



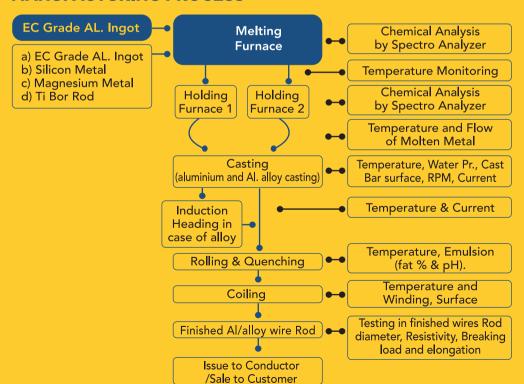
ALUMINUM ROD

After establishing itself as Nepal's leading manufacturer of wires, cables, and conductors, Litmus Industries is now expanding into aluminium rod manufacturing. Committed to quality, innovation, and sustainability, Litmus Aluminium Rod is designed for superior conductivity, strength, and reliability. Manufactured with high-purity aluminium and advanced technology, it meets international standards, making it ideal for electrical transmission, distribution, and industrial applications. This expansion reinforces Litmus's mission to drive Nepal's industrial growth while ensuring a sustainable and self-reliant future.

Specifications for EC 1350 (H12, H14 and 0 Temper) Size available: 7.6mm, 9.5mm, and 12mm



MANUFACTURING PROCESS



Aluminum Rod

Aluminum Wire Rods – Engineered for Excellence in Electrical Conductivity, Strength & Versatile Applications High-quality aluminum and alloy wire rods designed to meet diverse performance needs —from standard EC-grade to high-strength and specialty alloys. Suitable for power transmission, overhead conductors, cable sheathing, and industrial applications, ensuring optimal mechanical properties, conductivity, and processing compatibility

Aluminum & Alloy Wire Rods -High Conductivity Superior Strength | Versatile Applications









EC | T4 | AL-59 | 8176

| EC Grade – Low UTS "O" Temper | | | | | |
|-------------------------------|----------------|-------|---------|--|--|
| Property | Unit | Min | Max | | |
| UTS | MPa | 90 | 100 | | |
| Elongation (GL=250 mm) | % | 14.0 | - | | |
| Resistivity | ohm·mm²/ KM | _ | 27.898 | | |
| Conductivity | % IACS | 61.80 | - | | |
| Si | % | _ | 0.10 | | |
| Fe | % | _ | 0.40 | | |
| Cu | % | _ | 0.05 | | |
| Mn | % | _ | 0.01 | | |
| Cr | % | - | 0.01 | | |
| Zn | % | - | 0.05 | | |
| В | % | _ | 0.05 | | |
| Ti + V | % | _ | 0.02 | | |
| Al | % | 99.50 | Balance | | |

| EC Grade – High UTS "H12 And H14" | | | | | | |
|-----------------------------------|----------------|-------|---------|--|--|--|
| Property | Unit | Min | Max | | | |
| H12-UTS | MPa | 101 | 110 | | | |
| H14-UTS | MPa | 111 | 138 | | | |
| Elongation (GL=250 mm) | % | 8.0 | - | | | |
| Resistivity | ohm·mm² /KM | _ | 28.034 | | | |
| Conductivity | % IACS | 61.50 | - | | | |
| Si | % | _ | 0.10 | | | |
| Fe | % | _ | 0.40 | | | |
| Cu | % | _ | 0.05 | | | |
| Mn | % | _ | 0.01 | | | |
| Cr | % | - | 0.01 | | | |
| Zn | % | - | 0.05 | | | |
| В | % | _ | 0.05 | | | |
| Ti + V | % | _ | 0.02 | | | |
| Al | % | 99.50 | Balance | | | |

| 8176 Aluminum Alloy | | | | | |
|---------------------------|----------------|-----------|--------|--|--|
| Property | Unit | Min | Max | | |
| UTS | MPa | 100 | 120 | | |
| Elongation (GL=250 mm) | % | 10.0 | _ | | |
| Resistivity | ohm·mm²/ KM | - | 28.450 | | |
| Conductivity | % IACS | 60.60 | - | | |
| Si | % | 0.03 | 0.15 | | |
| Fe | % | 0.40 | 1.00 | | |
| Zn | % | - | 0.10 | | |
| Al | % | Remainder | _ | | |

