

SP Al 99,0

CATEGORY Metal spray wires

TYPE 99% pure grade aluminium wire for thermal spray applications.

APPLICATIONS Aluminum wire coatings are recommended for cathodic corrosion protection in atmospheric and salt / fresh water immersion, with application areas such as oil refining equipment, chemical processing equipment, boat bottom interiors exposed to bilge water and other similar types of exposure.

PROPERTIES As aluminum is anodic to steel, coatings of aluminum act as excellent sacrificial coatings on steel substrates. Furthermore, the aluminum coating tends to form an oxide film that protects it from further attack.

CLASSIFICATION AWS A 5.10: ER 1100
EN ISO 18273: S AL 1100 / AL 99,0

SUITABLE FOR Electrical conductance on components such as conductive areas on insulators, capacitor end caps and varistors. Cathodic corrosion protection on steel, structures such as bridges and water towers, for which the coating can be used alone or as a very good bond and protective undercoat for organic materials. Coatings on fiberglass panels for static dispersion and corrosion protection of outer casings, high temperature corrosion protection on exhaust valves.

APPROVALS CE approved

WIRE ANALYSIS

Al	Mn	Cu	Fe	Si	V	Rest	Fe+Si
99.0-99.95	<0.05	0.05-0.20	<0.95	<0.95	<0.1	<0.15	<0.95

COATING PROPERTIES

Heat Treatment	R _{P0,2} (N/mm ²)	R _m (N/mm ²)	A5 (%)	Bonding strength N/mm ²	Density g/cm ³	Porosity volume %	Macrohardness HRH
				7-30	2.41	1-2	78-82

PROCESS PARAMETERS / PACKING

Process Parameters			Packing	
D (mm)	Voltage (V) (DC+)	Current (A)	spool type	kg / spool / drum
1,6			K-300 / Drum	7 / 80
2,5			K-300 / Drum	7 / 80
3,2			K-415 / Drum	17 / 80
4,76			Coils	25

REDRYING TEMPERATURE not required