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## 陕西瑞福祥工贸有限公司

Shaanxi Ruifuxiang Industry And Trade Co., Ltd.

钛及钛合金棒材、国军标、医用棒、锻件、加工销售

Titanium and titanium alloy rods, national military standards, medical rods, forgings, processing and sales



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陕西瑞福祥工贸有限公司

## COMPANY PROFILE 公司简介

4500m²

厂房面积 Factory area

**50**人 技术人员 Technician

**1500**万

年销售额 Annual sales revenue 公司专业从事钛材料棒材加工及销售。产品主要以TA1, TA2, TA10, TA15, TC4, TC11牌号钛及钛合金棒现货、国军标, 医用棒, 钛合金板、钛加工件。公司技术水平成熟, 工艺先进。产品广泛应用于航天, 航空, 海域, 冶金, 电子, 体育, 电光源, 真空制盐, 精细化工, 石油化工, 制药, 氯碱工业, 电镀, 电解, 海水淡化等行业。钛及钛合金棒材, 加工件锻件产品已远销国内外, 产品的品质受到客户的一致好评

公司拥有完整、科学的质量管理体系,并通过ISO9001质量体系认证。国军标质量体系认证,从投料生产到成品检测,公司严格按照内部质量管理流程进行跟踪监测,以保证产品质量、生产效率和交期。严谨、高效、创新的理念深入每一位员工的内心。追求卓越,共创辉煌!

陕西瑞福祥工贸有限公司欢迎各界朋友莅临参观、指导和业务洽谈。

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Shaanxi Ruifuxiang Industry And Trade Co., Ltd. is a high-tech enterprise integrating the production, processing and sales of titanium and titanium alloy bars, military standard products, medical bars and forgings. The company is located in Baoji, Shaanxi Province, which is a production base integrating the production, research and development, and processing of non-ferrous metals, rare metals, and precious metals with titanium as the leading product.

The company specializes in the processing and sales of titanium material bars. Its products mainly include in-stock titanium and titanium alloy bars of grades Gr1, Gr2, Gr10, Gr15, Gr5(Gr23), BT9, military standard products, medical bars, titanium alloy plates and titanium machined parts. The company has mature technical level and ad-vanced technology. Its products are widely used in industries such as aerospace, avia- tion, marine, metallurgy, electronics, sports, electric light sources, vacuum salt production, fine chemicals, petrochemicals, pharmaceuticals, chlor-alkali industry, electroplating, electrolysis, and seawater desalination. Titanium and titanium alloy bars, as well as pro- cessed forgings, have been sold both at home and abroad, and the quality of the products has been highly praised by customers.

The company has a complete and scientific quality management system and has passed the ISO9001 quality system certification and military standard quality system certification. From raw material feeding and production to finished product inspection, the company strictly follows the internal quality management process for tracking and monitoring to ensure product quality, production efficiency and delivery time. The concepts of preciseness, high efficiency and innovation have taken root in the hearts of every employ- ee. We pursue excellence and create brilliance together!

Shaanxi Ruifuxiang Industry And Trade Co., Ltd. welcomes friends from all walks of life to visit, give guidance and conduct business negotiations.

## CORPORATE CULTURE 企业文化

瑞福祥钛 品质承载 RFX TITANIUM QUALITY BEARING



企业宗旨 为社会创造繁荣 为客户创造价值 为公司创造利益 为员工创造前途

经营理念 包容的企业文化 创新的经营理念 核心的产品技术

价值理念 要想照耀别人 必须点燃自己 要想体现价值 敢于奉献自己

管理目标 人尽其才 物尽其用 钱尽其值 各尽其能

管理方针 规范 及时 有效

质量方针 技术领先 质量保证 完美可靠 客户满意

企业文化 立品立质的承载 文化的承载 创业的承载 思想的承载 发展的承载

核心竞争力 突出人才 突出技术 突出价值观

#### Enterprise purpose

Create prosperity for society, create value for customers, create benefits for the company, and create prospects for employees

#### Management idea

Inclusive corporate culture, innovative business philosophy, core product technology

#### Value concept

To shine on others, one must ignite oneself, to demonstrate value, and to dare to dedicate oneself

#### Management objectives

Give full play to talents and resources, make the most of money and value, and each do their best

#### Management policy

Standardized, timely and effective

#### Quality policy

Leading technology, quality assurance, perfect reliability, customer satisfaction

#### Canagement policy

The carrier of quality and culture, the carrier of entrepreneurship, the carrier of ideas, and the carrier of development

