DUROMAR®

OIL & GAS APPLICATIONS

Long-Term Protection of Critical Assets from Corrosion, Erosion, and Chemical Attack using Duromar® Advanced Coating Systems

2026

Arudra Coatings

Of all the challenges impacting modern oil, gas, and petrochemical facilities, corrosion, erosion, and chemical degradation remain among the most critical and demanding for plant designers, operators, and maintenance teams. These environments expose equipment and structures to an aggressive combination of hydrocarbons, high temperatures and pressures, abrasive solids, sour gases (H_2S, CO_2), chemically treated water, solvents, acids, alkalis, and fluctuating pH conditions—resulting in continuous attack on steel and concrete surfaces through corrosion, erosion, cavitation, and chemical breakdown.

From the early development of large-scale oil, gas, and petrochemical infrastructure, Duromar® has been actively involved in addressing corrosion, erosion, and performance-related challenges across crude and product pipelines, separators, storage tanks, heat exchangers, vessels, sumps, effluent treatment units, cooling water systems, fire water networks, and process containment structures.

Duromar® recognized early that effective asset protection in oil, gas, and petrochemical applications requires 100% solids, high-performance multi-functional and novolac epoxy systems, specifically engineered to withstand aggressive hydrocarbons, chemical exposure, high flow velocities, abrasive slurries, thermal cycling, and continuous immersion service. These advanced coating systems deliver long-term durability, reduced maintenance downtime, and enhanced operational reliability for critical assets throughout oil, gas, and petrochemical operations.

Arudra Engineers Pvt Ltd - in technical collaboration with Duromar Inc (USA), is a licensed Manufacturer, Distributor & Applicator of Duromar® range of products.

Quality, Safety & Compliance

QUALITY SYSTEM CERTIFICATION DNV ISO 9001

OTABU CERTIFICATION PRIVATE LIMITED Otabu

CERTIFIED ISO 14001:2015 COMPANY

CERTIFIED ISO 45001:2018 COMPANY

NSF

WRAS
WATER REGULATIONS ADVISORY SCHEME

Major Oil & Gas Applications

1. Circulating and cooling water pipelines
2. Storage Tanks
3. Pumps
4. Water Injection Systems
5. Flooring Systems
6. Offshore Legs

Stop the costly cycle of frequent repairs and premature equipment replacement in your oil, gas, and petrochemical facilities. Duromar® protective coatings and linings provide a permanent, high-performance solution for rehabilitating and extending the life of critical steel and concrete assets, engineered to withstand the harshest operating conditions—including corrosion, erosion, abrasion, cavitation, and aggressive chemical exposure.

By choosing Duromar® specialized polymer systems, operators can restore and protect pipelines, storage tanks, process vessels, pumps, and chemical handling units, creating a seamless, non-permeable barrier that ensures long-term asset protection and operational reliability.

Circulating and cooling water pipelines

Oil & Gas pipelines are critical to upstream, midstream, and downstream operations, transporting crude oil, produced water, gas, and process fluids across facilities and long distances. Continuous exposure to hydrocarbons, saline and sour water, CO_2, H_2S, sand, scale, and chemical injection additives leads to internal corrosion, erosion, fouling, and deposit build-up, resulting in flow restriction, integrity loss, and unplanned shutdowns. High-performance protective linings are essential to safeguard pipeline internals, extend service life, reduce maintenance frequency, and ensure safe, efficient, and reliable oil & gas operations.

Internal Pipeline Protection

Complication:

Pipeline internals in oil & gas operations are exposed to crude oil, produced water, gas, sand, CO_2, H_2S, chlorides, and chemical additives. High flow velocities and entrained solids cause internal corrosion, erosion, fouling, and pressure losses, increasing the risk of integrity failure. High-performance internal protective linings are essential to safeguard pipelines, extend service life, and ensure safe, efficient, and reliable operation.

Solution:

Rebuild damaged and eroded areas using Duromar® SAR, followed by HPL-2510 to create a seamless, corrosion- and chemical-resistant internal lining for hydrocarbons, sour water, and abrasive flow. Surface preparation includes degreasing and abrasive blasting to Sa 2.5, ensuring a clean, dry surface before application.