| T4 Aluminum Alloy | | | | | | |
|------------------------------|--------|-------------|------|--|--|--|
| Property | Unit | Min | Max | | | |
| UTS | MPa | 160 | _ | | | |
| Elongation (GL=250 mm) | % | 14.0 / 10.0 | _ | | | |
| Conductivity | % IACS | 50.00 | _ | | | |
| Si | % | 0.50 | 0.90 | | | |
| Mg | % | 0.60 | 0.90 | | | |
| Fe | % | - | 0.50 | | | |
| Cu | % | - | 0.10 | | | |
| Mn | % | - | 0.03 | | | |
| Cr | % | _ | 0.03 | | | |
| Zn | % | _ | 0.10 | | | |
| Al | % | Remainder | _ | | | |

| Al-59 Alloy | | | | | |
|------------------------|--------|-----------|-------|--|--|
| Property | Unit | Min | Max | | |
| UTS | MPa | 140 | - | | |
| Elongation (GL=250 mm) | % | 14.0 | - | | |
| Conductivity | % IACS | 54.70 | - | | |
| Si | % | 0.30 | 0.40 | | |
| Mg | % | 0.30 | 0.40 | | |
| Fe | % | 0.14 | 0.20 | | |
| Cu | % | 0.015 | 0.020 | | |
| Mn | % | - | 0.01 | | |
| Cr | % | _ | 0.01 | | |
| Zn | % | _ | 0.01 | | |
| В | % | - 0.01 | | | |
| Al | % | Remainder | _ | | |

PACKING

The coil shall be supplied with following dimension:

| Inner diameter | Outer diameter | Height | | |
|---------------------|----------------|----------------|--|--|
| Approximately 550mm | 1500mm maximum | 850mm to 950mm | | |

The nominal weight for each coil approximately 2000 ± 200kg.

Each coil shall be securely strapped to a timber pallet. The pallet shall be dry or free from moisture to prevent insect or fungal attack.

Adequate protection shall be provided to prevent corrosion or physical damage to the coil. Each coil shall be wrapped with a blank polyethylene in order to be protected from damage and prevent contamination to the rods surface which might cause from the environment.

FINISHING & APPEARANCE

The Aluminium Rod is supplied in the form of a continuous coil without any joints. The Rod shall be clean, without any excessive oil & grease, of uniform lustre, smooth and free from flakes, cracks, kinks, dents, twists, and other injury or defects.

TECHNICAL SPECIFICATION

| Aluminum Designation | Temper | Diameter | | | Elongation (%) | | Conductivity | Standard |
|-------------------------|----------------|----------------------|-----|-----|-------------------|-----|--------------|---------------|
| | | | Min | Max | Min | Max | Min | |
| 1350 | 0 | 9.50 MM +/-0.51 MM | 90 | 100 | 14.0 | | 61.8 | IS 5484/ |
| | H12 | 12.70 MM +/- 0.51 MM | 101 | 110 | 8.0 | | 61.5 | ASTM B-233 |
| | H14 | | 111 | 138 | 6.0 | | 61.4 | |
| Aluminum | T4 | 7.60 MM +/- 0.40 MM | 160 | | 10.0 | | 50.0 | IS 9997/ |
| Alloy | | 9.50 MM +/-0.51 MM | | | 14.0 | | | ASTM B-398 |
| | | 12.70 MM +/- 0.51 MM | | | 14.0 | | | D-370 |
| | A I -59 | 9.50 MM +/-0.51 MM | 140 | | 14.0 | | 54.70 | SS4240813 |
| | | 12.70 MM +/- 0.51 MM | | | | | | |
| | 8176 | 9.50 MM +/-0.51 MM | 100 | 120 | 10.0 | | 60.60 | ASTM B 800 |



















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