#### Core competitiveness

Highlight talents, highlight technology, highlight values

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### 钛及钛合金棒 Titanium and titanium alloy rods

纯钛棒材及钛合金棒材是新型的结构材料,由于钛具有熔点高、比重小、比强度高、韧性好、抗疲劳、耐酸碱腐蚀、导热系数低、高低温度耐受性能好、在急冷急热条件下应力小等特点。被应用于航空、航天等高科技领域,并不断向化工、石油、电力、海水淡化、建筑、日常生活用品等行业推广。

Pure titanium rod and titanium alloy rod are new structural materials, which are characterized by high melting point, low specific gravity, high specific strength, good toughness, fatigue resistance, acid and alkali corrosion resistance, low thermal conductivity, good high and low temperature tolerance, and low stress under rapid cooling and heating conditions. Applied in high-tech fields such as aviation and aerospace, and continuously promoted to industries such as chemical, petroleum, power, seawater desalination, construction, and daily necessities.

规格 Size (mm)	锻造棒: ForgedbarsΦ(40-300) x L≤4000 轧制棒: RolledbarsΦ(6-120) x L≤6000		
牌号 Grade	TA1、TA2、TA3、TA9、TA10、TA18、TC4、GR1、GR2、GR3、GR7、GR12		
标准 Standard	GB/T2965-2007 ASTMB348		
备注 Remarks	1、规格尺寸可按客户要求定制;2、可提供高精度钛光棒。  1. The specifications and sizes can be customized according to customer requirements; 2. It can provide high precision titanium light bar.		









## 钛及钛合金丝

Titanium and titanium alloy wire

钛及钛合金丝是由纯钛或钛合金材料制成的丝状产品。

具有高强度、耐腐蚀、生物相容性、耐高温性等特性。

主要应用于医疗器械、航空航天领域、化工领域、环保领域等。

Titanium and titanium alloy wire are filamentous products made of pure titanium or titanium alloy materials. It has characteristics such as high strength, corrosion resistance, biocompatibility, and high temperature resistance.

Mainly used in the fields of medical devices, aerospace, chemical engineering, environmental protection, etc.

规格 Size (mm)	直丝Straight /轴丝Spool/盘丝Coll(mm): Φ0.8-6.0		
牌号 Grade	TA1、TA2、TA3、TA4、TC4、TA9、TA18、TA10、GR1、GR2、GR3、GR5、GR7等		
标准 Standard	ASTM B863-14 ASTM F136-13 ASTM F67-13		
备注 Remarks	可根据订单图纸定制生产 Customizable production based on order drawings		









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## 钛及钛合金板

#### Titanium and titanium alloy plates

#### 钛合金板技术要求:

1、钛及钛合金板材的化学成分应符合GB/T 3620.1的规定,需方复验时,化学成分的的允许偏差应符合 GB/T 3620.2的规定。2、板材的厚度的允许偏差应符合规定。3、板材宽度和长度的允许偏差应符合规定。

Technical requirements for titanium alloy plates:

- 1. The chemical composition of titanium and titanium alloy plates shall comply with the provisions of GB/T 3620.1. When the purchaser retests, the allowable deviation of the chemical composition shall comply with The provisions of GB/T 3620.2.
- 2. The allowable deviation of the thickness of the board should comply with the regulations.
- 3. The allowable deviation of the width and length of the board should comply with the regulations.

规格 Size (mm)	冷轧板Cold-rolled(Y态)δ(0.1-4.0)x(400-1000)x(1000-3000) 热轧板Hot-rolled(R态)δ(4.0-6.0)x(400-3000)x(1000-4000)		
牌号 Grade	TA1、TA2、TA3、TA9、TA10、TC4、GR1、GR2、GR3、GR5、GR7、GR12		
标准 Standard	GB/T3621-2007, ASTMB265		
备 注 Remarks	化学成分执行标准GB/T3620.1-2007 Chemical composition implementation standard GB/T3620.1-2007		









#### 段件类 Forging

牌号 Grade	产品类型 Product type	产品规格 (mm) Specification	执 行 标 准 Standards
GR1(TA1) GR2(TA2) GR3(TA3) GR4(TA4) GR5(TC4) GR7(TA9) GR9(TA18) GR12(TA10)	钛饼 Bread/Dics	Dia (3-2000) x < 1500	GB/T 16598-2013
	钛环 Ring/Circle	OD (3-2000) xID (0.1-1980) x ≤ 600	ASTM B861-14  GJB





## 标准件/紧固件

Standard parts/fasteners

钛紧固件分为: 钛螺丝类、钛螺栓类、钛螺母类等。

钛及钛合金标准件通常是用于航空航天、船舶、化工、医疗等行业的重要零部件。这些标准件的生产 制造需要遵循相应的材料和工艺标准,以确保其具有所需的强度、耐腐蚀性能和其他特性。

Titanium fasteners are divided into: titanium screws, titanium bolts, titanium nuts, etc.

