



WANZHI STEEL

丝类产品介绍

Steel Wire Introduction

万智钢铁是中国领先的钢铁产品生产商，负责协调销售，仓储，深加工，分销，出口，以满足客户对钢铁供应链的需求。

Wanzhi Steel is a leading manufacturer of steel products in China, coordinating sales, warehousing, further processing, distribution and export, to meet customers' needs in the steel supply chain.

万众同心，智慧先行

UNITE AS ONE.LEAD BY WISDOM.

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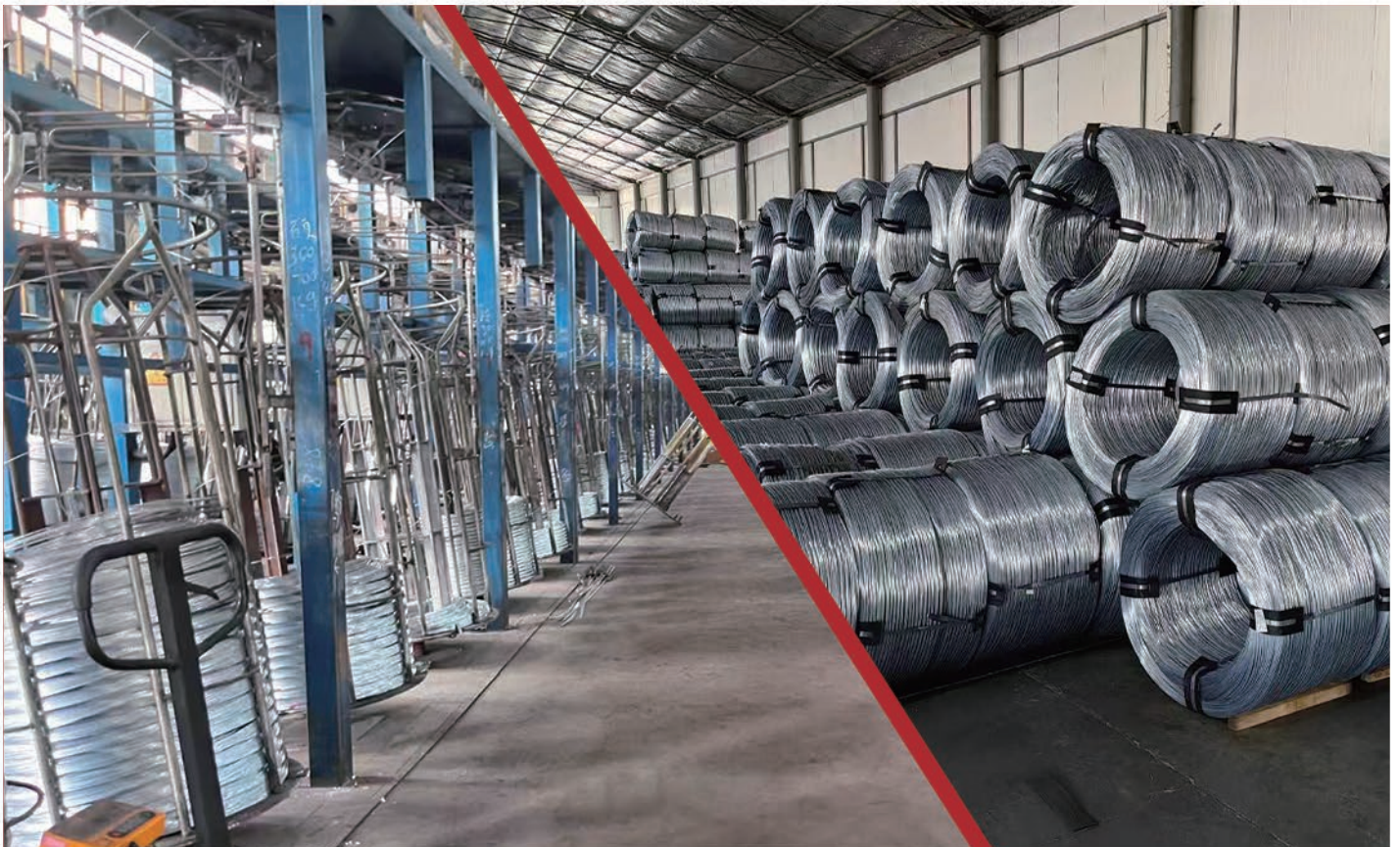
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企业简介

Company Profile

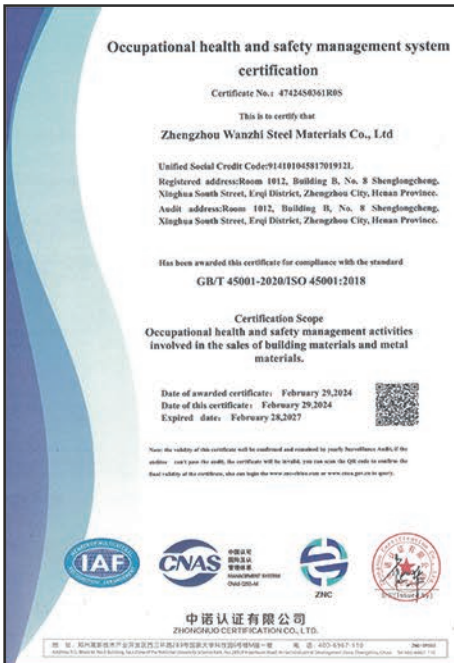
郑州万智物资有限公司是一家专注于金属丝制造的生产企业，经营总部位于中国河南省郑州市，工厂位于河北省深州市工业园区。工厂主要生产各类金属丝、镀锌丝、包塑丝、金属编织网等产品，自2011年成立以来，我们秉持着品质至上、创新驱动的理念，已经成功出口至九十多个国家，致力于做国际钢丝生意，为客户提供更高品质的钢丝产品。

