



— 雄琛科技 —

XIONGCHEN
TECHNOLOGY

SPECIALIZED MANUFACTURER
OF **WEAR PARTS**

耐磨零部件专业生产商

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About Us

关于我们

雄琛科技成立于2020年，位于中国四川省广汉市，总投资人民币6000万元。公司致力于超硬材料及石油钻采工具的研发、生产及制造，广泛应用于石油、航天、船舶、采矿等领域，取得了ISO认证以及20多项专利，是从事特种耐磨零部件的专业制造商，与国内外该领域多家企业有着长期合作。雄琛科技除拥有自身的成熟技术外，也以稳健的步伐投入研发，充分发挥生产高效和产品精细的优势，为客户提供优质的服务。

With a total investment of RMB 60 million, Xiongchen Technology was incorporated in 2020 in Guanghan City, Sichuan Province, China. The company is committed to the R&D, and manufacture of superhard materials and oil drilling tools which are widely applied in petroleum, aerospace, marine and mining industries, with ISO certification and more than 20 patents.

At present, it is one of the professional manufacturers engaged in special wear parts in China. It has built long-term cooperation with many enterprises in this field at home and abroad. In addition to the mature technology, Xiongchen also invests in research and development at a steady pace, and fully utilizes the advantages of high production efficiency and fine products to provide excellent services for customers.

A photograph of a modern, multi-story office building with a light-colored facade and large windows. The building is the headquarters of Xiongchen Technology. On the right side of the building, there is a large, vertical sign with the company's name in Chinese characters '雄琛科技' and a logo above it. The logo consists of a stylized 'X' shape in blue and red. In the foreground, there are some green trees and a small entrance area with a glass door.

雄琛科技

Certification »

体系认证及专利证书

20⁺



ISO14001:2015



ISO9001:2015



ISO45001:2018

雄琛科技在2021年获得环境管理体系认证、质量管理体系认证证书、职业健康安全管理体系认证证书。

雄琛科技获得3项发明专利，1项外观设计专利，10多项实用新型专利，以及4项软件著作权登记证书。

Xiongchen Technology obtained environmental management system certification, quality management system certification, and occupational health and safety management certification in 2021.

Xiongchen Technology has obtained 3 invention patents, 1 design patent, more than 10 utility model patent certificates, and 4 software copyright registration certificates.



Product Introduction

产品介绍



轴承 Bearing

- PDC轴承
PDC Bearing

- TC轴承
Tungsten Carbide
Bearing

- 聚晶金刚石轴承
Polycrystalline
Diamond Bearing

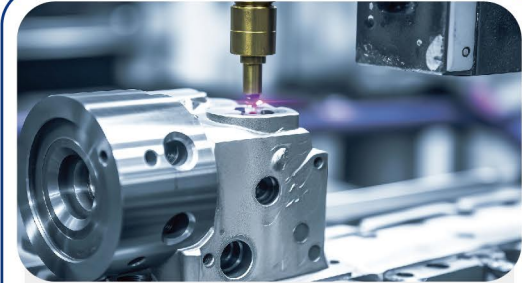
- 其他轴承
Other Bearings



超硬材料 Superhard Materials

- 聚晶金刚石复合片
PDC Cutter

- 金刚石截流阀片
PDC Throttle Plate



井下工具 Downhole Tools

- 连续偏心扩眼器
Eccentric Drilling Reamer

- 扶正器
Centralizer

- 精密机械件
Precision Machining Parts

PDC Bearing »

PDC轴承

PDC BEARING

在野外恶劣复杂的环境中，磨料液体和混合相流体的结合部分必须使用PDC轴承。目前，PDC轴承已广泛应用于旋转导向系统、涡轮钻具、泥浆马达、电动潜水泵以及油田作业中。

PDC bearing is necessary for harsh environments, which is applied in turbo drills, mud motors, electric submersible pumps, RSSs (rotary steerable systems), oil field operations, etc.



Advantages »

产品优势

高导热性

可以降低导致轴承退化的局部极限温度，避免在轴承启动或停机的过程中产生的高热量对轴承材料造成的损伤。

高负载

可在相当高的速度和负载范围下有效运行。

耐磨耐高温

金刚石材质具有极低的摩擦系数(摩擦系数在0.01到0.03之间)，可以在高温下进行作业。

高耐腐蚀性

可以不受应用环境中腐蚀性物质的影响，例如，可以不受钻井中存在的天然的或者泥浆里的化学物质的影响。

简化性

金刚石轴承在使用过程中，无需专门对其保障润滑，由于不需要密封件和独立润滑系统，可以简化设备和组件。

长寿命

使用寿命可达到1000小时到多年不等，是传统碳化钨轴承或其他的硬质合金轴承(TC轴承)6倍以上。

High thermal conductivity

The PDC material reduces the local limit temperatures that lead to bearing degradation and prevents damage to the bearing material caused by the high heat.

High load

They can operate effectively over a wide range of speeds and loads.

