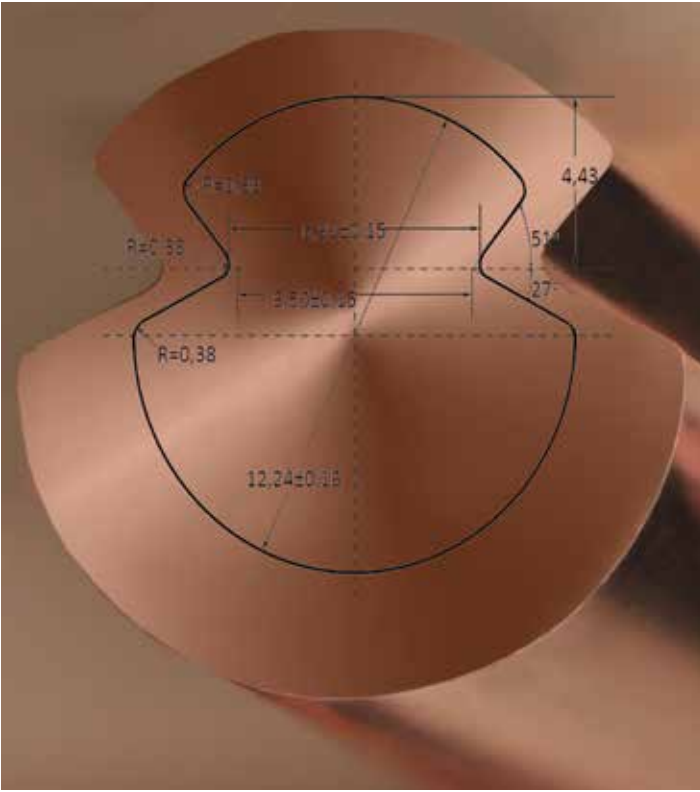


OVERHEAD CATENARY WIRES

- Sarkuysan, the first successful wholly publicly owned corporation of the country with its over 5000 shareholders, has been serving in the electrolytic copper industry with its products, including cable wire, trolley wire, bus bar and tube since 1972.
- Production processes are subject to strict quality control procedures and during the production of each product, including the trolley wires, all the requirements of ISO accredited test certificates are meticulously applied. Sarkuysan has ISO-EN 9001, ISO/TS 16949 Quality Management, ISO 14001 Environmental Management and OHSAS 18001 Occupational Health and Safety Management System certification.



FEATURES:

- Electrolytic copper (99.99% Cu) is used for the production of contact wires and conductors at Sarkuysan. Contact wires (trolley wires) of various dimensions are produced from electrolytic copper and silver bearing copper rods by drawing, rolling and roll-drawing methods.
- Pure copper and silver bearing copper alloy contact wires can be produced according to international standards such as ASTM B47, DIN 43141, UIC 870-0, TS EN 50149 and any other specified standards or customer specifications.
- Silver bearing copper contact wires offer high conductivity and high softening temperatures, which bring great advantages for high speed and high frequency rail systems.
- CuMg alloy, CuAg alloy and pure copper conductors which have high breaking stress, flexibility, strength and mechanical properties are ideal for use all types of catenary constructions.

FIELDS OF APPLICATION:

- Overhead electric railway systems
- Mass transit and high speed systems
- Both AC and DC applications
- Light rail, tram and trolley bus systems
- Overhead traveling cranes



sarkuysan

ELEKTROLİTİK BAKIR SANAYİ VE TİCARET A.Ş.

