A World
ARC® Efficiency & Protective Coatings (ARC-EPC), a brand of the 135-year-old A.W. Chesterton Company, has achieved a nearly four-decade proven global track record of enhancing critical industrial equipment and structures.

Innovation through Design
ARC-EPC products are engineered using the latest technologies and advanced material formulations—from ceramic bead reinforcement to nanotechnology—to withstand the most challenging environments. ARC’s highly experienced engineering staff is constantly at work on new, innovative coating solutions to meet the needs of industries’ critical application environments.

Use ARC Efficiency & Protective Coatings to:
- Revitalize worn equipment and damaged concrete surfaces previously considered irreparable
- Provide cost-effective, long-term corrosion prevention compared to exotic alloys and conventional coatings
- Increase operational efficiency frequently resulting in higher sustained output

Applications Expertise and Local Service
Backed by years of experience across a wide range of industries and applications, ARC’s industrial coatings experts provide the applications insight and local service your company needs to ensure success.

You’ll be supported by:
- An extensive global network of Sales Specialists supported, by local Stocking Distributors, In-Field Product Managers, Factory-Based Application Engineering, and Qualified Applicators
- Follow-up guidance for application and troubleshooting issues
- Regular training programs—including online webinars

ARC has a total solutions approach that responds to your organization’s needs no matter the location, scope, or challenge of the application. Contact us today to get started!
## Application Matrix Table

| Product       | Metal | Concrete | <60°C (145°F) Immersion | <90°C (200°F) Immersion | <130°C (260°F) Immersion | <150°C (300°F) Immersion | Concentrated Acid | Diluted Acid | Alkaline | Drinking Water | Mild Erosion | Severe Erosion | Moderate Abrasion | Severe Abrasion | Extreme Abrasion | Mild to Moderate Impact | Moderate to Severe Impact |
|---------------|-------|----------|-------------------------|------------------------|--------------------------|--------------------------|-----------------------|--------------|-----------|----------|--------------|---------------|----------------|---------------------|----------------|----------------|------------------|-------------------|
| **SPECIALTY REPAIR** |       |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| 5/5ES         | X     | X        | X                       | X                      | X                        | X                        | X                     |              |           |           |               |               |               |                     |                |                |                  |                  |
| 10            | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| **EROSION/ CORROSION-RESISTANT** |       |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| 855           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| 855N          | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| 858           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| HT-T          | X     |          | X                       | X                      | X                        | X                        | X                     |              |           |           |               |               |               |                     |                |                |                  |                  |
| HT-S          | X     |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| **ABRASION-RESISTANT** |       |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| BX1           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| BX2           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| BX5           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| IBX1          | X     |          | X                       | X                      | X                        | X                        | X                     |              |           |           |               |               |               |                     |                |                |                  |                  |
| IBX1 RC       | X     |          | X                       | X                      | X                        | X                        | X                     |              |           |           |               |               |               |                     |                |                |                  |                  |
| MX1           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| MX2           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| T7 AR         | X     |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| **CORROSION CHEMICAL** |       |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| S1PW          | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| S2            | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| S4+           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| SD4i          | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| S7            | X     |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| **CONCRETE THIN-FILM** |       |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| CS2           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| CS4           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| NVE VC        | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| **CONCRETE HIGH-BUILD** |       |          |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| 791           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| 988           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |
| NVE           | X     | X        |                         |                        |                          |                          |                      |              |           |           |               |               |               |                     |                |                |                  |                  |

Disclaimer: This chart is an aid in product selection but should not be used as the sole method for product selection. Final product selection is the responsibility of the purchaser. All recommendations are based on ambient temperature exposures <32°C (90°F).
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To use our Product Selector Tool to narrow your search of coatings for your application, go to:

[www.arc-epc.com](http://www.arc-epc.com)

or contact us:

Tel: +1 978 469 6888

Email: arc-epc@chesterton.com
ARC 5/5ES

Rapid-curing, emergency leak sealing coatings

- Patches and seals leaks up to 3 mm (.125 in) diameter
- Fares smooth pitted regions and cures to a hard film within 15 minutes
- Cures under water and on damp surfaces
- 5ES meets requirements of NSF 61 for cold water service

Application Areas

- Pitted metal surfaces
- Leaking ductwork
- Flange faces
- Cracked valves
- Scored hydraulic rams and pistons

Packaging and Coverage

Nominal, based on a 3 mm (120 mil) thickness

- 5: 250 g kit covers 0.052 m² (0.056 ft²)
- 5ES: 114 g “stick” covers 20,00 cm² (3.10 in²)

Technical Data

<table>
<thead>
<tr>
<th></th>
<th>Pull-off Adhesion</th>
<th>Maximum Temperature</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(ASTM D 4541)</td>
<td>Wet Service</td>
<td>Dry Service</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>246.8 kg/cm² (24.2 MPa)</td>
<td>66°C</td>
<td>93°C</td>
<td>150°F</td>
</tr>
<tr>
<td>Max.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5ES</td>
<td>300 kg/cm² (29.4 MPa)</td>
<td>150 kg/cm² (14.7 MPa)</td>
<td>121°C</td>
<td>250°F</td>
</tr>
<tr>
<td>Max.</td>
<td>300 kg/cm² (29.4 MPa)</td>
<td>150 kg/cm² (14.7 MPa)</td>
<td>121°C</td>
<td>250°F</td>
</tr>
</tbody>
</table>

Features and Benefits

- Cures on damp surfaces
- Surface-tolerant for faster and easier application
- 100% solids, no VOCs, no free isocyanates
- Enhances safe use
- Low temperature cure capable
- Cures down to 4°C (40°F)
- Compliant to NSF 61 standard for cold water service

Certified to NSF/ANSI 61

Product Case Study

Challenge

Issue
Cracked and leaking valve required replacement. The repair would require taking plant off line

Goal
Avoid plant shutdown and repair valve until annual shutdown for complete replacement

Root Cause
Aging

Solution

Preparation
Temporary leak stops were installed

External of valve was mechanically roughened to SP11 (white metal)

Application
ARC 5ES was pressed into crack to temporarily stop leaks

Two alternating layers ARC 5 and reinforcing mesh were spread over crack

Results

Client Report
Repairs carried out in three hours without taking tank out of service

Tank stayed in service without leakage for six months, until annual shutdown allowed valve replacement

One day plant shutdown: $125,000
ARC repair: $1,200

Savings: $123,800

$ = USD
ARC 10

A polymer alloy blend used to resurface scored and pitted regions which may be machined at a later stage to single tolerances

- Resurface worn metal parts which require machining to tolerances afterwards
- Resurface corroded and pitted metal surfaces
- Easily apply by trowel

Application Areas

- Flange faces
- Scored hydraulic rams
- Worn keyways
- Worn valve bodies
- Bearing housings
- Corroded stuffing boxes
- Shafts
- Pitted metal

Packaging and Coverage

Nominal, based on a 3 mm (120 mil) thickness

- 250 g kit covers 0.04 m² (0.45 ft²)
- 1.5 liter kit covers 0.50 m² (5.38 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>256,6 kg/cm² (25.2 MPa)</th>
<th>3,650 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service 66°C 150°F</td>
<td>93°C 200°F</td>
</tr>
</tbody>
</table>

Features and Benefits

- Resistant to a wide spectrum of chemicals including alkalis, acids, and solvents
  - Covers a broad range of chemical exposures
  - 100% solids, no VOCs, no free isocyanates
  - Enhances safe use
- High build viscosity
  - Suitable for rebuilding pitted and scored surfaces to a thickness of more than 6 mm (.24 in) in a single coat

Product Case Study

Challenge

Issue
Various areas with high metal loss were found when inspecting a salt water pump, which affected performance

Goal
Resurface internals and recover efficiency; Protect equipment from corrosive operating conditions; Reduce 10-month delivery time for a new pump

Root Cause
The corrosive conditions added to content of solids in pumped fluid caused corrosion and erosion

Solution

Preparation
Decontaminate and grit blast to Sa 2.5 with 3 mil (75-125 μm) profile

Application
Weld metal plate in cut water and apply ARC BX1 at 250 mil (6 mm)
Apply ARC 10 at 80-160 mil (2-4 mm) on flanges and machine to level
Apply ARC 858 at 250-315 mil (3-8 mm), to mold wear ring seats and smoothen all internal surface
Apply ARC S2 in a two-coat system at 20-24 mil (500-600 μm) on all internals

