理想成就未来

Ideal Perfect Future

石家庄理想汽车零部件有限公司

SHIJIAZHUANG IDEAL AUTO PARTS CO., LTD.

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IDEAL 理想

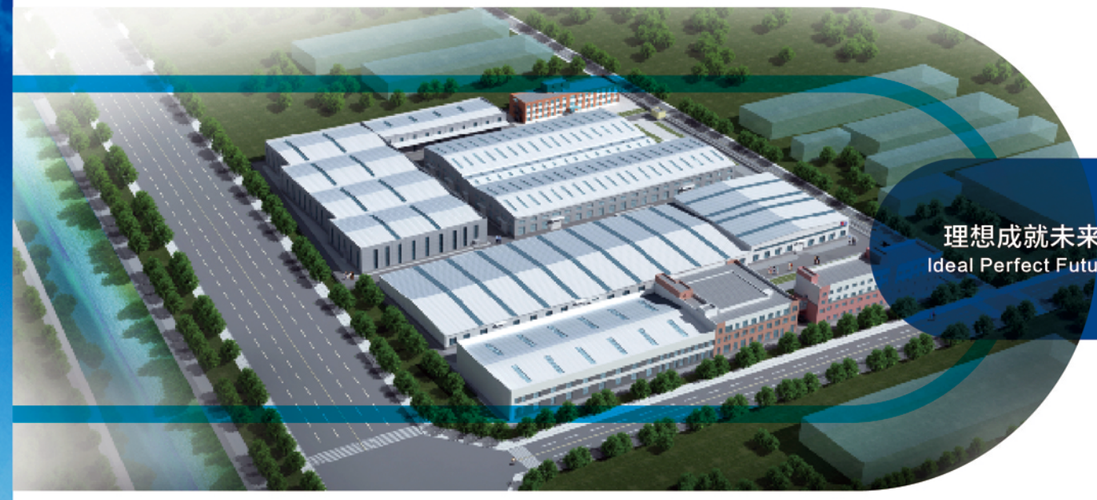
石家庄理想汽车零部件有限公司

SHIJIAZHUANG IDEAL AUTO PARTS CO., LTD.



为世界奉献理想品牌

Dedicate the IDEAL brand to the world



理想成就未来

Ideal Perfect Future

公司简介

COMPANY PROFILE







石家庄理想汽车零部件有限公司成立于 2006 年，位于河北省石家庄市藁城区，占地面积 110 余亩，主要从事工程机械及汽车用轴套、销轴、工业用剪刀片，油缸、减速机和泵阀类的高精密零部件生产销售。

公司 2024 年被认定为国家级“专精特新”**重点**小巨人企业、河北省制造业单项冠军、2023 年获河北省科技进步奖、高新技术企业。目前拥有多项国家专利，在公司核心产品的研发和制造上处于国际水平。

公司拥有河北省 A 级研发机构、石家庄市工业设计中心、石家庄市技术创新中心等研发平台; 拥有先进的机加工、热处理、表面处理能力和完善的试验、检验能力。

公司坚持“人本、诚信、创新、团队”的经营理念，凭借领先的技术、可靠的产品质量和优质的服务得到了客户的广泛认可，与国内外众多知名企业建了长期、稳定的合作关系。

Shijiazhuang Ideal Auto Parts Co. , Ltd. was established in 2006, is located in Shijiazhuang Gaocheng District, Hebei Province, covers an area of 110 acres, mainly engaged in high-precision components production and sales, such as bushings, pins, and parts used in industrial scissor blades, cylinders, reducers, pumps, and valves of engineering machinery and automotive.

The company is recognized as national level SRDI “Small Giant” enterprises, and the Single Manufacturing Champion of Hebei province. In 2023, the company was awarded the “Provincial Science and Technology Progress Award” and High-Tech Enterprises of Hebei province. The company has a number of national patents granted, and the international level ability of R & D and manufacturing of core products .

The company has R & D platforms such as Hebei A-level R & D Institute, Shijiazhuang Industrial Design Center and Shijiazhuang Technology Innovation Center, and advanced machining, heat treatment, surface treatment ability and perfect inspection and testing ability.

