> With the Almighty's divine support, proceeded with the implementation of our social and economic plans and programmes, guided by Oman Vision 2040 . Our economic and fiscal performance has improved and we have started to accomplish for you and with you the march of growth and prosperity.

Excerpt from the speech by His Majesty Sultan Haitham bin Tarik
addressing the nation on the occasion of the 2nd anniversary of assuming power.

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## About Us:

AquaPetro Chemicals - (A division of NDC) stands as a trailblazer in the realm of high-end chemical solutions, specialising in oil and gas fields, industrial water treatment, and an array of specialty products for process improvement across diverse industrial sectors. Our commitment to Research and Development places us at the forefront of innovation, enabling us to craft bespoke chemical solutions for major players in oil and gas, petrochemicals, refineries, power plants, pharmaceuticals, agro, fertilizers, pesticides, and other critical industries.

Innovation and research excellence: At AquaPetro, we pride ourselves on our relentless pursuit of innovation and research excellence. Our dedicated team employs cutting-edge technologies and proprietary processes to develop chemical solutions that redefine industry standards.

Manufacturing and toll blending services: Our state-of-the-art manufacturing and quality assurance and control laboratory, situated in the Rusyal Industrial Area in Muscat, serve as hubs for key production of specialty products and toll blending operations. This enables us to offer comprehensive manufacturing and toll blending services tailored to the unique needs of our clients.

Environmental sustainability: We are staunch advocates of environmental sustainability. Our manufacturing processes are designed with eco-friendly practices in mind, and we hold certifications that reflect our commitment to minimizing our environmental footprint.

Compliance and quality assurance: Our commitment to quality is unwavering. AquaPetro adheres to the highest industry standards and regulatory compliance, with a state-of-the-art quality assurance and control laboratory ensuring the precision and excellence of our chemical products.

Customer-Centric Approach: AquaPetro stands out with its customer-centric philosophy. Going beyond providing products we understand and meet the unique needs of each client. Continual improvement underscores our impact on improving operational efficiency for our valued clients.

Corporate Social Responsibility (CSR): We take pride in our Corporate Social Responsibility initiatives, demonstrating our commitment to community welfare, employee well-being, and ethical business practices.

Ongoing Training and Development: Investing in our people is integral to our success. AquaPetro prioritizes ongoing training and development programs for our employees, fostering a highly skilled and knowledgeable team.

Future Vision and Goals: As we look to the future, AquaPetro envisions continued leadership in the industry. Our strategic goals and milestones reflect our commitment to staying at the forefront of industry trends and advancements.

In alignment with our corporate ambition, AquaPetro Chemicals strives to make the world healthier, cleaner, and safer by providing, eco friendly products that sustain life.

## AquaPetro Chemicals

(A Division of NDC)


## AquaPetro Chemicals

 (A Division of NDC)
## SUSTAINABLE DEVELOPMENT GOALS



## AquaPetro Chemicals <br> (A Division of NDC)

## Our Approach



## VISION

To be the leading manufacturer of specialty chemicals, inspiring innovations, and excellence in every aspect of our business.
We strive to create a sustainable future by delivering high-quality, cutting-edge solutions that enhance the lives of people worldwide.

## VALUES

## Innovation:

We strive to continuously innovate and develop cutting-edge specialty chemicals that meet the evolving needs of our customers and the industry.

## Quality:

We are committed to delivering the highest quality specialty chemicals that consistently meet or exceed industry standards, ensuring the satisfaction and trust of our customers.

## Safety:

We prioritise the safety of our employees, customers, and the environment by adhering to strict safety protocols and implementing sustainable practices throughout our manufacturing processes.

## Integrity:

We conduct our business with the utmost integrity, maintaining transparency, honesty, and ethical practices in all our interactions with customers, suppliers, and stakeholders.


## Customer Focus:

We place our customers at the centre of everything we do, understanding their unique requirements and providing personalized solutions and exceptional service that exceed their expectations.


## Environmental Stewardship:

Demonstrate a strong commitment to environmental sustainability by minimising our ecological footprint, developing eco-friendly products, and supporting green practices.

## Quality Excellence:

Strive for excellence in every aspect of our operations, maintaining rigorous quality assurance processes to deliver products that meet or exceed industry standards.

## Employee Development:

Invest in the ongoing training and development of our employees, empowering them with the skills and knowledge needed to excel in their roles.