Results

Client Report
New pump: $126,800
New impellor and accessories: $39,016
ARC solution: $24,215

Total savings: $63,569
Delivery time for new pump: 300 days
Repair time with ARC: 20 days

S=USD
ARC 855

100% solids, ceramic reinforced thin-film coating to protect metal against chemicals, abrasion, and corrosion

- 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
- Water boxes
- Tanks and vessels
- Valves

Packaging and Coverage
Nominal, based on a 750 μm (30 mil) thickness
- 0.75 liter kit covers 0.98 m² (10.60 ft²)
- 1.5 liter kit covers 2.00 m² (21.53 ft²)
- 5 liter kit covers 6.67 m² (71.76 ft²)
- 16 liter kit covers 21.33 m² (229.63 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull-off Adhesion (ASTM D 4541)</td>
<td>352.7 kg/cm² (34.6 MPa) 5,020 psi</td>
</tr>
<tr>
<td>Maximum Temperature Wet Service</td>
<td>65°C (149°F)</td>
</tr>
<tr>
<td>Maximum Temperature Dry Service</td>
<td>120°C (248°F)</td>
</tr>
</tbody>
</table>

Features and Benefits
- Abrasion-resistant surface
  - Extends equipment life
- High gloss, low drag surface
  - Enhances efficiency
- High adhesive strength
  - Prevents under-film corrosion
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use

Product Case Study

Challenge
Issue
Unscheduled shutdowns, due to bearing vibration failure, result in production losses and increased maintenance costs

Goal
Reduce dust attachment to fan blades to lower resulting imbalance and vibration; Extend bearing life—MTBR (Mean Time Between Repairs); Control corrosion and abrasion

Root Cause
High humidity atmosphere with chlorides corrodes fan blades and accelerates dust attachment, creating fan imbalance

Solution
Preparation
Decontaminate to remove chlorides; Dynamic balancing of fan; Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile

Application
Apply ARC BX2 at 120 mil (3 mm) to leading edge of vanes
Apply ARC 855 at total DFT of 20 mil (500 μm)
Fan is statically balanced

Results
Client Report
Shutowns reduced to one per year at cost of $25,000
Bearing life extended as a result of reduced vibration

Estimated Savings
Annual fan costs including semi-monthly cleaning: $628,000
ARC material and labor: $32,000
Estimated yearly savings: $596,000
ROI: less than 1 month
$=USD

Build-up on fan blades.  
ARC BX2 applied to leading edge.  
Protected fan.
**ARC 855N**

*100% solids, reinforced thin-film coating to protect structures against chemical attack and corrosion*

- Meet the requirements of Mil Spec 32171
- Protect metal against chemical attack and corrosion
- Apply by brush or roller

**Application Areas**
- Deck coating
- Machine spaces
- AFFF stations
- Elevator rooms
- Structural steel
- Chain lockers

**Packaging and Coverage**

Nominal, based on 2 coats at 375 μm (15 mil) thickness

- 1,5 liter kit covers 2,00 m² (21.53 ft²)

**Technical Data**

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>Maximum Temperature (Dependent on Service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>352.7 kg/cm² (34.6 MPa)</td>
<td>Wet Service: 65°C (149°F)</td>
</tr>
<tr>
<td>5,020 psi</td>
<td>Dry Service: 120°C (248°F)</td>
</tr>
</tbody>
</table>

**Features and Benefits**

- Meets Mil Spec. 32171
  - Certified for on-board applications
- Low viscosity
  - Easily applied
- High adhesive strength
  - Prevents under-film corrosion
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use

**Product Case Study**

**Challenge**

**Issue**
Heavy traffic and chemical exposures damaged deck coating, increasing slip and fall hazards in machine space area

**Goal**
Reduce slip and fall hazard

**Root Cause**
Hydraulic oils and hydrocarbon-based fuels compounded by heavy foot traffic

**Solution**

**Preparation**
Surfaces were power tool cleaned to SP11 (white metal) with 2+ mil (50 μm) profile

**Application**
30 mil (750 μm) of ARC 855N applied by roller and then broadcast with 20-40 grit Al₂O₃ for non-slip surface.

Excess abrasive was removed and a 15 mil (375 μm) sealer coat of ARC 855N was applied

**Results**

**Client Report**
System complies to Mil Spec 32171 high durability deck coating surfaces

80% reduction in slip hazards noted

Annual coatings before ARC: $65,000
Annual ARC coating: $43,000

Savings: $22,000

$ = USD

Previous coating one year after installed.

High traffic regions coated for non-slip.

High traffic regions coated for non-slip.
**ARC 858**

100% solids, thick film, ceramic-reinforced abrasion control epoxy compound

- 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

**Application Areas**
- Pump casings
- Impellers and blades
- Heat exchangers
- Back plates
- Transport screws
- Valves

**Packaging and Coverage**
Nominal, based on a 750 μm (120 mil) thickness

- 250 g kit covers 0,20 m² (2.21 ft²)
- 940 ml cartridge covers 1,25 m² (13.50 ft²)
- 1,5 liter kit covers 2,00 m² (21.53 ft²)
- 5 liter kit covers 6,67 m² (71.76 ft²)
- 16 liter kit covers 21,33 m² (229.63 ft²)

**Technical Data**

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>478,5 kg/cm² (47 MPa)</th>
<th>6,810 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service 70°C</td>
<td>158°F</td>
</tr>
<tr>
<td></td>
<td>Dry Service 160°C</td>
<td>320°F</td>
</tr>
</tbody>
</table>

**Features and Benefits**
- High build - single coat applications
- High adhesive strength
- No underfilm corrosion
- 100% solids, no VOCs, no free isocyanates
- Enhances safe use

**Product Case Study**

**Challenge**

**Issue**
Failed coal tar coating resulted in pitting corrosion on face of gate. Corrosion kept gates from actuating and sealing correctly. Leakage down spillway channel creates icing in winter months.

**Goal**
Prevent further corrosion to gate; Promote improved actuating and sealing.

**Root Cause**
Galvanic corrosion.

**Solution**

**Preparation**
Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile

**Application**
Apply ARC 858 to rebuild pitted areas
Top coat with two coats of **ARC S2** at total DFT of 20 mil (500 μm) to provide smooth, flow efficient surface.

**Results**

**Client Report**
After two years in operation, no signs of corrosion and erosion.

After applying the ARC solution, the spillway gates opened and closed effectively.
Further icing issues reduced.

Corrosion and pitting on the spillway gate.

Pitting repaired using ARC 858.

Gate top coated with 2 coats of ARC S2.
**ARC HT-T**

100% solids, ceramic-reinforced abrasion-resistant epoxy that protects metal against mild abrasion, corrosion, and erosion in elevated temperature immersion

- Rebuild and protect new and old metal equipment
- Perform in immersed aqueous solution conditions up to 110°C (230°F)
- Easily apply by trowel

**Application Areas**

- Oil/water separators
- Oil/gas separators
- Heat exchangers
- Pressure vessels
- Tanks and vessels
- Crystalizers

**Packaging and Coverage**

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

- 5 liter kit covers 6.67 m² (71.76 ft²)

**Technical Data**

| Pull-off Adhesion (ASTM D 4541) | 316,9 kg/cm² (31,1 MPa) | 4,510 psi |
| Maximum Temperature (Dependent on Service) | Wet Service | 110°C | 230°F |
| | Dry Service | 150°C | 302°F |

**Features and Benefits**

- Strong, tough, durable
  - Reduces downtime
- Incorporates fine-graded sizes of reinforcements
  - Permeation and blister resistance
- Spark testable per NACE SP0188
  - Easy inspection
- High adhesive strength
  - Provides reliable performance
  - No under film corrosion
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use

**Product Case Study**

**Challenge**

**Issue**

Severe corrosion affected performance, resulting in reduced production capacity from well heads. Reduced reliability required weld repair of heat exchangers every 15-18 months

**Goal**

Increase operation reliability to more than 18 months; Eliminate weld repair and protect heat exchanger intervals

**Root Cause**

High temperature sea water with high chlorides accelerated corrosion of unprotected steel

**Solution**

**Preparation**

Decontaminate surfaces

Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile

**Application**

Apply ARC HT-T at 40-60 mil (1-1.5 mm) to fare smooth pitted surfaces

Critical sealing surfaces required machined molds to achieve required tolerances

**Results**

**Client Report**

Exceeded 18-month maintenance cycle goal

Inspection at 30 months showed no signs of corrosion damage

Prior maintenance cycle cost (30 months): $83K

ARC repair cost (30 months): $22K

Savings: $61K

$=USD
**ARC HT-S**

100% solids, high temperature resistant, ceramic-reinforced abrasion-resistant epoxy that protects metal against mild abrasion, corrosion, and erosion in elevated temperature immersion

