



MANUFACTURER OF

**Galvanized,  
Annealed, Bright Drawn,  
Mattress Spring,  
PVC Coated,  
Barbed Wire &  
Chainlink Fence**

# Introduction

## AL Khaleej Steel Industries L.L.C

Al Khaleej Steel Industries (AKSI) is a wholly owned subsidiary of Taurani Holdings Ltd. Dubai, that specialises in manufacture and supply of Galvanized Wire and other wire products. Located in Abu Dhabi, United Arab Emirates, the company has spanned across three continents through its ancillary offices and global sales partners. Our expertise include production, processing and supplying of Hot Dip Galvanized and Non- Galvanized Wire to a vast customer base across many sectors. As an ISO 9001:2015 certified company and ISO 14001:2015 certified environment management system, we adhere to the most stringent quality control at all levels of our operation.

Our state-of-the-art factory is equipped with the most advanced plant and equipment, skilled workforce, comprehensive quality management system and proactive R&D capabilities. As an underlined objective, that every employee complies to, is that we are truly committed to deliver high quality products and solutions to exceed our customers expectations.



### Mission

To improve our business by delivering high value products and solutions to all our customers in a sustainable way.

### Vision

To build a sustainable future through innovations and partnerships.

### Values

Honorable | Synergistic | Transformational | Customer Centric

# Our Commitment

We are committed to provide our customers, employees, contractors and all stake holders a safe and healthy atmosphere at all times.

We are also committed to do our bit to contribute to environmental protection, operational safety and community goodwill.



## Why AKSI? A Trusted Galvanized Wires Supplier

Al Khaleej Steel Industries LLC's business success depends on the quality of products and services while protecting the environment. We are committed to:

- Protect and strive for improvement of health, safety and security of our people at all times
- Eliminate Quality non-conformances and HSE incidents
- Meet specified customer requirements and ensure continuous customer satisfaction
- Set Quality & HSE performance objectives, measure results, assess and continually improve processes, services and product quality, through the use of an effective management system
- Proactively plan to avoid any business disruption and actively respond to any unforeseen circumstances.
- As a part of our Corporate Governance, we promote the highest sustainable economic growth, a healthy environment and considerable reduction in global carbon footprint.
- Apply our technical skills to all HSE aspects in the design and engineering of our services and products



We Are  
Specialized In  
Manufacturing  
**Galvanized  
Wires**

## Product Range & Applications

We manufacture wire of varied diameters ranging from 1.40mm to 6mm with Galvanized/non-Galvanized surface finishes and of various tensile strengths and other mechanical properties. Specifications of finished products can be as per ASTM/EN/DIN/JIS/BS/AS standards.

We deliver the products with multiple application usage where we give prime importance to corrosion resistance. We are specialized in manufacturing Galvanized Wires from low to medium carbon wire rod with the use of natural gas. Our product range fully adheres to various segments.

### AKSI Products

- Hot Dip Galvanized Wire
- Black Annealed Binding Wire
- Bright Drawn Wire
- Mattress Spring Wire
- PVC Coated Wire (Galvanized & Non-Galvanized)
- Galvanized Chainlink Fence
- PVC Chainlink Fence

### Applications

- Cable Armouring
- Fencing
- Gabions
- Wire Mesh
- ACSR
- Fasteners
- Farming application such as Vine Yard Wire
- Steel Wool
- Mesh
- Construction applications etc

# Features

AKSI galvanized product offers the following advantages over traditional coating process:

- Superior Corrosion Resistance -Resulting in a product that will last for a long time
- Consistent Coating Layer -Ensuring a smooth surface finish
- Improved Formability - Manufactured to the tensile strengths as per requirement
- Improved Paint Ability -Thereby reducing the need to re-paint the end product

We can supply wire in coil weights ranging from 100 kg to 1200 kg with HDPE, LDPE packing and 4 point PET or high tensile steel strapping.

## Quality System & Control

Al Khaleej Steel Industries has a reputation as an organization which prioritizes customer satisfaction with focus on quality, consistency and reliability.

AKSI strives on continuous improvement with system and knowledge integration coupled with R&D and social, legal responsibilities. AKSI has complete team of trained engineers and technicians who take care of process control, process improvement and quality of incoming, in process and finished products.

We have state of the art testing facilities to test and analyze process parameters and various properties of our product.

AKSI has been accredited with ISO 9001:2015 & ISO 14001:2015 certification which speaks about our quality of our products.

AKSI has long list of reputed international customers whose requirements are being catered to their satisfaction, which indicates the quality consistency of our products.



