Product Datasheet: ARC 858(E)

100% solids, thick film, ceramic reinforced abrasion control epoxy compound formulated to protect metal surfaces subjected to erosion, corrosion and chemical attack. ARC 858(E) industrial coating is designed to:

- Upgrade new and old equipment exposed to abrasion, corrosion or chemical attack
- Rebuild surfaces with erosion resistant protection outperforming weld overlays
- Fill grooves, pits, etc. in metal prior to overcoating with another ARC product
- Easily apply by trowel

Application Areas

- Pump casings
- Impellers and blades
- Back plates
- Wear plates
- Heat exchangers
- Bins and silos
- Hoppers
- Transport screws
- Pipe elbows
- Tanks and vessels
- Valves
- Dewatering screws

Packaging and Coverage

Nominal, based on a 750 µm (30 mil) thickness

- 250 g kit covers 0.20 m^2 (2.21 ft^2)
- 940 ml cartridge covers 1.25 m^2 (13.50 ft^2)
- 1,5 liter kit covers 2.00 m^2 (21.53 ft^2)
- 5 liter kit covers 6.67 m^2 (71.76 ft^2)
- 16 liter kit covers 21.33 m^2 (229.63 ft^2)

Note: Components are pre-measured & pre-weighed.

Each kit includes mixing and application instructions.
250 g, 1,5 liter & 5 liter kits include tools.

Color: Gray

Features and Benefits

- **Extremely abrasion resistant**
  - Extends equipment life
  - Reduces spare parts
  - Reduces downtime
- **High build - single coat applications**
  - Quick applications
- **High adhesive strength**
  - Provides long-term protection
  - Eliminates under-film corrosion
- **100% solids; no VOCs; no free isocyanates**
  - Enhances safe use
  - No shrinkage on cure
  - Resists permeation

Technical Data

Composition Matrix	A two component, modified epoxy resin reacted with an aliphatic curing agent		
Reinforcement	A proprietary blend of ceramic particles providing smooth, erosion resistant surface		
Cured Density		1.7 g/cc	106 lb/ cu.ft.
Compressive Strength	(ASTM D 695)	924 kg/cm^2 (91 MPa)	13,200 psi
Flexural Strength	(ASTM D 790)	380 kg/cm^2 (37 MPa)	5,400 psi
Flexural Modulus	(ASTM D 790)	7.0 x 10^4 kg/cm^2 6.9 x 10^3 MPa	10.1 x 10^5 psi
Pull-Off Adhesion	(ASTM D 4541)	351 kg/cm^2 (34.5 MPa)	5,000 psi
Tensile Strength	(ASTM D 638)	197 kg/cm^2 (19 MPa)	2,800 psi
Lap Shear Adhesion	(ASTM D 1002)	279 kg/cm^2 (27 MPa)	3,900 psi
Composite Shore D Durometer Hardness	(ASTM D 2240)	89	
Taber Abrasion CS17 / 1 Kg / 1000 cycles	(ASTM D 4060)	95 mg weight loss	
Vertical Sag Resistance, at 21°C (70°F) and 6 mm (1/4")		No sag	
Maximum Temperature (Dependent on service)	Wet Service Dry Service	70°C 160°C	158°F 320°F
Shelf life (unopened containers)	2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]		

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