Manufacturing quality

### 床身

机床采用composital或铸铁。composital是一种特殊的树脂花岗岩沥青混合材质，从而减少对机床本身的振动。

### MACHINE BED

The machine bed made of **Composital** or cast iron. Composital is a special resine-granite mixture that reduce vibration on the machine.

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- > 起落架夹紧系统
- > LANDING GEAR CLAMPING SYSTEM



## 尾座

尾座的液压负载由测力传感器进行控制。

## TAILSTOCK

The tailstock has hydraulic constant pressure controlled by load cell.

## 夹紧系统

工件的夹紧系统为根据工件的特征而定制。

## CLAMPING SYSTEM

The workpiece clamping system is **customized** on workpiece features.



# 磨削

## The grinding

### 不同的配置

该机可配备多种磨头配置：直线，角度分明，内部和B轴是由一个集成的力矩电机进行驱动。可以允许配置碳化硅、刚玉、CBN和金刚石砂轮对不同材质和表面处理的包括铬和超音速进行磨削。

### DIFFERENT CONFIGURATIONS

AZ grinders can be equipped with a wide range of wheelhead configurations: **straight, angular, internal** and **“B”- axis** which is driven by an integrated torque motor. **Silicon carbide, corundum, CBN** and **diamond** grinding wheels allow grinding of different materials and surface treatments including **chromium** and **HVOF**.



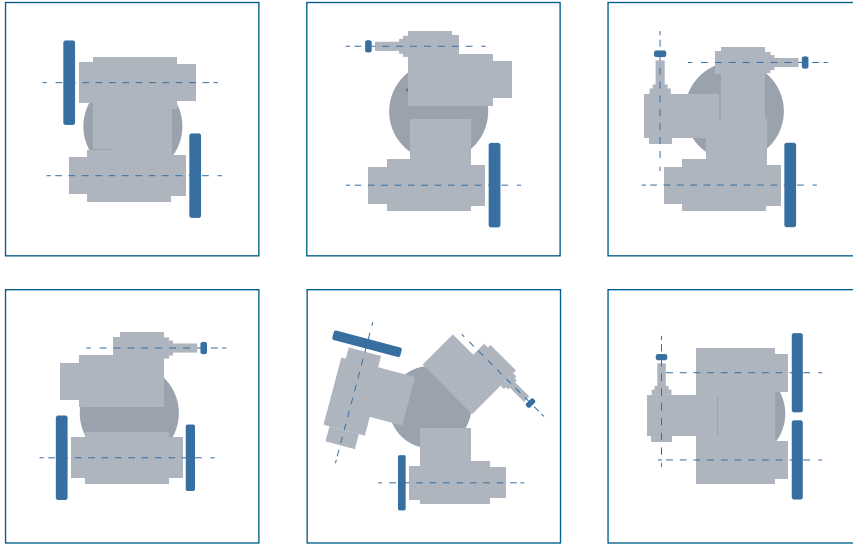
- > B轴磨头带有内圆和外圆主轴
- > B-AXIS WHEELHEAD WITH INTERNAL AND EXTERNAL SPINDLE





## 磨削配置\*

### GRINDING CONFIGURATIONS\*



\* 图片介绍只是其中一种，也可配置其他磨头。

\* The figures used are only indicative. Other wheelhead configurations are possible.

## 砂轮修整器

### THE DRESSING SYSTEM



> 单点金刚石内圆砂轮修整器

> Internal grinding wheel dresser with single point diamond.



