

**100% solids, ceramic reinforced, thin film coating to protect metal against chemicals, abrasion, and corrosion. ARC 855 industrial coating is designed to:**

- Upgrade new and old equipment exposed to abrasion, corrosion or chemical attack
- Replace traditional coatings, special alloys, engineered plastics, ceramics, etc.
- Easily apply by roller or brush

## Application Areas

- Pump Casings
- Impellers and blades
- Heat Exchangers
- Bins and Silos
- Hoppers
- Waterboxes
- Transport Screws
- Tanks and Vessels
- Valves

## Packaging and Coverage

- **ARC 855 requires a minimum of two coats**

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

- 0.75 liter kit covers 0.98 m<sup>2</sup> (10.6 ft<sup>2</sup>)
- 1.5 liter kit covers 2.00 m<sup>2</sup> (21.53 ft<sup>2</sup>)
- 5 liter kit covers 6.67 m<sup>2</sup> (71.76 ft<sup>2</sup>)
- 16 liter kit covers 21.33 m<sup>2</sup> (229.63 ft<sup>2</sup>)

Note: Components are pre-measured & pre-weighed.  
Each kit includes mixing and application instructions.  
0.75 liter, 1.5 liter & 5 liter kits include tools.

Colors: Black or gray



## Features and Benefits

- **Abrasion resistant surface**
  - Extends equipment life
  - Reduces spare parts
  - Reduces downtime
- **High gloss, low drag surface**
  - Improves material flow
  - Enhances efficiency
- **High adhesive strength**
  - Prevents under-film corrosion
- **100% solids; no VOCs; no free isocyanates**
  - Enhances safe use
  - No shrinkage on cure
  - Resists permeation
- **Low viscosity, thin film, brush or roller applied coating**
  - Easy to apply
  - Saves repair time

## 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, wear resistant surface |                                 |
| Cured Density                                               |                                                                               | 1.6 g/cc                                                                          | 100 lb/ cu.ft.                  |
| Compressive Strength                                        | (ASTM D 695)                                                                  | 840 kg/cm <sup>2</sup> (82.7 MPa)                                                 | 12,000 psi                      |
| Flexural Strength                                           | (ASTM D 790)                                                                  | 560 kg/cm <sup>2</sup> (54.2 MPa)                                                 | 8,000 psi                       |
| Pull-Off Adhesion                                           | (ASTM D 4541)                                                                 | 352.7 kg/cm <sup>2</sup> (34.6 MPa)                                               | 5,020 psi                       |
| Tensile Strength                                            | (ASTM D 638)                                                                  | 240 kg/cm <sup>2</sup> (23.4 MPa)                                                 | 3,400 psi                       |
| Linear Coefficient of Thermal Expansion                     | (ASTM C 531)                                                                  | 4.6 x 10 <sup>-5</sup> cm/cm/°C                                                   | 2.6 x 10 <sup>-5</sup> in/in/°F |
| Cathodic Disbondment                                        | (ASTM G 8)                                                                    | Passes 60 days                                                                    |                                 |
| Composite Shore D Durometer Hardness                        | (ASTM D 2240)                                                                 | 85                                                                                |                                 |
| Salt fog - scored panels                                    | (ASTM B 117)                                                                  | No rust > 10,000 hours                                                            |                                 |
| Vertical Sag Resistance, at 21°C (70°F) and 0.38 mm (.015") |                                                                               | No sag                                                                            |                                 |
| Maximum Temperature (Dependent on service)                  | Wet Service<br>Dry Service                                                    | 65°C<br>120°C                                                                     | 149°F<br>248°F                  |
| Shelf life (unopened containers)                            | 2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility] |                                                                                   |                                 |