

# Gas Metal Arc Welding

JIS Z3321 Y316  
 AWS A5.9 ER316  
 DIN 8556-SG 1.4403

## MS M-316

## Solid Wires for Stainless Steel

### Applications

Suitable for welding of 18%Cr-12%Ni-2%Mo stainless steel, 13%Cr steel, 17%Cr steel and high toughness steel when postheating is not recommended. Use for welding between dissimilar metal like carbon steel and stainless steel.

Brand Name		MS M-316							
Representative of diameter (mm)	0.8	0.9	1.0	1.2	1.6	-	-	-	-
Chemical composition of wire (%)	C	Si	Mn	P	S	Ni	Cr	Mo	-
	≤ 0.08	≤ 0.65	1.0 - 2.5	≤ 0.03	≤ 0.03	11.0-14.0	18.0-20.0	2.0-3.0	-
Mechanical property of deposited metal									
Tensile strength	≥ 550 N/mm <sup>2</sup>								
0.2% Offset strength	≥ 225 N/mm <sup>2</sup>								
Elongation	≥ 30 %								
Impact test	2mm Vnotch Impact value at -196° C 39 J								
Welding position	Horizontal/Flat position								
Welding polarity	DC-EP								
Shielding gas	98%Ar - 2%O <sub>2</sub>								
Welding current	Dia.0.8 mm	Dia.0.9 mm	Dia.1.0 mm	Dia.1.2 mm	Dia.1.6mm				
	80-180A	120-200A	140-250A	170-300A	200-350A				
Packing	12.50 kgs standard other packing weight can be provided upon request.								