Corporate Social Responsibility (CSR):
Act responsibly as a corporate citizen, contributing to the well-being of the communities in which we operate and upholding social and ethical responsibilities.

# Integrated Energy Environment solutions for industry 

## Oil and Gas field Chemicals:

AquaPetro Chemicals is a manufacturer of chemicals for petrochemical industry extensively formulated to address the challenges faced by onshore and offshore oilfields and oil well sites, related to asset integrity, flow assurance and productivity.
These chemicals are known to provide expandability and functionality to the operational sites for well drilling completion and intervention services. Optimal usage of oil and gas chemicals have proven their conventionality in terms of capital, manpower, and technology under limited resources.
Apart from their wide range of application in drilling, workover completion and producing crude oil wells, the functionality of the oil and gas industry are contingent on these speciality chemicals to carry out operations in the wellbore or formation. These chemicals include organic-inorganic mixtures, polymers and their complexes, water-soluble / oil-soluble solvents and many more.

Advantages:

- Straight improvement in the production at drilling sites and refinery processes
- Provides protection to metallic surfaces from highly corrosive agents that comes out during crude oil extraction, increasing their performance and longevity.
- Significant enhancement of Petro-chem crude oil recovery from on-shore and off-shore well sites
- Highly cost effective compared to maximum mechanical efforts.
- Saves time and assures monetary benefits for the owners and stakeholders.


## Upstream Chemicals

- Drilling and mud chemicals
- Well Stimulation chemicals
- Production chemicals
- Water Injection chemicals


## Drilling and Mud Chemicals

- Biocides
- Emulsifiers
- Lubricants
- Corrosion Inhibitors
- Foamers
- Dispersants
- Clay controlling agents
- Bentonite modifiers
- Rheology modifiers


## Well Stimulation Chemicals

- Gelling agents
- Friction reducers
- Crosslinkers
- Biocides
- Acid retarders
- Corrosion inhibitors
- Non-emulsifier/Surfactants
- Iron control/Sludge reduction
- Clay stabilisers
- Acid diverting agents
- Breakers
- Scale inhibitors
- H2S scavengers


## Production Chemicals:

- Biocides
- Demulsifiers
- Foamers
- Corrosion inhibitors
- Scale inhibitors
- H2S scavengers
- Water clarifiers
- Asphaltene dissolvers
- Paraffin control agents
- Rig cleaning surfactants
- Wellbore cleaners
- Iron sulfide and sludge control
- Lubricants
- Other products


## Water Injection Chemicals

- Corrosion inhibitors
- Scale inhibitors
- Biocides
- Demulsifiers
- Pour point depressant \& WAX inhibitor
- H2S scavengers
- Oxygen scavengers
- Polyelectrolytes, coagulants and flocculants


## Midstream Chemicals

- Crude line corrosion inhibitor
- Hydrotest corrosion inhibitor
- Scale inhibitor
- Paraffin/WAX/ Asphaltene
- Pipe line cleaning chemicals


## Integrated Energy <br> Environment solutions for industry



## Mid-Stream- Gas Treatment Chemicals

- Tri ethylene glycol
- Di ethylene glycol
- Mono ethylene glycol
- MDEA
- MEA
- Sodium acetate
- Sulfolane
- Piperazine


## Down Stream Chemicals

- DMDS- dimethyl disulfide
- DIPA- di Isopropyl amine
- MDEA- methyl di ethanol amine
- PCE- trichloro ethylene
- Ethyl mercaptan
- THT- tetrahydrothiophene
- Lubricity improver
- Antioxidant


## Commodity Chemicals

- Sodium hypo chloride
- Phosphoric acid
- Ammonia
- Citric acid
- Sodium nitrate
- Sodium nitrite
- Urea
- Nitric acid
- Sodium sulphide
- Sodium meta sulphide
- Hydrogen per oxide
- Sodium tri poly phosphate
- Sodium silica fluoride
- Sodium fluoride
- Ferric chloride
- Sodium carbonate
- Sodium bi carbonate
- Calcium hydroxide
- Calcium chloride
- Sodium hydroxide - lye, flakes and prills
- Activated carbon



Industrial water management and processes pose a key challenge for our customers every day. We see it as an opportunity to deliver solutions that work, are measurable and bring optimal savings to our customers. Few of the best scientific minds work alongside our engineering counterparts. We exist to solve a critical regulatory, environment and social challenge of industrial water and process usage.