Certified ISO 14001:2015 & ISO 9001:2015

All our products undergo extensive testing to ensure that our customers receive a quality product. Some of the testing activities are:

- Raw Material Inspection
- Tensile Test
- Zinc Coating Weight (mass) Test
- Coating Adhesion Test
- Torsion test
- Electrical Resistance Test
- Wire Reverse Bend Test

# Hot Dip Galvanized Wire

The galvanized wire has multiple applications in various industry.

It is very flexible, malleable and easy to work material allowing to obtain good results in their applications without the need of specialized labour. AKSI have galvanized wire range from diameter 1.40 mm to 6.00 mm and Zinc Coating range from 40 GSM to 610 GSM in various packing size ranging from 100 Kg to 1200 Kg.

AKSI galvanized product offers the following advantages over traditional coating process.

- Superior Corrosion Resistance
- Consistent Coating Layers
- Improved Formability
- Improved paintability

Wire Diameter in	Class 1 Coating, oz/ft <sup>2</sup>	Class 3 Coating, oz/ft <sup>2</sup>	Class 4 Coating, oz/ft <sup>2</sup>
0.062	0.20	0.65	n/a
0.072	0.20	0.65	n/a
0.076	0.25	0.70	n/a
0.080	0.25	0.70	n/a
0.092	0.28	0.75	n/a
0.099	0.28	0.80	n/a
0.106	0.30	0.80	1.20
0.120	0.30	0.85	1.20
0.135	0.30	0.85	1.20
0.148	0.35	0.90	1.20
0.162	0.35	0.90	1.20
0.177	n/a	0.90	1.20
0.192	n/a	1.00	1.20
0.207	n/a	1.00	1.20

and larger

Diameter mm	Class 1 Coating, g/m <sup>2</sup>	Class 3 Coating, g/m <sup>2</sup>	Class 4 Coating, g/m <sup>2</sup>
1.60	65	198	n/a
1.80	65	198	n/a
1.90	75	214	n/a
2.00	75	214	n/a
2.30	85	229	n/a
2.50	85	244	n/a
2.70	85	244	366
3.00	85	259	366
3.40	100	259	366
3.80	100	275	366
4.10	115	275	366
4.50	115	275	366
4.90	n/a	305	366
5.30	n/a	305	366

and larger

## Tensile Strength as per ASTM A 641 (Imperial Units)

Wire Diameter in.	Soft, Ksi	Medium, Ksi	Hard, Ksi
0.059 to 0.08	58 to 75	70 to 100	90 to 120
0.08 to 0.106	58 to 75	70 to 95	85 to 115
0.106 to 0.176	58 to 70	65 to 90	80 to 110
0.176 to 0.236	58 to 70	60 to 85	75 to 105

## Tensile Strength as per ASTM A 641 (SI Units)

Wire Diameter, mm	MPa		
	Soft	Medium	Hard
1.50 to under 2.00	400 to 515	485 to 690	620 to 825
2.00 to under 2.50	400 to 515	485 to 655	585 to 795
2.50 to under 4.70	400 to 485	450 to 620	550 to 760
4.70 to 6.00	400 to 485	415 to 585	515 to 715

# Barbed Wires

Commonly used as a protection element against human / non-human incursion and containment of land boundaries, we manufacture barbed wire in various sizes meeting ASTM & EN Standards.

## Product Specification

- Make: Galvanized steel wire
- Wire Diameter: 1.40 mm to 4.00 mm
- Number of Strands: Two
- Type of Barb: 4 pointer IOWA type interlock barb in standard range
- Barb Spacing: 65 mm, 75 mm, 85 mm, 100 mm, 125 mm, 150 mm
- Bundle weight: 5 kgs to 25 kgs





# Galvanized Steel or PVC Coated Steel Wire

## ChainLink Fence

Chainlink fence is a woven fence usually made of galvanized steel or PVC coated steel wire. It is also known as wire netting, wire mesh fence or diamond- mesh fence adhering to ASTM standards like F668.

