Thermal Spray Aluminium

Alloys, Technical Advice & Forms Of Supply

Overview

Aluminium Wires is commonly used for **Thermal Sprays (TSA)**. It is used for corrosion control, wear resistance, traction or restore dimensions. Aluminium wire is first melted, then sprayed onto the surface of another metal or structure. Applications include **Offshore Metal Structures**, **Seawater Immersions** and **Tidal & Splash Zone Environments**.

Alloys

Alloy Designations		Chemical Composition												
Purity	Chemical Symbols	Si	Fe	Cu	MN	Mg	Cr	Ni	Zn	Ga	V	Ti	Other	Al
99.80%	EN-AW-E AI 99.80 (A)	0.15	0.15	0.03	0.02	0.02	-	-	0.03	0.03	0.03	0.02	0.02	99.80 *
99.90%	EN-AW AI 99.90	0.07	0.07	0.02	0.01	0.01	-	-	0.03	0.03	0.05	0.01	0.01	99.90 **

* Minimum Guarantee 99.75

** Minimum Guarantee 99.85

Table 1.1

Max

EKSTERNAL WIDHT TRAVERSE OUTSIDE DIAMETER (#0)

Image 1.1

Forms Of Supply

AJMet supplies Aluminium Wires in 2 forms of packaging: Bobbin and Coil. See Table 1.2 for Bobbin Types. For supplies in coil, please contact us for further details.

Туре	External Width (mm)	Inner Diameter (mm)	Outer Diameter (mm)	Drum Diameter (mm)	Traverse (mm)	Cap Load (kg)
AJM-280A	80	18	280	150	66	6
AJM-280F	75	20	280	130	65	6-7
AJM-305	67.5	38.5	305	130	55	6.5
AJM-310	82	40	310	120	71	9
AJM-320R	63	51	320	125	51	8
AJM-320	82	51	320	125	72	10
AJM-360	65	51	360	97	56	10-11.8

Table 1.2

Technical Advice

Handle Spools

- 1 To avoid the spring effect, refer to image 2.1
- 2 Avoid cross wires in the feeding process
- 3 Avoid dropping the bobbin during handover this may cause the coil to break
- 4 For the correct and wrong way to lift our coils, refer to image 2.2 and 2.3 respectively



Image 2.1

During the process of feeding our wire to the metallization machine, we recommend holding the superficial tower by hand to avoid the spring effect (where the tower is out of place). Refer to Image 2.1, for the correct way to hold the tower.



Image 2.2



Image 2.3

Storage Recommendations

The product must be kept dry and protected from elements (rain, etc.). We recommend to store well in the original packaging to protect it from dust and foreign substances. Our recommended shelf life for our aluminum wire is 6 months. For optimal quality, we recommend using the material no later than 6 months.

Handling Measures



Wear safety goggles or glasses and suitable gloves



Wear safety shoes



Be careful when stacking rolls out of original packaging





Follow local security and safety protocols at all times

Note: The manufacturer will not be liable for any damage due to improper use of the submitted material