Wear resistance and heat resistance

The PDC material has an extremely low coefficient of friction (coefficient of friction between 0.01 and 0.03). It can operate under high temperature.

High corrosion resistance

They can be unaffected by corrosive substances (natural corrosive substances or chemicals in mud in the well) in the application environment.

Simplicity

There is no need for specialized lubrication during use, simplifying equipment and components by eliminating the need for seals and separate lubrication systems.

Long life span

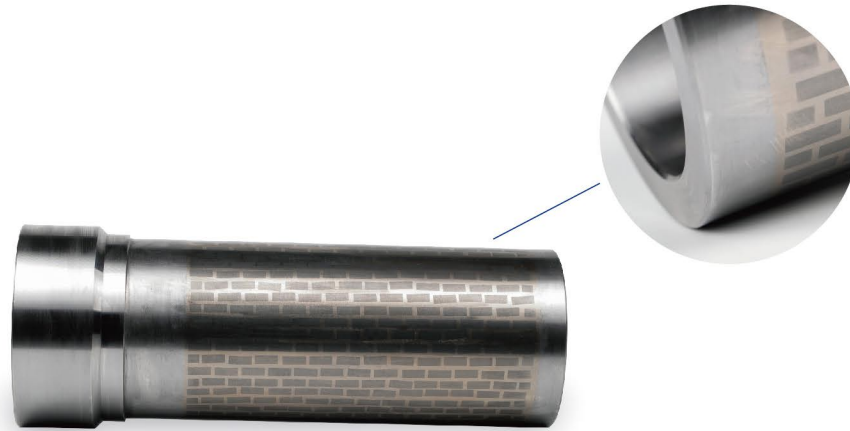
The service life is from 1000 hours to many years, which is more than 6 times longer than that of traditional tungsten carbide (WC) bearings.

Tungsten Carbide Bearing »

TC轴承

TC轴承又称硬质合金轴承，是采用氧乙炔火焰喷焊工艺方法，它由胎体与碳化钨粉和硬质合金，经火焰喷焊融为一体，后经机械加工而成。可以应用于旋转导向系统、涡轮钻具、泥浆马达、螺杆钻具、垂钻系统中。

适用于200°C以上的高温钻井工况以及不同的钻井液体系，寿命达到400小时以上，具有耐磨损、耐腐蚀、耐冲击、耐高温的特性。



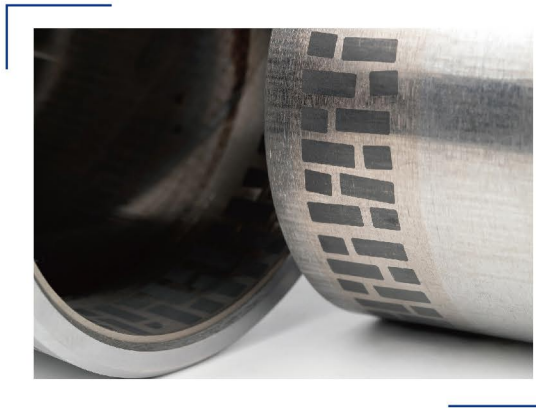
TC bearing, also called cemented carbide bearing, is machined after welding the substrate, tungsten carbide powder and cemented carbide through the technology of oxy-acetylene spray welding. It can be applied in PDM drills, mud motors, RSSs, turbo drills and vertical drilling systems.

The lifespan of TC bearing is above 400 hours. With the characteristics of wear resistance, corrosion resistance and high temperature resistance, it is suitable for high-temperature drilling conditions above 200 degrees Celsius and different drilling fluid systems.



Polycrystalline Diamond Bearing »

聚晶金刚石轴承



聚晶金刚石轴承：聚晶厚度4mm，聚晶中间由陶瓷碳化硼粉末填充，耐磨性强，摩氏硬度9，通过喷焊工艺焊接在公轴承或者母轴承上，本体硬度没有变化，机械性能不会降低，轴承使用过程中散热性能好，耐热更持久，不易开裂起皮脱落，聚晶的磨耗超过了TC寿命的10倍以上，大大降低了传统TC轴承所产生的事故率。

The polycrystalline, whose thickness is 4 mm, is filled with ceramic boron carbide powder. It is wear-resistant and the Mohs hardness reaches 9. The body hardness does not change and mechanical properties are not reduced through the spray welding technology on the male or female bearing. The bearing has excellent heat-resistant performance during use. Thus, it is not easy to crack and peel. The service life of the polycrystalline is 10 times longer than that of the Tungsten Carbide, greatly reducing the accident rate of the traditional TC bearings.

Other Bearings »

其他轴承

■ 表面硬质合金颗粒轴承

Hardfacing 5000 Hardmetal Bearing

硬质合金颗粒广泛应用于金属表面的堆焊喷涂,主要用于石油、矿山、采煤、地质等工业中,具有硬度高,耐磨损、耐腐蚀、耐高温性,无杂质,焊接效果好等特性。

Tungsten carbide particles are widely used in metal surface surfacing and spraying in petroleum, mining, coal, geology and other industries. With the surfacing technology, tungsten carbide is possessed of the characteristics of high hardness, wear resistance, corrosion resistance, high-temperature resistance, no impurities, good welding performance, etc.