We provide more than water chemicals products and solutions. By becoming customers' implementation partner in their responsible water journey, we continue to build long-term relationships based on innovations and IT driven solutions. Today, clients trust us for running their plants whilst ensuring the highest regulatory compliance and improving operational efficiency and cost savings at the same time.

With the increasing global water shortage and tightening environmental norms, we endeavour to create water solutions that are sustainable, responsible yet profitable for our customers.

- Cooling tower water treatment
- Boiler water treatment
- RO chemicals
- Chiller water treatment
- Waste / effluent/ sewage water treatment
- Swimming Pool Chemicals
- Desalination antiscalant / biocides/ corrosion inhibitors


## Cooling Water

## Treatment Chemicals

Water is used extensively as a highly efficient coolant in many commercial, manufacturing, and industrial process activities where cooling is required. To ensure such cooling systems are correctly maintained and operate at optimum efficiency it is essential that the correct cooling water conditions are established and then always maintained. This can be achieved using carefully selected cooling tower chemicals. The cooling system operation can directly affect reliability, efficiency, and cost of any industrial, institutional, or power industry process.

## Major problems associated with cooling water systems:

## Corrosion

Manufacturing of common metals used in cooling systems, such as mild steel, involves removing oxygen from the natural ore. Cooling water systems are an ideal environment for the reversion of the metal to the original oxide state. This reversion process is called corrosion.

## Scale \& Fouling

Minerals such as calcium carbonate, calcium phosphate, and magnesium silicate are relatively insoluble in water and can precipitate out of the water to form scale deposits when exposed to conditions commonly found in cooling water systems.

## Biological Contamination

Cooling water systems provide an ideal environment for microbial organisms to grow, multiply, and cause deposit problems in heat exchange equipment.

Microbial growth can strongly influence corrosion, fouling, and scale formation, if not controlled properly. Macrofouling can occur in once-through cooling systems or water intakes in lakes and rivers.

Various species of clams, mussels, other marine organisms can attach to the piping, reducing water flow and increasing corrosion.

Scale and corrosion, bio fouling, are one of many issues that lead to reduced heat transfer efficiency, increase in maintnance or replacement costs, increase in fuel consumtion and down-time. The cooling water side of the heat exchaners fouled with deposits and corrosion cause high power consumption and system failure.

While these issues can lead to cooling tower damage and added downtime for repairs, they can also hinder operational efficiencies by impacting heat transfer. If scale, grime, or microbiological buildup coats your heat transfer surfaces, it impairs water-cooling ability, meaning you must run up operational and energy costs.
AquaPetro chemicals - cooling tower range of chemicals
Scale and corrosion inhibitor
Passivating \& descaling chemicals
Cooling water oxidizing and non-oxidising biocides

## Dispersant

## Bio-dispersant

Antifoam


## WATER TREATMENT CHEMICALS



## Boiler Water

## Treatment chemicals

AquaPetro is engaged in the formulation of a range of boiler chemicals aimed at the entire operational safety of boilers and feed water treatment. These formulations are function in removal of objectionable levels of mineral scales, metal oxides, sludge and other depositions, eliminating impeccable oxidation corrosion, maintaining precise pH value and instant oxygen removal. They are organic, non-corrosive and easy to dose.
Grouped into two sections, one catering to boiler feed water treatment and another to boiler internal surfaces protection.

## Boiler internal treatment chemicals

This range of chemicals are responsible for minimizing metal cavitation, reducing chances of overheating or failure.

- Boiler corrosion inhibitor
- Boiler antiscalant
- Boiler descaling chemical
- Multipurpose boiler chemical
- DEHA
- Morpholine
- Cyclohexylamine
- Boiler feed water treatment chemicals

These chemicals find use in boiler feed water to remove contaminants, mineral scales, dissolved oxygen, which causes several obstructions in functioning of a boiler system.

Untreated water if inducted in boiler, may damage the equipment, increasing chances of unscheduled plant shutdown. These chemical formulations also reduce the amount of oxide concentration that enter boiler, maintaining clean boiler tubes, improving efficiency.