The company insist on the business philosophy of “People-oriented, Integrity, Innovation and Teamwork” . Our state-of -the-art technology, reliable product quality and first-rate service has been widely recognized by customers, and the company has established a a long-term, stable relations of cooperation with many well-known enterprises at China and abroad.

R & D CAPABILITY

研发能力





公司是河北省级工业企业研发机构、石家庄市企业技术中心、石家庄市工程机械低速重载摩擦副技术创新中心。研发中心在职人员全部为本科以上学历，研发人员占公司总人数的 15% 以上，其中中高级职称人员占研发人员的 50% 以上。

公司十分重视研发投入，每年的研发费用均占当年销售收入的 10% 以上。

公司常年承担多项省级、市级科研项目，产生多项专有技术，填补多项国内空白，并拥有多项发明、实用新型专利。

公司致力于高精度、高难度、高附加值的精密机械加工零部件的研发和制造。2023 年度获得省科技进步奖。



The company is the Industrial Enterprise Research and Development Institution of Hebei province, and the Shijiazhuang Enterprise Technology Center, and the Shijiazhuang Technology Innovation Center for low-speed and heavy-duty friction pairs of construction machinery. All the employees in the R&D center, who account for more than 15% of the total number of the company employees, have bachelor's degree or above, and more than 50% of them has middle and senior professional titles.

The company attaches great importance to R&D investment, which accounted for more than 10% of the company' s annual sales revenue.

The company undertook a number of provincial and municipal scientific research projects, produced a number of state-of-the-art technologies, and has a number of patents granted.

The company is committed to the R&D and manufacturing of high-precision, high-difficulty, high-value-added precision machining parts.

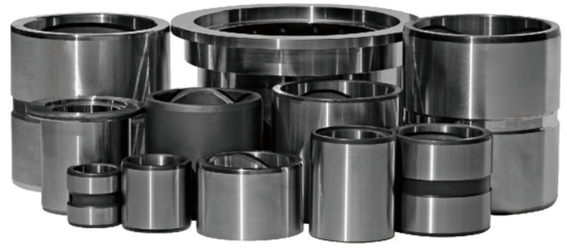
The company was awarded the “Provincial Science and Technology Progress Award” in 2023.





STEEL BUSHING

钢套



产品特性 Product Features

钢套分类 Item	材质 Material	热处理 Heat treatment	表面处理 Surface treatment	润滑型式 Lubricating type	适用范围 Application
高频淬火钢套 High frequency quenching	45、40Cr	基体正火处理 167~229HB、或调质处理 201~269HB，内表面高频淬火，表面硬度 52~60HRC，淬硬层深度 1.0~2.0mm，淬硬层有效硬度 45HRC。Normalizing, hardness 167~229HB, or quenching & tempering, hardness 201-269HB, high-frequency quenching of inner surface with hardness 52~ 60HRC, minimum hardness 45HRC from 1.0~2.0mm depth.	磷化 Phosphatizing	螺旋槽 双 8 字油线 十字油线 三环油线 Spiral grooves, Dual-8 shape oil grooves, Cross shape grooves, trip－circle oil grooves	挖掘机 装载机 起重机 Excavators, Loaders, Cranes
渗碳淬火钢套 Carburizing and quenching	20、20CrMnTi、20CrMo 等低碳或低碳合金钢 20、20CrMnTi、20CrM etc. Low carbon steel or low carbon alloy steel	表面渗碳淬火，表面硬度 56~62HRC，渗碳层深度 0.8~1.2mm。Surface hardness 56 to 62HRC, and carburizing layer 0.8 to 1.2mm.	磷化、喷石墨 Phosphatizing or spraying graphite.	双 8 字油线 十字油线 三环油线 油穴 Dual-8 shape oil grooves, Cross shape grooves, trip－circle oil grooves , oil pits	挖掘机 旋挖钻机 大型装载机 连续墙抓斗 Excavators, Rotary drilling rigs Heavy duty Loaders Diaphragm wall grabs
整体淬火钢套 Whole quenching	40Cr 等中碳合金钢 40Cr etc. Middle carbon alloy steel	整体淬火，硬度 40~52HRC。Whole quenching, hardness 40 to 52HRC.	磷化 Phosphatizing	8 字油线、十字油线 三环油线 Dual-8 shape oil grooves, Cross shape grooves, trip－circle oil grooves	装载机 Loaders

