

SPECIALITY ALLOYS

Aluminum 4043 Alloy

Introduction :

4043 Aluminum Alloy is the most widely used in Metal Inert Gas (MIG) welding or brazing. 4043 Al. Alloy rods used for welding of heat treatable metals, especially aluminum alloy 6xxx series alloy and also used to repair welding Al/Si cast alloy grades 353 / A356. The alloy is less sensitive to weld cracking and produces brighter and almost smut free welds.

Application :

- Welding filler wire
- Spray and flame metallizing wire
- Recommended for welding 3003, 3004, 5052, 6061, 6063, and casting alloys 43, 355, 356, and 214

Chemical Composition

| Aluminum Alloy Designation | Si | Fe | Cu | Ті | Zn | Mn | Mg | Other Each | Other Total | AI |
|-------------------------------|----------------|------|------|------|------|------|------|---------------|----------------|-----|
| 4043 | 4.50 - 6.00 | 0.60 | 0.30 | 0.15 | 0.10 | 0.15 | 0.20 | 0.05 | 0.15 | REM |

Electrical & Mechanical Properties of Aluminum Alloy Wire & Wire Rods.

| Aluminum Alloy Designation | APAR Product Code | Temper | Diameter | Tensile strength (Mpa) | Elongation | Resistivity | Conductivity | |
|-------------------------------|-------------------------|--------|-------------|------------------------------|------------|-------------|--------------|--|
| | Code | | (mm) | Min | (%) | (μΩm) | (%IACS) | |
| | Alloy W/R 4043 | М | 7.60 ± 0.40 | 150 | 16.0 | 31.928 | 54.00 | |
| | | | 9.50 ± 0.50 | | | | | |
| 4043 | Alloy Wire 4043 | T8 | 6.00 ± 0.06 | 170 | 1.5 | 30.5 | 56.53 | |
| | | | 4.00 ± 0.04 | 190 | 1.5 | 30.5 | 56.53 | |
| | | | 3.00 ± 0.03 | 200 | 2.0 | 30.5 | 56.53 | |

- We develop and manufacture a broad range of alloys.
- Wires available with different sizes as per customer requirement.
- Wire Rods can be supplied in Coils of maximum weight 2.0MT, Drawn wire 6.0mm up to 4.0mm in coils of maximum weight 1.0MT, Drawn wire below 4.0mm up to 3.0mm in coils of maximum weight 0.50MT,
- The table above shows some typical values but we can also produce according various international standards and tailor made customer specifications.