

Product Data Sheet



WOKA™ 3302

90% Tungsten Carbide 10% Nickel Powder for
WOKA Jet™ 400 and JP 5000 HVOF Spray Guns
with Kerosene Fuel Parameters

Typical Applications:

Generates abrasion resistant coatings that are hard and dense and resist oxidation and corrosion. Coatings can be used at service temperatures up to 480 °C (900 °F).

Material Properties:

Nominal Composition	WC 10Ni
Particle Size	-45 +15 µm
Characteristics	Spherical, agglomerated and sintered

Typical Coating Properties:

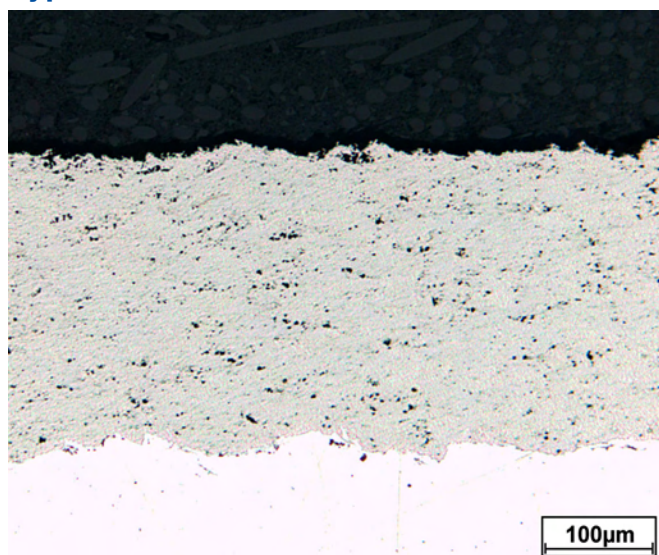
Deposit Efficiency	35 – 40 %
Micro hardness (HV0.3)	1100 – 1200
Profile, as-sprayed (Ra)	4 – 6 µm 160 – 235 µin
Wear rate (ASTM G65 B)	6.0 – 6.5 mm³

Corrosion resistance in aqueous environments:

1 M NaCl	0.5 M H2SO4	1 M HCL	1 M NaOH
NOT MEASURED			
POOR		EXCELLENT	

Results reported using Sulzer Metco Standard Practices.
Contact Sulzer Metco for recommended testing procedures.

Typical Microstructure:



Recommended Spray Parameters:

Spray Gun		WokaJet™ 400 / JP 5000	
Barrel length		152 mm	6 in
System		MultiCoat HVOF	
Oxygen	Flow	900 nlpm	2055 scfh
Kerosene	Flow	23.1 l/hr	6.1 gal/hr
Stoichiometric Ratio		1.15	
Powder Feeder		Twin 120-H / Single 220-H	
Suction/Spreader		NL/NL	
Carrier N2	Flow	4 – 6 nlpm	9 – 13.5 scfh
Spray Distance		28 – 32 cm	11 – 12.5 in
Spray Rate		80 – 100 g/min	10.5 – 13.2 lb/hr
Workpiece			
Surface Speed		> 40 m/min	> 130 ft/min
Gun Traverse Rate		5 mm/rev	0.20 in/rev

Spray parameters are presented as a starting point and may require adjustment to suit specific spray applications.

Order Number:

Europe:	1041111	5 kg container (approx. 11 lb)
Americas:	1041065	10 lb container (approx. 4.5 kg)

For more information, please contact your Sulzer Metco Account Representative or visit us on our web site at www.sulzermetco.com.

JP 5000 is a product of Praxair / Tafa