- Perform in immersed aqueous solution conditions up to 150°C (302°F)
- Replace exotic alloys, engineered plastics, ceramics, and conventional coatings
- Easily apply by roller, brush, squeegee, or airless spray

**Application Areas**
- Oil/water separators
- Oil/gas separators
- Heat exchangers
- Fans and housings
- Tanks and vessels
- Pumps and valves

**Packaging and Coverage**

*Nominal, based on a 375 μm (15 mil) thickness*

- 5 liter kit covers 6.67 m² (71.76 ft²)
- 16 liter kit covers 21.33 m² (229.63 ft²)

**Technical Data**

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>365.4 kg/cm² (35.9 MPa)</th>
<th>5,200 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service</td>
<td>150°C</td>
</tr>
<tr>
<td></td>
<td>Dry Service</td>
<td>175°C</td>
</tr>
</tbody>
</table>

**Features and Benefits**

- **Strong, tough, durable**
  - Reduces spare part inventory
  - Reduces downtime
- **Incorporates fine-graded sizes of reinforcements**
  - Resistant to cold wall delamination and permeation
- **Spark testable per NACE SP0188**
- **High adhesive strength to metal**
  - Reduces under-film corrosion
- **100% solids, no VOCs, no free isocyanates**
  - Enhances safe use

**Product Case Study**

**Challenge**

**Issue**
Internal tank corrosion is limiting its service life

**Goal**
Increase equipment life; Protect internal surface against corrosive operating conditions

**Root Cause**
Operation conditions with condensate (demineralized water) and temperature (110°C/230°F) are highly corrosive for the carbon steel tank

**Solution**

**Preparation**
Wash surfaces with hot water
Grit blast to Sa 2.5 with 3 mil (75-125 μm) angular profile

**Application**
Apply ARC HT-S in a two-coat system at 20-24 mil (500-600 μm) final thickness

**Results**

**Client Report**
New tank: $134,500
ARC solution: -$10,000
Total cost prevention: $124,500

**Additional Benefits**
Demineralized water quality meets specification requirements

**Client Follow Up**
Client plans to coat next tank

Corroded tank internal surface.  Product mixing.  Coated tank internals.
ARC BX1

100% solids, modified epoxy formulation reinforced with a proprietary blend of ceramic beads and powders for extremely abrasive sliding wear environments

- Protect areas exposed to sliding abrasion
- Replace ceramic tiles and rubber linings which can disbond more easily
- Easily apply by trowel

Application Areas
- Bins and silos
- Slurry pumps
- Wear plates
- Blow lines
- Chutes
- Transport screws

Packaging and Coverage

Nominal, based on a 6 mm (240 mil) thickness
- 1,5 liter kit covers 0,25 m² (2.69 ft²)
- 5 liter kit covers 0,83 m² (8.97 ft²)
- 20 kg kit covers 1,37 m² (14.70 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>238,9 kg/cm² (23,5 MPa)</th>
<th>3,400 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service 95°C</td>
<td>203°F</td>
</tr>
<tr>
<td></td>
<td>Dry Service 205°C</td>
<td>400°F</td>
</tr>
</tbody>
</table>

Features and Benefits

- High ceramic loading level
  - Extends life of equipment exposed to coarse particle wear
- Chemically resistant polymer matrix
  - Covers a broad range of chemical exposures
- High adhesive strength
  - Resists disbonding
- High build - single coat
  - Allows for vertical build capability to most substrates
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use

Product Case Study

Challenge

Issue
Buckets on continuous excavator were wearing out in less than six months. Traditional weld repair resulted in stress fatigue failure

Goal
Client sought to extend repair interval by 200% and eliminate heat-associated stress fatigue

Root Cause
Heat-related stress fatigue was weakening grain boundaries, leading to cracks and accelerated abrasive wear

Solution

Preparation
Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile

Application
Apply ARC BX1 at an average thickness of 6-8 mm (250-320 mil) only to the regions exposed to sliding abrasion

Results

Client Report
Heat-related stress fatigue minimized by using ARC BX1

Service life increased from 6 to more than 12 months

At 20-month maintenance period only 5 kg of ARC BX1 was needed to repair localized damage

ARC BX1 coating has been applied to three more excavators in same manner at this mine site

Repair life of 6 months with hard face welding.

ARC BX1 coating applied to the boarders between the teeth.

After 20 months only 5 kg of ARC BX1 was needed for repair.
ARC BX2

100% solids, modified epoxy formulation reinforced with a proprietary blend of ceramic beads and powders for fine particle, abrasive sliding wear environments

- Protect areas exposed to moderate sliding abrasion
- Resurface damaged metal in lieu of more traditional weld overlays
- Easily apply by trowel

Application Areas
- Slurry pumps
- Transport screws
- Slurry pipes
- Wear plates
- Hydropulpers
- Transport screws
- Slurry pipes
- Wear plates
- Transport screws
- Slurry pipes
- Wear plates
- Hydropulpers

Packaging and Coverage
Nominal, based on a 3 mm (120 mil) thickness
- 1,5 liter kit covers 0,50 m² (5.38 ft²)
- 5 liter kit covers 1,67 m² (17.94 ft²)
- 20 kg kit covers 2,82 m² (30.32 ft²)

Technical Data

| Pull-off Adhesion (ASTM D 4541) | 238,2 kg/cm² (23,4 MPa) | 3,390 psi |
| Maximum Temperature (Dependent on Service) | Wet Service 95°C | 203°F |
| | Dry Service 205°C | 400°F |

Features and Benefits
- High ceramic loading level
  - Extends life of equipment exposed to fine particle wear
- High adhesive strength
  - Resists disbonding
- Low mixed viscosity
  - Eases mixing, application and finishing
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use

Product Case Study

Challenge

Issue
Flue gas desulfurization units are highly corrosive and hard on equipment

Goal
Extend the life of absorber agitators made with expensive, super duplex alloy to operate in corrosive and abrasive desulfurization environments

Root Cause
Abrasive lime slurry at high velocity in high chloride environment

Solution

Preparation
Abrasive blast surface to Sa 2.5 with 3 mil (75 μm) angular profile using aluminum oxide media

Application
Apply ARC 855 as a primer
Apply ARC BX2 at 3 mm (120 mil)
Dynamically balance impellers and rotating lances using ARC BX2

Results

Client Report
Periodic inspection reports support a minimum of 3 years performance before maintenance

Mixer during operation.

Mixer and lance with the applied ARC 855 and ARC BX2 coatings.

Design was modified to include additional support for the mixer and lance.
**ARC BX5**

**Rapid curing, 100% solids, ceramic-reinforced multi-component coating, formulated for moderate sliding wear and abrasion caused by fine particles**

- Cure under adverse conditions with maximum adhesion
- Quickly patch and repair worn equipment and structures
- Easily apply by trowel

**Application Areas**

- Pneumatic conveyors
- Transport fans
- Screw conveyors
- Cyclones and hoppers
- Wear plates
- Pipe elbows

**Packaging and Coverage**

*Nominal, based on a 3 mm (120 mil) thickness*

- 0,75 liter kit covers 0,25 m² (2.69 ft²)
- 2,5 liter kit covers 0,83 m² (8.97 ft²)

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>224,8 kg/cm² (22,1 MPa)</th>
<th>3,200 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service</td>
<td>60°C</td>
</tr>
<tr>
<td></td>
<td>Dry Service</td>
<td>120°C</td>
</tr>
</tbody>
</table>

**Features and Benefits**

- **Rapid cure chemistry**
  - Quick return to service
- **Surface-tolerant formulation**
  - Bonds to moist and suboptimally prepared substrates
- **100% solids, no VOCs, no free isocyanates**
  - Enhances safe use

**Product Case Study**

**Challenge**

**Issue**
Ceramic tile lasts 4-6 months before cracking and delamination occurs. Exposed steel wears through and requires weld repair before retiling.

