

ALUMAR is a specialized steel wire with excellent corrosion resistance developed by KISWIRE.

Zn-Al(5%) is additionally coated on traditional Zn coated wire. This Zn-Al alloyed wire improves corrosion resistance and fatigue properties significantly.

Applications

Telecommunication cable, ACSR, Inner Cable for Automotive, Guard Cable and other various springs for multiple purposes

Advantages

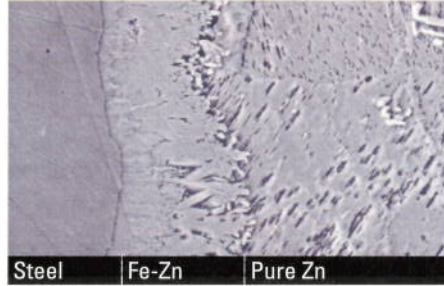
- ALUMAR is a more cost-efficient alternative to stainless or Zn coated wire because of its 3-4 times better corrosion resistance than Zn coated wire.
- ALUMAR offers excellent coilability and productivity with its better ductility than traditional Zn coated wire.
- ALUMAR is environment-friendly without any hazardous heavy metals (Cr6+ etc). ALUMAR is found useful for multiple purposes from home appliance to automotive manufacturing.



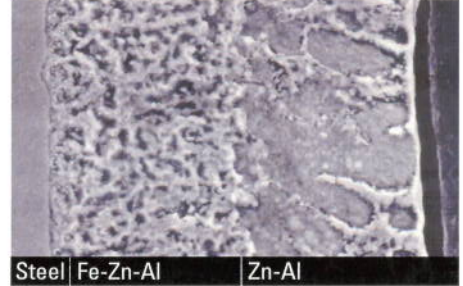
ALUMAR WIRE

Technical data comparison between ALUMAR and regular Zn coated wire

Regular Zn coating composition

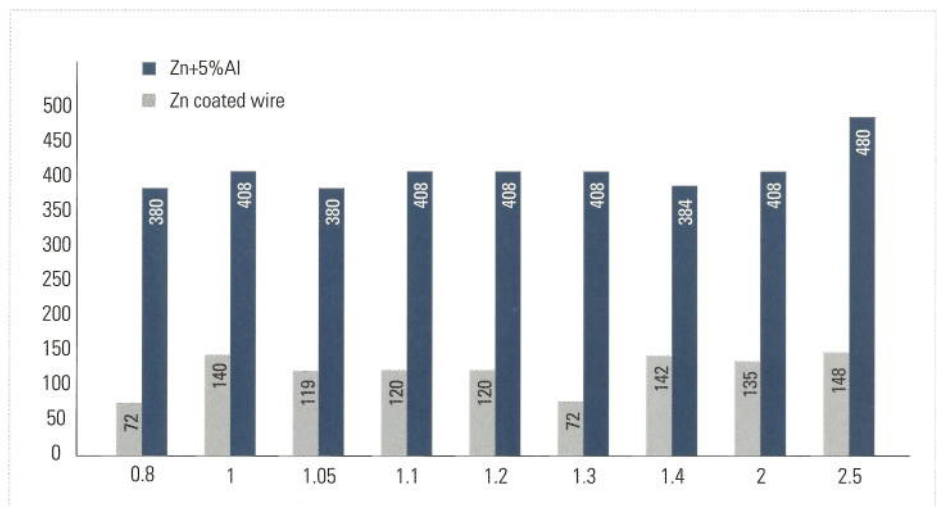


ALUMAR composition



- ALUMAR has shown better efficiency than Zn coated wire in the drawing process. ALUMAR also has excellent fatigue properties after coiling process.
- As compared to regular Zn coated wire, ALUMAR exhibits less hardness of the coating layer which enhances ductility.

Salt spray test data per diameter



ALUMAR provides 3-4 times better corrosion resistance than regular Zn coated wire.