### Specifications

- Make: GI / PVC- GI / PVC-Annealed
- Mesh Size: 25x25 mm to 80x80 mm
- Core Wire Diameter: 1.50 mm to 4.00 mm
- PVC Wire Diameter: 2.20 mm to 5.00 mm
- Height: 1 meter to 4 meter
- Available: In various colors as per customer requirements in RAL code

### Features

- Exceptional Performance in highly corrosive environment
- Uniform zinc coating of core wire
- Uniform PVC coating
- Superior adherence of PVC for maximum durability
- High Quality of PVC coating with good shine and lustre

### Applications

- Agricultural fencing
- Dividing side yard or property
- Warehouse or Industrial areas fencing
- Security areas fencing
- Residential fencing
- Parks and Playgrounds fencing



# Mattress Spring Wire

Mattress spring wires are high carbon steel wires, particularly suitable for manufacturing of mattress and seating applications like bonnell springs, pocket springs, helical springs, border frames and wire forms.

Depending on customer requirements various grades and surface treatments are provided. AKSI has state of the art coating and wire drawing facility to manufacture high quality mattress and seating wire to match various international standards like ASTM A-407, BS-4637, DIN-17223.

## Specifications

- Diameter Range: 1.40 mm to 4.00 mm
- Tensile Range: 1300 N/mm<sup>2</sup> to 2000 N/mm<sup>2</sup>
- Finish: Phosphate coated or Borax coated
- Coil Weight: 250 kg to 1,000 kg
- Packing: Pattern lay coils with suitable steel/PET strapping & VCI paper with HDPE packing.

## Features

- Smooth and uniform surface finish without any surface abnormalities
- Consistent diameter with close tolerance
- Consistent and uniform tensile properties throughout the coil

## Applications

- Bedding/Mattress Industry
- Automotive Seating Systems
- Furniture Industry
- Spring Component/Wire forming



## CHEMICAL ANALYSIS

	C%	Si %	Mn %	P %	S%
Min.	0.38	-	0.40	-	-
Max.	0.85	0.35	0.85	0.035	0.035

Manufacturing  
High Quality  
**Mattress  
Spring Wire**



# With High UV Resistance Capability

## PVC Wire

AKSI manufactures PVC coated galvanized/annealed steel wires using modern equipment that gives the best quality and consistency. We use high quality PVC raw material which has high UV resistance capability. This UV Resistant provides long lasting outdoor corrosive atmosphere. The core wire is made from galvanized or annealed wire as per customer specification.

### Specifications

- Core Material: Galvanized Steel Wire / Annealed Wire
- Core Wire Diameter: 1.50 mm to 4.00 mm
- PVC Wire Diameter: 2.40 mm to 5.00 mm
- Coil Weight: 20 Kg to 700 Kg
- PVC Coating Color: Available in various colors as per RAL Code

### Features

- Resistant to damage and abrasion
- Accurate and consistent dimension with close tolerance
- Highly Corrosion Resistant
- Excellent Bonding of PVC with Steel Wire
- High UV protection of PVC coating
- Consistent tensile properties as per customer requirements
- Smooth finish of PVC coating with good shine and lustre
- Improved toughness of PVC coating to withstand abrasion

### Applications

- PVC coated wires are used for construction of chainlink fences for industrial and residential usage, security fences for highways, railways, airports etc.
- Manufacture of Gabion Boxes, Gabion Mattresses etc. for construction of retaining wall, channel lining, strengthening of river/sea beds erosion control
- Manufacturers of Hangers
- PVC coated wires are also used for binding purpose in the form of "U" shaped wires, Tie wires, Binding and Craft wires and Garden wires



# Annealed Wire, Binding/Baling Wire

Annealed wire is low carbon steel wire which has undergone annealing (heat treatment) process without coating of zinc. The annealed process reduces the tensile strength and increases the ductility of the wire making it more flexible to work with and hence the annealed wire is more suitable for application where high amount of formability is essential.

We at AKSI manufacture annealed wire adhering to international standards like ASTM/BE/EN/JIS

## Specifications

- Diameter Range: 1.50 mm to 4.00 mm
- Tensile Range: Max, 450 N/mm<sup>2</sup>
- Packing: 250 kg to 1,000 kg

## Applications

- Construction Industry – mainly used in the civil construction field.
- Packaging of Products – used as Tie wire
- Hay Baling in the agricultural field
- Fencing products including barbed wire

## CHEMICAL ANALYSIS

	C%	Si%	Mn%	P%	S%
Min.	-	-	-	-	-
Max.	0.60	0.35	0.06	0.045	0.045

International  
Standards  
**Low Carbon  
Steel Wire**



P.O.BOX 91380, 61NR29, ICAD-3,  
Abu Dhabi - UAE

T. +971 2 673 2010/11

F. +971 2 673 2012

E. [contact@alkhaleejsteels.com](mailto:contact@alkhaleejsteels.com)

[www.alkhaleejsteels.com](http://www.alkhaleejsteels.com)