**Goal**
Extend patch repair to greater than 30 days; Reduce maintenance cycle time to less than 12 hours

**Root Cause**
Brittle fracture failure of ceramic tiles results from impact of coal; Acidic wash water corrodes steel.

**Solution**

**Preparation**
Grind down residual ceramic epoxy with power tool
Decontaminate surface with solvent (MEK)
Roughen with a rotary grinding tool

**Application**
Apply ARC BX5 at 120-200 mil (3-5 mm) to steel and cove up onto the ceramic tile
Apply ARC S2 at 12 mil (300 μm)

**Results**

**Client Report**
ARC repairs completed in eight hours
ARC solution provided over six months’ service before a touch-up was required
Due to success, client has selected ARC coatings as “patch repair” for all tile-lined chutes and lines

Damage to existing ceramic tiles caused unscheduled shutdown and loss of production.

Installation of ARC BX5.

ARC BX5 with ARC S2 topcoat cures rapidly, allowing fast return to service of chute.
ARC I BX1

100% solids, impact-resistant, ceramic-reinforced epoxy/urethane hybrid coating for severe abrasive wear and high impact resistance

- Protect surfaces exposed to impact ≤50 ft lb (≤68 Nm) and sliding abrasion
- Provide a longer lasting alternative to rubber lining and ceramic tiles
- Resist direct as well as reverse impact forces

Application Areas
- Hoppers/chutes
- Discharge plates
- Slurry elbows
- Rubber elbows
- Pulverizer exhausters
- Vibrating screen decks

Packaging and Coverage
Nominal, based on a 6 mm (240 mil) thickness
- 20 kg kit covers 1,39 m² (14.93 ft²)

Pull-off Adhesion (ASTM D 4541) 222,7 kg/cm² (21,9 MPa) 3,170 psi

Maximum Temperature
(Wet Service) 95°C
(Dry Service) 205°C

Features and Benefits
- Urethane-modified formulation
  - Resists repeated direct and reverse impact forces
- No free isocyanates, 100% solids, no VOCs
  - Enhances safe use
- High ceramic loading level
  - Resists moderate to severe impact

Product Case Study

Challenge
Issue
Failure of a rubber and tile lined chute caused leaks and unscheduled outages with lost production costs of more than $115K/day

Goal
Plant sought increased life cycle of chutes

Root Cause
Seams in rubber lining exposed to highly abrasive slurry discharge caused rubber tears and delamination

Solution
Preparation
Pressure wash and decontaminate surfaces
Power tool clean to Sa 2.5

Application
Apply ARC I BX1 to prepared surfaces to mate up to damaged rubber and tile sections
Use radiant heat lamps to accelerate cure to less than 24 hours

Results
Client Report
Over 200 hours of increased production as a result of utilization of ARC coatings
Rubber (material/labor/downtime): $1.5M
ARC (material/labor/downtime): $417K
Net savings: $1,083M

ARC I BX1 and now ARC I BX1 RC are standard repair items in plant

Discharge flume with damaged tile/rubber liners.
Applying ARC I BX1.
ARC I BX1 coated surfaces.
ARC BX1 RC

A rapid-curing, high impact-resistant, 100% solids, epoxy/urethane hybrid coating with ceramic reinforcements for severe wear regions and impact

- Cure quickly allowing a faster turnaround with repairs
- Coat and protect surfaces exposed to moderate-to-severe impact and sliding abrasion
- Rapidly repair/replace cracked ceramic tile or rubber lining where impact forces combined with sliding wear tear seams and edges
- Easily apply by trowel

Application Areas
- Rubber pump liners
- Discharge plates
- Pipe elbows
- Tile-lined chutes
- Rubber-lined agitators
- Vibrating screen decks

Packaging and Coverage
Nominal, based on a 6 mm (240 mil) thickness
- 1.5 liter kit covers 0.25 m² (2.69 ft²)
- 2.5 kg kit covers 0.42 m² (4.49 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull-off Adhesion (ASTM D 4541)</td>
<td>≥ 238.2 kg/cm² (23.4 MPa) 3,390 psi</td>
</tr>
<tr>
<td>Maximum Temperature (Wet Service)</td>
<td>95°C</td>
</tr>
<tr>
<td>Maximum Temperature (Dry Service)</td>
<td>205°C</td>
</tr>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>205°C</td>
</tr>
</tbody>
</table>

Challenge:

- **Issue**: Coal pulverizers experience unscheduled shutdowns due to impact damage to tile liner. Alternative coatings lasted less than one month.
- **Goal**: Extend repair cycle to a minimum of 6 months
- **Root Cause**: High velocity coal fines impacting brittle ceramic tile

Solution:

- **Preparation**: Power tool clean to SP 11 with 2+ mil (50 µm profile)
- **Application**: Apply 240-375 mil (6-9 mm) of I BX1 RC on 12-hour shutdown to damaged areas, butting up to remaining tile

Results:

- **Client Report**: Inspection after one month showed 95% of product thickness remained with zero delamination
  - **Tile repairs**: $50,000/year
  - **Alternative coatings**: $10,000/year
  - **ARC BX1 RC**: $3,500/year
  - **Savings on tiles**: $46,500/year
  - **Savings on coating**: $6,500/year

**Features and Benefits**

- **Urethane-modified formulation**
  - Resists repeated direct and reverse impact for reliable performance
- **Modified rapid cure curing agent**
  - Reduces cure time to less than 3 hours, getting equipment back online faster
- **100% solids, no VOCs, no free isocyanates**
  - Enhances safe use

**Product Case Study**

- **MPS Coal Pulverizer.**
- **Damaged pulverizer walls.**
- **Coated pulverizer after 1 month.**
ARC MX1

100% solids, ceramic-reinforced multi-component system, formulated for extreme impact and sliding-wear abrasion caused by medium-to-coarse particle flow

- Protect surfaces against both, dry coarse particle erosion and wet slurry abrasion
- Provide a longer lasting alternative to rubber linings and ceramic wear tiles under impact
- Replace CD4, Ni-hard or hardox as wear-resistant material

Application Areas
- Pulverizers
- Hoppers and silos
- Pumps and pipe elbows
- Fans/blowers/cyclones
- Ceramic tile deflector hoods
- Rubber-lined deflector hoods
- Conveyor screws

Packaging and Coverage
Nominal, based on a 6 mm (240 mil) thickness
- 6 kg kit covers 0.37 m² (3.97 ft²)
- 20 kg kit covers 1.23 m² (13.23 ft²)

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>Maximum Temperature (Dependent on Service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>224.8 kg/cm² (22.1 MPa)</td>
<td>Wet Service 95°C (203°F)</td>
</tr>
<tr>
<td>4,200 psi</td>
<td>Dry Service 205°C (400°F)</td>
</tr>
</tbody>
</table>

Features and Benefits
- Tough, ceramic-reinforced coating resists broad range of slurries
  - Extends life of equipment exposed to coarse particle wear
- Advanced hybrid polymer matrix
  - Resists repeated high impact force
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use

Product Case Study
Challenge
Issue
Hard face weld overlay was not meeting 12-month maintenance cycle. Associated repair costs every 12 months equal $4.5K

Goal
Restore and protect conveyor screw from abrasion, improving reliability; Eliminate need for weld overlay on entire flyght

Root Cause
Severe abrasion from bark with up to 10% sand abrade drum and flyghts

Solution
Preparation
Grit blast to Sa 2.5 with 3 mil (75 μm) profile

Application
Apply ARC MX1 at 6 mm (1/4 in) to flyght faces and shaft
Reinforce flyght tips only with hardened weld overlay

Results
Client Report
Maintenance cycle increased from less than 12 months to more than 72 months

Estimated 72-month savings per screw:

$27K

$=USD

Abrasped screw conveyor.
ARC MX1 applied and tips welded.
After 12 months: client identified no issues with performance.
ABRASION-RESISTANT ARC Efficiency & Protective Coatings

ARC MX2

100% solids, ceramic-reinforced multi-component coating, formulated for extreme sliding-wear and abrasion caused by fine particles

- Protect surfaces against both dry fine particle erosion and wet slurry abrasion
- Restore worn equipment to near-original condition
- Easily apply by trowel

Application Areas
- Cyclones
- Valves
- Agitators
- Mixers
- Cleaner cones
- Pipe spools

Packaging and Coverage
Nominal, based on a 3 mm (120 mil) thickness
- 2.5 liter kit covers 0.83 m² (8.97 ft²)
- 16 liter kit covers 5.33 m² (57.41 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>238.9 kg/cm² (23.5 MPa)</th>
<th>3,400 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service 95°C 203°F</td>
<td>205°C 400°F</td>
</tr>
</tbody>
</table>