Product Details:

Duromar® SAR

DUROMAR® SAR is an easy-to-use rebuilding putty with excellent abrasion and chemical resistance, heavily filled with aluminum oxide and suitable for restoring pump casings, slurry tanks, weld seams, and worn metal components.

Duromar® HPL-2510

DUROMAR® HPL-2510 is a versatile, easy-to-apply 100% solids coating suitable for circulating water pipelines, sewage treatment systems, and process water tanks. It can be applied by brush, roller, or conventional spray.

External Pipeline Rehabilitation System

Complication:

External pipelines in oil & gas facilities are subject to environmental exposure, coating degradation, and external corrosion, leading to metal loss and integrity risks. In accordance with ASME PCC-2 guidelines, an External Pipeline Rehabilitation System employs proper surface preparation and engineered, high-performance coating systems to restore corrosion protection, extend service life, and ensure safe, reliable pipeline operation without replacement.

Solution:

Restore metal loss with Duromar® SAR, reinforce with FineWrap composite, and protect with HPL-2510 to extend pipeline life without replacement. Prepare the surface by removing old coatings and corrosion, grit blasting to Sa 2.5, and applying the system immediately to avoid flash rust.

Product Details:

Duromar® FINEWRAP

Duromar® FineWrap is a fiber-reinforced composite wrapping system that strengthens, seals, and protects ageing pipelines and equipment, restoring integrity without shutdown or replacement.

Duromar® SAR

DUROMAR® SAR is a user-friendly, abrasion- and chemical-resistant rebuilding putty, heavily reinforced with aluminum oxide, designed to repair and rebuild worn pump casings, slurry tanks, weld seams, and damaged metal surfaces.

Duromar® HPL-2510

DUROMAR® HPL-2510 is a versatile, easy-to-apply 100% solids coating suitable for circulating water pipelines, sewage treatment systems, and process water tanks. It can be applied by brush, roller, or conventional spray.

Storage Tanks

Storage tanks in oil & gas facilities are exposed to crude oil, produced water, chemicals, and aggressive vapors containing moisture, chlorides, CO_2, and H_2S, leading to internal corrosion, bottom plate attack, and coating degradation. High-performance protective linings and coatings are essential to protect tank internals, maintain product integrity, prevent leaks, and extend service life while ensuring safe and reliable storage operations.

Acid/Chemical storage Tanks

complications:

Acid and chemical storage tanks are critical assets in oil, gas, and petrochemical facilities, used for storing highly corrosive acids, alkalis, and process chemicals. Continuous exposure to aggressive chemicals, temperature variations, and corrosive vapors subjects these tanks to severe corrosion, leakage risks, and structural degradation, making them among the most demanding components in chemical handling systems.

Solutions:

Rebuild damaged areas using Duromar® SAR and apply HPL-2132, HPL-4320, or EXP to provide a high-build, chemically resistant lining for protection against aggressive acids, alkalis, and process chemicals. Surface preparation includes degreasing and abrasive blasting to Sa 2.5.

Product Details:

Duromar® EXP

DUROMAR EXP is a higher chemical and temperature resistant version of the EAC used in the most aggressive of chemical environments. It's used to resurface heat exchangers, valves, or pump internals.

Duromar® HPL-2132

DUROMAR® HPL-2132 is a highly filled, trowellable, 100% solids lining system with excellent chemical resistance. This highly filled coating system can be applied up to a thickness of 250 mils in a single coat. The combination of high film build and specially engineered ceramic fillers provide long term protection against even the harshest abrasion and prevent water from permeating through the coating.

Duromar® HPL-4320

DUROMAR® HPL-4320 is a high functionality, 100% solids novolac material, designed for concentrated sulfuric acid and other inorganic acid service. It can be applied by hand, but it is most efficiently applied over large areas by plural component airless.

Mud System Tanks

Mud system tanks are critical process vessels in drilling and well-service operations, used to store and circulate drilling muds and fluids. Continuous exposure to abrasive solids, high-alkalinity chemicals, hydrocarbons, and constant agitation subjects these tanks to severe abrasion, erosion, and corrosion, making them among the most demanding components in drilling fluid management systems.

