

THERMAL SPRAY FLEXICORD

Technical Bulletin

ACS
ALLOY COATING SUPPLY
PURE ALUMINA
Ceramic series – ref : 98210 1147 000

PURE ALUMINA Flexicord is designed to be sprayed with our MASTER JET® flame spray gun. PURE ALUMINA Flexicord provides: chemically inert coatings having a good thermal cycle resistance, good electrical insulation at high temperature, medium abrasion resistance and good corrosion resistance versus most of acids & alkalis. Stable up to 1100 °C.

Applications

Enables free-standing coatings (up to 5mm and even more) to make crucibles or other components, Thermal and electrical insulation for inductive furnace, Electrical insulation for inductive heaters, filament heating rollers, Improvement of ceramic tiles surface performance, O and C diffusion-barrier coatings to protect metals from oxidation or carburization (Pt, Co, Steels, WC, etc...). Very good corrosion resistance, very good thermal shock resistance.

Typical composition (%) - G^{TIP}

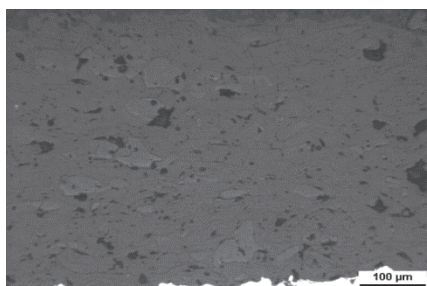
Al ₂ O ₃	99,7
Other	0,3% max

Color code

Skin	Pink
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Packaging

Ø Flexicord	4,75 mm +/- 0,1mm
Spool	Plastic - SD 300mm
Weight	5,5 Kg +/- 10%

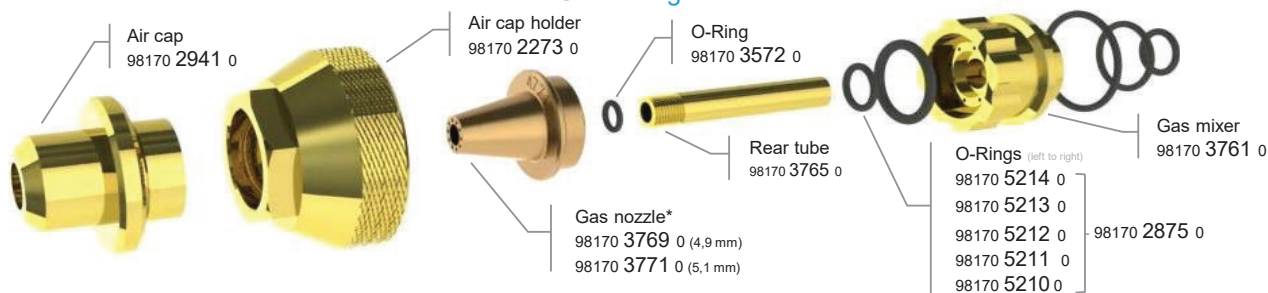


Typical microstructure of Pure Alumina sprayed with our Master Jet® flame spray gun.

Coating features

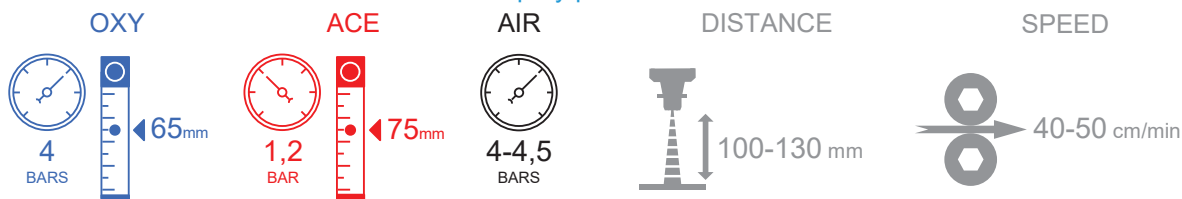
Porosity	8 - 12%
Pore diameter	~5 - 25 µm
Roughness Ra (as sprayed)	8 - 12 µm
Hardness	700 - 770 Hv ₃₀₀
Density	3,6 g/cm ³
Thermal Conductivity	~10-20 W.m ⁻¹ .K ⁻¹
Deposit Efficiency	55%
C.T.E.	80.10 ⁻⁶ .K ⁻¹

Gun configuration



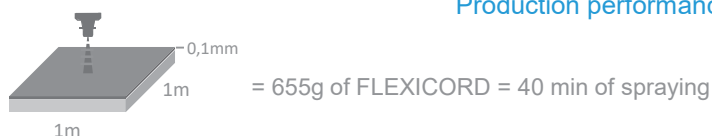
*Use 4,9 mm in dry area – 5,1 mm in wet area

Spray parameters



Master Cleaner required (ref.: 98110 3000 000)

Production performances



SAINT-GOBAIN COATING SOLUTIONS

SAINT-GOBAIN