技术参数 Tech. parameters

钢套分类 Item	摩擦系数 Friction factor	最高使用温度 Highest using temperature	极限动载荷 Critical dynamic load	最高滑动速度 Highest sliding speed	耐磨损性能 Wearability	耐冲击性能 Anti-impact ability	耐腐蚀性能 Anti-corrosion ability	注油间隔时间 Oiling interval time
高频淬火 High frequency quenching	0.17	350℃	250N/mm²	1.5m/s	+++	++++	+++	+++
渗碳淬火 Carburizing and quenching					++++	++++	+++	++++
整体淬火 Whole quenching			200N/mm²		++	+++	+++	++

HONEYCOMB BUSHING
蜂窝轴套



现有轴套技术状况 Traditional bushing technologies

现有轴套一般采用各种形式的油槽来储油、布油，而油槽存在如下缺点：

- 在储油、布油的同时破坏了轴套内壁的承载能力，降低了轴套的使用寿命。
- 布油不均匀，形成大面积润滑盲区，很容易造成轴套和轴的咬合。
- 油槽的储油量有限，在使用过程中需频繁维护。

Oiling grooves is normally used for bearing to reserve oil and lubricate the sliding surface, the disadvantage is:

- The loading ability in reserving and distributing oil process is reduced, and service life is decreased.
- The oil can not be well-distributed, causing the lubricating blind zone and occlusion of sliding surfaces.
- The oil reserve ability is finite, and frequent maintenance in the service life is needed.

蜂窝轴套
Honeycomb bushing

蜂窝轴套从根本上解决了以上缺点，该产品具有以下特点：

- 产品为无缝轴套，在轴套的内壁上均匀地布有截面形状为圆锥状的盲孔。
- 轴套内孔研磨过程中自然形成润滑油楔，保证启动时快速形成油膜。
- 蜂窝的储油量大，是普通油槽储油量的 3~5 倍，可长时间免维护。
- 内壁均布蜂窝，蜂窝在圆周方向的中心距固定，无论多大的轴套，在布油时只需很小的转动角度就可将油布满轴套内表面，没有润滑盲区。
- 蜂窝骨架结构大幅提高了承载能力，延长了轴套的使用寿命。
- 最新一代工程机械轴套产品。

Honeycomb bushing overcomes the above disadvantages, and its distinguishing feature is:

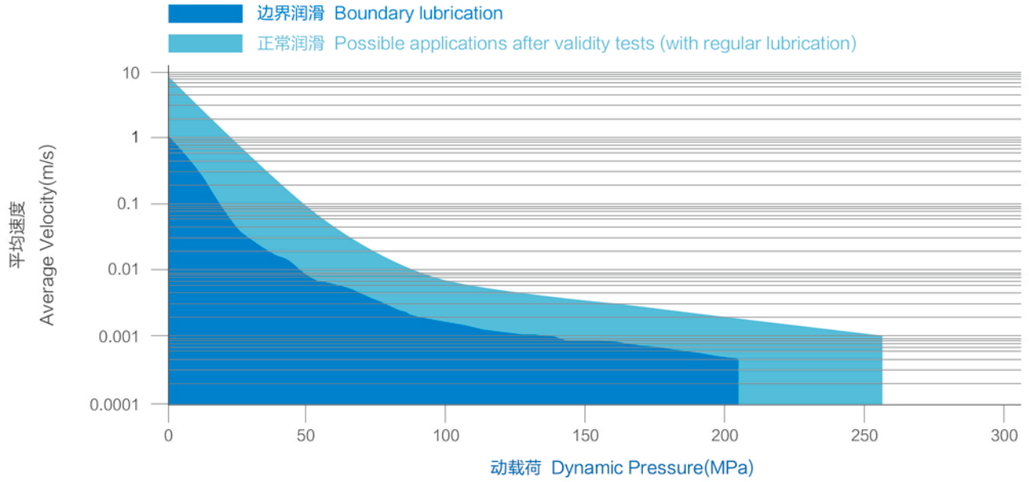
- Bushing is seamless , and cone shape blind holes, oil pits are evenly distributed on the internal surface.
- Lubricating wedge automatically formed with rubbing on the bushing surface, that ensure oil film formed quickly.
- The Honeycomb has perfect oil reserve ability 3-5 times than normal oil grooves, it can last long time without maintenance.
- Oil pits are evenly arranged in the internal surface, and oil can be distributed with a small rotating angle.
- Honeycomb-skeleton structure provides high loading capacity and prolongs the service life of bushings.
- It is a newest generation product used for construction machinery.