Features and Benefits
- Tough, ceramic-reinforced coating resists broad range of slurries
  - Extends life of equipment exposed to coarse particle wear
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use
- Low viscosity formulation
  - Simplifies application
  - Lowers installed cost

Product Case Study

Challenge

Issue
Mine production impacted by insufficient pump performance to meet required 300M³/hour flow

Goal
Avoid purchasing additional pumps with an acquisition cost of $25K and operational cost of $3.5K; Meet flow demand and reduce maintenance and operational costs

Root Cause
After 20,000 hours operation in acidic mine water with entrained solids degraded pump internals and critical tolerances

Solution

Preparation
Surfaces grit blasted to Sa 2.5 with 3 mil (75 μm) angular profile

Application
Apply ARC 858 to rebuild pump back to tolerances where abrasion and erosion had damaged casing and impeller
Apply ARC MX2 in high-wear regions to address abrasive suspended solids
Apply final topcoat of ARC 855 for additional corrosion protection and to improve flow efficiency

Results

Client Report
After repair, pumps operated at more than 94% of OEM efficiency with 3% less energy consumed

Cost Avoidance
New pump installation/operation: $28.50K
ARC material and labor: $6.80K
Associated energy saving: $3.29K
Total first year savings (per pump): $18.41K

$=USD
**ARC T7 AR**

*A ceramic reinforced novolac vinyl ester, protective barrier coating for high-temperature, chemical exposures where aggressive, abrasive conditions may be present*

- Resist a wide range of inorganic, as well as organic, acids and hydrocarbon-based chemical compounds
- Resists abrasion
- Easily apply by trowel

**Application Areas**
- Flue gas ducts
- Process tanks
- Agitator blades
- Slurry pumps
- Pipes
- Rubber-lined reactor tanks

**Packaging and Coverage**

*Nominal, based on a 3 mm (120 mil) thickness*

- 20,4 kg kit covers 2,50 m² (27.00 ft²)

**Technical Data**

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>158 kg/cm² (15,5 MPa) 2,249 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td></td>
</tr>
<tr>
<td>Wet Service (water)</td>
<td>135°C</td>
</tr>
<tr>
<td>Dry Service (continuous)</td>
<td>180°C</td>
</tr>
</tbody>
</table>

**Features and Benefits**

- **Chemical-resistant polymer matrix**
  - Resists a broad spectrum of organic and inorganic acids
- **Incorporates high-strength ceramic reinforcements**
  - Permeation-resistant
  - Abrasion-resistant
- **Toughened resin structure**
  - Resists cracking and disbondment under thermal cycling conditions

**Product Case Study**

**Challenge**

**Issue**

Rubber-lined exhaust elbows clog up with gypsum and wear out in less than six months requiring unit shutdown to replace

**Goal**

Extend repair cycle and reduce gypsum buildup

**Root Cause**

Carryover contains gypsum and highly corrosive phosphoric acid

**Solution**

**Preparation**

Damaged rubber lining removed

Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile

**Application**

Apply ARC T7 AR to 240-360 mil (6-9 mm)

Apply veil coat of **ARC T7 AR VC**

**Results**

**Client Report**

Elbows lasted 6 months and localized high-wear region was repaired at nominal cost

Additional product thickness to be applied in future elbows

Annual rubber lining: $75,000

ARC lining: **$52,000**

Savings: **$23,000**

$=USD

---

*Flash cooler with exhauster.*

*Exhaust elbow in shop laydown.*

*Repaired unit ready for install.*
ARC S1PW

100% solids, reinforced thin film coating to protect structures against erosion, corrosion, and chemical attack. ARC S1PW is certified for cold water service requiring NSF 61 certification.

- Provide excellent barrier protection against erosion, corrosion, and chemical attack
- Meet all requirements of NSF 61 for potable, cold water service
- Easily apply by brush, roller, or plural component spray

Application Areas
- Crude oil storage tanks
- Chemical storage tanks
- Wastewater clarifiers
- Thickener tanks
- Cooling water systems
- Potable water pumps, valves, and fittings

Packaging and Coverage
Nominal, based on a 375 μm (15 mil) thickness
- 1125 ml cartridge covers 3.0 m² (32.3 ft²)
- 5 liter kit covers 13.3 m² (143.52 ft²)
- 16 liter kit covers 42.67 m² (459.26 ft²)

Features and Benefits
- Ceramic-reinforced
  - Resists erosion
- Low viscosity
  - Easy to apply
- Excellent adhesion
  - No under-film corrosion
- Compliant to NSF 61 standard for cold water service
  - Non-contaminating formulation

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (Metal)</th>
<th>ASTM D 4541</th>
<th>477 kg/cm² (46.8 MPa)</th>
<th>6,790 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature</td>
<td>Wet Service (NSF 61)</td>
<td>23°C</td>
<td>75°F</td>
</tr>
<tr>
<td>(Dependent on Service)</td>
<td>Dry Service (General)</td>
<td>62°C</td>
<td>144°F</td>
</tr>
<tr>
<td></td>
<td>Wet Service (General)</td>
<td>52°C</td>
<td>126°F</td>
</tr>
</tbody>
</table>

Product Case Study

Challenge

Issue
Exposed aggregate in sand filter was promoting algae growth, leading to increased vessel draining and cleaning

Goal
Seal surface and apply coating to reduce algae growth

Root Cause
Exposed aggregate promotes algae retention

Solution

Preparation
Surfaces grit blasted to CSP3 finish

Application
Skim coat of cementitious mortar applied to resurface concrete.
Two coats of ARC S1PW applied at 15-20 mil (375-500 μm) in alternating colors

Results

Client Report
Vessel has been in continuous service for over seven years
Algae cleaning can be easily done with low pressure hoses
Cleaning time reduced from two times per month to three times per year—saving over 200 man-hours per year

Drained sand filter vessel.
Installing ARC S1PW coating.
Sand filter in service.
ARC S2

100% solids, ceramic-reinforced thin film coating to protect structures against erosion, abrasion, and corrosion

- Protect against corrosion and erosion
- Provide improved material flow properties
- Apply by brush, roller, airless or plural component spraying

Application Areas
- Tank lining
- Fans and housings
- Condensers
- Heat exchangers
- Hoppers
- Pumps and valves

Packaging and Coverage
Nominal, based on a 375 μm (15 mil) thickness
- 1125 ml cartridge covers 3.00 m² (32.29 ft²)
- 1.5 liter kit covers 3.94 m² (42.4 ft²)
- 5 liter kit covers 13.33 m² (143.52 ft²)
- 16 liter kit covers 42.67 m² (459.26 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>463 kg/cm² (45.5 MPa)</th>
<th>6,590 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service</td>
<td>52°C</td>
</tr>
<tr>
<td></td>
<td>Dry Service</td>
<td>80°C</td>
</tr>
</tbody>
</table>

Features and Benefits

- 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
- Low viscosity: brush, roller, or spray applied coating
  - Easy to apply

Product Case Study

Challenge

Issue
Previously applied coal tar coatings failed prematurely at two years, resulting in unanticipated floor corrosion. Corrosion protection of six years required for maintenance cycle

Goal
Reduce pitting corrosion; Extend maintenance cycle to six years

Root Cause
Thickener solution, containing sulfates, chlorides, and abrasive slurry attacks unprotected steel

Solution

Preparation
Grit blast remove old coal tar epoxy
Grit blast to Sa 2.5 with 3 mil (75 μm) profile

Application
Apply ARC S2 stripe coat to weld seams
Apply two coats of ARC S2 at 15-20 mil (375-500 μm)/coat

Results

Client Report
ARC coating providing more than six years of service life (three times more than coal tar solution)
Elimination of two thickener clean outs provide additional savings

Annualized Coating Solution

Previous coal tar (material and labor): $12K
ARC repair (material and labor): $6K
Savings per year: $6K

$=USD
**ARC S4+**

*100% solids, advanced-reinforced thin film coating to protect structures against extreme chemical attack*

- Protect against extreme chemical attack in immersion
- Apply by brush, roller, airless or plural component spraying

**Application Areas**

- Exhaust gas ductwork
- Chemical storage tanks
- Heat exchangers
- Fans and housings
- Chimneys and stacks
- Tank linings

**Packaging and Coverage**

*Nominal, based on a 375 μm (15 mil) thickness*

- 1125 ml cartridge covers 3,00 m² (32.30 ft²)
- 5 liter kit covers 13,33 m² (143.52 ft²)
- 16 liter kit covers 42,70 m² (459.30 ft²)