Solutions:

Rebuild damaged areas using Duromar® SAR and apply EAC-FE or HPL-4310 to protect against abrasion, slurry wear, and chemical exposure in drilling operations. Prepare the surface by removing deposits and abrasive blasting to Sa 2.5

Product Details:

Duromar® EAC-FE

DUROMAR® EAC-FE is a brushable more resilient version of EAC used to enhance fluid flow, resist cavitation, or anywhere requiring more impact resistance in a thin film product.

Duromar® SAR

DUROMAR® SAR is an easy-to-use rebuilding putty with excellent abrasion and chemical resistance, heavily filled with aluminum oxide and suitable for restoring pump casings, slurry tanks, weld seams, and worn metal components.

Duromar® HPL-2131

DUROMAR® HPL-2131 is a trowellable material, which is designed to rebuild and/or protect both steel and concrete tanks along with other structures subject to severe erosion and corrosion. It is [[[[[[[[[[[[best applied using a mastic grout pump or plural component spray equipment.

Fuel Storage Tanks

Fuel storage tanks in oil, gas, petrochemical, and power generation facilities are critical assets that must safely contain hydrocarbons under continuous exposure to aggressive service conditions. Internal and external tank surfaces are subjected to corrosion from water bottoms, microbial activity, chemical contaminants, fluctuating temperatures, and atmospheric exposure, which can lead to pitting, coating failure, product contamination, and loss of structural integrity.

Solutions:

Rebuild corroded areas using Duromar® SAR and apply HPL-2131 or EAC to provide a high-build lining that protects against hydrocarbons, water bottoms, and internal corrosion. Surface preparation includes sludge and oil removal, followed by abrasive blasting to Sa 2.5.

Product Details:

Duromar® EAC

DUROMAR® EAC is a brush-applied maintenance material offering excellent resistance to acids, caustics, and abrasion, ideal for resurfacing tanks, heat exchangers, and pump or valve components.

Duromar® SAR

DUROMAR® SAR is an easy-to-use rebuilding putty with excellent abrasion and chemical resistance, heavily filled with aluminum oxide and suitable for restoring pump casings, slurry tanks, weld seams, and worn metal components.

Duromar® HPL-2310

DUROMAR® HPL-2310 is a low viscosity, medium pot life coating with excellent chemical resistance in an ambient cured material. HPL-2310 is compatible with API 652 recommendations for a thin film lining system and approved by API 1631 for immersion service in Diesel, Fuel Oil, gasoline and other hydrocarbons. It is designed to be applied by brush, roller or with conventional airless equipment. It ships DOT non-corrosive.

Pumps

Pumps in oil & gas operations handle crude oil, produced water, chemicals, and slurry containing sand, CO_2, H_2S, and chlorides, leading to corrosion, erosion, cavitation, and rapid wear of wetted components. High-performance protective coatings and linings are essential to protect internal surfaces, maintain hydraulic efficiency, and extend pump service life under severe operating conditions.

Cooling Water Pumps

Complications

Cooling water pumps in oil & gas facilities operate under continuous exposure to high flow velocities, suspended solids, chlorides, biofouling, and corrosive contaminants, leading to erosion, corrosion, cavitation, and efficiency loss. High-performance protective coatings and linings are essential to protect wetted components, reduce wear, and ensure reliable, energy-efficient operation over extended service life.

Solutions:

Rebuild worn areas using Duromar® SAR and apply EAC-LV to provide a smooth, corrosion-, erosion-, and cavitation-resistant surface that improves hydraulic efficiency and service life. Surface preparation includes degreasing and abrasive blasting to Sa 2.5.

Product Details:

Duromar® SAR

DUROMAR® SAR is an easy-to-use rebuilding putty with excellent abrasion and chemical resistance, heavily filled with aluminum oxide and suitable for restoring pump casings, slurry tanks, weld seams, and worn metal components.

Duromar® EAC-LV

DUROMAR EAC-LV is a brushable version of EAC used to provide a smooth final surface while enhancing fluid for resisting cavitation. EAC –LV should be used anywhere a smooth, abrasion, and impact resistant coating system is required.