Zhengzhou Wanzhi Materials Co., Ltd. is a manufacturing enterprise specializing in metal wire manufacturing. Its operating headquarters is located in Zhengzhou City, Henan Province, China, and its factory is located in Shenzhou Industrial Park, Hebei Province. The factory mainly produces various types of metal wires, galvanized wires, plastic-coated wires, metal braided mesh and other products. Since its establishment in 2011, we have adhered to the concept of quality first and innovation-driven and have successfully exported to more than 90+ countries. We are committed to Engage in the international steel wire business and provide customers with higher quality steel wire products.



我司注重质量管理要求，目前已获得ISO9001、ISO14001、ISO45001认证，并且注重生产设备的更新换代，工厂不断更新迭代配备了先进的生产设备，在拔丝、镀锌、包塑各个工艺流程上做到严格的质量把控，所有产品在出货前做到各个环节的查验和确认。

Our company pays attention to quality management requirements. We have obtained ISO9001, ISO14001, and ISO45001 certifications. We also pay attention to the upgrading of production equipment. The factory is constantly updating and iterating with advanced production equipment. We strictly control the quality of each process of wire drawing, galvanizing, and plastic coating. All products are inspected and confirmed at each link before shipment.



车间展示(Product Workshop)



检测品控展示(Testing Quality Control)

我司重视服务体验，配备了专业的服务团队和生产技术团队，目前已经服务过90+国家，年销售突破80000吨，远销世界各地。

Wanzhi Steel attaches great importance to service experience.

Equipped with a professional service and production technology team.

Currently served more than 90+ countries.

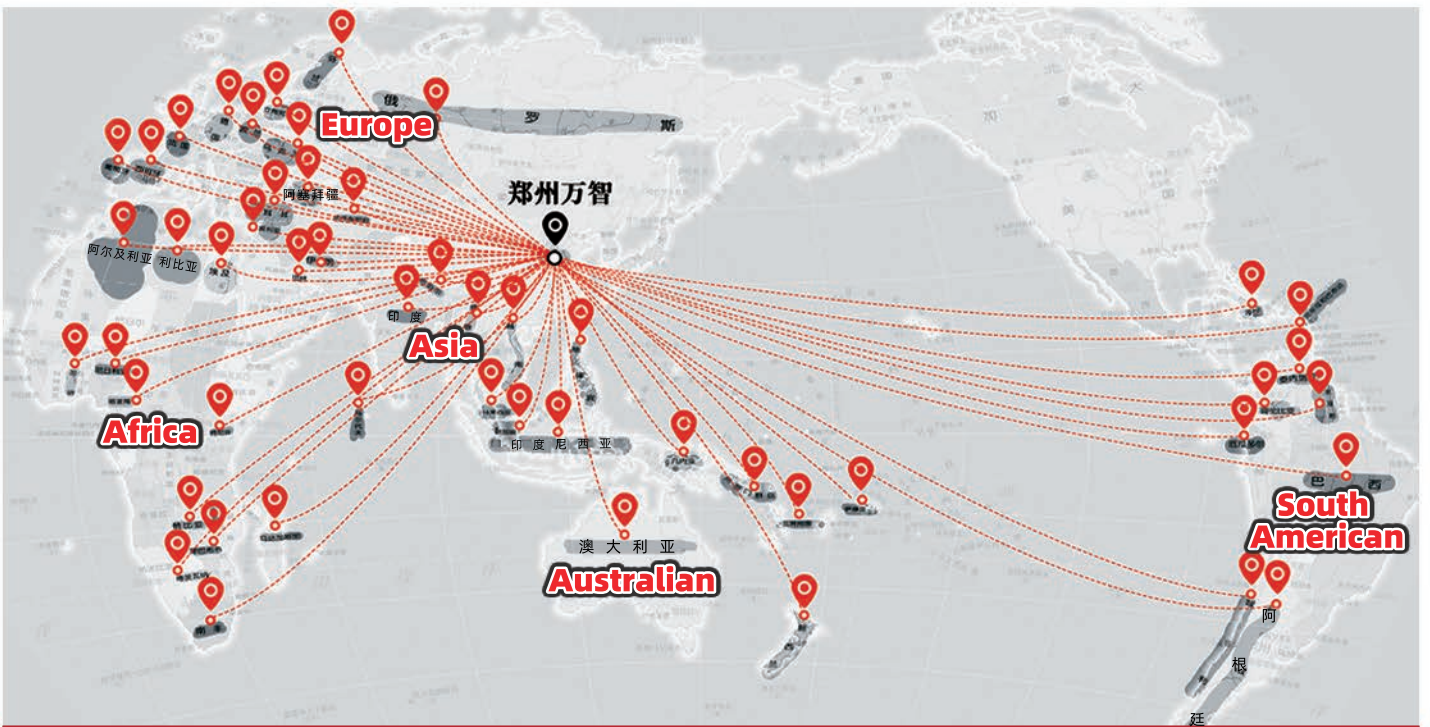
With annual sales exceeding 80,000 tons and exported to all over the world.



