

The ultimate repair solutions for Plant & equipment – buildings & structures

Protecting your assets from abrasion – cavitation – erosion – corrosion – chemical attack

AF Industries is a globally recognised supplier of a unique range of high-performance repair composite materials and specialist protective coatings for equipment, machinery, buildings and structures.

We offer unique solutions such as fluid flow equipment linings to corrosion protection for offshore platforms. Our unique solutions can be applied throughout all industrial sectors: Oil & Gas, Marine (ThistleBond), Power Generation, Paper & Pulp, Chemical & Corrosion, Water & Wastewater, Petrochemical & General Industry.

The unique range of products are supplied in the CEE+ and Middle East region throughout our extensive network of regional Distributors and Applicators. This enables us to provide local solutions throughout the following countries: Italy, Austria, Czechia, Slovakia, Hungary, Croatia, Bosnia and Herzegovina, Montenegro, Serbia, Albania, Kosovo, Macedonia, Bulgaria, Romania, Cyprus, Turkey, Egypt, Lebanon, Oman, Iraq, Syria, Qatar, UAE and KSA.



Our Unique Product Range

Metal Repair Systems
Ceramic Linings
High Temperature & Immersion Repair
Underwater Repair & Coating Systems
Rubber (Elastomeric) Repair Systems
Composite Wrapping Systems (GRP)
Emergency Pipe Repair Systems
ThistleBond Marine & Pipe Repair Kits
Chemical & Corrosion Protective Coatings
Concrete Repair & Screed Systems
Waterproofing Membranes & Pipe Coatings
Unique Liquid Roofing Solutions
Protective Floor Coatings
Specialist Coatings
Thermic Coatings
Primers
ThistleBond Products
Surface Preparation Tools

What We Can offer You

Reduce manufacturing costs
Reduce spare parts inventory
Reduce un-scheduled plant shutdowns
Reduce plant downtime
Reduce the amount of replacement parts
Reduce the costs of overhaul
Reduce environmental pollution
Increase environmental protection
Increase the operating life of equipment
Increase pump efficiency
Increase the speed of overhaul
Increase 'Mean Time Between Failure'
Increase plant profitability



Repair damaged metal parts quickly



Repair & reline damaged fluid flow equipment



Quickly stop leaking pipe work & provide further integrity

Upgrade your equipment

Protect your assets

Reduce your ownership costs

The ultimate repair solutions for Plant & equipment – buildings & structures

Metal repair systems

AF Industries supplies a wide range of metal repair composites capable of resurfacing damage or worn metallic surfaces. The products will rebuild the substrate and bring the surface back to the original equipment manufacturers specifications.

Metal Repair Product Range

UPS 105 EG THISTLEBOND METAL REPAIR PASTE	High build engineering grade repair paste
UPS 110 FG FLUID GRADE METAL	Brush applied resurfacing fluid grade
UPS 115 XL EXTENDED LIFE METAL	Extended working life high build engineering grade repair paste
UPS 120 XFF FAST CURING FLUID METAL	Fast curing fluid for application to oily surfaces
UPS 125 XFP FAST CURING METAL PASTE	Fast curing engineering grade repair paste
UPS 19060 SG THISTLEBOND STICK GRADE METAL	Fast curing putty for emergency repairs
UPS 19060 SGUW STICK GRADE METAL UNDERWATER	Fast curing putty for underwater repairs

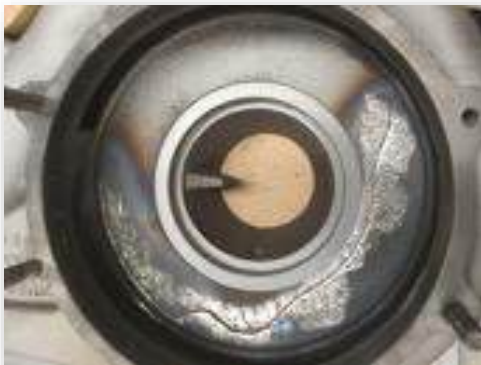


Features

Solvent free composites
Advance epoxy resin technology
High build capability
Extremely surface tolerant
Excellent adhesion to wide range of substrates
Chemically resistant to wide range of industrial chemicals

Benefits

No fire risk – Reduce Health & Safety risks
Ability to fill deep pits & holes
Ability to smooth out surfaces to original dimensions
Eliminates bi-metallic corrosion
Fully machinable
Suitable for total immersion



Typical Applications

Cracked & leaking pipes	Tank seams	Cracked engine blocks
Stripped threads	Scored hydraulic rams	Worn shafts
Pump volutes & impellers	Valve casings	Tube sheets
Filter bodies	Transformers	Liners

The ultimate repair solutions for Plant & equipment – buildings & structures

Ceramic lining systems

AF Industries supplies a unique range of poly-ceramic composite coatings that protect fluid flow equipment subject to fluid erosion, corrosion, abrasion, corrosion and chemical attack. The products can rebuild damaged surfaces and then protect the repaired surface from further wear & abrasion.

