PRODUCT SPECIFICATION

Lastifil 807

Joining difficult to weld steel - highest toughness

CLASSIFICATION

EN ISO 14343-A : G 18 8 Mn
AWS A5.9 : ER 307Si

GENERAL DESCRIPTION

Joining highly alloyed and difficult to weld steel.
Very tough, wear resistant refacings, resistant against heavy shocks, corrosion and rust.
Work hardens under impact load.
Crack resistant base layer for hard facings.
Oxidation resistant up to 850°C (1560°F).

APPLICATIONS

Welding armour steel, wear resistant chromium steels (3CR12 for example), manganese steel (12% Mn), joining stainless steel to carbon steel.
Refacing rails, frogs, clutches, crane wheels.
Universal welding wire for maintenance and repair.

CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

C :	< 0.09	**Si :**	< 1.50	**Mn :**	5.00 - 8.00	**Cr :**	17.00 - 20.00	**Ni :**	7.00 - 10.00
Mo :	< 0.30	**Cu :**	< 0.30	**S :**	< 0.03	**P :**	< 0.03		

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm²	Tensile Strength N/mm²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 350 MPa	≥ 500 MPa	≥ 25%	≥ 50 J (R.T.)

GENERAL INFORMATION

Welding positions	All			
Shielding gas	Ar/CO2 (M12: EN ISO 14175) or Ar/O2 (M13: EN ISO 14175)			
Packing	15 kg spool (in a cardboard box)			
Polarity	DC+			
Diameter (mm)	0.8	1.0	1.2	1.6

Tips & tricks

Joining difficult to weld steel: in function of the chemical analysis and the work piece thickness, preheating or cooling down slowly can be necessary.
Manganese steel (12%) is welded without preheat (max. 350° (660°F) interpass temperature).