

SHAPED-WIRE BROCHURE

Company Profile

Shandong Xingying Environmental Energy Technology Co. LTD

Has manufacturing and exporting shaped wires for more than 10 years. We dedicated in manufacturing and customizing all alloy materials of flat wires, rectangular wires, oval wires in addition to all custom irregular shaped wires.





Precious Production

Advanced equipment and international standard production line secure all products quality.



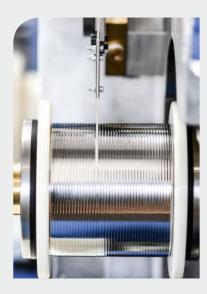
Custom Wires

Here are all standard and irregular shaped wires listing. Just choose your perfect wires.

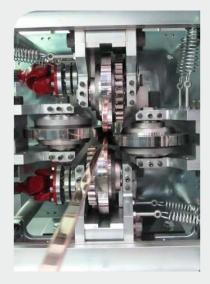


Designs & Drawings

We can design and custom all your needed shaped wires for all your specific applications.







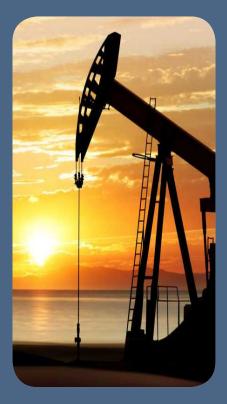
Shaped Wires are Popular in...



Agriculture



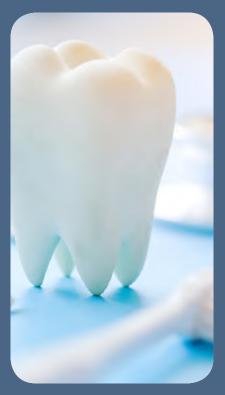
Architecture



Petroleum



Electric Power

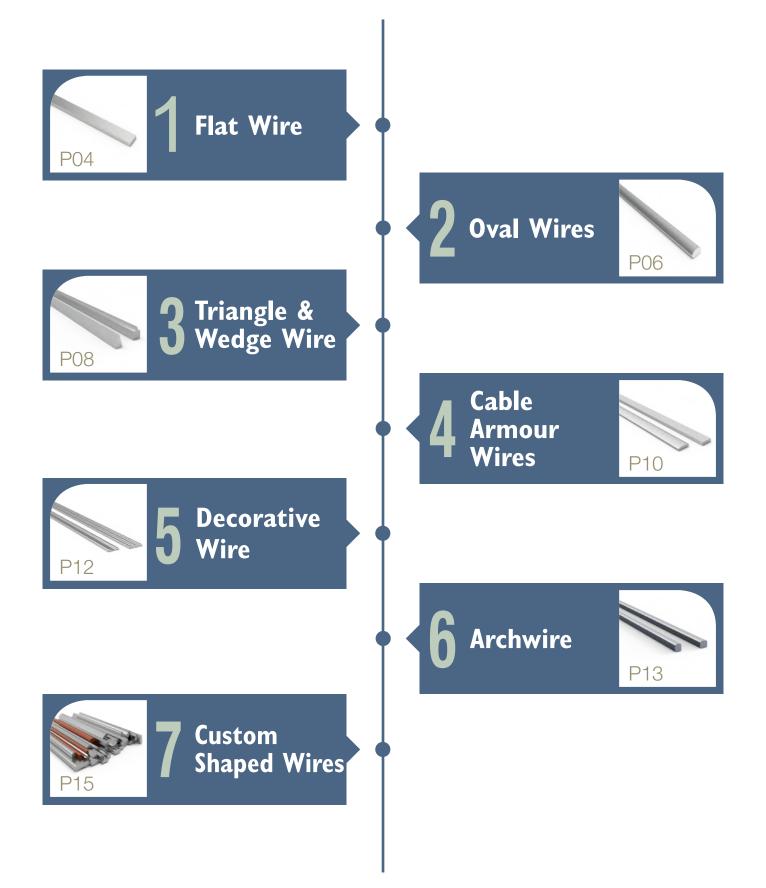


Orthodontics



Music

Contents



Flat Wire

Flat wire is drawn from round wires. It is rolled into a flat cross section into optional sizes through a series of rolling operations and intermediate anneals where necessary.