Ceramic Linings Product Range

UPS 200 EG CERAMIC REPAIR PASTE	High build engineering grade repair paste
UPS 205 FG FLUID GRADE CERAMIC	Brush applied resurfacing fluid
UPS 210 CR EFFICIENCY FLUID CERAMIC	Brush applied fluid flow enhancement coating
UPS 225 HT HIGH TEMPERATURE CERAMIC	Brush applied high temperature resistance resurfacing fluid (130°C immersion)
UPS 225 HTA HIGH ACID CERAMIC	Brush applied high temperature acid resistant resurfacing fluid (110°C)
UPS 250 UWC UNDERWATER CERAMIC	High build epoxy coating designed to be applied in a single coat to steel or concrete surfaces underwater

Heavy Duty Ceramic Linings Product Range

UPS 519 HD HEAVY DUTY CERAMIC	Engineering paste grade for medium sliding abrasion from fine particles
UPS 241 HDX HEAVY DUTY CERAMIC X	Engineering paste grade for extreme sliding wear from particles or wet slurries
UPS 242 HDX-T HEAVY DUTY CERAMIC X-T	Engineering paste grade for extreme impact and sliding wear from coarse particles and aggregates
UPS 243 HDX-HT HEAVY DUTY CERAMIC X-HT	Engineering paste grade for extreme sliding wear from particles and slurries at elevated temperatures (240°C)
UPS 236 TUC BRUSH GRADE TOUGHENED POLYURETHANE	Fluid grade coating for high impact areas from coarse particles and aggregates



Features

Solvent free composites
Advance epoxy resin technology
High mechanical adhesion
Outstanding abrasion & wear resistance
Chemically resistant to wide range of industrial chemicals
Excellent adhesion to wide range of substrates
Contains high quality hardened ceramic particles

Benefits

No fire risk – Reduce Health & Safety risks
Rebuild damage or worn surfaces
Resurface fluid flow equipment & improve efficiency
Long term asset & equipment protection
Suitable for total immersion in high temperature environments
No sagging or slumping during application
Extend working life of equipment

Typical Applications

Pumps & valves	Fluid flow equipment	Condenser tube sheets
Heat exchangers	Pipes, chutes & hoppers	Impellers & propellers
Fan blades	Tanks & processing equipment	Water boxes
Voith units	Turbines	Rudders
Dredging pumps	Crushers	Pipe surfaces

The ultimate repair solutions for Plant & equipment – buildings & structures

Rubber (Elastomeric) repair systems

AF Industries offers a wide range of urethane based flexible rubber repair and relining systems. They have been developed to give fast and effective solutions for repairs to rubber and metallic surfaces suffering from abrasion.

Rubber (Elastomeric) Repair Product Range

UPS 360 RRP RUBBER REPAIR PASTE	Standard curing elastomer repair paste for rubber components
UPS 363 RRF RUBBER REPAIR FLUID	Rubber repair fluid for lining rubber equipment
UPS 364 RRP-FS RUBBER REPAIR PASTE – FAST SET	Fast setting elastomeric repair paste for quick turnaround applications
UPS 365 RR RUBBER REPAIR 60 CARTIDGE	Fast curing elastomer repair paste for conveyor belt repairs
UPS 367 RR RUBBER REPAIR 80 SACHETS	Fast curing elastomeric repair paste for gasket, lining and mould repairs



Features

- Solvent free composites
- Advance polyurethane resin technology
- 60 and 80 Durometer grades
- Extreme abrasion resistance
- Surface tolerant

Benefits

- Reduce Health & Safety risks
- Rebuild damaged rubber surfaces
- Standard and fast curing grades
- Reduced downtime
- Excellent elongation

Typical Applications

Conveyor belts	Rubber rollers	Gaskets and valves
Off road tyres	Rubber coated impellers	Chutes & hoppers
Rubber hoses	Moulds	Marine fenders

The ultimate repair solutions for Plant & equipment – buildings & structures

Composite & emergency pipe repair

AF Industries offers two types of Pipe Repair Solutions: UPS COMPOSITE WRAPPING and UPS EMERGENCY PIPE REPAIR. Both offer unique features and benefits to the users and can be used in a wide range of applications.