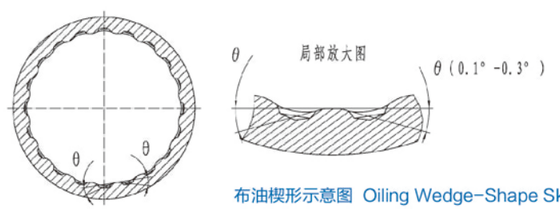
HONEYCOMB BUSHING
蜂窝轴套

材料、热处理及表面处理 Material , heat and surface treatment

材质	Material	20CrMnTi、20CrMo 等低碳合金钢 Low carbon alloy steel
热处理	HT	表面渗碳淬火或 QPQ 处理 Carburizing and quenching，or QPQ
表面处理	ST	双层复合减磨处理 Double friction reduce treatment
润滑型式	Lubricating Type	蜂窝 Honeycomb
适用范围	Application	挖掘机、旋挖钻机、大型装载机、连续墙抓斗 Excavators, rotary drilling rigs, heavy duty loaders, diaphragm wall grabs
摩擦系数	Friction Factor	<0.1
最高使用温度	Highest Using Temp	350℃
极限动载荷	Critical Dynamic Load	250N/mm^2
最高滑动速度	Highest Speed	1.5m/s
耐磨性能	Wearability	++++
耐冲击性能	Anti-impact Ability	++++
耐腐蚀性能	Anti-corrosion Ability	+++
注油间隔时间	Oiling Interval Time	+++++

PV曲线 PV factor curve





布油楔形示意图 Oiling Wedge-Shape Sketch

COPPER ALLOY BUSHING

铜套



技术参数及应用特点
Tech. parameters and characteristics

中国牌号 CN Code	ZCuZn25Al6Fe3Mn3	ZCuAl10Fe3Mn2	ZCuAl10Fe4Ni4	ZCuSn5Zn5Pb5
美国牌号 USA Code	C86300	C95400	C95800	C83600
日本牌号(旧) JP Code (old)	HBsC4	ALBC2	ALBC3	BC6
日本牌号(新) JP Code (now)	CAC304C	CAC702C	CAC703	CAC406
抗拉强度 Tensile strength	≥755N/mm²	≥540N/mm²	640~690 N/mm²	200 N/mm²
屈服强度 Yield strength	≥500N/mm²	≥216N/mm²	275~345 N/mm²	100 N/mm²
硬度 Hardness	≥220HB	≥135HB	160~180HB	68~95HB
延伸率 Extensibility	≥12%	≥20%	≥15%	≥14%
特点 Characteristic	强度和硬度特别高，耐磨性好 Excellent strength and hardness, good wearability.	强度高，耐磨性和耐腐蚀性好 Good strength and wearability, Good Anti-corrosion ability.	强度比较高，耐磨性和耐腐蚀性好 Fine strength, good wearability and Anti-corrosion ability.	耐压性、耐磨性、切削性、铸造性均好 Good toughness, wearability and good cutting , casting performance.
用途 Application	适用于低速、高承载的滑动轴承，应用于挖掘机、注塑机、旋挖钻机等工程机械及塑料机械行业 For low speed and heavy duty bushings, used for excavator, injection molding machine , rotary drilling machine etc.	适用于较高承载的滑动轴承，船用小型螺旋桨、齿轮、轴瓦、阀座、叶轮等 For heavy loading bushings, used for propeller for boat, gears,bushing,valves,impeller etc.	适用于较高承载的滑动轴承，化学工业机械零件等 For heavy loading bushings, used for chemical industry machine.	适用于中高速、低承载的滑动轴承，轴瓦等 For medium to high speed, low loading bushings and bearing.

