

A Blend of Aluminium Oxide (Al₂O₃) and Titanium Dioxide (TiO₂) Powders for use with Thermal Spray Equipment or Conventional Plasma Spray Processes

MetaCeram 25030

0

- Excellent interparticle bond strength
- Can be ground or lapped to a fine finish
- Very good corrosion and abrasion resistance
- Excellent for applications with electrolytic corrosion

MetaCeram 25030

MetaCeram 25030 is a blend of aluminium oxide (Al_2O_3) and titanium dioxide (TiO_2) powders and is designed for use with high energy combustion thermal spray equipment like the TeroDyn[®] 2000 or conventional plasma spray processes.

Coatings produced with this powder are dense with excellent interparticle bond strength and can be ground or lapped to a fine finish.

Very good corrosion and abrasion resistance makes this a good material for pump seals.

TECHNICAL DATA

Typical Values*	
Typical Hardness:	80 HRC (15N converted)
Typical Micro-hardness:	DPH _{300g} 780
Typical Density:	0.1264 lb/in ³
Max. Service Temperature:	2,000°F (≈1093°C)
Porosity:	<10%
Carney Flow Rate:	15 seconds
Bulk Density:	1.9 g/cc
Powder Coverage:	0.021 lb/ ft ² @ 0.001"
Melting Point:	3340°F (≈1838°C)

Nominal Composition:

Aluminum dioxide, Titanium dioxide

PROCEDURE FOR USE

Coatings of Eutectic 25030 should be rough ground with 120 grit silicon carbide or 150 grit diamond wheels. Finish grind using a 400 grit diamond wheel.

Recommended Parameters - TeroDyn[°] 2000 System

Oxy-Aceytelene

Nozzle: RotoJet: Module Adaptor: Oxygen: Acetylene: T-Valve Setting: Spray Rate: Deposit Efficiency: Spray Distance: RL 210 or RL 210-W RPA 3 @ 40psi air Aqua 50 psi / 35 flow 12 psi / 75 flow 6 clicks 3 lb/hr 85% 4 to 6 inches

Oxy-Propylene/Propane

Nozzle:RL 210RotoJet:RPA 3Module Adaptor:AquaOxygen:80 psPropylene:30 psT-Valve Setting:7 clickSpray Rate:3 - 4 TDeposit Efficiency:85%Spray Distance:5 to 6

Propane RL 210M RPA 3 @ 25psi air Aqua 80 psi / 50 flow 30 psi / 56 flow 7 clicks 3 - 4 lb/hr 85% 5 to 6 inches

TYPICAL APPLICATIONS

Recommended for volute pump casings, applications with electrolytic corrosion and pump seal areas (especially when corrosion is present).

Observe normal spraying practices, respiratory protection and proper air flow pattern advised. For general spray practices, see AWS Publications AWS C2. 1-73, "Recommended Safe Practices for Thermal Spraying and AWS TSS-85, "Thermal Spraying, Practice, Theory and Application." Thermal spraying is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting spray operations.DO NOT operate your spraying equipment or use the spray material supplied, before you have thoroughly read the equipment instruction manual. Refer to the Eutectic website for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH.



Eutectic Corporation: N94 W14355 Garwin Mace Dr. Menomonee Falls WI, 53051 USA +1 800. 558. 8524 • eutectic.com Eutectic Canada:

428, rue Aimé-Vincent Vaudreuil-Dorion Québec J7V 5V5 Canada +1 800. 361. 9439 • eutectic.ca