Centrifugal Pumps

Complications

Centrifugal pumps in oil & gas operations handle corrosive fluids, cooling water, and produced water containing chlorides, sand, CO_2, and chemical additives, resulting in erosion, corrosion, cavitation, and loss of hydraulic efficiency. High-performance protective coatings and linings are essential to protect impellers, casings, and wear rings, reduce downtime, and extend pump service life under demanding operating conditions.

Solutions:

Rebuild damaged areas using Duromar® SAR or HAR and apply Duromar® EAC to protect impellers and casings from corrosion, abrasion, and cavitation while improving operational efficiency. Surface preparation includes degreasing and abrasive blasting to Sa 2.5.

Product Details

Duromar® HAR

DUROMAR® HAR is a carbide-filled trowelable wear-resistant putty. It is a more abrasion-resistant product than SAR, with similar working characteristics. It is used primarily in areas requiring more resistance to fine slurries either in liquid or powder form.

Duromar® EAC

DUROMAR® EAC is a brush-applied maintenance material offering excellent resistance to acids, caustics, and abrasion, ideal for resurfacing tanks, heat exchangers, and pump or valve components.

Flooring Systems

Flooring systems in oil & gas facilities are subjected to heavy equipment loads, chemical spills, hydrocarbon exposure, abrasion, thermal cycling, and impact, leading to surface degradation, cracking, and safety hazards. High-performance industrial flooring systems are essential to provide chemical resistance, mechanical strength, slip resistance, and long-term durability while ensuring safe and compliant operating environments.

Anti-Slip Floors

Product Details:

Anti-slip floors in oil & gas facilities are exposed to oil, grease, water, chemicals, and heavy foot traffic, creating high slip and fall risks. Specialized anti-slip flooring systems provide enhanced traction, chemical resistance, and abrasion durability, helping maintain safe walkways and work areas while supporting reliable, long-term plant operations.

Solutions:

Apply Duromar® DF-1301 for sealing, repair damaged areas with DUROFIL, and finish with DF-1310 to provide a durable, chemical-resistant, and slip-resistant flooring system. Surface preparation includes removal of oil and contaminants, followed by grinding or shot blasting to achieve CSP 3–5 before application.

Product Details:

Duromar® DF-1301

DUROMAR DF-1301 is a clear, 100% solids concrete sealer with a long working time. It is used primarily to seal the concrete prior to the application of additional topcoats and to restore the mechanical properties of old concrete. It can be cured at temperatures as low as 40° F and can be applied to damp concrete.

Duromar® DUROFIL

DUROMAR® DUROFIL is a specially formulated 100% solids epoxy grout and rebuilding product for filling holes and rebuilding severely chemically attacked concrete floors and secondary containment areas. DUROFIL provides an excellent base for other DUROFLOR® products, such as CHEMCRETE, DF-4301, etc., where more acid resistance or a smoother finish is required.

Duromar® DF-1310

DUROMAR® DF-1310 is a general purpose epoxy floor coating with good low temperature curing characteristics, excellent flexibility and impact resistance, and good adhesion to damp concrete. Although not recommended for strong acids or solvent protection, it does, however, have good chemical resistance to dilute and mild inorganic acids as well as water, seawater and de-mineralized water.

Secondary Containment Zone

Secondary containment systems are critical safety barriers in oil, gas, petrochemical, and industrial facilities, designed to contain spills and leaks from primary storage assets. Continuous exposure to leaked chemicals, hydrocarbons, weathering, UV radiation, and standing liquids subjects these structures to severe chemical attack, cracking, and degradation, making them among the most demanding components in spill control and environmental protection systems.

Solutions:

Seal with DF-1301, repair using DUROFIL, and apply DF-4301 for chemical-resistant protection. Prepare the surface by cleaning and shot blasting to CSP 3–5 before application.

