

**Characteristics and Applications:**

HOBART 316L HISIL has good resistance to corrosion in sulfuric acid, phosphorous acid and chlorinated environments, the weld metal contains a higher silicon level than 316L that provides better wetting action, the ultra low carbon content which makes it particularly recommended when there is a risk of inter-granular corrosion.

It is suitable for welding application of chemical plants, pressure vessel, pipeline, shipbuilding and architectural structure.

**Notes on usage:**

1. Before welding, oil, rusty, moisture should be removed from base metal and the welding place should have the proper protection prevent wind.
2. Use DC(+) polarity and 98%Ar+ 2% O<sub>2</sub>, 98%Ar +2%CO<sub>2</sub> as the shielding gas. Maintain the flow rate not less than 20L/min.
3. Trailer Shield is required to ensure the weld pool completely shielded until solidification is complete and no porosity problem.
4. Keep dry while in storage and delivery.

**Typical chemical composition of filler metal (wt%)**

C	Mn	Si	Cr	Ni	Mo
0.015	1.50	0.80	18.3	12.5	2.5

**Typical mechanical properties of weld metal**

Tensile strength MPa(ksi)	Elongation %
600(87)	38

**Sizes**

MIG Wires (mm)	0.8 / 0.9 / 1.0 / 1.2 / 1.6