铜镶石墨套是在高力黄铜的基体上镶嵌石墨或 MoS2 固体润滑剂的一种高性能固体润滑产品。在使用过程中，通过摩擦热使固体润滑剂与轴摩擦，形成油、粉末并存润滑的优异条件，既保护轴不磨损，又使固体润滑特性永恒。

Inlaying graphite or MoS2 solid lubricant on the base of brass, is a high performance solid lubricating product. In the working process, friction thermal heat up the solid lubricant to form oil and powder lubricating environment, not only protect the shaft and bearing but also keep the solid lubricant continue in the lubricating process.

BUFFERING SLEEVE AND ASSEMBLY

缓冲套及组件



产品特性 Product Features

产品分类 Product Category	材质 Material	机械性能 Mechanical Property
缓冲套 Buffer bushing	45	外表面高频淬火，表面硬度 52~60HRC, 淬硬层深度 1.0~2.0mm Surface high-frequence quenching, hardness 52 to 60HRC, hardening depth 1.0 to 2.0mm
	40Cr、42CrMo	氮化处理，表面硬度≥550HV，渗氮层深度≥0.2mm，白亮层厚度 0.01-0.025mm Nitriding treatment, surface hardness ≥550 hv, nitriding layer depth ≥0.2 mm, white layer thickness 0.01-0.025 mm
	HBsC4 等铜合金	硬度 220~270HB
	球墨铸铁 Spheroidal graphite cast iron	硬度≥170HB
缓冲柱塞 Buffer piston	15CrMo 、20CrMo 等低碳合金钢	渗碳淬火，表面硬度 56~62HRC Carburizing and quenching , hardness 56 to 62HRC
导向套 Guide sleeves	HBsC4	硬度 220~270HB Hardness 220~270HB
	QT400	正火处理，硬度 130~190HB Normalizing, hardness 130~190HB

应用特点 Application Characteristics

- 高速、高压油缸缓冲区的重要部件，设置独特的浮动缓冲区，能够在油缸行程终端有效吸收冲击。
- 外表面满足 ABBOTT 曲线要求。
- 缓冲斜面采用独特的磨削工艺，严格保证长度和角度的要求。
- 缓冲套与导向部件配组，保证最优间隙。
- 应用于挖掘机油缸。
- To efficiently absorb impact from hydraulic cylinders with special designed floating buffer zone. It is an important part for high-speed and High-pressure cylinders.
- Surface fulfill the requirement of ABBOTT curve.
- Distinctive grinding process is used for machining of buffer bevel, to guarantee the requirement of the dimensions and angles.
- Selective Assembly of buffering sleeves and guiding parts to insure the optimal clearances.
- Application to hydraulic cylinders for diggers.

SCISSOR BIADES
剪刀片



应用特点 Application Characteristics

- 材质，选用优质硼钢、特钢等材料适用于液压剪、剪板机等不同条件的作业场景。
- 热处理，采用独特的热处理工艺，金相组织、硬度均匀，具有耐冲击、性能稳定可靠等优点。
- 具有较高的硬度同时兼具良好的韧性，不易崩口、使用寿命长 。
- Material, select high-quality boron steel, special steel and other materials suitable for hydraulic shear, shears and other different conditions of the work scene.
- Unique heat treatment process is used, the blades have better metallographic structure, uniform hardness, high impact resistance, stable and reliable performance.
- With high hardness and good toughness, not easy to break, long service life.