> 金刚石扩口杯形砂轮修整器

> Diamond flaring cup wheel dresser



> 金刚石电子砂轮修整器

> Diamond electroplated wheel dresser



## 技术

### The technology

#### 先进的技术

机床由AZ公司设计的在世界处于领先的机电一体化解决方案。当下市场上销售的产品，AZ公司选择测量、移动、控制等世界领先的直接供应商及他们的合作公司和AZ公司的工程师们在几乎涉及到的范围内共同创造而成。

机床可以配置不同的测量系统:

- + 绝对在线测量
- + 量爪在线测量直径
- + 带有双接触式的外圆测量

选配装置:

- + 测量不同位置的探针
- + 内圆平衡头法兰式
- + 内圆平衡头主轴式

#### THE MOST ADVANCED TECHNOLOGY

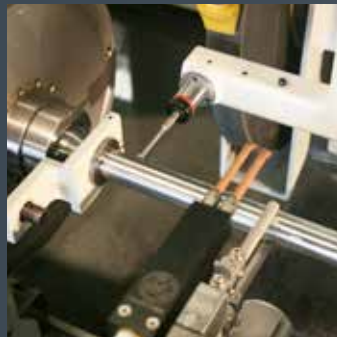
The machines produced by AZ perform the most advanced mechatronics solutions. The measurement, the movements, the controls are chosen on the top worldwide leader suppliers and their combinations with AZ engineer creativity produce one of the most sophisticated range of products today on the market.

The machine can be supplied with different measurement systems:

- + ABSOLUTE IN-PROCESS MEASURING
- + IN-PROCESS DIAMETER MEASURING WITH FORK
- + EXTERNAL MEASURING WITH DOUBLE TOUCH

optional equipment:

- + PROBE FOR DIFFERENT POSITION MEASURING
- + INTERNAL BALANCING HEADS FLANGE TYPE
- + INTERNAL BALANCING HEADS SPINDLE TYPE







公司的航空领域



AKP

# 配有间隙的起落架内圆磨床

Landing gear external grinding machines with gap

最大回转直径

Max swing on the gap

3600 mm

回转直径

Swing over table

1000-1200 mm

工件长度

Workpiece length

1250-5000 mm



GSB

## 起落架内圆磨床

Internal landing gear grinding machines

最大内圆磨削直径

Max internal grinding diameter

350 mm

最小内圆磨削直径（直径X长度）

Min internal grinding diameter (diameter x length)

40 x 1000-2000-3000 mm

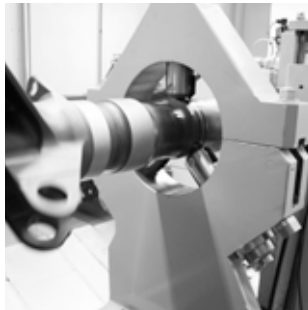
最大工件尺寸（直径X长度）

Max workpiece dimensions (diameter x length)

800x1000 mm

900x2000 mm

1000x3000 mm





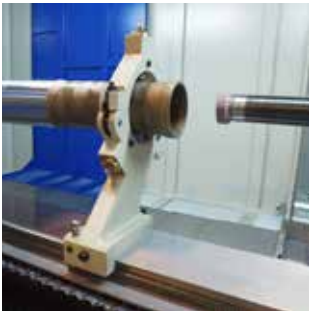


RU

RUG

# 能在一台机床上加工内径和外径的万能磨床

Universal grinding machines for external and internal diameters





最大回转直径  
Max swing

1200 mm

最大工件长度  
Max workpiece length

6000 mm



## 起落架内外圆的随动磨削

Landing gear orbital grinding machines for external and internal diameters

带有旋转工作台满足非对称重型零件的加工  
for asymmetrical heavy parts, with Rotating table



**LBC777**  
AZ AEROSPACE

AZ  
AEROSPACE

外圆磨削能力

Internal grinding capacity

70-900 mm

内圆磨削能力

External grinding capacity

10-450 mm

正切式磨削能力

Tangential grinding capacity

2000x850x1500 mm



## 欧洲制造 意大利制造

AZ spa  
via dell'elettronica 20  
36016 Thiene (VI) ITALY

T +39 0445 575543  
F +39 0445 575756  
*info@azspa.it*







Marketing Dept. of AZ spa EN/IT - 20170316

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AZ spa  
via dell'elettronica 20  
36016 Thiene (VI) ITALY

T +39 0445 575543  
F +39 0445 575756  
*info@azspa.it*