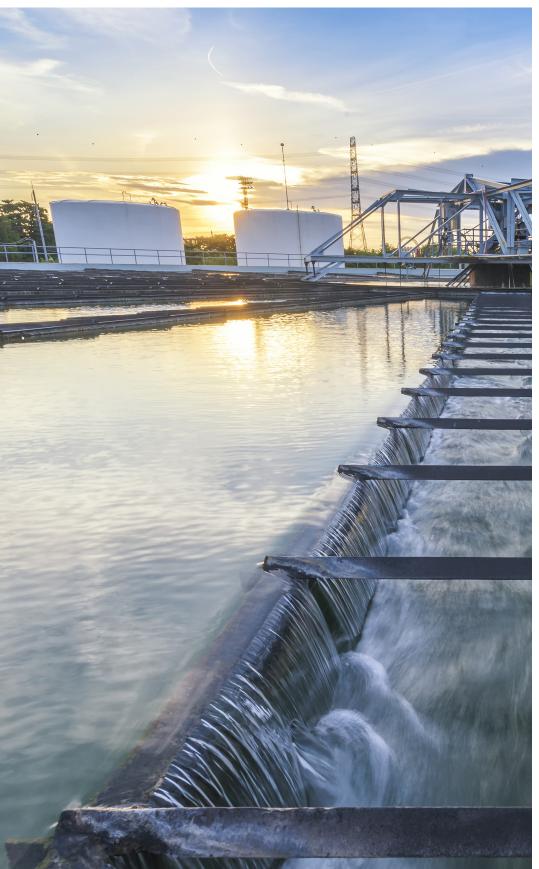
# METITO



# Experts In Water Treatment Technology









# **TABLE OF CONTENTS**

Introduction ..... 02



## Metito Chemicals ..... 03

Cooling Systems Treatment Program	05
Boiler and Steam Generation	08
Chemical Treatment Program	
Desalination Program	09
Flushing and Passivation Services	11
Water Clarification and Wastewater Treatment Program	11

Automation and Feeding Equipment	12	
Industrial Specialty Water Treatment	14	
Commodity Chemicals	15	
Process Chemicals	15	
Chemical Cleaning	16	
Chlorine Dioxide	17	



Metito Customer ...... 20 Excellence



## Introduction



## Chemicals

Metito's Chemical Division was founded in 1982. Metito develops state-of-the-art chemical solutions, services, and automation systems that help clients optimize operational performance and derive maximum value. This is done through utilizing effective chemicals to improve productivity and reduce the total cost of operations while minimizing the overall environmental footprint.

Metito manufactures its products at multiple production sites and inhouse laboratories. Products cover water treatment applications and process additives, thereby offering solutions for vast applications and industries including power, primary-metals, fertilizers, oil and gas, refining, petrochemical, food and mining. Metito also provides chemical solutions for institutional sectors including hotels, hospitals, municipalities, airports, district cooling and universities. Our formulated M-Series chemicals are well established and have been a well-known name in the market for many years.

We are proud to have a full range of membrane

manufacturer approvals for reverse osmosis antiscalants and the NSF approvals necessary to serve our markets, where full traceability and quality control of all ingredients are seen as a minimum requirement.

Municipalities and industries around the globe have come to rely on Metito's innovative products and services designed for operational efficiencies and cost-effectiveness. From conventional water treatment to state-of-the-art membrane filtration and disinfection technologies, we offer water solutions that benefit industries and communities alike.

#### Customer Excellence Standards

Metito is continuously developing its R&D activities to address changing industry requirements and benchmark global best practices to best serve its clients. Applying Metito's Customer Excellence Standards delivers measurable and sustainable benefits and guarantees shared value across all levels and at all times.





#### **Experience Matters**

Since its establishment in 1982, Metito Chemicals has grown significantly in terms of offerings and manpower. This was made possible with the supervision of highly qualified experts with solid industry experience and a successful track record of providing sustainable solutions that are safe and effective. Our specialists successfully developed Chemical solutions and products for various applications in more than 46 countries around the world.

Safety is our focus and is always our priority in whatever we do. We are proud to have an excellent safety record, with numerous awards testament to this. Working with heavy industry and oilfield clients alike has driven our culture and systems to the highest standards. Our OHSAS 18001 certification underlines our commitment to compliance and best practice.