Titanium and titanium alloy standard parts are usually important components used in industries such as aerospace, shipbuilding, chemical, and medical. The production and manufacturing of these standard components need to follow corresponding material and process standards to ensure that they have the required strength, corrosion resistance, and other characteristics.

规格 Size (mm)	钛: M0.5-M3 钽/锆: M3-M64			
牌号 Grade GR1、GR2、GR4、GR5、Ta1、Zr702				
标准 Standard DIN JIS GB				
备 注 Remarks	可根据订单图纸定制生产 Customizable production based on order drawings			









## 法兰类 Flanges

材质Material: 钛Titanium、钽Tantalum、锆Zirconium

牌号	产品类型	产品规格 (inch)	压力 (MPa)	状态	执 行 标 准
Grade	Product type	Specification	Pressure	Condition	Standards
GR1 GR2 GR3 GR4 GR5 GR6 GR7 GR9 GR11 GR12 GR23	高劲法兰 High strength flange 螺纹法兰 Threaded flange 松套法兰 Free flange 盲板法兰 Blind flange 平焊法兰 Flat welded flange 承插焊法兰 Socket welding flange	1/2 "-24 "	150lb-2500lb	M R Y	ASME B16.5 ASME B16.47 DIN,JIS,KS HG/T 20592-2009 HG/T 20615-2009 HG/T 20623-2009









## 管件类 Pipe fitting

材质Material: 钛Titanium、钽Tantalum、锆Zirconium

标准Standard: HG/T3651 GB12459 GB/T 27684-2011 ASME B16.9 DIN JIS

壁厚Thickness: ASME B36.19M/36.10M

规格Specifications: DN15-DN1200













## 担 // Tantalum

钽主要存在于钽铁矿中。钽的硬度适中,富有延展性,可以拉成细丝式制薄箔。其热膨胀系数很小。 具有极高的抗腐蚀性,可用来制造蒸发器皿等,也可做电子管的电极、整流器、电解电容。医疗上用来制 成薄片或细线,缝补破坏的组织。钽的抗腐蚀性、化学稳定性和机械性能使其在电子、化工、医疗等多个 领域都有重要的应用前景。

Tantalum mainly exists in tantalite ore. Tantalum has moderate hardness and high ductility, and can be drawn into thin filaments for foil production. Its coefficient of thermal expansion is very small. It has extremely high corrosion resistance and can be used to manufacture evaporating vessels, as well as electrodes for electronic tubes, rectifiers, and electrolytic capacitors. Used in medical practice to make thin sheets or threads to mend damaged tissues. The corrosion resistance, chemical stability, and mechanical properties of tantalum make it have important application prospects in multiple fields such as electronics, chemical engineering, and healthcare.

类 型 Types	产品类型 Product type	产品规格 (mm) Specification	执 行 标 准 Standards
板 plate		δ(0.03-0.2) x ≤300 x L δ(0.2-30) x ≤600 x L	
管 Tube	Ta1 Ta2 TaW2.5 TaW10	OD(2.0-105) x WT(0.3-6.0) x L	ASTM B708
棒 Rod		Φ(5.0-110) x L	ASTM B365
<u>44</u> Wire		Φ(0.5-5.0) x L	









## 错、铌 Zirconium、Niobium

**错** 是一种坚硬的银色金属,在特殊工况下具有低中子吸收、高功率和高耐腐蚀性。错具有低中子吸收截面,能抵抗核反应堆的腐蚀环境。对大多数厂家的酸、碱、海水和其他试剂具有优异的耐受性。常被应用于化工厂、手术器械、爆炸底火等。

**铌** 是一种稀有的高熔点金属,呈银灰色,质地柔软,具有延展性,还具有优良的超导性、高熔点、耐腐蚀、耐磨等特性。铌广泛应用于钢铁、超导材料、航空航天、原子能等领域。

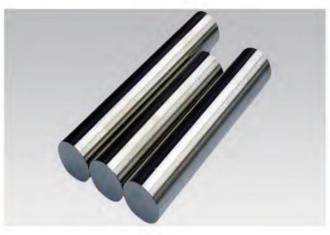
**Zirconium** is a hard silver metal with low neutron absorption, high power, and high corrosion resistance under special working conditions. Zirconium has a low neutron absorption cross-section and can resist the corrosive environment of nuclear reactors. Has excellent tolerance to acids, bases, seawater, and other reagents from most manufacturers. Often used in chemical plants, surgical instruments, explosive primers, etc.

