

THERMAL SPRAY FLEXICORD

Technical Bulletin



ALUMINA SUPRA

Ceramic Supra series – ref : 98210 1347 000

ALUMINA SUPRA Flexicord is designed to be sprayed with our MASTER JET® flame spray gun. Alumina Supra is the best Flexicord for Demanding applications requiring electrical insulation and high resistance to breakdown and also for corrosion protection and diffusion barrier coatings up to 1000°C, combined with good wear resistance and excellent corrosion resistance versus most of acids & alkalis applications.

Applications

Moderate temperature applications, Electrical insulation for inductive heaters, resistive heaters, filament heating rollers, moderate and high voltage insulation. Diffusion barrier versus O and C: protective oxidation coating on metals. Coating on graphite and CFC furnacing plates. Protective coating for corrosion protection. Can be impregnated.

Typical composition (%) - T^{TIP}

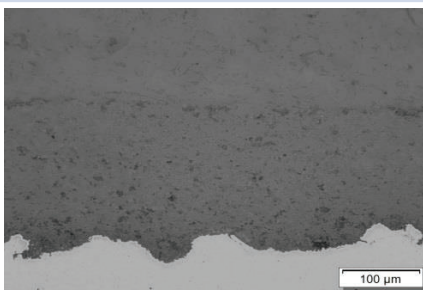
Al ₂ O ₃	99,7
Other	0,3% max

Color code

Skin	Pink
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Packaging

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

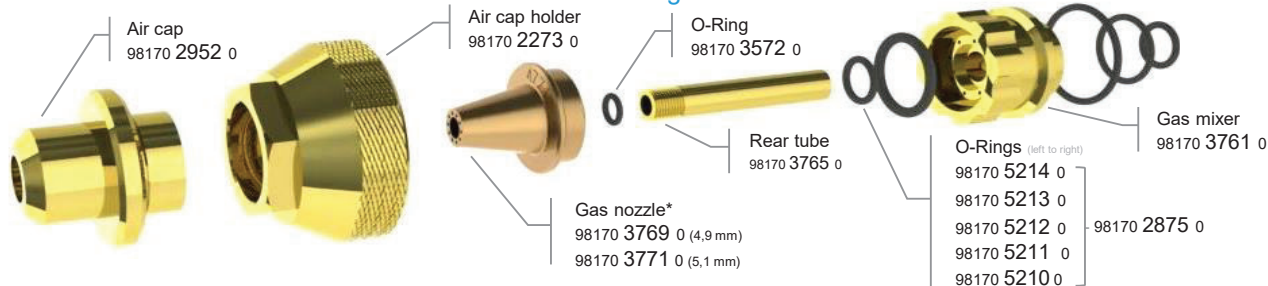


Typical microstructure of Alumina Supra sprayed with our Master Jet® flame spray gun.

Coating features

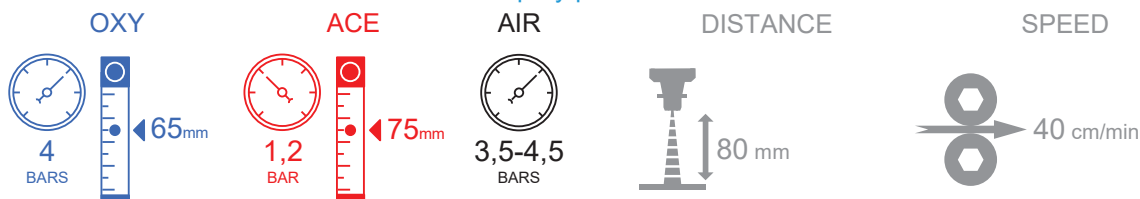
Porosity	~5,1%
Pore diameter	~2 - 12 µm
Roughness Ra (as sprayed)	~4,7 µm
Hardness	680 HV ₃₀₀
Density	3,37 g/cm ³
Thermal Conductivity	12 W.m ⁻¹ .K ⁻¹
Resistivity	10 ¹¹ Ω/cm at 25°C
DC dielectric strength	10-15 kV/mm
Deposit Efficiency	29%
C.T.E.	8.10 ⁻⁶ K ⁻¹

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

