

ATB-300® - corrosion protection



Chemical Processing



Waste Water Treatment



Petrochemical Industry



Pharmaceuticals



Heavy Engineering



Power Generation

Flowcrete Corrosion Protection

References
 Amoco
 BASF
 Baxter Healthcare
 Bayer
 BP Chemical
 Dupont
 Philips Petroleum
 Rhône Poulenc
 Shell
 Solvay



Flowcrete Corrosion Protection comprises a range of seamless systems based on the unique ATB-300[®] shrink free modified vinyl ester resins.

By withstanding aggressive environments, they provide the ultimate corrosion protection against highly concentrated acids, alkalis and solvents.

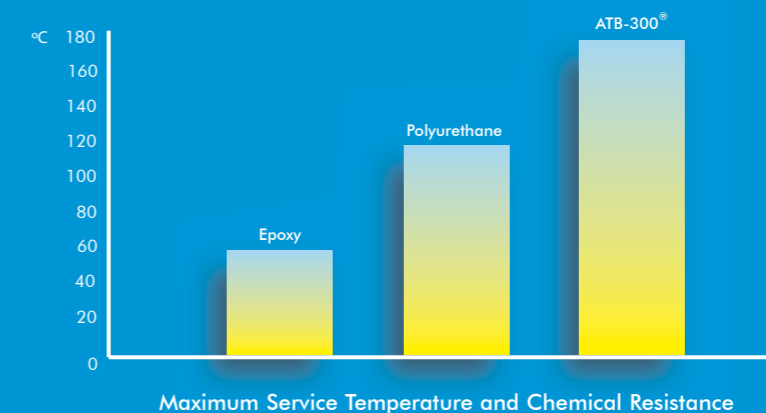
Why use Flowcrete Corrosion Protection ATB-300[®] Systems?

- Highest mechanical and thermal shock resistance.
- First class resistance to most acids, alkalis and solvents.
- Shrink free imposes no stress.
- Withstands abrasion and impact.
- Resistant to cracking and crazing.
- Exceptional temperature resistance.
- Fast cure minimises downtime.

Environmental legislation places great emphasis on both internal and external protection of chemical storage and production facilities as well as bunding around them.

Flowcrete corrosion protection systems meet all safety considerations for industrial production and prevention of pollution.

Project Quality is guaranteed by our global network of Flowcrete ATB-300[®] specialist applicators.



Technical Specifications

1 Coatings



Roller and spray applied vinyl ester coatings:

- RC = 0.5 - 1mm roller coating.
- RC Composite = 1 - 2mm textured coating.
- SC = 0.5 - 1mm spray applied coating.
- SL = 3mm self levelling floor finish.
- Coatings for metal structures are available.

2 Linings



Hand or spray applied vinyl ester based glass fibre reinforced linings:

- GL = 2 - 3mm glass fibre reinforced lining.
- Honeycomb 'C' = insulating and isolating board with conductive face for use with GL linings.

3 Floor Screeds and Renders



Horizontal and vertical trowel applied vinyl ester based systems:

- H-05 = 5mm thick floor screed.
- H-10 = 10mm thick floor screed.
- H-15 = 15mm thick floor screed.
- V-05 = 5mm thick wall render.

4 Antistatic Systems



Electrostatic dissipating (ESD) systems are needed for areas of explosion risk such as for dry powder processing zones, solvent handling and storage:

- ESD RC = 0.3mm antistatic roller coating.
- ESD GL = 2 - 3mm antistatic glass fibre reinforced lining.
- ESD H-10 = 10mm antistatic floor topping.

PRODUCT SELECTOR

How to choose the optimum product for your application:

- Select your intended area of application.
- Identify possible systems options.
- Make your final system selection using the rating given by characteristics.

SYSTEM PERFORMANCE GUIDE

The table shows how well the system complies with different performance characteristics.

Scale of 1 to 5:
5 Excellent
4 Very good
3 Good (Pass)
2 Fair
1 Poor

COMPARATIVE PERFORMANCE OF ALL AVAILABLE SYSTEMS

System Options	RC Roller Coat	RC Composite	SC Spray Coat	SL Self Levelling	GL Glass Lining	Honeycomb 'C'	V-05 Vertical	H-05 Horizontal	H-10 Horizontal	H-15 Horizontal
	Coatings				Linings		Floor Screeds and Renders			
Areas of application	Coatings				Linings		Floor Screeds and Renders			
Secondary Containment Bunds					✓	✓	✓	✓	✓	✓
Storage and Warehousing	✓	✓		✓	✓		✓	✓	✓	✓
Waste Water Treatment			✓M		✓	✓				
Metal Tank Linings	✓M		✓M		✓M					
Liquid Processing		✓		✓	✓		✓	✓	✓	
Dry Powder Processing	✓			✓			✓	✓	✓	
Solvent Handling and Storage	✓	✓		✓	✓		✓	✓	✓	✓
Explosion Risk (◆)	✓◆	✓◆			✓◆	✓◆	✓◆	✓◆	✓◆	✓◆
Plant and Battery Rooms	✓	✓	✓M	✓	✓		✓	✓	✓	
Clean Room Laboratories	✓	✓		✓			✓	✓		
Liquid Nitrogen Handling					✓		✓			
Tanker Handling Bays					✓		✓			✓
Flue Gas Desulphurisation Process					✓	✓	✓		✓	
Performance criteria										
Fire Safety	5	5	5	5	5	n/a	5	5	5	5
Slip Resistance	3	5	3	4	2/3	n/a	4	4	4	4
Impact Resistance	2	3	3	4	5	3/4	5	4	5	5
Thermal Resistance	5	5	5	5	5	5	5	5	5	5
Heavy Traffic	3	4	3	4	4	2/3	4	4	5	5
Impermeability	5	5	5	5	5	n/a	5	5	5	5
Wear Resistance	3	3	5	5	5	n/a	5	5	5	5
Chemical Resistance	5	5	5	5	5	5	5	5	5	5
Scratch Resistance	4	4	5	4	4	n/a	5	5	5	5
Cleanability	5	3	5	4	5	n/a	4	4	4	4
ESD Systems Available	◆	◆	n/a	n/a	◆	◆	◆	◆	◆	◆

◆ ESD Systems Available M Metal Substrate System

Chemical Base of System	Cement Based	Epoxy Resin	Polyurethane Resin	Vinyl Ester Resin ATB-300®
Chemical Conditions (spillage)				
Acetic Acid - 30% at 20°C			✓	✓
Acetic Acid (glacial) - 100% at 40°C				✓
Citric Acid - 30% at 20°C		✓	✓	✓
Citric Acid - 100% at 100°C				✓
Hydrochloric Acid - 10% at 20°C			✓	✓
Hydrochloric Acid - 37% at 80°C				✓
Lactic Acid - 10% at 20°C		✓	✓	✓
Lactic Acid - 100% at 100°C				✓
Nitric Acid - 10% at 20°C			✓	✓
Nitric Acid - 50% at 20°C				✓
Sodium Hydroxide - 50% at 20°C	✓	✓	✓	✓
Sodium Hydroxide - 50% at 80°C				✓
Sulphuric Acid - 20% at 20°C		✓	✓	✓
Sulphuric Acid - 95% at 20°C				✓
Ethanol, Butanol and Methanol	✓		✓	✓
Sugars		✓	✓	✓
Service Conditions				
Steam Cleaning	✓		✓(9mm)	✓
Maximum Temperature	200°C plus	60°C	110°C (9mm)	145 - 185°C
Ultimate Compressive Strength (Mpa)	50	60	70	120+

The ATB-300® systems are available in colours upon request.



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