Metito is committed to deliver high quality products. Our product specifications, production process and the sourcing strategy of our raw materials are fully harmonized. We take pride in employing procurement and quality control specialists who maintain and develop this high quality.

We also go the extra mile when it comes to the application of our products. That is why we make our expertise available to our customers, advising and supporting them in using our products as efficiently, safely, and responsibly as possible. All this is backed by robust computer–modelled solutions.

Timely and impeccable delivery is important. This is

why logistics is a key priority for Metito. It is not merely about delivering our products on time but also about transferring and processing them safely. We are large enough to offer the full range of services but small enough to ensure flexibility and timeliness in all our solutions. Our lead times are amongst the lowest in the industry, made possible by our local production facilities and proactive stocking policies.

We have always lived up to the market's highest standards imposed by the market and often taken the lead to develop new offerings for our clients, focusing on product efficiency and environmental benefits. This comes from the expertise within Metito and the many years of experience in our chemicals team. The considerable investment in research and development and industry / product specialists are proof of our commitment to deliver unique, industry-focused solutions with continual improvement at the heart of our operation.

Metito has embraced its responsibility for the environment and our legacy for future generations. Sustainability is at the core of our operation and the results we deliver. Our products are developed with an eye on the future, whether that be chemical, mechanical and operational offerings. We recognize that our chemistries are only part of the equation; how we apply them and the guidance we give has a considerable impact on the total cost of operation of each site.

Our goal is to perform all our sales, service and manufacturing to the complete satisfaction of our customers, as captured in our Metito Customer Excellence Standards.

## **Cooling Systems Treatment Program**

Scaling, fouling, biological contamination and corrosion in cooling water systems directly affect the efficiency and safety of plant operations across industries. While only 2-3% of the cooling tower operation cost is related to the chemical program, it directly impacts on the plant productivity and operations efficiency. At Metito this is addressed through our unique approach to understand the specific requirements of our customers to guarantee the performance and achievement of the target result.

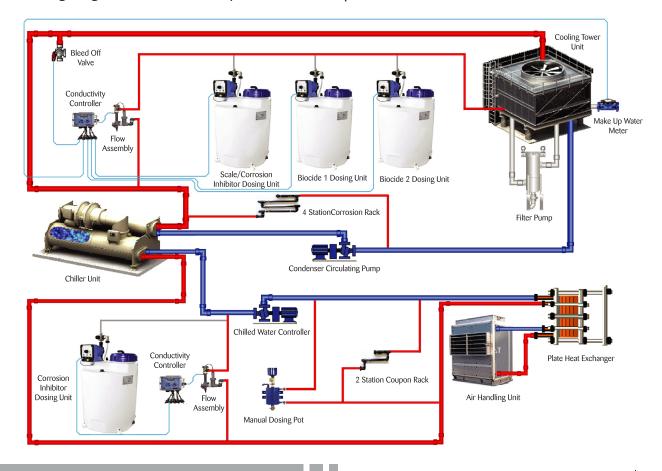
Metito's Cooling System Treatment Program includes unique blends of effective chemistries, software simulation, automation and onsite service by professional engineers. The customized treatment solutions are generated by covering and modeling the full chemical, operational and mechanical aspects of the cooling system. The attention to details of each specific industry, utilization of advanced software enables the delivery of highly efficient treatment programs which are executed by highly qualified engineers, ensuring greater results and the highest level of plant efficiency and assuring a significant reduction in operational cost

while assuring full compliance with the regulations and the safe discharge of water.

#### Scale and Deposit Control Program

Scale deposition is a fundamental problem in cooling water systems as it reduces the heat transfer efficiency by forming insoluble deposits on heat exchanger tubes and surfaces. The formation of scale can result in under deposit corrosion, restriction in water flow and an increase in water consumption thereby reducing plant productivity and increasing operational and maintenance cost. Typical deposits are calcium carbonate, calcium sulfate, calcium phosphate, magnesium silicate, silica compounds and mixtures of these.

In addition to mineral scale, the formation of sludge and organic foulants also contribute to the challenges related to deposits formation in the cooling system equipment. These foulants are introduced through the silt and debris in the air, corrosion bi-products, bio-mass deposits and process contamination.





