

Introduction

United Wires Factory has joined the market of galvanized steel wires since 2006 with the mission of providing the manufacturers of electrical cables with the best quality galvanized steel wires for electrical cables armoring and providing the steel cores for overhead conductors reinforcement. This is achieved over a production facility of 35000 m² using the most advanced technologies, fully automated control systems and a qualified team of 350 employees.



United Wires Factory

Raw Materials

To ensure the high quality of the finished products; which is the main concern of the United Wires, we restrictly apply inspection procedures for raw materials coming from the most reputable national and international suppliers, according to the International Standards:

- Steel**
- Low Carbon Grade AISI (1006, 1008, 1010).
 - High Carbon Grade AISI (1045, 1060, 1070).

- Zinc**
- Special High Grade Zinc of purity 99,995 according to ASTM B6.



Packaging: Baskets



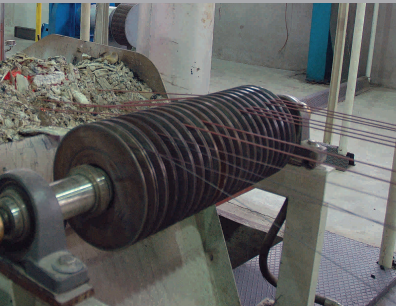
Packaging: Coils

Production Process

The plant operates continuously environmentally friendly within the flow of Drawing, Annealing, Pre-galvanizing Treatment and Galvanization processes. The latest advanced technology in the Zinc monitoring system is used by "Nitrogen Wiping System" to ensure perfect Zinc Coating all over the wire surface.



Drawing



Annealing



Pre Galvanizing Treatment



Galvanization



Nitrogen Auto Control Unit



Stranding

Product Range

1- Low Carbon Galvanized Steel Wires



- Main Application: Armoring Cables
- Wires Diameter Range: 0.8 to 4 mm
- Applicable Standards:
BS* 10244 Part 2/2001, 7835, 10257-1/98, 1441,1442 and 443
DIN* 1548
JIS* 3530
OR as per customer requirements.
- Zinc Coating: H.D.G according to ASTM B498M - 83 (Class A) & DIN 1548
- Packaging: Air Coils (Sea Worthy Packaging for Export)

Packaging Type	Wire Diameter Range (mm)	Inner Diameter (mm)	Outer Diameter (mm)	Maximum Weight (Kg)
Air Coils	0.8 mm: 1.6mm	450 mm	550 mm	300
		300 mm	600 mm	
	1.6 mm: 4.00mm	600 mm	800 mm	700
		450 mm	900 mm	

* Custom made packaging is available

2- High Carbon Galvanized Steel Wires

- Main Application : Steel Core for A.C.S.R "In Overhead Power Transmission".
- Strand Composition: (1+6) or (1+6+12)
- Surface Uniform Quality: Hot Dipped Galvanized and Greased.



- Standards : IEC 60888, IEC 61089
BS EN 50189
DIN 48200 & 48204
OR as per customer requirements
- Zinc Coating: H.D.G according to ASTM B498M-93 (Class A) & (Class B)
- Packaging: Wooden Spools

Flange Diameter (mm)	Barrel Diameter (mm)	Central Holes (mm)	Width (mm)
1000	500	85	590
1500	700	85	800
2000	1020	100	1200

* Custom made packaging is available

* JIS: Japanese International Standard

* BS: British Standard

* DIN: German Standard

Quality Control

Quality Control procedures of inspection start with raw material, manufacturing and packaging processes using a serial of high technology on-line instruments followed by laboratory tests according to the International Standards.

1. Mechanical Tests:

- Elongation and Tensile stress tests: Zinc Coated Steel Wires are tested for elongation and for tensile strength.
- Torsion Test: the most important mechanical test to ensure that the mechanical characteristics are affirmed by numbers of turns.

2. Zinc Tests:

- Diameter Checks: these guarantee that the wires are correctly rounded and within specified tolerance of diameters.
 - Zinc Coating: to ensure that the Zinc Coating over wires surface is smooth, continuous and of thickness according to international standards.
- *OR as per customer requirements
- Zinc Adhesion: to ensure adhesive Zinc Coating layers over wires surface

3- Electrical Test:

- DC Resistant Test is according to International Standards
- *OR as per customer requirements



UNITED WIRES

