# Product Datasheet: ARC 858

***100% solids, thick film, ceramic reinforced abrasion control epoxy compound formulated to protect metal surfaces subjected to erosion, corrosion and chemical attack. ARC 858 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

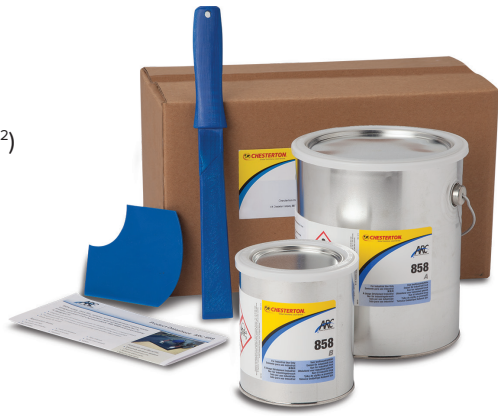
Nominal, based on a 750 µm (30 mil) thickness

- 250 g kit covers 0.20 $m^2$ (2.21 $ft^2$)
- 940 ml cartridge covers 1.25 $m^2$ (13.50 $ft^2$)
- 0.75 liter kit covers 1.00 $m^2$ (10.60 $ft^2$)
- 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, 0.75 liter, 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

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|---|---|---|---|
| Composition — Matrix | A two component, modified epoxy resin reacted with an aliphatic curing agent | | |
| Composition — Reinforcement | A proprietary blend of ceramic particles providing smooth, erosion resistant surface | | |
| Cured Density | | 1.6 g/cc | 100 lb/ cu.ft. |
| Compressive Strength | (ASTM D 695) | 910 $kg/cm^2$ | 13,000 psi |
| Flexural Strength | (ASTM D 790) | 620 $kg/cm^2$ | 8,800 psi |
| Flexural Modulus | (ASTM D 790) | $6.9 \times 10^4$ $kg/cm^2$ | $9.9 \times 10^5$ psi |
| Pull-Off Adhesion | (ASTM D 4541) | 478.5 $kg/cm^2$ (47 MPa) | 6,810 psi |
| Tensile Strength | (ASTM D 638) | 211 $kg/cm^2$ | 3,000 psi |
| Lap Shear Adhesion | (ASTM D 1002) | 150 $kg/cm^2$ | 2,100 psi |
| Composite Shore D Durometer Hardness | (ASTM D 2240) | 88 | |
| Taber Abrasion H-18/250 gram/1000 cycles | (ASTM D 4060) | 71 mg weight loss | |
| Vertical Sag Resistance, at 21°C (70°F) and 0.6 mm (1/4") | | No sag | |
| Maximum Temperature (Dependent on service) | Wet Service<br>Dry Service | 70°C<br>160°C | 158°F<br>320°F |
| Shelf life (unopened containers) | 3 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility] | | |


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