

# SMT-686

Type : MIG/TIG

## Conformances

AWS A5.14/ ASME SFA5.14 ERNiCrMo-14

## Applications

- Mainly used for welding Super-Duplex, Super-austenitic stainless steels, as well as Nickel alloys(UNS N06059, N06022, C-276, 22, 625, 686)

## Features

- This is capable of being used to deposit overlays of outstanding corrosion-resistance onto a range of steels.
- SMT-686 is suitable for use at requiring general corrosion resistance in HCl or sulfuric acid.

## Welding Position

## Current

GMAW: DC+(Pulse)

GTAW: DC-

## Shielding Gas

Ar, Ar+He

## Diameter / Packaging

Diameter	MIG	TIG
mm (in)	12.5kg (27.6lbs)	5kg (11lbs)
1.0 (0.039)	✓	
1.2 (0.045)	✓	
1.6 (1/16)	✓	✓
2.0 (5/64)		✓
2.4 (3/32)		✓
3.2 (1/8)		✓

## Typical Chemical Composition of the Wire (%)

C	Si	Mn	P	S	Ni	Cr	Mo	Fe	W
0.008	0.07	0.31	0.001	0.001	58.2	22.13	15.17	0.28	3.17

## Typical Mechanical Properties of All-Weld Metal

YS Mpa(lbs/in <sup>2</sup> )	TS Mpa(lbs/in <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)
-	816 (118,000)	40.2	-196 (-321)	91 (67)