

## Key Facts

- Low alloy **Nickel-Moly** Gas Tungsten Arc Welding (GTAW) rod for welding of high yield strength steels
- Low alloyed with a nominal 1-½% Nickel, ½% Molybdenum plus micro additions of Copper and Chromium to enable welding of selected low alloy, medium-high tensile strength steels with minimum tensile strengths of 700 MPa
- Excellent impact strength at low temperatures ~40J @ -60°C
- Supplied in a re-sealable heavy-duty cardboard tube

## Description

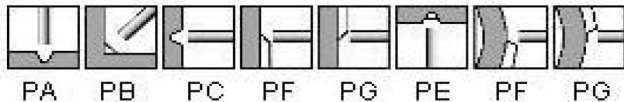
Low alloy Gas Tungsten Arc Welding (GTAW) rod with a nominal 1-½% Nickel, ½% Molybdenum plus micro additions of Copper and Chromium to enable welding of selected low alloy, high tensile strength steels with tensile strength ranging from 700 - 750MPa.

## Classification, Approvals & Conformances

AS/NZS 1167.2: RM2  
 ISO 16834-A: W 69 5 Mn3Ni1,5Mo  
**AWS A5.28: ER100S-1**

## Welding Positions

All positional, including Vertical-Down.



## Markings & Identification

End stamped with AWS Class: ER100S-1

## Recommended Shielding Gas

Welding Grade Argon 99.95%  
 AS 4882-2003: SG-A ISO-14175-97: I1

## Applications

**INETIG 100** is used widely in the specialised metal working, offshore fabrication, chemical and petrochemical industries. It also finds applications in the fabrication of HSLA (high-strength low-alloy) steels, which may be used for industrial machinery construction, cranes and other highly stressed structural components.

## Typical All Weld Metal Analysis

C - Carbon	Mn - Manganese	Si - Silicon	P - Phosphorus
0.070%	1.50%	0.50%	0.007%
S - Sulphur	Ni - Nickel	Mo - Molybdenum	Cu - Copper
0.007%	1.60%	0.45%	0.12%
Cr - Chromium	Fe - Iron		
0.05%	Remainder		

## Typical All Weld Metal Mechanical Properties

<b>Yield Strength:</b>	760 MPa
<b>Tensile Strength:</b>	830 MPa
<b>Elongation (5xD):</b>	22%
<b>Typical Diffusible Hydrogen Content:</b>	≤ 3ml/100g of deposited weld metal
<b>Impact Strength Charpy-V</b>	160J @ +20°C
	100J @ -20°C
	80J @ -40°C
	40J @ -60°C

## Packaging & Ordering Information

Size	Pack	Current Type and Range		Part Number
1.6mm	5kg	DC-	40-120	300310
2.4mm	5kg	DC-	60-190	300311

To ensure finished weld joints made with **INETIG 100** rods meet their mechanical properties we recommend that preheat and interpass temperature of **150°C** be.