UPS COMPOSITE WRAPPING is used to encapsulate large diameter pipework up to 1,210mm and withstand pressures of 300psi and temperatures of 150°C.

UPS EMERGENCY PIPE REPAIR is a rapid curing single pack bandage used on pipe work up to 400mm to provide leak sealing within minutes of application.

Heavy Duty Ceramic Linings Product Range

UPS 19000 RH THISTLEBOND STANDARD RESIN & HARDENER	Brush applied epoxy gel to be used in conjunction with UPS Technical Fabrics to wrap and seal large diameter pipes
UPS 19007/9 GT THISTLEBOND GLASS TAPE	Specially woven glass tape used with UPS 19000 RH to provide the full Composite Wrapping Solution
UPS 19003 THISTLEBOND A&B CEMENT	Trowel grade epoxy paste to fill badly corroded or pitted pipe surfaces
UPS 19601/3/4/5 PR THISTLEBOND EMERGENCY PIPE REPAIR BANDAGE	Rapid curing single pack water activated bandage for sealing leaking pipes - Quickly
UPS KRACK 24/48 ISOLATING BONDING TAPE	Flexible silicone-based tape for sealing low pressure weeping pipes prior to application of UPS 19601/3/4/5 PR
UPS 445/7/8/9 ISL INSTANT LEAK STOPPER	Flexible natural rubber tourniquet for sealing low to medium leaking pipes prior to application of UPS 19601/3/4/5 PR



Before

During repair

After repair

Features

Solvent free
Advance epoxy & polyurethane technology
BV Type Approved Products
NSF 61 Approved Systems
WRAS Approved Products
Extremely surface tolerant

Benefits

No fire risk – Reduce Health & Safety risks
Seal leaking pipes within minutes
Apply to a wide range of pipe surfaces
Extended asset life of problematic pipework
High pressure & high temperature resistance
Eradicate the need for hot work / welding

Typical Applications

Diesel pipework
Sea water

Low concentration chemicals
Drinking water

Effluent
Steam

The ultimate repair solutions for Plant & equipment – buildings & structures

Chemical & corrosion protective coatings

The UPS Chemical & Corrosion coatings range is suitable for contact and full immersion conditions in a wide range of industrial chemicals. Based on the latest epoxy & epoxy novolac resin technology the product range can protect steel or concrete surfaces from chemical attack from 98% Sulphuric Acid, 36% Hydrochloric Acid, 75% Phosphoric Acid and many strong industrial chemicals.

UPS Corrosion protection products are based on polymer, acrylic, epoxy and polyurethane resin systems. Depending on the type of surface preparation allowed on site our coating systems are capable of giving 25 years plus + protection from UV degradation or weathering. Our diverse range of coatings offer practical long-term solution to external corrosion of metallic and concrete surfaces.

Chemical & Corrosion Protective Coatings Product Range

UPS 405 EPC EPOXY PROTECTIVE COATING – RANGE	High build solvent free epoxy coating for metallic and concrete surfaces for aqueous based industrial chemicals
UPS 403 UCU ULTIMATE EPOXY NOVOLAC 75 – RANGE	Range of high build epoxy novolac coatings for metallic and concrete surfaces capable of resistance 98% Sulphuric Acid
UPS 407 EN EPOXY NOVOLAC UPS 510 UN UNI-NOX	High build solvent free epoxy novolac coating Water based UV stable acrylic membrane that can be applied directly onto mechanically or hydro-blasted prepared surfaces
UPS 509 UVST UV STABLE TOPCOAT	Solvent based UV stable polyurethane topcoat, available in a wide range of colours

This is just a select few products from the full range



Features

Solvent free
Advance epoxy & polyurethane technology
BV Type Approved Products
Brush, Roller & Spray grades available
WRAS Approved Products
Extremely surface tolerant

Benefits

No hot work - Reduce Health & Safety risks
Long term asset protection
Protection from aggressive industrial chemicals
Suitable for confined space applications
Single coat application when spray applied
Protection at elevated temperatures

Typical Applications

Chemical trays	Chemical tanks	Chemical bunds
Pumps	Process floors	Containment areas
Structural steel	Intake areas	Pipe surfaces

The ultimate repair solutions for Plant & equipment – buildings & structures

Concrete repair, screed & Protective floor systems

AF Industries has a wide range of concrete repair materials that can reinstate badly damaged cementitious surfaces and protect them from further wear and abrasion. Our product range covers fast curing patch repair materials, lightweight screeds and polymer modified cementitious screeds to eradicate damp and the ingress of moisture.