The flat wires are available in different alloys based on various applications. And gauge ranges from 0.3 mm to 12 mm. They can be packed in straight bars or coils for different requirements.

* More thickness and widths are available upon request.

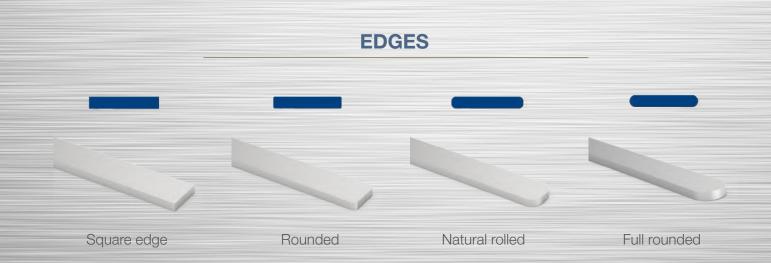


MATERIAL

- Iron
- Steel
- Stainless steel
- Aluminum
- Copper & copper alloy

SURFACE TREATMENT

- Hot dipped galvanized
- Electrical galvanized
- Electroplating



Flat Wire



SIZE RANGES

- Thickness: .020" .375"
- Width: 125" .625"



PACKAGE

- Continuous coil
- Precision cut lengths



ADVANTAGES

- Small tolerance
- Burr free
- Few or no welds
- Accurate size in coil or straight bars
- No or less secondary operations
- ISO 90001 certificated



Decorative Meshes



Steel conveyor belt



Screw conveyor wire



Cable Armour wire

Oval Wires High Tensile for Farming Fencing and Plant Support

Oval wire is an popular and common in special profile wires. It has wide ranges of applications in agriculture. It is widely used as fencing wire for cattle and other big animals in South American countries. It also plays important roles in growing plant or tomatoes supporting applications.

This type oval wires adopts high tensile steel wire for higher tensile strength and breaking load.

The hot dipped galvanized surface can withstand harsh environments outdoors.

MATERIALS OF OVAL WIRES

High tensile strength steel wire.

• 45# steel (SAE 1045 steel)

- 55# steel (SAE 1055 steel)
- 65# steel (SAE 1065 steel)

TECHNICAL INFORMATION

- Tensile strength: 1000–1200 N/mm²
- Breaking load:
 600 KGF, 725 KGF, 800 KGF, 1200 KGF
- Zinc coating: 40–300 g/m²
- Package:
 - 1000 m/roll, 1250 m/roll or 50 kg/roll

BENEFITS OF OVAL WIRES

- High tensile strength fencing
- High corrosion resistance surface
- Easy handling with oval shape section
- Wire range of size choice
- Special sizes are available.
- Economical and efficient.

MAIN MARKETS

South America

- Brazil
- Paraguay
- Uruguay
- Chile

COMMON SPECIFICATIONS OF OVAL WIRES

ltem	Nominal diameter	Standard grade	Heavy grade	Ex-high grade	Breaking force	Length	Weight
	(mm)	(g/m²)	(g/m²)	(g/m²)	(kgf)	(m)	(kg/coil)
OWSP-01	2.4 × 3.0	50	90	230	700	1000	45
OWSP-02	1.8 × 2.2	50	90	230	400	1900	45
OWSP-03	2.0 × 2.4	50	90	230	500	1500	45
OWSP-04	2.2 × 2.7	50	90	230	600	1250	45
OWSP-05	4.45 × 5.25	35	50	230	500	170	25

AVAILABLE PACKAGE



Plastic film or PVC strip.



Plastic film inside and woven bags.

APPLICATIONS OF OVAL WIRES



- Agriculture fencing
- Horticulture structures



- Vineyard support
 - Trellis support

Triangle & Wedge Wire

For Wedge Wire screen and Floor Drain Grate

Triangle wire, also called V-shaped wire, is popular in the filtration applications like wedge wire screen and floor drain grate.