专业团队(Professional Team)



客户来访(Customer Visits)



远销各国(Exported to Various Countries)

金属丝简介

Introduction of Metal Wires

金属丝是金属盘条、盘圆或金属棒为原材料，通过拔丝设备、退火设备等专用设备经过多次拉拔-退火-再拉拔-再退火等工序，加工成各类不同规格和型号的丝（线）产品，这个产品就叫金属丝。

Metal wire is made of metal wire rod or bars as raw materials. It is processed into various wire products of different specifications and models through multiple drawing - annealing - re-drawing - re-annealing processes using professional equipment such as wire drawing equipment and annealing equipment.



金属丝分类

Classification of Metal Wires

分类依据 (Classification Bases)	详细内容 (Detailed Contents)
依据钢的碳含量(Based on the Carbon Content of Steel)	低碳钢 (Low-carbon steel) : 0.04%-0.25%; 中碳钢 (Medium-carbon steel) : 0.25%-0.6% 高碳钢 (High-carbon steel) : 0.6%-1.35%; 常用线材原料 (Common wire raw materials) : Q195低碳钢盘条 (Q195 low-carbon steel wire rod) 特殊需定制 (Special requirement needs customization)
依据工艺(Based on the processing technology)	盘条/圆钢、盘螺/钢筋、冷拔丝、黑退火丝、镀锌丝、包塑丝等 (Coiled/Round steel rod, Coiled /Straight rebar, cold-drawn wire, black annealed wire, galvanized wire, PVC-coated wire, etc.)
依据外形 (Based on the Shape)	圆钢、钢筋、圆丝、扁丝、椭圆丝等 (wire rod, steel rebar, round wire, flat wire, oval wire, etc.)
依据用途 (Based on the Application)	打包丝、扎丝、绑丝等 (Packaging wire, binding wire, tying wire, etc.)



高碳钢(High Carbon Steel)



镀锌丝(Galvanized Wire)



包塑丝(PVC Coated Wire)



打包丝(Tying Wire)

盘条/圆钢

Coiled/Round Steel Rod

盘条通常指直径比较小的圆钢，供货形态是卷成盘，一般用作拉丝的胚料，也可直接用作建筑材料好加工成机器零件。在工地上常见的有直径 6、8、10、12 毫米的，以低碳钢居多。

圆钢是指截面为圆形的实心长条钢材。其规格以直径表示，单位毫米(mm)，如 “50mm” 即表示直径为50毫米的圆钢。



Coiled steel rod usually refers to round steel rod with a relatively small diameter. It is supplied in the form of coils and is generally used as blanks for wire drawing. It can also be directly used as building materials and processed into machine parts. Commonly seen on construction sites are 6, 8, 10, and 12 mm in diameter, mostly low-carbon steel.

Round steel rod refers to a solid long steel bar with a circular cross section. Its specifications are expressed in diameter, with the unit being millimeters (mm). For example, "50mm" means a round steel bar with a diameter of 50mm.

项(Item)	产品参数(Product Parameter)	
产品名称 (Product Name)	盘条 (Coiled Steel Rod)	圆钢 (Round Steel Rod)
形状 (Shape)	盘绕状 (Coiled)	直条状 (Straight)
截面形状 (Section Shape)	圆形 (Circular)	
表面状况 (Surface Condition)	光面居多 (Mostly Smooth Surface)	
常见直径范围 (Common Diameter Range)	6-10 (6.5/8/10)mm	5.5-250mm
用途 (Usage)	拉丝、制钉、建筑等 (Wire Drawing, Nail Making, Construction, etc.)	钢筋、螺栓及各种机械零件，制造机械零件、无缝钢管的管坯等 (Steel bars, bolts and various mechanical parts, manufacturing mechanical parts, seamless steel pipe blanks, etc.)
包装方式 (Packaging Method)	成卷 (In rolls)	捆扎、木箱、托盘等 (Bundle, wooden box, pallet etc.)
卷重 (Roll Weight)	500-2000kg	

盘螺/钢筋

Coiled /Straight Rebar

钢筋是指钢筋混凝土用和预应力钢筋混凝土用钢材，其横截面为圆形，有时为带有圆角的方形。包括光圆钢筋、带肋钢筋。交货状态为直条和盘圆两种。

光圆钢筋实际上就是普通低碳钢的小圆钢和盘圆。

带肋钢筋是指表面带肋的钢筋，通常带有2道纵肋和沿长度方向均匀分布的横肋。用公称直径的毫米数表示，通常为8-50毫米，例如8、12、16、20、25、32、40毫米。

钢筋在混凝土中主要承受拉应力，广泛用于各种建筑结构。特别是大型、重型、轻型薄壁和高层建筑结构。

Rebar refers to steel used for reinforced concrete and prestressed reinforced concrete, with a circular cross-section, sometimes a square with rounded corners. It includes plain round bars and ribbed bars. The delivery state is straight bars and coils.

