

Wire type:

MAG Solid wire

Current:



Welding positions:



Shielding gas:

M12-M13 = ArCO₂-ArO₂

Hilchrome G308L Si is our solid wire for MAG welding low carbon 18Cr10Ni austenitic stainless steel grades like AISI 304, 304L. Typical applications include all industries where similar materials (incl. higher carbon types) as well as ferritic 13% Cr steels are used. Hilchrome G308L Si is also suitable for Nb (Cb) or Ti stabilised grades 347 and 321. Weld metal has an excellent resistance to general and intergranular corrosion (up to 350°C), good resistance to oxidising acids and cold reducing acids.

Base materials to be welded:

- ASTM/AISI Grade 302, 304, 304L, 304LN, 321, 347
- WNr 1.4306, 1.4301, 1.4541, 1.4550, 1.4311, 1.4300
- CrNi 18 10 and similar stainless steel grades

Applications:

- Shipbuilding & Offshore
- Power Generation
- General fabrication & construction works
- Repair & Maintenance
- Process Industry

Equivalent product in alternative welding process:

SMAW	GMAW	FCAW	GTAW	SAW	Gas welding / brazing
Hilchrome 308R	-	-	Hilchrome W308L	-	-

Chemical composition, wt.% weld metal – typical:

C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Nb	V	Al
0,03	1,70	0,90			21,0	10,0					

Mechanical properties, weld metal – typical:

Condition	0,2% Yield strength MPa	Tensile strength MPa	Elongation Lo=5d - %	Impact Values ISO-V J
As welded	≥ 320	≥ 550	≥ 30	+20°C ≥ 80 -196°C ≥ 35

Note: properties under M13 = ArO₂ gas shielding

Packaging and welding data:

Dia. mm.	Spooltype	Weight / spool kg.	Current A	Voltage V
0,8	BS300	15	60-90	18-24
1,0	BS300	15	80-140	18-25
1,2	BS300	15	100-250	18-26