#### Solutions for Scale and Deposit Control

Prevention of scale deposition is accomplished by controlling the water chemistry below the mineral scale's saturation point. This includes the use of pH adjustment, phosphate sequestrants, and polymer dispersants. The use of scale inhibitors is mainly intended for open systems since closed systems mainly use soft or demineralized water.

#### **Optional Treatments**

#### Increase the Solubility of Minerals

Every mineral in water has a solubility limit effected by ion concentration, pH and temperature. The use of scale inhibitors the solubility of mineral scale but it must be noted that there is a limit for the inhibition property of different grades of inhibitors that are typically organic phosphonates and polymers.

#### Crystal Modification

This approach works on the deposits after it is formed by changing its morphology and structure by forming non-adherent form of crystals that are released from the system with the regular blowdown.

#### Dispersion

The use of dispersants to break up the particles of mineral scale. Another type of dispersants is a surfactant based which is effective in the prevention of bio-mass formation and organic foulant agglomeration.

#### **Corrosion Control Program**

Corrosion damages the key components (pipes, pumps, heat exchangers and other metallic components) in the cooling system and reduces its original strength leading to a reduction in its life and resulting in process leaks and equipment failures in the recirculating cooling system network.

Corrosion is caused by the reversion of the metal surface to its original oxide state which can be observed by general uniform metal loss, localized or pitting corrosion, galvanic under deposit and micro-bio induced corrosion (known as MIC). Metito has a comprehensive line of corrosion inhibitors (Cathodic and Anodic) ranging for zinc-based, phosphate, non-phosphate and filming type.

Corrosion control is also achieved via different mechanisms in addition to the application of proper chemicals as corrosion monitoring is essential for every cooling system regardless of its size. Metito utilizes corrosion coupons and/or online monitoring equipment to monitor this critical factor. Computer modeling is then used to define the type of corrosion inhibitors needed based on water quality and system design.

#### **Range of Products**

- Inorganic and polyphosphates
- Organic phosphonates
- Polymers
- Molybdate
- Nitrites
- Silicates
- Azoles
- Filmers

#### Bacteria and Bio-Control Program

Microbiological problems commonly exist in cooling water systems. These living organisms are present in the air, soil, and water. Under the proper conditions, they grow into large bio-mass that block water flow, obstruct heat transfer, induce corrosion, impose health risks, and cause offensive odours. If left uncontrolled, microbiological growth will result in fast deterioration of the cooling system pipes, packing, heat exchangers, nozzles, and other parts.

#### **Micro Bio-Control Solutions**

#### Oxidising Biocides

Chlorine and hypochlorite are the most commonly used oxidisers in the industry. In some cases their effectiveness is hindered and the use of enhancers such as brominating agents is needed. The use of a stabilised form of chlorine-based biocides is also considered in areas with elevated ambient temperature. Chlorine dioxide has a high level of performance under different conditions and in situations where there maybe process leaks.

#### Non-Oxidising Biocides (NOB)

The use of NOBs is intended to support the oxidisers or replace them in case of limitation in the use of chlorine or other regulatory rules, such as discharge requirements. The selection of the best NOB or combination of two different types depend on the chemistry used in the cooling system and the system operating parameters.

#### Enhancers

Dispersants (surface active agents) are used to enable the biocide penetrate into biomass layers and to assure proper disinfection of the system.

Bio-control is considered an essential part in allowing the effective treatment program to deliver its results. Improper bio-control can result in the failure of the best chemical treatment program to deliver the expected results.



# Boiler and Steam Generation Chemical Treatment Program

Almost every industrial plant relies on steam generation in the production facility for heating or direct use on steam in the process. The reliable production of steam generation requires an effective chemical program, proper application and continuous monitoring.

Metito takes into consideration all the requirements and system parameters when designing an effective and comprehensive program for boiler treatment and has a wide range of customized products based on industry type, boiler design and steam use. The full range of boiler water treatment chemicals, testing, and automation can maximize system efficiency, eliminate unplanned downtime, reduce maintenance costs, and extend equipment life.

The final design of the treatment program is carefully selected from nearly 80 product variations selected by expert engineers and based on the requirements of the customer and system data.

