



## 5556 – PRODUCT DATA SHEET

Nexalloy 5556 is an aluminum filler with higher levels of magnesium and zinc than 5356 which will yield increased crack resistance, tensile strength and good ductility. Commonly used on 5154, 5254, 5454 and 6456.

## NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS

AWS A5.10 classification ER5556, R5556 Canadian Bureau of Welding - CWB American Bureau of Shipping - ABS

### Chemical Composition (weight %)

|           |            |           |           |
|-----------|------------|-----------|-----------|
| Aluminum  | Remainder  | Silicon   | 0.25 Max  |
| Manganese | 0.50-1.00  | Magnesium | 4.70-5.50 |
| Iron      | 0.40 Max   | Chromium  | 0.05-0.20 |
| Copper    | 0.10 Max   | Titanium  | 0.05-0.20 |
| Beryllium | 0.0003 Max | Zinc      | 0.25 Max  |

Other Elements 0.05 Max & Total 0.15 Max

### Typical Properties

|                    |                 |             |
|--------------------|-----------------|-------------|
| Melting Range      | 1065 – 1175 F   | 574 – 636 C |
| Density            | .096 lbs\cu in. |             |
| Post Anodize Color | White           |             |

### Wire and Rod Diameters Available

0.030 0.035 3/64" 1/16" 3/32" 1/8" 5/32" 3/16" 1/4" 5/16"

### Packaging Available

**Plastic Spools** – 1LB/0.4KG, 5LB/2.2KG, 10LB/4.5KG, 16LB/7.2KG, 20LB/9KG

**Metal Spools** – 10LB/4.5KG, 15LB /6.8KG **TIG Rods** – 5LB/2.2KG, 10LB/4.5KG, 50LB/22.6KG

**Drums** – 150LB/68KG, 300LB/136KG

### MIG Welding Procedures: DCEP

| Wire Diameter | WFS ipm | Amps    | Volts | Consumption LB/100FT | Argon(cfh) |
|---------------|---------|---------|-------|----------------------|------------|
| 0.030         | 480-625 | 60-175  | 15-24 | 0.65-1.25            | 25-30      |
| 0.035         | 450-750 | 70-185  | 15-27 | 1.00-4.25            | 30-35      |
| 3/64"         | 330-500 | 125-260 | 20-29 | 1.00-4.25            | 35-45      |
| 1/16"         | 250-450 | 170-300 | 24-30 | 3.8-66               | 45-75      |
| 3/32"         | 160-200 | 275-400 | 26-31 | 35-66                | 60-85      |

### TIG Welding Procedures: ACHF- with Pure or Ziconiated Hemisphere shape tungsten tip

| Base Thickness | Filler Wire Size | Tungsten | Amps    | Consumption LB/100FT | Gas Cup Size | Argon(cfh) |
|----------------|------------------|----------|---------|----------------------|--------------|------------|
| 1/16"          | 1/16"            | 1/16"    | 60-80   | 0.75                 | 3/8"         | 20         |
| 3/32"          | 3/32"            | 3/32"    | 85-120  | 1.00                 | 3/8"         | 20         |
| 1/8"           | 3/32"            | 3/32"    | 125-160 | 1.50                 | 3/8"         | 20         |
| 3/16"          | 1/8"             | 1/8"     | 190-220 | 4.5-6.0              | 7/16"        | 25         |
| 1/4"           | 5/32"            | 5/32"    | 200-300 | 8-10                 | 1/2"         | 30         |
| 3/8"           | 3/16"            | 3/16"    | 330-380 | 15-20                | 5/8"         | 35         |
| 1/2"           | 1/4"             | 1/4"     | 400-450 | 25-40                | 5/8"         | 40         |

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