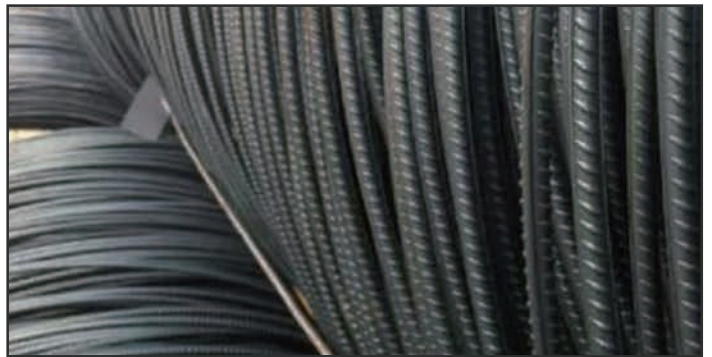
Plain round bars are actually small coiled and round steel rod of low-carbon steel.

Ribbed bars refer to steel bars with ribs on the surface, usually with 2 longitudinal ribs and transverse ribs evenly distributed along the length. It is expressed in millimeters of nominal diameter, usually 8-50 mm, such as 8, 12, 16, 20, 25, 32, 40 mm.

Rebars mainly bear tensile stress in concrete and are widely used in various building structures. Especially large, heavy, light thin-walled and high-rise building structures.



项(Item)	产品参数(Product Parameter)	
产品名称 (Product Name)	盘螺 (Coiled Rebar)	钢筋 (Straight Rebar)
表面状况 (Surface Condition)	带肋纹 (Ribbed) /光面 (Smooth Surface)	
常见直径范围 (Common Diameter Range)	6-10mm	8 - 40 (8/12/16/20/25/32)mm
强度级别 (Strength Grade)	HRB400、HRB500 等 (HRB400, HRB500, etc.)	
用途 (Usage)	箍筋、板的受力筋等 (Stirrups, Reinforcement Bars for Slabs, etc.)	梁柱等大型建筑结构的主筋 (Main Reinforcement Bars for Large Building Structures such as Beams and Columns)
包装方式 (Packaging Method)	成卷 (In rolls)	捆扎、木箱、托盘等 (Bundle, wooden box, pallet etc.)
卷重 (Roll Weight)	1000-2000kg	



冷拔丝

Cold Drawn Wire

冷拔丝也叫冷拔低碳丝，是金属冷加工的一种。原料是盘条。其实就是铁丝制造的一种主要工艺，使用这种方法能将盘条变成细铁丝，来适应各种工程中的需求。

Cold drawn wire is also called cold drawn low carbon wire, which is a kind of metal cold processing. The raw material is coiled steel rod. In fact, it is a main process for making iron wire. This method can be used to turn steel rod into thin iron wire to meet the needs of various projects.



项(Item)	产品参数(Product Parameter)
产品名称 (Product Name)	冷拔丝 (Cold-drawn Low Carbon Wire)
材质 (Material)	碳素钢、不锈钢等 (Carbon Steel, Stainless Steel, etc.)
常见直径范围 (Common Diameter Range)	0.2-6mm
用途 (Usage)	建筑、五金、工艺品等 (Construction, Hardware, Handicrafts, etc.)
生产工艺 (Production Process)	冷拔加工 (Cold Drawing Process)
包装方式 (Packaging Method)	内塑外编、内塑外麻、纸箱等 (Inner plastic and outer knitting, Inner plastic and outer linen, Cardboard boxes, etc.)
卷重 (Roll Weight)	小卷 (Small rolls) 5kg/10kg/25kg/50kg 大卷 (Large rolls) 100kg/200kg/500kg



加工技术(Processing technology)

普通的圆钢，让它通过比它的直径小一点的孔中强行拉过，则圆钢直径就会变小，长度会伸长，不断重复这样的加工过程，使圆钢拉伸到想要的粗细。产生这种塑性变形以后的钢材硬度会增加，塑性会基本消失。

Force coiled steel rod through a hole that is slightly smaller than the diameter, in this way, the diameter will become smaller and the length will lengthen, then repeat this process until reach the wire diameter you want. After this plastic deformation, the hardness of the steel will increase and the plasticity will basically disappear.

特点(Characteristics)

冷拔丝具有表面无油光泽度好、利于镀锌、镀铬、喷涂等特点；

镀锌层均匀、附着力强、耐腐蚀力持久。

冷拔丝在建材中应用较多，其硬度大、抗拉力、抗折能力大大增强，适合做建筑材料。

Oil-free surface, good gloss, and is conducive to galvanizing, chrome plating, and spraying.

The galvanized layer is uniform, has strong adhesion, and has long-lasting corrosion resistance.

Widely used in building materials. Its hardness, tensile strength, and bending resistance are greatly enhanced, making it suitable for building materials.



黑退火丝

Black Annealed Wire

退火丝又叫火烧丝、捆绑丝，是由Q195低碳钢盘条(或者铁丝)拉拔成的黑铁丝，一般是在冷拔丝的基础上经过酸洗除锈、拉拔成型、高温退火等工艺精制而成。

Annealed wire, also known as fire wire, binding wire, is a black iron wire drawn from Q195 low carbon steel coiled (or iron wire), generally on the basis of cold drawn wire after pickling and descaling, drawing molding, high temperature annealing and other processes refined.