Wedge wire, commonly acts as the support rod in the wedge wire screen system.

They are all available in stainless steel, carbon steel and other required alloy materials.

* Special sizes and materials are also available.



Wedge Wire Screens

The wedge wire screen commonly adopts triangle wire as the profile wire for accurate filtration and wedge wire as the support rod.

Due to the flexible and adjustable open area and slot opening, the triangle wire and wedge wire decides the filtration accuracy and working efficiency in the wedge wire screen system.



Triangle wire as profile wire





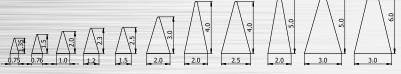
e wire Triangle wire as support rod Wedge wire as support rod

Triangle & Wedge Wire

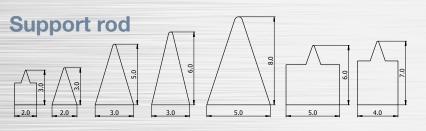
For Wedge Wire screen and Floor Drain Grate

AVAILABLE SIZES (unit mm)

Profile wire

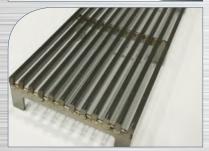


Triangle wire (W × H).
0.75 × 1.35, 0.76 × 1.5, 1.0 × 2.0, 1.2 × 2.3, 1.5 × 2.5, 2.0 × 3.0, 2.0 × 4.0, 2.5 × 4.0, 2.5 × 4.0, 2.0 × 5.0, 3.0 × 5.0, 3.0 × 6.0.



- Triangle wire (W × H).
 3.0 × 5.0, 3.0 × 6.0, 5.0 × 8.0.
- Wedge wire (W × H).
 2.0 × 3.0, 5.0 × 6.0, 4.0 × 7.0.





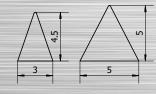
Floor Drain Grates

Another important application of triangle wire is floor drain grates.

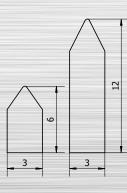
Floor drain grating adopts triangle wires as the surface wire due to its smooth surface, excellent filtration, high open surface ratio and low possibility of blanking.

It adopts stainless steel triangle wires due to its excellent corrosion and rust resistance performance.

AVAILABLE SIZES (unit mm)



• Triangle wire (W × H). 3 × 4.5, 5 × 5.



• Wedge wire (W × H). 3 × 6, 3 × 12.

Cable Armour Wires

Flat or Formed Wires for shielding and protection

Armour is an essential component is power and control cables. It can increase the mechanical strength and improve anticorrosive performance and shielding performance of cables.

The armour is available in round or flat wires. When the calculated diameter under armour is above 13 mm, the flat wire should replace the round wire as cable armour.

We can supply standard and customized cable armouring wires. The **cable armour wire** is a metal cover to protect the cables from mechanical damage. The flat wire armour is available for rectangular shape and formed shapes in various materials.

All the flat armour wires comply with the International standards.

* Special sizes and materials are also available.



AVAILABLE MATERIALS

- Galvanized steel (Most popular type).
- Copper or tinned copper.
- Aluminum or aluminum alloys.



COMPLY WITH STANDARDS

- International. IEC 60502, IEC 60228.
- China. GB/T 12706.1-2008.
- India. BIS IS 3975-1999.

AVAILABLE SHAPES



Standard flat wire



Formed fan-shaped wire

Cable Armour Wires

Flat or Formed Wires for shielding and protection

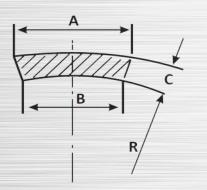
FLAT WIRE SIZES



Cross Section of Flat Wire

- Min. Thickness: 0.5 mm.
- Max. Width: 10 mm.
- * Special sizes are also available.