Product details:

Duromar® DF-1301

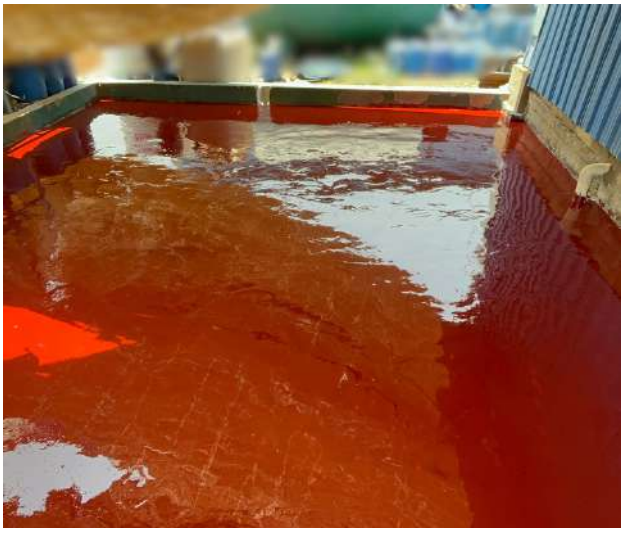
DUROMAR® DF-1301 is a clear, 100% solids concrete sealer with a long working time, used to seal concrete prior to topcoating and to restore the strength of aged surfaces. It can cure at temperatures as low as 40°F and can be applied to damp concrete.

Duromar® DUROFIL

DUROMAR® DUROFIL is a 100% solids epoxy grout used to fill and rebuild chemically damaged concrete floors and containment areas. It provides a durable base for DUROFLOR® topcoats such as DF-4301 or CHEMCRETE.

Duromar® DF-4301

DUROMAR® DF-4301 is a 100% solids novolac floor coating with excellent resistance to acids, bases, and solvents. It can be applied by brush, roller, or plural spray and is ideal for secondary containment areas and floors exposed to chemical spills.



Offshore Legs

Offshore legs are critical structural components of offshore platforms, providing stability and load-bearing support in harsh marine environments. Continuous exposure to seawater immersion, tidal splash zones, wave impact, UV radiation, and corrosive marine atmospheres subjects these legs to severe corrosion, erosion, and fatigue, making them among the most demanding assets in offshore structural systems.

Solutions:

Rebuild damaged areas using Duromar® SAR and apply EAC or HPL-2510 to protect against seawater corrosion, splash-zone exposure, and marine environments. Prepare the surface by removing marine salts and abrasive blasting to Sa 2.5.

Product Details:

Duromar® EAC

DUROMAR® EAC is a brush-applied coating with excellent resistance to chemicals and abrasion, used for resurfacing tanks, heat exchangers, and pump components.

Duromar® SAR

DUROMAR® SAR is an easy-to-use rebuilding putty with high abrasion and chemical resistance, reinforced with aluminum oxide for restoring worn metal surfaces, weld seams, and equipment components

Duromar® HPL-2510

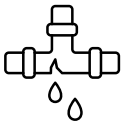
DUROMAR® HPL-2510 is an outstanding, versatile and easy to use 100% solids material. It can be used for circulating water pipe, sewage treatment systems, or process water tanks. It can be applied by brush, roller or with conventional spray equipment.

Application	Resurface	Rebuild	Lining
Pipeline Internals	-	SAR	HPL-2510
External Pipeline Rehabilitation Systems	FINEWRAP	SAR	HPL-2510
Acid/Chemical storage Tanks	EXP	HPL-2132	HPL-4320
Mud System Tanks	EAC-FE	SAR	HPL-2131
Fuel Storage Tanks	EAC	SAR	HPL-2310
Cooling Water Pumps	EAC_LV	SAR	-
Centrifugal Pumps	EAC	HAR	-
Anti-Slip Floors	DF-1301	DuroFil	DF-1310
Secondary Containment Zone	DF-1301	DuroFil	DF-4301
Offshore Legs	EAC	SAR	HPL-2510

DUROMAR® PRODUCTS KEY FEATURES

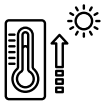
Corrosion-resistant lining

Chemical and saltwater protection



Leak-proof, seamless design

High abrasion and impact resistance



Withstands thermal and mechanical stress

Long service life

Low maintenance requirements

Compliant with industrial safety standards

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