项(Item)	产品参数(Product Parameter)
产品名称 (Product Name)	黑退火丝 (Black Annealed Wire)
材质 (Material)	低碳钢丝 (Low-carbon Steel Wire)
常见直径范围 (Common Diameter Range)	0.17-4.5mm
用途 (Usage)	建筑行业、手工艺品、产品包装及日常民用等各个领域。(construction industry, handicrafts, product packaging and daily civilian use etc)
包装方式 (Packaging Method)	内塑外编、内塑外麻、纸箱等 (Inner plastic and outer knitting, Inner plastic and outer linen, Cardboard boxes, etc.)
卷重 (Roll Weight)	小卷 (Small rolls) 5kg/10kg/25kg/50kg 大卷 (Large rolls) 100kg/200kg/500kg



镀锌丝 Galvanized Wire

镀锌丝是采用优质低碳钢盘条，经过拉拔成型、酸洗除锈、高温退火、镀锌、冷却等工艺流程加工而成，色泽光亮，丝质柔软。

镀锌丝又分为电镀锌丝和热镀锌丝。

电镀锌丝是在电镀槽内通过电流单向性在金属外表形成锌层，其工艺简单、镀层均匀、环保、成本低，但生产速度慢，镀层薄，适用于一些要求不高的场合。锌层厚度一般为10g/m²。

Galvanized wire is made of high-quality low-carbon steel wire rod, which is processed through drawing, pickling and rust removal, high-temperature annealing, galvanizing, cooling and other process processes. It has bright color and soft silk.

Galvanized wire is divided into electro-galvanized wire and hot-dip galvanized wire.

Electro-galvanized wire is formed on the metal surface by unidirectional current in the electroplating tank. The process is simple, the coating is uniform, environmentally friendly, and the cost is low, but the production speed is slow and the coating is thin, which is suitable for some occasions with low requirements. The thickness of the zinc layer is generally 10g/m².



热镀锌丝是利用金属锌与铁在高温下的合金化反应，在钢铁表面形成锌铁合金层，其工艺相对复杂，上锌量高，抗腐蚀性强，成本较高，适用范围更广，使用寿命可达十几年之久。锌层厚度一般为30-275g/m²。

Hot-dip galvanized wire uses the alloying reaction of metal zinc and iron at high temperature to form a zinc-iron alloy layer on the surface of steel. The process is relatively complicated, the zinc coating is high, the corrosion resistance is strong, the cost is high, the application range is wider, and the service life can reach more than ten years. The thickness of the zinc layer is generally 30-275g/m².

项(Item)	产品参数(Product Parameter)
产品名称 (Product Name)	镀锌丝 (Galvanized Wire)
材质 (Material)	优质Q195、Q235低碳钢材 (High-quality Q195, Q235 low-carbon steel)
截面形状 (Section Shape)	圆形 (Circular)
常见直径范围 (Common Diameter Range)	0.45-5.0mm
镀锌层 (Zinc Coating)	10-275g/m ²
用途 (Usage)	广泛用于建筑、工业、农业、手工艺品、编制/焊接丝网、高速公路防护栏、产品包装及日常民用等各个领域 (Widely used in various fields such as construction, industry, agriculture, handicrafts, woven/welded wire mesh, highway guardrails, product packaging and daily civilian use etc.)
包装方式 (Packaging Method)	内塑外编、内塑外麻、纸箱、托盘、轴等 (Inner plastic and outer woven bags, Inner plastic and outer hemp rope, carton boxes, Pallet, Spool etc.)
卷重 (Roll Weight)	线轴 (spool) 5-20kg 小卷 (Small rolls) 10-25kg 大卷 (Large rolls) 100-800kg



轴丝 Spool Wire

轴丝：顾名思义，就是经过精密打轴机把各种金属丝打在既定尺寸的轴上。

轴的目的只要有两个，一是因为需要打轴的丝都普遍偏细，太细的丝无论是从生产还是运输使用过程都是容易弄乱；二是因为一些客户的使用特性，必须要求把铁丝打在规定尺寸的轴上。

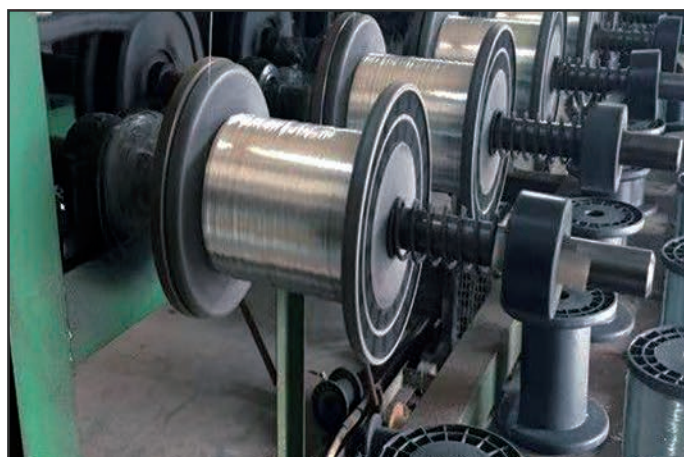
Spool wire: As the name implies, it is to use a precision spooling machine to wrap the metal wires onto a spool of a predetermined size.

There are two purposes for using spool package.

First, the wires that need to be spooled are generally thinner. Too thin wires are easy to mess up during production, transportation, and use.

Second, some customers require that the wires be spooled onto a spool of a specified size due to their usage characteristics.