HIGH PRECISION PARTS OF PUMPS AND VALVES
精密泵阀零件



产品特性 Product Features

类别 Product Category	材质 Material	前处理 Pretreatment	热处理 Heat treatment	内表面粗糙度 Surface finish of Internal Surface
变量衬套 Variable displacement bushes	20CrMo	基体正火处理 160~207HB Normalizing , hardness 160~207HB	渗碳淬火，表面硬度 60~64HRC，渗层深度 0.3~0.6mm Carburizing and quenching, surface hardness 60~64HRC, depth 0.3~0.6mm.	Ra0.15、Rmax2、Rmr ref.5% Rmr 0.25 50%
回位衬套 Return bushes				
先导阀套 Sleeves of pilot valves				
活塞导套 Guide sleeves of pistons				
柱塞 Plunger	31CrMoV9	调质 30-36HRC Quenching and tempering 30-36 HRC	气体氮化，表面硬度＞700HV，氮化层深度 0.2-0.4mm Gas nitriding, surface hardness > 700 hv, nitriding layer depth 0.2-0.4 mm	

应用特点 Application Characteristics

- 内表面珩磨处理，外表面超精磨加工，保证极低的表面粗糙度。
- 保证液压系统的持续稳定。
- 应用于泵、阀及精密马达。
- Excellent surface finish by honing(internal surface) and grinding(external surface).
- To ensure sustainable stability of the hydraulic system.
- Used in pumps, valves and precision motors.

PLANETARY PINION SHAFTS AND ASSEMBLY

行星轴及组件

产品特性 Product Features

类别 Product Category	材质 Materials	前处理 Pretreatment	热处理 Heat Treatment	应用 Application
行星轴 Planetary pinion shafts	20CrMnTiH、 15CrMo	基体正火处理 170~210HB Normalizing , hardness 170~210HB	渗碳淬火，表面硬度 58~62HRC，渗层深度 0.6~0.9mm Carburizing and quenching, surface hardness 58~62HRC, depth 0.6~0.9mm	减速机高精度零部件 High precision parts in speed-reducers
行星轴组件 Planetary pinion shaft assembly	45&KMS-7	基体调质处理 240~270HB Normalizing , hardness 170~210HB		



应用特点 Application Characteristics

- 高精度自动在线测量外圆磨床，严格保证行星轴外圆尺寸及形位公差。
- 应用于工程机械各类减速机机构。
- Automatic on-line measurement high precision cylindrical grinders are used to manufacture the parts, which insures the OD and geometric tolerance of the planetary pinion shaft.
- The parts are used in all kinds of speed-reducing mechanism in construction machinery.

PINS

销轴



产品特性 Product Features

材质 Material	45、40Cr	42CrMo
基体调质硬度	201~269HB	220~270HB
表面淬火 Surface quenching	高频淬火， 表面硬度：52~60HRC， 淬硬层深度：1.5~2.5mm High-frequency quenching, surface hardness 52~60HRC, hardening depth 1.5~2.5mm	高频淬火， 表面硬度：56~62HRC， 淬硬层深度：1.5~2.5mm High-frequency quenching, surface hardness 56~62HRC, hardening depth 1.5~2.5mm
表面处理 Surface treatment	表面可做镀硬铬处理，硬铬层厚度 0.03~0.05mm，硬度≥900HV Surface hard chrome plating treatment is available and chrome layer thickness can be 0.03-0.05mm,hardness greater than 900HV	

应用特点 Application Characteristics

- 芯部调质处理，具有高强度和冲击韧性，外表面感应淬火，具有高硬度和耐磨性。
- 油路设计独特，加油顺畅。
- 法兰采用环缝自动焊机焊接。
- 和各种形式轴套配合使用，应用于挖掘机、装载机、旋挖钻机等工程机械的动臂等回转部位。
- After quenching and tempering heat treatment binding with surface high frequency quenching process, giving product high strength and toughness,high hardness and wearability.
- Unique oil channel, oiling smooth.
- Girth automatic welding machine is used for flange welding process.
- Mating with for any kind bearing sleeves, the pins are largely used for rotation position of excavator, loader, rotary drilling machine and other engineering machine.