**Technical Data**

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>330 kg/cm² (32,4 MPa)</th>
<th>4,700 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service 60°C</td>
<td>140°F</td>
</tr>
<tr>
<td></td>
<td>Dry Service 150°C</td>
<td>300°F</td>
</tr>
<tr>
<td></td>
<td>Post Cure Wet Service 95°C</td>
<td>203°F</td>
</tr>
</tbody>
</table>

**Features and Benefits**

- Multi-functional chemistry
  - Resists concentrated chemicals
- High cross-link density
  - Permeation-resistant
  - Improved thermal stability
  - Enhanced mechanical properties
- Spark testable per NACE SP0188
  - Easy post-application inspection
  - Facilitates quality assurance
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use

**Product Case Study**

**Challenge**

**Issue**
Contamination from aging rubber lining created water quality issues that impacted steam-generation equipment

**Goal**
Eliminate sulfur leaching into water; Apply barrier coating that is resistant to demineralized water and regeneration chemicals

**Root Cause**
Aged vulcanized rubber lining leaches sulfur into demineralized water

**Solution**

**Preparation**
Hydro blast to remove rubber lining
Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile

**Application**
Apply ARC 858 to restore and smooth surface
Apply two coats of ARC S4+ at total DFT 25-30 mil (630-750 μm)

**Results**

**Client Report**
After coating, filled vessels require no flush or rinse to remove residual contamination
In operation, the vessels showed sulfur levels not greater than 1 ppb
Lining has been in service for more than 5 years

---

*Removal of the rubber lining in progress. Blistering of the lining is visible.*

*External view of the tank.*

*After proper surface preparation, ARC S4+ was applied in a two-coat system.*
ARC SD4i

100% solids, advanced-reinforced thin film coating to protect structures and equipment in extreme immersion services

- Protect against corrosion and erosion
- Provide extended protection in aggressive chemical immersion services
- Apply by brush, roller, or airless or plural component spraying

Application Areas

- Flotation cells
- Thickener tanks
- Hydrocyclones
- Slurry pipes
- Slurry tanks
- Bins, hoppers, and silos

Packaging and Coverage

Nominal, based on a 375 μm (15 mil) thickness

- 1125 ml cartridge covers 3,00 m² (32.30 ft²)
- 5 liter kit covers 13,33 m² (143.52 ft²)
- 16 liter kit covers 42,67 m² (459.26 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>241 kg/cm² (23.7 MPa)</th>
<th>3,430 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet Service</td>
<td>65°C</td>
<td>149°F</td>
</tr>
<tr>
<td>Dry Service</td>
<td>120°C</td>
<td>248°F</td>
</tr>
</tbody>
</table>

Features and Benefits

- Abrasion-resistant surface
  - Extends equipment life
- High gloss, low drag surface
  - Improves material flow
- 100% solids, no VOC’s, no free isocyanates
  - Enhances safe use
- Low viscosity, thin film, brush, roller, and spray applied
  - Easy to apply

Product Case Study

Challenge

Issue
Hydrocyclone on offshore platform corrodes rapidly without protection, requiring repeated weld overlay repairs

Goal
Improve the efficiency of separation by preventing corrosion and metal loss/damage; Avoid equipment replacement with a super duplex stainless steel unit at a cost of greater than $65K

Root Cause
High chloride and solids concentration of solids and hydrocyclone turbulence

Solution

Preparation
Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile
Treat to remove residual chlorides

Application
Apply ARC 858 to areas of severe corrosion pitting and rebuild smooth surface
Apply two coats of ARC SD4i with DFT of 30-40 mil (750-1000 μm) per coat for abrasion and corrosion protection and enhanced flow

Results

Client Report
Unit is operational for more than 4 years since ARC solution. Inspection at 3-year point showed no signs of coating failure or pitting

| Replacement: | $65,000 |
| ARC material: | $3,200 |
| Labor to install: | $13,000 |
| Total Savings: | $48,800 |

Payback vs. Replacement = less than 3 months
ARC S7

A low-VOC, novolac vinyl ester, sprayable protective barrier coating for high-temperature chemical exposures where thermal cycling conditions may be present

- Resist thermal cycling conditions up to 180°C (350°F)

Application Areas
- Flue gas ducts
- Storage and process tanks
- Gas/gas heat exchangers
- Electrostatic precipitators
- Chimney stack liners
- Bag filters

Packaging and Coverage
Nominal, based on a 375 μm (15 mil) thickness
- 14 liter kit covers 37,33 m² (401.86 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull-off Adhesion (ASTM D 4541)</td>
<td>166 kg/cm² (16,3 MPa)  2,370 psi</td>
</tr>
<tr>
<td>Maximum Temperature</td>
<td></td>
</tr>
<tr>
<td>Wet Service</td>
<td>135°C (water)</td>
</tr>
<tr>
<td>Dry Service</td>
<td>180°C (continuous)</td>
</tr>
</tbody>
</table>

Features and Benefits
- Chemical-resistant polymer matrix
  - Resists a broad spectrum of organic and inorganic acid
- Incorporates fine-graded sizes of reinforcements
  - Permeation-resistant
- Toughened resin structure
  - Resists cracking and disbondment under thermal cycling conditions
- High dielectric resistivity
  - Allows user to inspect with high voltage spark testing per NACE SP0188

Product Case Study

Challenge

Issue
Previously specified coating failed within 12 months. Cost of alloy cladding was not justified. If left unprotected, exposed steel would fail due to corrosion within 12 months

Goal
Extend service life to more than 24 months with no evident corrosion

Root Cause
Condensing acids at the cold areas of the ductwork caused heavy corrosion on framework of the duct

Solution

Preparation
Decontaminate surface
Grit blast to Sa 2.5 with 3 mil (75 μm) angular profile

Application
Apply ARC S7 by brush as stripe coat to all weld seams
Airless spray apply ARC S7 at total DFT of 20 mil (500 μm)

Results

Client Report
After extensive testing and approval, ARC S7 was selected by OEM as new lining system
Six units were coated with ARC S7 and shipped to job sites for installation
More than 1200 m² of ARC S7 has been installed in bag houses for OEM client

Original coating started to fail within 12 months of application.

ARC S7 is applied in ducts using airless spray equipment.

Bag house protected with ARC S7 in service over 2 years with no failures.
ARC CS2

100% solids, mineral-reinforced, wear-resistant, low-viscosity epoxy

- Protect new and old concrete subject to mild chemical and/or physical damage
- Replace tiles, outlast paints and other concrete coatings
- Apply by roller, brush, squeegee, or airless or heated plural component spray

Application Areas
- Concrete tanks
- Secondary containment
- Water intakes and dams
- Sumps, drains, and pits
- Process floor areas
- Pump and equipment bases

Packaging and Coverage
Nominal, based on a 500 μm (20 mil) thickness
- 16 liter kit covers 32.00 m² (344.45 ft²)

Features and Benefits
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use
- Can be applied to dry or damp concrete
  - Saves time by allowing application under a variety of conditions
- Surface modified mineral reinforcements
  - Excellent resistance to permeation
- Adhesion exceeds cohesive strength of concrete

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>Wet Service</th>
<th>&gt;35.1 kg/cm² (&gt;3.4 MPa)</th>
<th>&gt;500 psi Concrete Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>52°C</td>
<td>125°F</td>
<td></td>
</tr>
<tr>
<td>Dry Service</td>
<td>93°C</td>
<td>200°F</td>
<td></td>
</tr>
</tbody>
</table>

Product Case Study

Challenge

Issue
Coating destroyed in secondary containment bund after spills of aluminum sulfate

Goal
Protect concrete and other structures from chemical attack; avoid cost of lost product and potential fines

Root Cause
Reinforcement content of previous coating allowed wicking of aggressive chemicals; Substrate attack caused failure

Solution

Preparation
HP water blast 600 bar (8500 psi)
Decontaminate with IMS II

Application
Apply ARC 797 to prime
Apply ARC 988 to pitch to grade
Apply ARC CS4 to seal floor
Apply ARC CS2 to protect walls

Results

Client Report
More than 3 years without damage to the coating
Avoided possible fines
Avoided annual reconstruction costs
Avoided first year recoat costs: $8.5K
3 year savings for recoating: $25.5K

$=USD

Failed coating after spills.

Cleaned and prepared surface.

