

## OG 2

### Oxy-Acetylene Welding Rod - Non Alloyed Steels

#### Standards

|                    |      |
|--------------------|------|
| AWS/ASME SFA - 5.2 | R60  |
| EN 12536           | O II |
| TS 3623 EN 12536   | O II |

#### Properties and Applications

Low carbon steel welding rod, for oxy-acetylene gas welding, containing slightly higher manganese. It is a general purpose welding rod with medium strength, used for welding carbon steels and low alloy steels with tensile strengths up to 410 N/mm<sup>2</sup>. Commonly used for carbon steel pipe installation and repair works in power plants, process piping, machine and agricultural tool repair, joining steel plates and wrought irons, filling holes and edged on wrought iron, where an intense heat source is required for straightening, forming, preheating post weld heat treatment, regardless of the complexity and position in which welding has to be done. Welding shall be performed in neutral flame characteristics. It has got a fluid weld puddle.

#### Materials

| Width          | DIN       |
|----------------|-----------|
| S235J2         | St 37.3   |
| P235TR2        | St 37.4   |
| P235GH- P265GH | H I, H II |

#### Typical Chemical Values of Weld Metal

| Type of Analysis | C    | Si   | Mn   |
|------------------|------|------|------|
| Weld Deposit     | 0.10 | 0.30 | 1.00 |

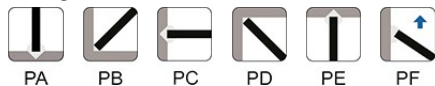
#### Typical Mechanical Values of Weld Metal

| Test Condition | Protection Gas | Yield Strength (N/mm <sup>2</sup> ) | Tensile Strength (N/mm <sup>2</sup> ) | Elongation A5 (%) | Charpy V-Notch Properties (J) |
|----------------|----------------|-------------------------------------|---------------------------------------|-------------------|-------------------------------|
| As welded      | Oxy-Fuel       | 300                                 | 440                                   | 20                | 20°C → 50                     |

\* Chemical composition and mechanical properties are valid when using shielding gas .

#### Application Information

##### Welding Positions



##### Welding Parameters & Efficiency

| Diameter x Length (mm) |
|------------------------|
| 1.60x1000              |
| 2.00x1000              |
| 2.40x1000              |
| 3.20x1000              |
| 4.00x1000              |

#### Packaging Information

| Product Code | Diameter x Length (mm) | Quantity per Box | Box Gross Weight (kg) | Boxes per Outer Box | Outer Box Gross Weight (kg) | Packaging Type |
|--------------|------------------------|------------------|-----------------------|---------------------|-----------------------------|----------------|
| 21161GBKM2   | 1.60x1000              | 5 kg             | 5.20                  | 4                   | 5.20                        | Cardboard Tube |
| 21161HBKM2   | 2.00x1000              | 5 kg             | 5.20                  | 4                   | 5.20                        | Cardboard Tube |
| 21161IBKM2   | 2.40x1000              | 5 kg             | 5.20                  | 4                   | 5.20                        | Cardboard Tube |
| 21161LBKM2   | 3.20x1000              | 5 kg             | 5.20                  | 4                   | 5.20                        | Cardboard Tube |
| 21161MBKM2   | 4.00x1000              | 5 kg             | 5.20                  | 4                   | 5.20                        | Cardboard Tube |

#### Storage & Re-Drying Information

Shouldn't be exposed to high static load and impact.  
It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.