Concrete Repair, Screed & Protective Floor Product Range

UPS 804 ECPR EPOXY CONCRETE PATCH REPAIR	Fast curing repair mortar for quick repairs to damaged floors and expansion joints
UPS 805 ECLW EPOXY CONCRETE LIGHT WEIGHT	Lightweight repair mortar for repairs to overhead and vertical concrete surfaces
UPS 813 EQS EPOXY QUARTZ SCREED	Heavy duty solvent free epoxy screed applied by trowel to damaged industrial floor surfaces
UPS 882 EFC EPOXY FLOOR COATING	Solvent free epoxy high build floor coating for medium to heavy duty industrial floor surfaces

This is just a select few products from the full range

Typical Applications

Expansion joints	Steps	Walls
Sills	Covings	lintels

Liquid roofing & waterproofing membranes

Our range of single component waterproofing materials are able to seal virtually any surface with a strong flexible membrane to give long term protection from UV degradation and weathering. The UPS range of waterproofing materials includes water-based acrylic, solvent based acrylic & solvent based polyurethane coatings.

Liquid Roofing & Waterproofing Membranes Product Range

UPS 661 EC EMBEDMENT COATING UPS 662 UV TOPCOAT	Solvent based polyurethane system designed to be applied to any roof surface giving 25 years waterproofing protection
UPS 778 AWC ACRYLIC WATERPROOFING COATING – RANGE	Water based acrylic membrane system for concrete and porous surfaces giving up to 10-year waterproofing protection
UPS 780 ERR EMERGENCY ROOF REPAIR	Solvent based acrylic emergency waterproofing system designed to seal leaking surfaces

This is just a select few products from the full range

Typical Applications

Mineral felt Bitumen surfaces	Flat / pitch roofs GRP	Asbestos encapsulation Corrugated
----------------------------------	---------------------------	--------------------------------------



The ultimate repair solutions for Plant & equipment – buildings & structures

Thermic coatings – liquid insulation composites

UPS Thermic Coatings are based on a combination of innovative fillers bound in a 100% solids epoxy resins. Our coatings are designed to reduce heat transfer from underlying metallic surfaces and thereby reduce heat loss and the risk of burns through personal contact. In addition, the coatings provide long term corrosion protection for metallic surfaces and reduce the potential for condensation on cold pipework.

Thermic Coatings – Liquid Insulation Composites Product Range

UPS 554 TC THERMIC COATING 140	Solvent free high build epoxy insulative coating designed to be applied to offline hot process surfaces or cold-water lines
UPS 555 TC THERMIC COATING 140 X	Solvent free high build epoxy insulative coating designed to be applied to hot process surfaces ranging from 75-140°C
UPS 557 TC THERMIC COATING 250	Single component solvent free silicon coting designed to be applied to offline hot process surfaces ranging from 75-250°C

Typical Applications

Process equipment Separators	Heat exchangers Exhausts	Pipe surfaces Filters
---------------------------------	-----------------------------	--------------------------

Primers

Our range of primers allow the user to coat damp, porous or newly laid cementitious surfaces or prime manually or mechanically prepared metallic surfaces. Our primers can be over coated using any chemical or corrosion protection coating in the UPS Range.

Primers Product Range

UPS 909 PP POROUS PRIMER – RANGE	Low viscosity penetrating epoxy primer for concrete surfaces
UPS 905 DP DAMP PRIMER	Low viscosity epoxy primer for newly paid or damp concrete surfaces
UPS 908 MP METAL PRIMER	Thin film solvent

Typical Applications

Storage tanks Roofs	Floors Ramps	Containment areas Concrete bund
------------------------	-----------------	------------------------------------

Just an example of a few Official Approvals UPS holds throughout the product range...



**BUREAU
VERITAS**
Certificate No.
58535/AO BV



Your Local Distributor