- Boiler oxygen scavenger
- Boiler pH adjusting chemical
- Carbohydrazide
- Hydrazine hydrate


The images used are for reference and illustrative purposes only

## WATER TREATMENT CHEMICALS



## Reverse Osmosis

## Chemicals

AquaPetro Chemicals offers a complete range of Reverse osmosis chemicals, which includes antiscalants, inorganic \& organic cleaning chemicals in powder and liquid form, bio dispersants and biocides.
Even with the best pretreatment based on feed water characteristics, reverse osmosis membrane continues to face several problems associated with scaling, fouling, biological growth along with operational problems.

As AquaPetro is a water treatment equipment supplier, we have in-house chemical manufacturing facilities and thus we have strong competence on equipment and chemical performance. We also carry out in-house membrane autopsy studies.

## Antiscalants:

Our Product range of antiscalants reduces membrane scaling, fouling. It also disperses silt, colloidal particles and fouling tendencies thereby giving sustained performance for a longer time and reduces unscheduled shutdown and cleaning costs.

## Facilitates maximum recovery

Provide optimum control of feed water with concentrate LSI up to +3.0 .

## Safe for use in potable water

Certified under ANSI/NSF standards.

## Membrane cleaning chemicals

Our range of liquid and powder cleaning chemicals (Inorganic \& Organic) are specially formulated blend of cleaner for the inorganic scale \& organic compounds and also biological slime.

## Benefits

- Liquid / powder cleaner which allows shorter mixing time.
- Low foaming formulation.
- Cost effective program for carbonate or sulfate scale and for organic compound \& slime.


## Biocides

- Our range of non- oxidising biocide works speedy and provide effective response even in heavily contaminated waters.


## Benefits

- Biocide activity spans over a spectrum of microorganisms.
- Liquid formulation.
- Heavy slime deposit can be eliminated or controlled by regular use of biocide in heavily infected reverse osmosis system.


The images used are for reference and illustrative purposes only

## WATER TREATMENT CHEMICALS



## Product Benefits

## Biocides:

- Instantaneous antimicrobial activity as non-oxidizing slimicide/ bactericide.
- Kills bacteria, fungi \& algae exclusively for use in non-potable applications.
- Compatible with thin film (Polyamide) and cellulose acetate membranes.
- Degrades rapidly and naturally to comply with strict environmental discharge regulations.
- More stable and compatible to sodium hexametaphosphate and most polymers.


## Antiscalents:

- Highly effective antiscalant across abroad spectrum of waters.
- Minimises scaling and reduces the frequency of membrane cleaning. Will usually replace the need for acid addition.
- Low dose rate gives a highly cost-effective solution to scale control.
- Compatible with all membrane types.
- Effective iron and manganese sequestrate.
- Enables systems to work at enhanced rates of recovery.


## WASTE WATER TREATMENT



## Polyelectrolytes

AquaPetro has a wide range of Polyelectrolytes for raw water clarification, effluent treatment, colour removal, paint detackification \& a range of process applications.

## Action \& Benefits

Coagulation \& flocculation solid liquid separations with faster sedimentation.

## Dewatering

Reduces moisture from centrifuge, RVDF \& Belt press.

## Faster separation

Use of polyelectrolytes results in faster separation of a solid from liquid \& oil from liquid as a result of denser floc formation.

## Cost effective

Polyelectrolytes requirement is lower as compared to conventional coagulants like Alum, PAC etc. and hence work out to be economical alternatives to conventional treatment.

## Easy to use

Polyelectrolytes are easier to dose. Custom-made dosing equipment are available from Thermax. Solid, liquid varieties are available to suit your needs.
Low to ultra-high molecular weight solid, liquid \& emulsion polyelectrolytes are available to suit your needs.

## - Removal of turbidity in raw water application.

- 0/W separation, sludge dewatering, SS removal in primary and secondary treatment
- Turbidity removal as filter aid, coal washery for colloidal SS removal, sedimentation of particulate matter in scrubbed water. from blast furnace \& basic oxygen furnace, ETP 0/W separation.
- Color removal \& precipitation for textile mills.
- Centrifuge, sedimentation of biological sludge, sludge dewatering and paper krofta Bio sludge sedimentation, dewatering, setting in primary \& secondary ETP.
- Bio sludge sedimentation and dewatering.
- Sedimentation of SS in primary \& secondary clarifier in ETP, thickening \& centrifuge in coal washery.
- Flocculation of sludge in primary, secondary industrial ETP furnace scrubbed suspended solids sedimentation.
- Detackification of overspray paint in paint booths of automobile industry \& ancillary.
- Detackification of HR grade paint overspray in paint booths.
- Customised solutions are available


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