SHEARS FORK LIFTING PLATFORM AND AERIAL WORK PLATFORM PINS

剪叉车/高空作业车销轴

产品特性 Product Features

材质 Materials	45	40Cr	42CrMo
基体调质处理	201–269HB	220–260HB	240–280HB
表面处理	氮化氧化处理 表面硬度≥550HV(0.1kg) 白亮层厚度 10–25μm 渗氮层深度≥0.2mm Nitriding oxidation treatment Surface hardness ≥550 hv (0.1 kg) The thickness of white layer is 10–25μm Nitriding layer depth ≥0.2 mm	氮化氧化处理 表面硬度≥600HV(0.1kg) 白亮层厚度 12–25μm 渗氮层深度≥0.2mm Nitriding oxidation treatment Surface hardness ≥600 HV (0.1 kg) The thickness of white layer is 12–25μm Nitriding layer depth ≥0.2 mm	氮化氧化处理 表面硬度≥650HV(0.1kg) 白亮层厚度 12–25μm 渗氮层深度≥0.25mm Nitriding oxidation treatment Surface hardness ≥650 HV (0.1 kg) The thickness of white layer is 12–25μm Nitriding layer depth ≥0.25 mm



应用特点 Application Characteristics

- 芯部调质处理，具有高强度和冲击韧性。
- 氮化氧化处理，产品具有表面高硬度和耐磨性。
- 氮化氧化处理，中性盐雾试验 NSS300 小时，保护评级≥9 级。
- 氮化氧化处理，对环境影响极小，是一种绿色处理技术。
- 应用于剪叉车、高空作业车等连接部位。
- Core conditioning treatment, with high strength and impact toughness.
- Nitriding oxidation treatment, the product has a high surface hardness and wear resistance.
- Nitride oxidation treatment, neutral salt spray test NSS 300 hours, protection rating ≥9.
- Nitriding oxidation treatment, which has little effect on environment, is a kind of green treatment technology.
- It is applied to the connecting parts such as shears fork lifting platform, aerial work platform and so on.

GEAR PARTS

轮齿类零件

产品特性 Product Features

类别 Product Category	材质 Materials	前处理 Pretreatment	热处理 Heat treatment
齿轮轴 Gear shafts 花键轴 Spline shafts 齿轮 Gears	20CrMnTiH	基体正火处理 150~190HB Normalizing , Hardness 150~190HB	渗碳淬火，表面硬度 58~62HRC， 渗层深度 1.2~2.0mm 芯部硬度 35~42HRC Carburizing and quenching, surface hardness 58~62HRC, depth 1.2~2.0mm, core hardness 35~42HRC
	42CrMo	基体调质处理 270~300HB Quenching and tempering , Hardness 270~300HB	氮化处理，表面硬度＞600HV， 氮化层深度 0.15~0.4mm Nitriding treatment, surface hardness＞600HV, depth 0.15~0.4mm



应用特点 Application Characteristics

- 经过精密加工后，可稳定传输动力和扭矩。
- 应用于各型精密传动装置。
- The parts can transmit power and torque stably.
- The parts are used in all kinds of high–precision transmission devices.

MANUFACTURING CAPACITY – MACHINING

制造能力–机加工

公司拥有 300 多台国际先进的精密机械加工设备，为顾客提供高精度、高难度机械加工产品的解决方案。

The company has 300+ of precision machining equipment with international advanced level to provide customers with solutions for high-precision and difficult-machining products.



五轴、四轴加工中心

Five-axis, four-axis machining center



德玛吉 DMU50 五轴加工中心

DMU50 five axis machining center(Demaghi)



马扎克 HCN6000L 型卧式加工中心

Mazac HCN6000L horizontal machining center



柔性、智能、自动化生产线

Flexible, intelligent and automated production line

MANUFACTURING CAPABILITY

HEAT TREATMENT AND SURFACE TREATMENT

制造能力–热处理和表面处理

公司拥有多条国际先进水平的热处理和表面处理生产线，可专业进行渗碳、碳氮共渗、软氮化、光亮淬火、精密调质、高频淬火、超音频淬火等热处理加工，以及磷化、喷涂等表面处理加工。

The company has a number of internationally advanced heat treatment and surface treatment production lines, which specialize in carburizing, carbonitriding, nitrocarburizing, bright quenching, precision quenching and tempering, high-frequency quenching, ultrasonic quenching and other heat treatment processes, as well as phosphating, spraying and other surface treatment processes.