#### **Product Range**

#### **Boiler Feed Water Treatment**

Oxygen scavengers (organic and inorganic)

- Alkalinity builders
- Passivation agents (corrosion protection)
- Neutralizing amines

#### **Boiler Internal Water Treatment**

- Coordinated phosphate
- Non-phosphate polymer program
- Phosphate /polymer
- Antifoam agents

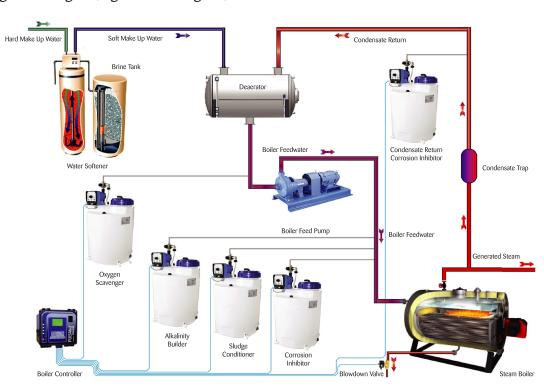
#### **Steam and Condensate Treatment**

- · Neutralizing amines
- Filming amines
- Oxygen scavengers and passivating agents (100% volatile type)

#### Wet Layup Programs

#### **Special Treatment Programs**

- Descaling agents (acid and non-acidic)
- · Food compliance program
- · Fireside additives





Metito was the first company to introduce the reverse osmosis (RO) technology for desalination outside the USA in 1972 and since then the Company has developed thousands of successful projects using the same technology across the world.

RO operation requires the assurance of water quality and efficient production of water and Metito offers complete and reliable RO solutions including, pre-treatment modules, cartridge, multi-media, filters, pre-filtration, softeners, and chemical feed systems. The full ranges of RO chemicals are approved by and accredited from all market-leading membrane manufacturers with NSF Standard 60 approvals and compatible with the various membrane types.

Metito's chemicals under the Desalination Program are highly effective and cover all types of feed water types: brackish, seawater, fresh and industrial wastewater. They can also be applied over, a wide range of pH spectrum with assured compatibility. All solutions under this program are computer modelled by advanced software to include full evaluation of all mechanical, operational, and chemical parameters including cationic/anionic feed water analysis. Online monitoring and detection solutions are also available to remotely control chemical feeds and to continuously monitor operations and performance insuring a safe and sustainable supply of water and minimal downtime.

Earning the trust of market leaders and a reputation for excellence, Metito has led the trend to mega seawater (SW) desalination in a number of countries with the latest being in Egypt. Metito developed and commissioned Al Galala SWRO plant, the largest seawater desalination plant in Egypt with capacity of 150,000m³/day and is now developing Al Arish SWRO with a capacity of 200,000m³/day. The chemical solutions used for both projects are of world-class quality and ensure the optimum operations and sustainable success of such projects.

#### **Product Range**

#### **Antiscalants**

Prevention of mineral scale deposits on membranes by use of effective antiscalants can assure the prevention of membrane fouling and optimum plant productivity. Metito wide range of antiscalants, with a track record of nearly 40 years of successful application, has been developed to deliver superior protection for a wide range of RO systems producing potable water or purifying industrial water. Metito products are NSF approved.

#### **Cleaners**

The CIP process is an integral part of RO operation and the use of effective cleaners assures that the cleaning brings the expected restoration of the RO plant. Metito has a comprehensive range of cleaners uniquely formulated to remove mineral scales, organic deposits and/or micro-bio based fouling material. The available cleaners are acidic and alkaline types mixed and empowered by enhancers to maximize the outcome of the cleaning process.

#### **Biocides**

Bio-growth and fouling of the RO membranes are common challenges that lead to upsets in the RO operation. The use of effective and properly selected non-oxidizing biocides against a wide range of bacteria can bring effective control to microbiological fouling in the RO membranes and guarantee a steady operation, preventing unplanned downtime.

#### **Pre-treatment**

One of the requirements for RO operation is low SDI, no chlorine and proper pH in RO feed water. In some cases, this requires the feeding of pre-treatment chemicals for maximizing membrane productivity and performance. Metito has a wide range of coagulants, dechlorination agents and acids to address such requirements efficiently.

#### **Thermal Desalination**

Metito's treatment programs provide superior performance, controlling scales, and foaming challenges in high-temperature brine plants.



## Flushing and Passivation Services

Metito provides comprehensive solutions for the flushing and passivation of newly installed piping systems (cooling, chilled or process pipelines) in line with the international guidelines and recommendations such as BSRIA.

