

# MG 201

Gas Metal Arc (MAG) Welding Wire - Creep Resisting Steels

| Standards           |          |
|---------------------|----------|
| AWS/ASME SFA - 5.28 | ER80S-G  |
| AWS/ASME SFA - 5.28 | ER70S-A1 |
| EN ISO 21952 - A    | G MoSi   |
| TS EN ISO 21952 - A | G MoSi   |
| DIN M. No.          | 1.5424   |

**Properties and Applications**

Low alloyed wire electrode for GMA (MIG/MAG) welding of creep resistant boiler and pipe steels subjected to operating temperatures up to 530°C. Also suitable for joining C-Mn steels, which will be postweld heat treated. CO<sub>2</sub> or mixed shielding gases can be used depending on the thickness of the base metal. A thin and homogeneous copper coating increases electrical conductivity and protects the wire from rusting.

| Approvals & Certificates |                       |
|--------------------------|-----------------------|
| CE                       | TUV                   |
| Materials                |                       |
| Width                    | DIN                   |
| S255N - S420N            | StE 255 - StE 420N    |
| P235G1TH - P255G1TH      | St 35.8 - St 45.8     |
| P295GH, P355GH           | 17Mn4, 19Mn5          |
| 16Mo3                    | 15Mo3                 |
| P235GH, P265GH           | H I, H II             |
| L360NB - L415NB          | StE 360.7 - StE 415.7 |
|                          | X52, X60              |

**Typical Chemical Features of the Welding Wire**

| Type of Analysis | C    | Si   | Mn   | Mo   |
|------------------|------|------|------|------|
| Welding Wire     | 0,10 | 0,60 | 1,20 | 0,50 |

**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      | M21            | 500                                 | 600                                   | 23                | 20°C → 100                    | 0°C → 50 |

\* Chemical composition and mechanical properties are valid when using shielding gas EN ISO 14175 - M21 (%82 Ar + %18 CO<sub>2</sub>).

**Application Information**

**Welding Positions**

**Polarity:**

**Protection Gas:**  
M20 M21 C1

**Welding Parameters & Efficiency**

| Diameter (mm) |
|---------------|
| 0.80          |
| 1.00          |
| 1.20          |
| 1.60          |

**Packaging Information**

| Product Code | Diameter (mm) | Quantity per Box | Box Gross Weight (kg) | Boxes per Outer Box | Outer Box Gross Weight (kg) | Packaging Type             |
|--------------|---------------|------------------|-----------------------|---------------------|-----------------------------|----------------------------|
| 22000BJAM2   | 0.80          | 15 kg            | 15.70                 | 1                   | 15.70                       | Wire Basket Spool (K300MS) |
| 22000D1GM2   | 1.00          | 250 kg           | 261.00                | 1                   | 261.00                      | Fiber Drum                 |
| 22000DJAM2   | 1.00          | 15 kg            | 15.70                 | 1                   | 15.70                       | Wire Basket Spool (K300MS) |
| 22000EJAM2   | 1.20          | 15 kg            | 15.70                 | 1                   | 15.70                       | Wire Basket Spool (K300MS) |
| 22000GJAM2   | 1.60          | 15 kg            | 15.70                 | 1                   | 15.70                       | Wire Basket Spool (K300MS) |

**Storage & Re-Drying Information**

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