项 (Item)	产品参数 (Product Parameter)
产品名称 (Product Name)	轴丝 (Spool Wire)
材质 (Material)	镀锌丝、改拔丝、钢丝、不锈钢丝等 (Galvanized wire, cold-drawn wire, steel wire, stainless steel wire etc)
常见直径范围 (Common Diameter Range)	0.15-0.5mm
用途 (Usage)	钢丝球、一次性口罩等 (Steel wire ball, disposable mask, etc.)
生产工艺 (Production Process)	各种金属丝经过精密打轴机缠绕在轴上 (Metal wires are wrapped on the spool through a precision spooling machine)
包装方式 (Packaging Method)	轴、纸箱、托盘等 (Spool, carton boxes, pallets, etc)
卷重 (Roll Weight)	5-20kg



锌铝合金丝 Zinc Aluminum Alloy Wire

锌铝合金丝又名高尔凡丝，是一种新型防腐材料，根据含量不同分为85/15 (Zn85Al15)、90/10 (Zn90Al10)、95/05(Zn95Al5)，被广泛应用于低碳、高碳钢的各种产品。

锌铝合金丝是由6.5毫米低碳钢线材经拉拔成型、高温退火、酸洗除锈、热浸镀锌等工艺精制而成，与纯锌丝和纯铝丝相比，其产品具有柔韧性强、可塑性好、抗腐蚀性、优施工性能优越等特点。常见直径范围是0.5-5毫米，价格比镀锌铁丝要更贵。



Zinc-aluminum alloy wire, also known as Galfan wire, is a new type of anti-corrosion material. It is divided into 85/15 (Zn85Al15), 90/10 (Zn90Al10), and 95/05 (Zn95Al5) according to different contents. It is widely used in various products of low-carbon and high-carbon steel.

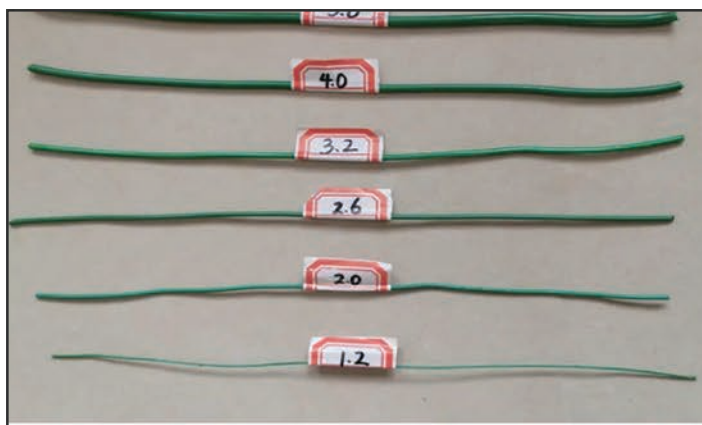
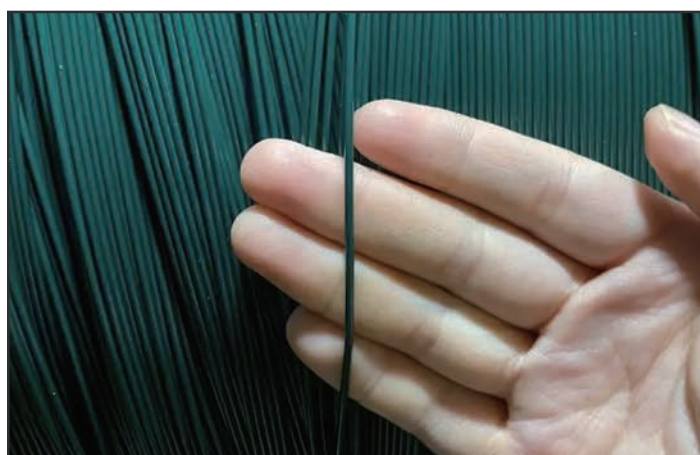
Zinc-aluminum alloy wire is made of 6.5 mm low-carbon steel wire through drawing, high-temperature annealing, pickling and rust removal, hot-dip galvanizing and other processes. Compared with pure zinc wire and pure aluminum wire, it has the characteristics of strong flexibility, good plasticity, corrosion resistance, and excellent construction performance. Common diameter range is 0.5-5mm, the price is more expensive than galvanized iron wire, but cheaper than aluminum wire.

Gauge	SWG		BWG		AWG	
	Inch	mm	Inch	mm	Inch	mm
5	0.212	5.385	0.220	5.588	0.182	4.621
6	0.192	4.877	0.203	5.156	0.162	4.115
7	0.176	4.47	0.180	4.572	0.144	3.665
8	0.159	4.046	0.165	4.191	0.129	3.264
9	0.144	3.658	0.148	3.759	0.1144	2.906
10	0.128	3.215	0.134	3.404	0.1019	2.588
11	0.116	2.946	0.12	3.048	0.0907	2.305
12	0.104	2.642	0.109	2.769	0.0808	2.053
13	0.092	2.337	0.095	2.413	0.072	1.828
14	0.08	2.032	0.083	2.108	0.0641	1.628
15	0.072	1.829	0.072	1.829	0.0571	1.45
16	0.064	1.626	0.065	1.651	0.0508	1.291
17	0.056	1.422	0.058	1.473	0.0453	1.15
18	0.048	1.219	0.049	1.245	0.0403	1.024
19	0.04	1.016	0.042	1.067	0.0359	0.912
20	0.036	0.914	0.035	0.839	0.032	0.812

包塑丝 PVC Coated Wire

包塑丝又叫涂塑丝，选用低碳钢铁丝或优质镀锌丝做原材料，经过深加工处理使塑料与丝牢固的结合在一起，具有抗老化、抗腐蚀、防龟裂等特点，使用寿命是镀锌丝的几倍。

PVC coated wire is also called plastic coated wire. It uses low carbon steel wire or high quality galvanized wire as raw materials. After deep processing, the plastic and wire are firmly combined. It has the characteristics of anti-aging, anti-corrosion, anti-cracking, etc., and its service life is several times that of galvanized wire.