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OVERHEAD CATENARY WIRES

Trolley wires for overhead catenary system

| SPECIFICATIONS OF CONTACT WIRES (TROLLEY WIRES) | | | | | | | | | |
|---|---------------------------------------|----------------|--------------------|---------------------|---------------------------|---------------------------|---|--|------------|
| Material | Nom. Cross Section (mm ²) | Nom. Dia. (mm) | Nom. Weight (Kg/m) | Max. Elongation (%) | Min. Breaking Stress (kN) | Min. Breaking Stress (Kg) | Min. Tensile Strength (Kg/mm ²) | Min. Tensile Strength (N/mm ²) | Spool Type |
| UIC-870-80 Hard Copper | 80 | 10.60 | 0.712 | 7 | 29.8 | 3040.0 | 38.0 | 372.7 | 1300 |
| UIC-870-100 Hard Copper | 100 | 12.00 | 0.890 | 7 | 35.8 | 3650.0 | 36.5 | 357.9 | 1300 |
| UIC-870-107 Hard Copper | 107 | 12.24 | 0.952 | 7 | 35.8 | 3905.5 | 36.5 | 357.9 | 1300 |
| UIC-870-150 Hard Copper | 150 | 14.50 | 1.335 | 7 | 53.7 | 5475.0 | 36.5 | 359.7 | 1300 |
| TS 50149 BC 120 Cu-Ag 0.1 | 120 | 12.85 | 1.068 | 7 | 40.7 | 4150.2 | 34.6 | 339.2 | 1300 |
| TS 50149 AC 120 Cu-Ag 0.1 | 120 | 13.20 | 1.068 | 7 | 40.7 | 4150.2 | 34.6 | 339.2 | 1300 |
| TS 50149 AC 150 Cu-Ag 0.1 | 150 | 14.80 | 1.335 | 7 | 50.9 | 5190.4 | 34.6 | 339.3 | 1300 |
| TS 50149 BC 150 Cu-Ag 0.1 | 150 | 14.50 | 1.293 | 7 | 50.9 | 5190.4 | 34.6 | 339.3 | 1300 |



Conductors for overhead catenary system

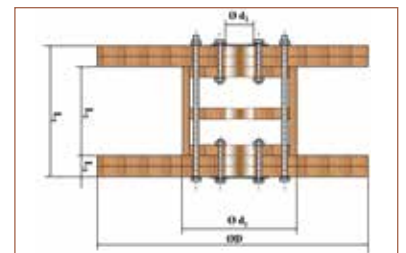
| SPECIFICATIONS OF CATENARY SYSTEM CONDUCTORS | | | | | | | | | | |
|--|---------------------------------------|----------------|----------------|--------------------|----------------------|----------------------|--|---------------------------------------|------------|----------|
| Material | Nom. Cross Section (mm ²) | Nom. Dia. (mm) | Wire, NxØ (mm) | Nom. Weight (Kg/m) | Breaking Stress (kN) | Breaking Stress (Kg) | Tensile Strength (Kg/mm ²) | Tensile Strength (N/mm ²) | Spool Type | |
| Dropper | Cu-Mg | 12.0 | 6.0 | 7x0.65+6x7x0.54 | 0.103 | 7.50 | 765.0 | 63.75 | 625.17 | 630-800 |
| Y Dropper | Cu-Mg | 35.0 | 7.5 | 7x2.50 | 0.310 | 19.78 | 2017.0 | 57.63 | 565.14 | 800 |
| Messenger Wire | Cu-Mg | 65.4 | 10.5 | 37x1.50 | 0.597 | 45.50 | 4639.7 | 70.90 | 695.70 | 800-1250 |
| Feeding Cable | Flexible Copper | 95.0 | 14.7 | 259x0.70 | 0.953 | 30.27 | 3086.7 | 32.50 | 318.60 | 800-1250 |
| Feeding Cable | Flexible Copper | 105.0 | 13.7 | (1x31+18x28)x0.50 | 0.950 | 36.68 | 3740.0 | 35.62 | 349.30 | 800-1250 |
| Connection Wire to The Rail at Pole Earthing | Insulated and Non-insulated Copper | 50.0 | 9.0 | 19x1.80 | 0.438 | 19.01 | 1938.0 | 38.76 | 380.10 | 800-1250 |



Packing for trolley wires and conductors

| WOODEN SPOOL SPECIFICATIONS | | | | | | | | |
|-----------------------------|-----------------------|-----|-----|-----|-----|----|-----------------|-----------|
| Spool Type | Spool Dimensions (mm) | | | | | | Net Weight (Kg) | Tare (Kg) |
| | D | d1 | d2 | L1 | L2 | L3 | | |
| 630 | 630 | 280 | 127 | 430 | 380 | 25 | 300-450 | ~28 |
| 800 | 800 | 460 | 127 | 530 | 470 | 30 | 700-800 | ~30 |
| 1250 | 1250 | 700 | 80 | 580 | 460 | 60 | 1500-2500 | ~200 |
| 1300 | 1300 | 810 | 127 | 515 | 355 | 80 | 1200-1350 | 160-189 |

* Please contact with Export Marketing Department for other product sizes or type of packing.



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