Applying ARC CS4 topcoat.
ARC CS4

100% solids, highly chemical-and wear-resistant low viscosity, thin film 100% Novolac epoxy

- Protect new and old concrete subject to severe chemical attack
- Apply by roller, brush, squeegee, or airless or heated plural component spray

Application Areas
- Chemical tanks
- Secondary containment
- Sumps, drains, and pits
- Neutralization tanks
- Chemical process floors
- Pump foundations

Packaging and Coverage
Nominal, based on a 500 μm (20 mil) thickness
- 5 liter kit covers 10,00 m² (107.64 ft²)
- 16 liter kit covers 32,00 m² (344.45 ft²)

Technical Data
<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>&gt;35,1 kg/cm² (&gt;3,4 MPa)</th>
<th>&gt;500 psi Concrete Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service (continuous) 40°C 105°F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wet Service (intermittent) 52°C 125°F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dry Service 80°C 175°F</td>
<td></td>
</tr>
</tbody>
</table>

Features and Benefits
- Resistant to broad range of acids and caustics
  - Easy coating selection
- Durable high-performance coating
  - Outlasts conventional coatings
- 100% solids, no VOCs, no free isocyanates
  - Enhances safe use
- Adhesion exceeds cohesive strength of concrete

Product Case Study

Challenge

Issue
Severe corrosion to failing acid brick-lined concrete basin resulted in leaks and environmental fines

Goal
Avoid future fines and return basin to chemical-resistant status

Root Cause
Sulfuric and hydrochloric acids

Solution

Preparation
Old acid brick was removed as well as damaged concrete
Surfaces abrasive grit blasted and alkaline washed

Application
Cementitious mortar used to resurface damaged concrete
All surfaces coated with two coats of ARC CS4 at 15-20 mil (375-500 μm)/coat

Results

Client Report
Repairs carried out over 2-week period
Basin operated for more than six years before repairs were required
Acid brick estimate: $150,000
ARC lining: $47,000
Savings: $103,000

$=USD

Basin in petrochemical complex.
Surface preparation.
ARC CS4 final application.
ARC NVE VC

2-layer system, high-performance modified novolac vinyl ester coating for concrete where extreme chemical resistance is required

* Serve as a stand-alone, thin film coating
* Protect against a wide range of concentrated acids, organic solvents, and alkalis
* Easily apply by brush, roller, squeegee, or airless spray

Application Areas
- Battery rooms
- Bleaching areas
- Pickling/plating lines
- Sumps, trenches, and pits
- Chemical containments
- Bleaching areas
- Chemical containments

Packaging and Coverage
Nominal, based on a 300 μm (20 mil) thickness
- System Kit covers 9.60 m² (103.30 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>&gt;38 kg/cm² (3.8 MPa)</th>
<th>551 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet</td>
<td>130°C</td>
</tr>
<tr>
<td></td>
<td>Dry</td>
<td>200°C</td>
</tr>
</tbody>
</table>

Product Case Study

Challenge

Issue
Fiberglass mat-reinforced polyester lining cracked and delaminated from process floor in ClO₂ mixing room in bleach plant

Goal
Replace failed lining with more chemically resistant liner

Root Cause
Spills of 15% ClO₂

Solution

Preparation
Surfaces decontaminated then surface ground to CSP3 finish

Application
Damaged concrete re-pitched to drain at 2° slope using cementitious mortar

ARC NVE primer applied followed by two coats of ARC NVE VC at 15-20 mil (375-500 μm)/coat

Results

Client Report
Coated areas have been in continuous service for over 4 years

Fiberglass*: $35,000
ARC repairs: $27,000
Savings: $12,000

*Lasts one year

Images:
- Delaminated fiberglass mat polyester.
- NVE VC in service.
- NVE VC in service.
ARC Efficiency & Protective Coatings

CONCRETE HIGH-BUILD

ARC 791

100% solids, high-build, quartz (SiO₂)-reinforced, highly chemically resistant, modified epoxy coating that can bond to damp concrete, concrete resurfacer

- Resurface concrete damaged by chemical attack or mechanical stress
- Bond to damp concrete, making substrate impermeable for aggressive chemicals
- Apply to vertical substrates at nominal DFT of 6 mm (250 mil) using ARC 797 primer
- Easily apply by trowel

Application Areas
- Acid and alkali spill areas
- Bottling lines
- Wastewater treatment
- Concrete tanks/sumps
- Food processing plants
- Trenches and drains
- Tile repointing

Packaging and Coverage
Nominal, based on a 6 mm (240 mil) thickness
- System Kit covers 4.10 m² (44.13 ft²)
- Bulk Kit covers 16.70 m² (180.00 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion</th>
<th>(ASTM D 4541)</th>
<th>&gt;35.1 kg/cm²</th>
<th>&gt;3,4 MPa</th>
<th>&gt;500 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Service Temperature (Dependent on Service) (Water immersion)</td>
<td>Wet Service (continuous)</td>
<td>66°C</td>
<td>150°F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dry Service (continuous)</td>
<td>93°C</td>
<td>200°F</td>
<td></td>
</tr>
</tbody>
</table>

Features and Benefits
- Coefficient of thermal expansion comparable to concrete
- Resists cracking and delamination
- 100% solids, no VOCs, no free isocyanates
- Enhances safe use
- Bonds to dry or damp concrete
- Saves time
- Versatile
- Adhesion exceeds cohesive strength of concrete

Product Case Study

Challenge

Issue
Uncoated concrete neutralization pit for boiler feed water treatment required protection against dilute acid used in demineralization process

Goal
Provide long-term protection of the concrete

Root Cause
As part of the demineralization process, pits, drains, and plinths are exposed to flush water with HCl and NaOH

Solution

Preparation
Allow concrete to reach full 28-day cure
Mechanically scarify surface to CSP3 finish

Application
Apply ARC 791 coating to mild areas of exposure at .250 in (6.4 mm)
Apply ARC 988 coating to aggressive areas of exposure at .250 in (6.4 mm)

Results

Client Report
ARC was in service for 5 years without problem until plant was closed for economic reasons

Concrete protected with ARC 791 and ARC 988.
ARC specified by plant engineer.
Environmental conditioning required during application.
CONCRETE HIGH-BUILD

ARC 988

Highly chemically resistant, 100% solids, pure novolac resin-based, quartz-reinforced concrete resurfacer

- Resurface new and rebuild old concrete degraded by chemical or physical damage
- Protect against concentrated acids (98% sulfuric acid), organic solvents, and alkalis
- Easily apply by trowel

Application Areas

- Battery rooms
- Pickling/plating lines
- Sumps, trenches, and pits
- Chemical containments
- Pump foundations
- Concentrated acid areas

Packaging and Coverage

Nominal, based on a 6 mm (240 mil) thickness

- System Kit covers 4.10 m² (44.13 ft²)
- Bulk Kit covers 16.70 m² (180.00 ft²)

Technical Data

<table>
<thead>
<tr>
<th>Pull-off Adhesion (ASTM D 4541)</th>
<th>&gt;3.51 kg/cm² (&gt;34 MPa)</th>
<th>&gt;500 psi Concrete Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service (continuous) 66°C</td>
<td>150°F</td>
</tr>
<tr>
<td>(Water immersion) Dry Service (intermittent) 93°C</td>
<td>200°F</td>
<td></td>
</tr>
</tbody>
</table>

Product Case Study

Challenge

Issue
Current coatings used in chemical storage areas were failing within 2 years of application; Exposed concrete results in increased risk of environmental spills

Goal
Provide no less than 2 years of protection to concrete infrastructure, reducing risk of environmental spill

Root Cause
Continuous exposure to 54% H₃PO₄ attacks cement paste in concrete leading to concrete degradation

Solution

Preparation
Neutralize and thoroughly scarify concrete

Application
Trowel apply 6 mm (.25 in) of ARC 988
Recut expansion joints and fill with chemically resistant joint sealant

Results

Client Report
Coating performing without failure for more than 3 years
Based on success, a further 10,000 m² (100,000 ft²) has been coated with ARC products

Benefits
Protection of concrete containment
Reduced risk of environmental spills and associated fines

ARC 988-coated pump base: good condition after four years.
ARC 988-coated processing areas.
ARC 988-coated floor areas.
ARC NVE

*Three-layer system, high-performance, quartz-reinforced novolac vinyl ester lining for concrete applications requiring extreme chemical resistance and moderate abrasion and impact protection*

- Replace acid-resistant tiles or overlays of phenolic, furan, polyester, or concrete
- Protect against concentrated acids, organic and inorganic acids, solvents, and alkalis