法国爱协林5吨可控气氛箱式多用炉生产线

5-ton controllable atmosphere box-type multipurpose furnace production line (Aichelin,France)



德国益发1.5吨可控气氛箱式多用炉生产线

1.5-ton controllable atmosphere box-type multipurpose furnace production line(IVA,German)



德国益发真空氮化炉生产线

Vacuum nitriding furnace production line



韩国汉阳全自动高频淬火生产线

Automatic high-frequency quenching production line (Hanyang, Korea)



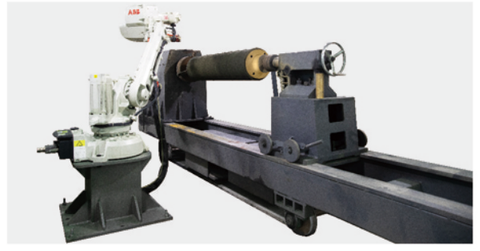
全自动磷化生产线

Automatic phosphating production line



全自动喷涂生产线

Auiomatic spraying production line



LBP–100 等离子喷涂设备

LBP-100 plasma spraying equipment

INSPECTION AND TESTING CAPABILITY
检验和试验能力

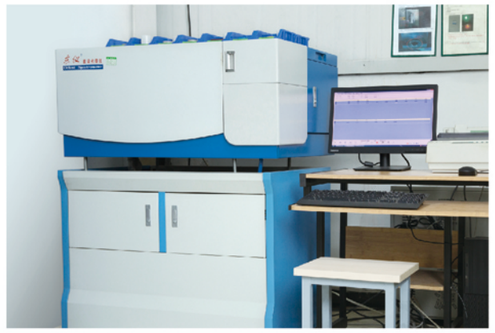
公司拥有国际先进水平的检测设备，可精密检测产品的尺寸、形状、位置精度，可进行各类理化试验，验证产品的各项性能指标。

The company has internationally advanced testing equipment, which can precisely detect the size, shape, and position accuracy of the products, and can conduct various physical and chemical tests to verify the performance of the products.



GLOBAL S 07.10.0 桥式三坐标测量机

GLOBAL S 07.10.0 Bridge-type 3-coordinate measuring machine



DF-400 型直读光谱仪

DF-400 direct reading spectrometer



RA-2200AH 型圆度圆柱度仪

RA-2200AH roundness and cylindricity meter



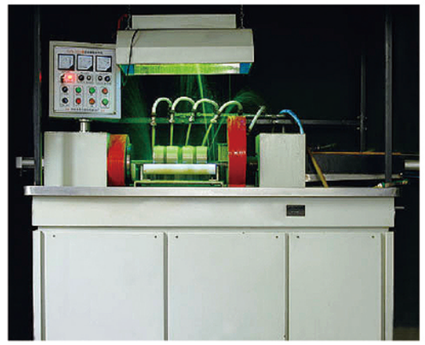
DX2-23 型表面纹理与轮廓测量仪

DX2-23 surface texture and profile measuring meter

INSPECTION AND TESTING CAPABILITY
检验和试验能力

我公司拥有国际先进水平的MMH-350微机控制滑动轴承摩擦磨损试验机，能够模拟工程机械工况，对滑动轴承的往复摆动摩擦性能进行测试。

The company has an internationally advanced MMH-350 microcomputer-controlled sliding bearing friction and wear tester, which can simulate the working conditions of construction machinery and test the reciprocating friction performance of sliding bearings.



MTW-2A 型荧光磁粉探伤机

MTW-2A fluorescent magnetic particle flaw detector



WDW-300C 型电子万能试验机

WDW-300C electronic universal testing machine



MMH-350 微机控制滑动轴承摩擦磨损试验机

MMH-350 microcomputer-controlled sliding bearing friction and wear tester

主要功能：

- 最大载荷可达 80MPa；
- 模拟工程机械实际工况进行液压加载；
- 通过传感器记录载荷、扭矩、温度、噪音、摆动速度、摆动次数、摆动角度等试验数据，并通过软件形成试验曲线图。

Functions:

- The maximum load can reach 80MPa;
- hydraulic loading is used to simulate the actual working conditions of construction machinery;
- Record test data such as load, torque, temperature, noise, swing speed, swing times, swing angle, etc., and form test curves through software.