项 (Item)	产品参数 (Product Parameter)
产品名称 (Product Name)	包塑丝、涂塑丝、PVC涂塑铁丝 (简称: PVC丝, PE丝) (PVC-coated wire, plastic wire, PVC coated iron wire (referred to as: PVC wire, PE wire)
颜色 (Color)	深绿色、鲜绿色、白色、黑色等 (Dark green, bright green, white, black, etc)
内径 (Inner Diameter)	0.45-4mm
涂层厚度 (Coating thickness)	0.2-2mm
品种 (Varieties)	黑铁丝包塑丝、镀锌铁丝包塑丝、钢丝包塑丝、铜丝包塑丝等 (black iron wire plastic coated wire, galvanized iron wire plastic coated wire, steel wire plastic coated wire, copper wire plastic coated wire, etc.)
用途 (Usage)	动物饲养防护,水产养殖,农业,林区防护,体育馆等 (Animal breeding protection, aquaculture, agriculture, forest protection, gymnasium, etc.)
卷重 (Each Volume Welghs)	0.1kg-500kg/coil



打包丝

Baling Wire

打包丝又叫扣丝、巴太丝，主要用于编织袋和麻袋封口、农作物绑扎、日常物品绑扎或建筑捆绑用，以及再生资源的废旧物品打包，及棉麻公司打包专用等，长度随用户定。

【丝径】：2mm-6mm

【材质】：镀锌丝、退火丝、包塑丝

【包装】：塑料袋、纸箱、托盘等，或按客户要求。

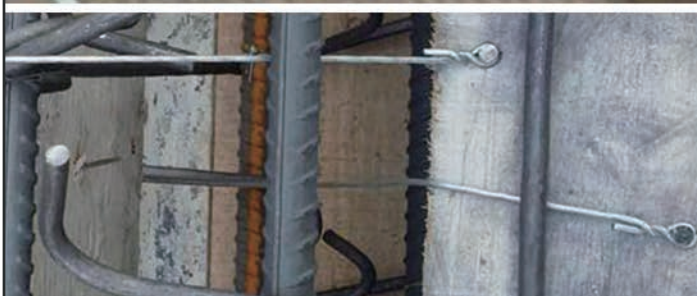
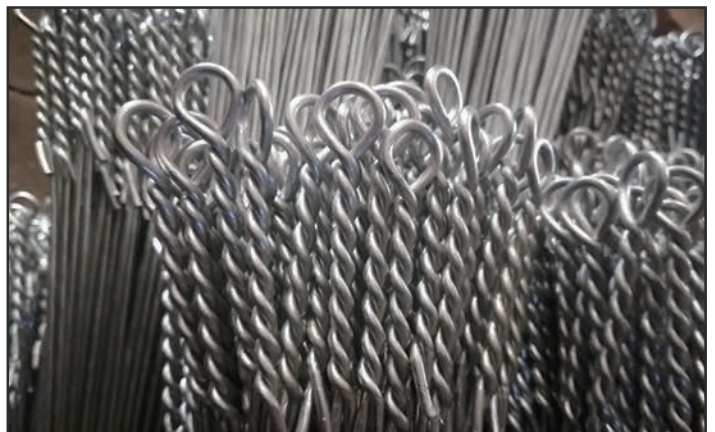


Baling wire is also called buckle wire or bag tie wire. It is mainly used for sealing woven bags and sacks, tying crops, tying daily items or building tying, as well as packaging of waste items from renewable resources, and special packaging for cotton and linen companies. The length is determined by the user.

【Wire diameter】：2mm-6mm

【Material】：galvanized wire, annealed wire, pvc-coated wire

【Packaging】：plastic bags, cartons, pallets, etc., or as required by customers



绑丝 Binding Wire

绑丝又叫扎丝、截断丝，是一种捆扎和固定东西的铁丝。生活物品的捆扎，建筑捆绑钢筋，或者在工业、建筑领域捆绑和连接各种金属结构的一般用丝。

【特点】：丝质柔软、易邦扎、不易断，绑扎简便易操作。

【材质】：镀锌丝、冷拔丝、退火丝、包塑丝。

【主要丝径】：0.71mm,0.8mm,1.0mm,1.2mm,1.6mm,2.0mm。

尤以0.71mm和0.8mm最为普遍。

【长度】：10cm-50cm，或者客户要求

【包装】：纸箱，或者客户要求



Binding wire is also called tie wire or cutting wire. It is a kind of iron wire used for binding and fixing things. It is used for binding daily necessities, binding steel bars in buildings, or binding and connecting various metal structures in the industrial and construction fields.