**Application Areas**

- Battery rooms
- Pickling/plating lines
- Bleaching areas
- Sumps, trenches, and pits
- Chemical containments
- Chemical loading stations

**Packaging and Coverage**

*Nominal, based on a 6 mm (240 mil) thickness*

- System Kit covers 9.70 m² (104.00 ft²)

**Technical Data**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull-off Adhesion (Excellent - 100% Concrete Failure) (ASTM D 4541)</td>
<td>≥ 39 kg/cm² (3.96 MPa)</td>
<td>&gt; 560 psi</td>
</tr>
<tr>
<td>Maximum Temperature (Dependent on Service)</td>
<td>Wet Service (continuous)</td>
<td>135°C (275°F)</td>
</tr>
<tr>
<td></td>
<td>Dry Service (continuous)</td>
<td>200°C (392°F)</td>
</tr>
</tbody>
</table>

**Features and Benefits**

- Resists concentrated chemicals, including alkalis, acids and solvents
- Covers a broad range of chemical exposures
- Coefficient of thermal expansion comparable to concrete
- Resists disbondment
- Deep penetrating primer system
- Promote high adhesion to concrete

**Product Case Study**

**Challenge**

**Issue**
Failing tile liner and underlying concrete contaminating stock product; Outage for repairs was only 72 hours

**Goal**
Resurface and seal chest walls and prevent future contamination of pulp stock

**Root Cause**
Hot bleached stock attacked mortar and grout lines causing tile delamination and attack of underlying concrete

**Solution**

**Preparation**
Old tile removed, then surfaces abrasive grit blasted to CSP 3 finish

**Application**
NVE primer applied followed by 3 coats of NVE topcoat at 120-200 mil (3-5 mm)/coat; Total DFT 360-600 mil (9-12.5 mm)

Final veil coat of NVE VC applied at 15-20 mil (375-500 µm)

**Results**

**Client Report**
Repairs carried out over 3 days
Chest is operational now for more than 1 year with no issues

<table>
<thead>
<tr>
<th>Tile replacement*</th>
<th>$65,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC repairs</td>
<td>$47,000</td>
</tr>
</tbody>
</table>

**Savings:** $22,000

*Tile repair would have only addressed 25% of area

$=USD

Chest wall after tile removed and blasted.

Installing ARC NVE coating.

Applying NVE sealer coat.
Dispensing Systems

Pneumatically operated dispensing and spraying systems promotes accurate mixing and product placement with minimal waste for those ARC coatings packaged in dual component cartridges. Auto-orienting, resealable caps, auto-lock static mixers, and snap-on atomizing spray heads compliment this approach.

Simple to Use
- Same gun is adjustable for all ARC products in cartridge configuration
- Easy, drop-in side loading
- Retraction trigger automatically releases cartridge when empty
- Optimized static mixer design ensures complete mix at head
- Resealable, auto-aligning end caps extend shelf life of partially used cartridges
- Low air volume demand allows for convenience of plant air (dry and oil-free) use

Pneumatic Gun
The heart of the system is the ergonomically correct, pneumatically actuated gun with adjustable mix ratio setting capabilities for 1:1, 2:1, 3:1, and 4:1 mix ratios. This single unit allows for application of ARC 858, S1PW, S2, SD4i and S4+, all of which are configured to the two-component cartridge fill package. Its sealed unit construction is virtually maintenance-free and its adjustable fluid and atomizing air regulators allow you to optimize flow and atomizing air to meet your specific application requirement. The dual-stage trigger with integrated atomizing air regulator and piston feed allows for single-point adjustment. This unit is ideal for shop applications as well as smaller field installations and touch ups for larger jobs.

Static Mixers
Atomizing mixers for ARC S1PW, S2, SD4i, and S4+ utilize a unique four-chamber static mixer which is highly efficient and reduces mixer length, enabling increased mobility and ease of use. These mixers have a quick lock alignment capability to ensure proper attachment to cartridge. They are available with preconfigured straight pattern tips.
Dispensing tips for ARC 858 utilize a helical mix chamber design for consistency and completeness of mix. These mixers have a quick lock alignment capability to facilitate proper attachment to cartridge.
Application Tools

*Having the right tool to apply the product is always a benefit. Now you can buy the same tools supplied with each kit of ARC coating. Made of tough, injection molded polyethylene these tools are designed to provide comfort, ease, of use, and a high quality finish.*

Mixing Sticks
These 4.7 cm (12 in) long mixing sticks have an ergonomically designed handle to provide increased comfort when mixing highly viscous products. A double chamfered chisel design on the end as well as sides improves use as a mixing stick when using the tool to scrape unmixed product off the bottom or side wall of a container or when used as an application tool.

Applicator Spatula
Made from injection-molded polyethylene, these flexible tools are ideal for applying and finishing high-viscosity grade ARC coatings.

Applicator Brush
These 15 cm (6 in) long injection-molded polyethylene handled brushes have 5 cm (2 in) wide nylon bristle brushes which are cut back for stiffness, making them ideal for applying 100% solids ARC coatings.
ARC Composites

METAL COMPOSITE SYSTEMS

**Specialty Repair**

5/5ES
- Paste Grade and Putty Grade
- Emergency Patching Compound
- Underwater Cure

10
- Paste Grade
- Machinable Rebuilding Compound

**Erosion/Corrosion-Resistant**

855
- Erosion-Resistant
- Fluid Grade Coating

855N
- High Durability Deck Coating
- Mill Spec 32171

858
- Erosion-Resistant
- Paste Grade Coating
- Faring Compound

HT-T
- High-Temperature
- Erosion-Resistant
- Paste Grade Coating

HT-S
- High-Temperature
- Erosion-Resistant
- Fluid Grade Coating

**Corrosion Chemical**

S1PW
- General Service
- Chemical-Resistant Sprayable Coating
- NSF Certified

S2
- Erosion-Resistant
- General Service
- Chemical-Resistant Sprayable Coating

SD4i
- Erosion-Resistant
- Moderate Service
- Chemical-Resistant Sprayable Coating

S4+
- Extreme Service
- Chemical-Resistant Sprayable Coating

S7
- High-Temperature
- Severe Exposure
- Chemical-Resistant Sprayable Coating

**Abrasion-Resistant**

BX2
- Fine-Particle Wear Compound

MX2
- Pure Al₂O₃
- Fine-Particle Wear Compound

BX5
- Rapid Cure
- Fine-Particle Wear Compound

BX1
- Coarse-Particle Wear Compound

IBX1
- Coarse-Particle
- Impact-Resistant Wear Compound

IBX1 RC
- Impact-Resistant Wear Compound
- Rapid Cure
- Fast Turn-Around

MX1
- Extreme Wear Compound

T7 AR
- High Chemical Resistance
- High Temperature Resistance
- Extreme Wear-Resistant
PRODUCT OVERVIEW

CONCRETE COMPOSITE SYSTEMS

Primers
- 797
  - 100% Solids
  - Epoxy Primer Sealer
- NVE PC
  - Novolac Vinyl Ester
  - Primer Sealer

Thin-Film Coating
- CS2
  - 100% Solids
  - General Service
  - Chemical-Resistant Concrete Coating
- CS4
  - 100% Solids
  - Aggressive Exposure
  - Chemical-Resistant Concrete Coating
- NVE VC
  - Novolac Vinyl Ester
  - Severe Exposure
  - Chemical-Resistant Concrete Coating

High-Build Coating
- 791
  - 100% Solids
  - Quartz-Reinforced
  - General Service
  - Chemical-Resistant Concrete Resurfacer
- 988
  - 100% Solids
  - Quartz-Reinforced
  - Aggressive Exposure
  - Chemical-Resistant Concrete Resurfacer
- NVE
  - Novolac Vinyl Ester
  - Quartz-Reinforced
  - Severe Exposure
  - Chemical-Resistant Concrete Resurfacer
Global Solutions, Local Service

Since its founding in 1884, the A.W. Chesterton Company has successfully met the critical needs of its diverse customer base. Today, as always, customers count on Chesterton solutions to increase equipment reliability, optimize energy consumption, and provide local technical support and service wherever they are in the world.

Chesterton’s global capabilities include:

- Servicing plants in over 100 countries
- Global manufacturing operations
- More than 500 Service Centers and Sales Offices worldwide
- Over 1200 trained local Service Specialists and Technicians

Visit our website at www.arc-epc.com