FORMED WIRE SIZES

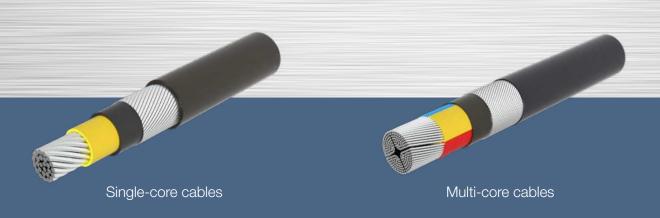


Cross Section of Formed Wire

Туре	Width (A)	Width (B)	Thickness (C)	Radius (R)
FFW-01	4.00	3.4	0.80	10.00
FFW-02	6.10	5.3	1.40	27.50

* Special sizes are also available.

AVAILABLE APPLICATIONS



Decorative Wires

Custom Patterns and Various Material

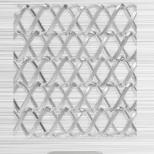


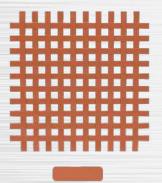
Decorative mesh is one of the most important application of shaped wires.

The profile wires provide custom wire patterns for different decorative requirements and patterns designs.

This type decorative wires mainly contain flat wire, D shape wire, square shape wire and irregular shaped wires.

* Special sizes and materials are also available.





FLAT SHAPE DECORATIVE WIRE

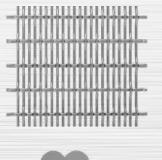
- Available materials: stainless steel, galvanized steel, copper steel, aluminum steel and other alloy steels.
- Size ranges: Thickness: .020" – .375" Width: .125" – .625"

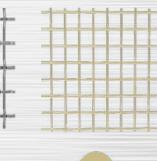
D SHAPE DECORATIVE WIRE

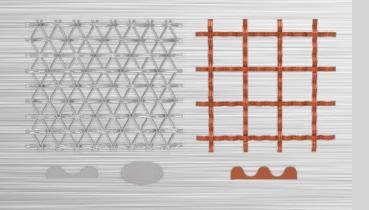
• Available materials:

stainless steel, galvanized steel, copper steel, aluminum steel and other alloy steels.

• Size ranges: Thickness: min. 0.3 mm Width: max. 10 mm







IRREGULAR SHAPE DECORATIVE WIRE

- Available materials: stainless steel, galvanized steel, copper steel, aluminum steel and other alloy steels.
- Irregular type A size ranges:
- 1.2 × 2.4 mm 1.6 × 3.2 mm Custom
- Irregular type B size ranges:
- 1 × 2.95mm 1.2 × 5mm custom

ArchWire Accurately manufacture for Exact Size



Nowadays, the rectangular and square shaped wire has replaced the round wires and more and more popular as orthodontic **archwire**. They provide minimal friction, better tooth control and small width control.

Stainless steel material is the most widely used materials due to its lower costs, better elasticity and yield strength than other materials.

All our square and rectangular wires are exactly manufactured to the exact size, in all dimensions and flexibility (or stiffness).

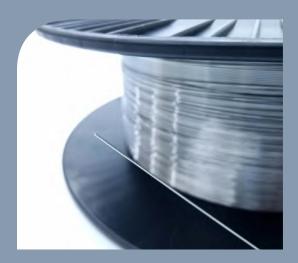
AVAILABLE SHAPED WIRE TYPES



Rectangular wire



Square wire



BENEFIT OF ARCHWIRE

- Excellent corrosion resistance.
- Good elasticity and yield strength.
- Lower spring back ability and store less energy.
- Lower bracket-wire friction.
- Improved mechanical properties.
- More economical than Titanium material.
- Better tooth control and small width control.



APPLICATION OF ARCHWIRE

Rectangular and square shaped wire is widely used for the Orthodontic Archwire production in medical fields.