**Niobium** is a rare high melting point metal with a silver gray color, soft texture, ductility, and excellent properties such as superconductivity, high melting point, corrosion resistance, and wear resistance. Niobium is widely used in fields such as steel, superconducting materials, aerospace, and atomic energy.

类 型 Types	牌号 Product type		产品规格(mm) Specification	执 行 标 准 Standards	
板 锆 Zr	版 错 Zr 铌 Nb	δ(0.03-0.2) x ≤300 x L	锆 Zr	铌 Nb	
plate		Nb1	δ(0.2-30) x ≤600 x L	ASTM B495-10	
管 Tube	Zr1 Zr3 Zr5	NbZr1	OD(2.0-105) x WT(0.3-6.0) x L	ASTM B550	ASTM B392
棒 Rod		NbZr2	Φ(5.0-110) x L	ASTM B551	ASTM B393
<u>44</u> Wire		NbHf10-1	Φ(0.5-5.0) x L	ASTM B493	





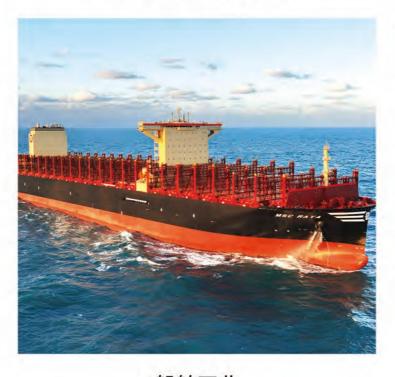




# APPLICATION FIELD 应用领域



航天航空 Aerospace and aviation



船舶工业 Shipbuilding industry



医疗器械 Medical equipment



石油化工 Petrochemical industry



汽车制造 Automobile manufacturing

热轧板 Hot rolled plate

## TECHNOLOGICAL PROCESS

工艺流程 圆坯 Round bills 红环 Rolling ring 机械加工 Machinin 锻环 Forging ring 金属钛产品加工 流程示意图 Titanium products processing flow diagram. 丝材 Wire 校直磨光 Correct & polish 0 棒 材 Bar 棒坯 Billet 锻造 Forging 机械加工 Machining 海绵钛 压电极 熔炼 锻造 Sponge titanium Pressure electrode Forging 无缝管 Seamless pipe 奉 坏 Billet 挤压 Estimate 轧制 Halling 矫 IF comen 钛带 Titanium strip 焊接 Welding 焊管 Welded pipe 商品锭 锻件 Commodity ingot Forging piece 0 100000 18 1 板坯 Slab 热轧 Hot-rolling 冷轧板 Cold rolled plate 冷轧 Cold rolling 酸碱洗 Acid alkali washing \*注:本示意图仅供参考,具体工艺细节稍有变化,属正常情况。 \*Note: This schematic diagram is for reference only. Specific process details may vary slightly and are considered normal



1路羽合十合

陕西瑞福祥工贸有限公司位于以钛为主导的有色金属,稀有金属,贵金属生产,研发与加工为一体的生产基地——陕西,宝鸡。

宝鸡市有2700多年建城史, 1949年正式设立, 誉称"炎帝故里、青铜器之乡", 出土了晚清四大国宝及石鼓、何尊等文物, 存有西府社火、凤翔木版年画、泥塑等中华工艺; 是西部工业重镇、高端装备制造业基地、中国钛谷, 中国重要的铁路交通枢纽之一, 是中国凤香型白酒代表西凤酒的故乡。

Shaanxi Ruifuxiang Industry And Trade Co., Ltd. is located in Baoji, Shaanxi Province, which is a production base integrating re- search and development, and processing of non-ferrous metals, rare metals, and precious metals, mainly based on titanium.

Baoji City has a history of more than 2700 years of urban

construction. It was officially established in 1949 and is

known as the "hometown of Emperor Yan" and the "hometown of bronze ware". Four national treasures of the late Qing Dynasty, as well as cultural relics such as stone drums and He Zun, have been unearthed, containing Chinese crafts such as Xifu Shehuo, Fengxiang woodblock New Year paintings, and clay sculptures; It is an important indus-trial town in western China, a high-end equipment manufacturing base, China's Titanium Valley. one of China's important railway transportation hubs, and the hometown of China's Phoenix flavor Baijiu, which represents Xifeng liquor.