

## NEXALLOY ER5556 – PRODUCT DATA SHEET

Nexalloy ER5556 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/A5.10M/ASME SFA 5.10 Classification ER5556, R5556, ISO 18273 Al 5556/ AlMg5Mn1Ti(A), EN AW-Al Mg5Mn, TUV, CE 0035-CPR-C809.

#### 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 | 0.0001 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                     |
| UTS                | 68ksi – 470MPA            |
| Elongations        | (2") 5%                   |

#### 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

| 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         |



Nexal Aluminum Inc.  
www.nexalloy.com

5938 Ambler Drive Mississauga, ON L4W 2N3  
An ISO 9001:2015 Certified Company

Phone: 1-905-629-8282  
Fax: 1-905-629-8532

The data and information contained or referenced is presented as typical results without guarantee or warranty and Nexal expressly disclaims liability incurred of any kind with reliance thereon.

**Aluminum Manufacturing since 1973**