OPTIONAL ARCHWIRE SIZES

ltem	Sizes (inch)	Sizes (mm)
AW-01	0.014" × 0.025"	0.014 × 0.635
AW-02	0.016" × 0.016"	0.406 × 0.406
AW-03	0.016" × 0.022"	0.406 × 0.559
AW-04	0.017"×0.022"	0.432 × 0.559
AW-05	0.018" × 0.018"	0.457 × 0.457
AW-06	0.018" × 0.022"	0.457 × 0.559
AW-07	0.017" × 0.025"	0.432 × 0.635
AW-08	0.018" × 0.025"	0.457 × 0.635
AW-09	0.019" × 0.025"	0.483 × 0.635
AW-10	0.020" × 0.020"	0.508 × 0.508
AW-11	0.021"×0.025"	0.533×0.635

Custom Shaped Wires

Accurate Dimensions & Endless Shapes



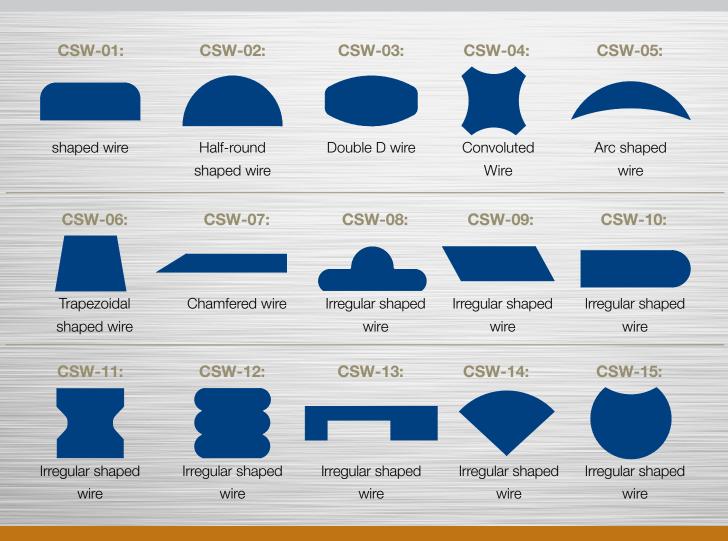
We manufacture high accuracy and wide range of **custom shaped** wires in addition to standard shapes.

The custom shaped wires are widely used in decorative mesh productions, medical orthodontic use, agriculture farm fencing, industrial filtration and conveying applications.

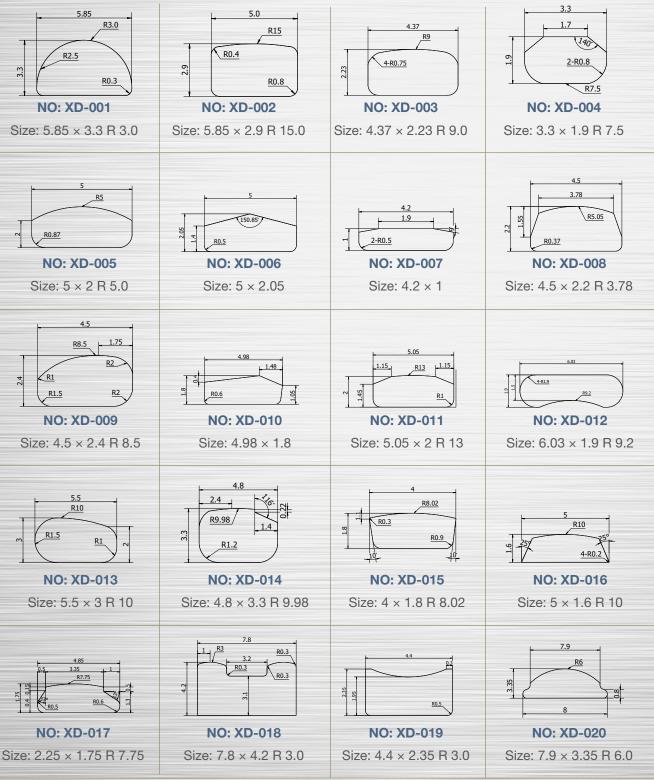
The range of materials are mainly stainless steel, carbon steel, aluminum, copper and other alloy materials. Other alloy materials are also available for your specific applications.

All the custom shaped wires are produced according to customers' drawings and requirements including radius, deep plunging channels and overall dimensions.

Just refer to the following shaped wires and find the perfect one suitable for you. More designs just sending us your drawings and requirements, we will custom for you.



CAD Designs



* More designs is updating...





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