

AI-16742

Specifications

DIN 855 UP5-GF-40-C

Description and Applications

AI-16742 is a sub arc wire designed to deposit a ferritic-martensitic alloy with the addition of nitrogen to enhance the resistance to thermal fatigue and intragranular corrosion by reducing the formation of $M_{23}C_6$ carbides at the grain boundaries.

Applications include: **AI-16742** has been designed primarily for use on Continuous Caster Rolls in the Steel Industry.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Ni	Mo	N
0.070	1.47	0.40	13.6	3.32	1.41	0.06

Mechanical Properties of Weldmetal

	As Welded
Hardness (3 layers)	HRC 47
Machineability	Good with carbide tool
Oxy-Acetylene Cutting	Cannot be flame cut
Deposit Thickness	Depends on procedure
Microstructure	Martensite +ferrite 10%
Welding Flux	AI-16 Record 605

Welding Parameters

Diameter (mm)	Current type	Amps	Stick-out
2.4	DC +ve	280-400	30-35
3.2	DC +ve	325-450	30-35
4.0	DC +ve	400-450	30-35

Disclaimer

All figures in this datasheet should be considered indicative only. No guarantee is made as to their accuracy. All figures subject to change without notice. Batch analysis is available for all products sold. Should you require any further information, please contact us at sales@alloysint.com.au