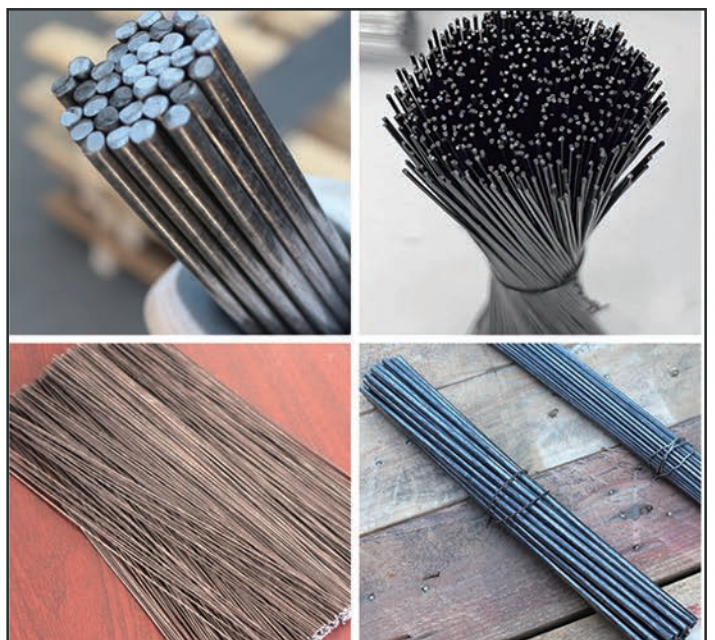
【Features】：Soft silk, easy to bind, not easy to break, simple and easy to operate.

【Material】：galvanized wire, cold drawn wire, black annealed wire, pvc-coated wire etc.

【Main wire diameter】：0.71mm, 0.8mm, 1.0mm, 1.2mm, 1.6mm, 2.0mm. 0.71mm and 0.8mm are the most common.

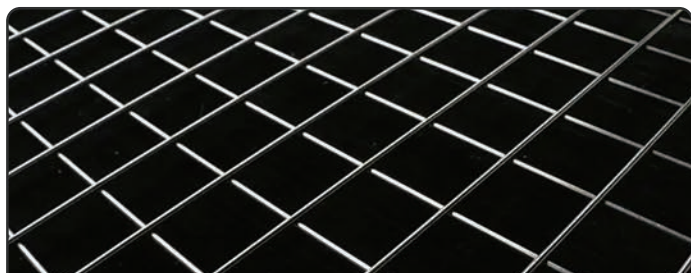
【Length】：10cm-50cm, or as required by the customer

【Packaging】：Carton, or as required by the customer

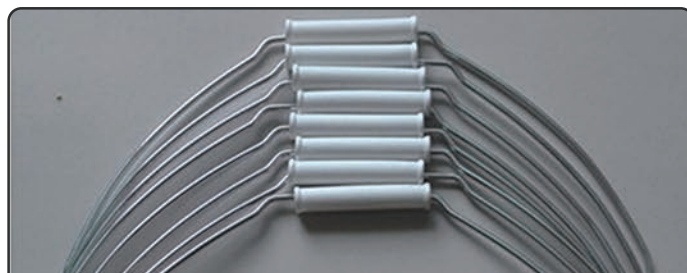


深加工产品

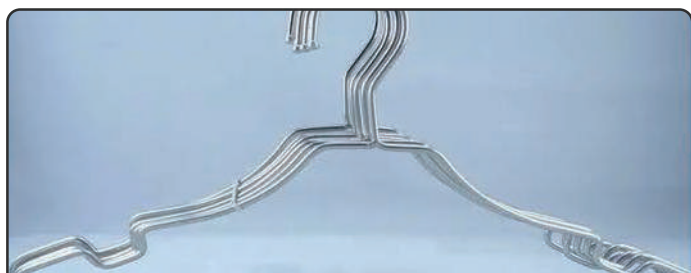
Deep-processed Products



网片丝(Wire Mesh)



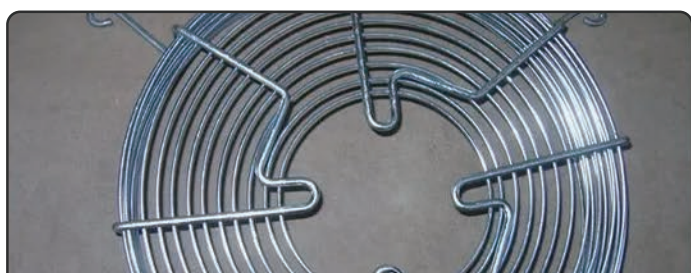
桶梁提丝(Handle of The Keg Lift)



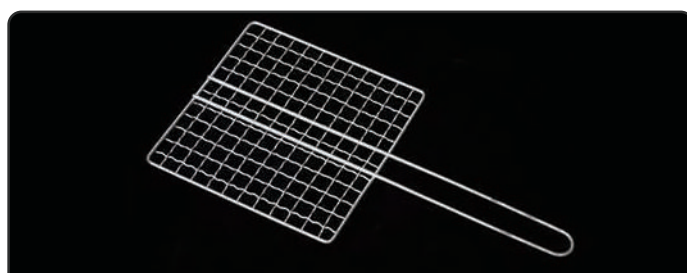
衣架丝(Hanger Wire)



养殖笼用丝(Breeding Cage Wire)



网罩丝 (Wire for Mesh Cover)



烧烤用丝(Barbecue Wire)



骨架丝(Boning Wire)



窗帘挂钩丝(Curtain Hook Wire)



草皮钉(Spike)



S钩丝(S-hook Wire)