■ 镍铬合金耐磨轴承

Hardfacing Nicer 60 Bearing

镍铬合金具有高硬度、高强度、高耐磨性和抗腐蚀性等特点,用其粉末制备涂层致密,与基体结合好,能够有效地保护零件表面免受磨损和腐蚀。

Nickel-chromium alloy is characterized by high hardness, high strength, high wear resistance and corrosion resistance, etc.. Its powder can be used onto the surface of the substrate as the coating to prevent it from abrasion and corrosion.

■ 高密度碳化钨粉末轴承

Hardfacing 4500 Carbide Powder Bearing

涡轮钻具、泥浆马达等要求苛刻的井下应用,需要独特的轴承解决方案。雄琛科技研发的高密度碳化钨粉末轴承,能提供产品卓越的性能与可靠性。

Turbine drilling tools, mud motors and other demanding downhole applications require unique bearing solutions. Xiongchen has developed high-density tungsten carbide powder bearings that provide product with superior performance and reliability.

PDC Cutter ▶▶

聚晶金刚石复合片

聚晶金刚石复合片（PDC）由金刚石粉末和硬质合金基体在高温高压下烧结而成，具有极高的耐磨性和抗冲击性。可根据客户提供的图纸加工成不同的形状、尺寸和倒角。产品广泛用于石油钻井、地质钻探、采矿工程、建筑施工等领域。

Polycrystalline diamond compact (PDC) is sintered from diamond powder and cemented carbide substrate under high temperature and high pressure, and has extremely high wear resistance and impact resistance. It can be processed in different size, shape and chamfer according to the customer's drawing. Products are widely used in oil drilling, geological drilling, mining engineering, construction and other fields.

耐磨损 

High wear resistance

耐冲击 

High impact resistance

**产品
优势**

耐高温 

High heat resistance

高硬度 

High hardness



PDC Throttle Plate »»

金刚石截流阀片

金刚石截流阀片具有耐冲刷、耐腐蚀、耐冷热冲击的特性。阀门开关过程中摩擦系数低，阀芯与阀座的耦合更紧密，密封性能更好。

The PDC throttle plate has the characteristics of scouring resistance, corrosion resistance and thermal shock resistance. The friction coefficient is low during the valve switch process, the coupling between the valve core and the valve seat is tighter, and the sealing performance is better.

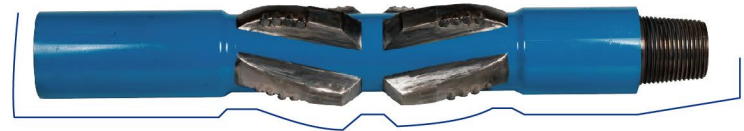


Eccentric Drilling Reamer »

连续偏心扩眼器

连续偏心扩眼器，根据不同的井况也叫做岩床破坏器，微扩孔，旋流清砂器。

流道的设计为鹰翼型，如鹰在长空面对流阻一划而过，又因偏心结构携砂能力变的更强，对于井眼的缩径修整更是探囊取物一般，特别是在深井井塌，水平井段出现急弯，岩屑床卡阻钻具组合划伤钻柱本体，导向工具憋卡难以起钻等情况下能起到更好的改善作用。



Eccentric drilling reamers are also called bed breakers, micro reamers, and cyclone sand cleaners depending on the well conditions.

The flow channel is designed as an eagle wing, like an eagle in the sky to face the flow resistance. On account of the eccentric structure, the sand carrying capacity gets stronger, and it is easy for the borehole shrinkage and repair. They play a significant role especially in the deep well collapse and the dogleg of the horizontal section when the cuttings bed jams drilling assembly and scratches the drilling column body, or the guide tool gets stuck and difficult to pull out of the hole.

Centralizer »

扶正器

在油气、地质钻井工程中，稳定套是防止井斜的重要工具。广泛应用于斜井及水平井、小井及不规则井眼和油层段。

Centralizer is an important tool to prevent well deflection in oil and gas, and geological drilling projects. It is widely applied in inclined and horizontal wells, small and irregular boreholes and oil formation segment.



CUSTOM SERVICES

精密机械件

Precision Machining Parts

雄琛提供特种耐磨件的定制服务，如螺杆钻具和旋转导向系统配件。旋导系统通常用于定向井、水平井或大位移井，其配件多种多样，如分流器、套筒、盖板等。

Xiongchen provides custom services of special wear parts, such as accessories of downhole motors and rotary steerable system (RSS). RSSs typically are deployed when drilling directional, horizontal, or extended-reach wells. There are many kinds of RSS accessories, such as splitter, cover plate, and sleeve.



Applications

应用领域



石油开采
Oil Exploitation



地质钻探
Geological Drilling



风力发电
Wind Power Generation



采矿工程
Mining



航空航天
Aerospace



船舶重工
Marine



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