Coating weight per diameter & Salt spray test

| Diameter(mm) | Coating Weight(g/m2) | | Salt spray test(Hr) | Remarks |
|--------------|----------------------|---------|---------------------|---|
| | EN 10270-1 | KISWIRE | | |
| 0.80~1.00 | Min 50 | Min 50 | Min 200 | Coating weight & salt spray test stated on the table is minimum value and subject to change according to the customer's requirements. |
| 1.01~1.50 | Min 60 | Min 60 | Min 240 | |
| 1.51~2.00 | Min 70 | Min 70 | Min 280 | |
| 2.01~2.50 | Min 80 | Min 80 | Min 320 | |
| 2.51~3.00 | Min 95 | Min 95 | Min 360 | |
| 3.01~3.50 | Min 100 | Min 100 | Min 400 | |
| 3.51~4.00 | Min 110 | Min 110 | Min 400 | |

Even with the cut ends of springs, the remaining aluminum of ALUMAR wire will allow the ends to achieve up to 80% of normal salt spray test results.

Available diameter range per specification

| Spec | Grade | Diameter (mm) | | Remark |
|-------------------------------|--------------------|---------------|-------|-------------|
| | | Min | Max | |
| KS D 3510 (JIS G 3521) | SW-B | 0.80 | 4.000 | 62~82Carbon |
| | SW-C | 0.80 | 4.000 | 72~82Carbon |
| KS D 3556 (JIS G 3522) | PW-1 (SWP-A) | 0.80 | 4.000 | 82Carbon |
| | PW-2 (SWP-B) | 0.80 | 3.500 | 82Carbon |
| EN 10270-1 (DIN 17223 P-1) | Grade SL (Grade A) | 0.80 | 4.000 | 62~82Carbon |
| | Grade SH (Grade B) | 0.80 | 4.000 | 72~82Carbon |
| | Grade SH (Grade C) | 0.80 | 3.500 | 82Carbon |
| | Grade DM | 0.80 | 4.000 | 72~82Carbon |
| | Grade DH (Grade D) | 0.80 | 3.500 | 82Carbon |
| ASTM A 227 | Class 1 | 0.80 | 4.000 | 62~82Carbon |
| | Class 2 | 0.80 | 4.000 | 72~82Carbon |
| ASTM A 228 | PW-2 | 0.80 | 3.500 | 82Carbon |
| AS 1472 | Range 1 | 0.80 | 4.000 | 62~82Carbon |
| | Range 2 | 0.80 | 4.000 | 72~82Carbon |
| | Range 3 | 0.80 | 3.500 | 82Carbon |

Packing Standard

| Wire size (mm) | Block size | Coil | | | | Carrier | | Spool (Bobbin) | | Reelless | |
|----------------|------------|-------------|---------|---------|--------|-------------|----------------|----------------|---------------|-------------|------|
| | | Weight (Kg) | ID (mm) | OD (mm) | H (mm) | Weight (Kg) | D x H x W (mm) | Weight (Kg) | Flange (mm) | Weight (Kg) | Code |
| 0.80-0.85 | 14" | 80 | 270 | 420 | 230 | - | - | 50 | 355 (DIN 355) | 450 | Z2 |
| | | | | | | | | 200 | 560 (DIN 560) | | |
| 0.86-1.39 | 16" | 100 | 280 | 500 | 230 | 450 | 300x950x600 | 200 | 560 (DIN 560) | 450 | Z2 |
| | | | | | | | | 450 | 760 (DIN 760) | | |
| 1.40-1.80 | 20" | 100-200 | 400 | 600 | 300 | 450 | 380x950x800 | 450 | 760 (DIN 760) | 450 | Z2 |
| 1.80-2.50 | 24" | 150-300 | 540 | 800 | 500 | 1000 | 510x1250x950 | - | - | 450 | Z2 |
| 2.30-3.50 | 27" | 150-500 | 540 | 800 | 500 | 1000 | 600x1250x980 | - | - | 700-1000 | Z3 |
| 3.51-4.00 | 30" | 150-500 | 600 | 850 | 500 | 1000 | 600x1250x980 | - | - | 700-1000 | Z3 |

Catchweight coil



Reelless coil



Carrier



Wooden or steel reel