The main objectives of the flushing work is to make the system free of all contaminants such as iron oxides, loose mill scale, grease and oil or welding splashes, cement or brick dust that may enter the system during site erection

and pipe installation. Passivation is then needed as the final step before start-up / commissioning of the plant.

The Metito Flushing Program comprises of special pumps, filtration system, on-site export support, and the use of highly effective chemicals. Metito experts have completed more than three hundred flushing and passivation jobs with a total estimated volume exceeding 200,000m<sup>3</sup> of water.

# Water Clarification and Wastewater Treatment Program

Metito has over 60 years of experience in wastewater treatment and prides itself with its team of industry experts and unmatched knowledge in this field. Metito's unique designs for customized wastewater treatment solutions and systems enable clients to evaluate their wastewater and to treat it to the level most beneficial to their operational requirements and environmental commitment; primary, secondary, and advanced treatment levels.

At Metito, we offer customized treatment solutions from clean to dirty water and reuse up to hyper pure water for municipal (raw water and wastewater) and industrial use. Metito's treatment chemicals and equipment used in wastewater treatment can optimize cost of operations through the usage of the most the advanced chemicals and innovative biological treatment solutions.

Metito's solutions effectively handle sludge by augmenting the performance of dewatering systems and equipment thereby enabling clients to use the onsite, readily available treated and recycled wastewater in their operations instead of discharging and opting for more expensive water from other sources.

Metito's global know-how and local presence in strategic markets across the world allow the company ample knowledge of stringent local water quality requirements and ensures strict compliance with the most challenging parameters and regulations.

- High-performance anionic and cationic coagulants
- Flocculants
- Antifoams
- Defoamers
- · Dry anionic and cationic polymers
- Odour controllers
- Eco-friendly enzymes and microbes







With being a fundamentally engineering company, Metito Chemicals utilizes the vast experience and know-how of its expert engineers to develop equipment solutions that can optimize operations and elevate the effectiveness of its bespoke chemical products.

#### **Product Range**

#### **Pre-treatment solutions**

Metito designs, supplies, and installs a full line of pretreatment systems that include; softeners, de-alkalisation, de-mineralisation, and reverse osmosis systems. Metito supplies an extensive range of dosing equipment for applications such as boiler water treatment, cooling water systems, chillers water systems, domestic water, reverse osmosis systems, and swimming pools.

#### **Dosing and Control Systems**

Metito's dosing and control equipment ensures that steam boilers and cooling towers continue running safely and efficiently. In addition to the packaged chemical dosing systems we provide a range of water treatment dosing pumps and spares (e.g. timer, water-meter signal or other external input options).

There are different types of controllers for boilers, cooling towers, closed systems, swimming pools, and other applications. These controllers are capable of managing conductivity, pH, ORP, halogen levels, inhibitor levels, blowdown timing, and solenoids and may also monitor many other important parameters such as chemical levels and water meters inputs.

Metito has also introduced the highest specification of biofouling and corrosion corrator monitors to ensure that the solutions provided by the company are based on real operational results to enabling clients to accurately quantify the effectiveness of the provided services. Furthermore, Metito provides ancillary equipment such as level probes, control probes, water meters, solenoid valves and all the fittings associated with such items.

#### Metito 4

Metito 4 is Metito's new chemicals platform bringing together a wealth of state-of-the-art experience and superior features.

Metito 4 combines chemistry, equipment, software, and communications technology ensuring optimum control. This technology is not restricted to our products, the corrosion and bio-film monitors are chosen based on market-leading and award-winning technology. Systems

are not restricted to one system per controller and the system architecture is open, allowing use of chemicals from all suppliers, thus removing the link to proprietary products as with other market offerings.

The system is available for boilers, cooling systems, closed systems, and RO processes where our MetRO communications package brings real-time normalization data and graphical representation to life.

#### Features:

- On-line, web based summary of account status
- Process values continuously updated including past 24 hour/min, max and average values
- Alarm status
- One-click to any device in the field for full view and reconfiguration
- Analysis, troubleshooting, adjustments
- Seamlessly organize devices according to a process (es), facility, customer, etc.
- · User "access" and "permissions" management
- Eliminates surprises during 'routine' visits

Monitoring and control is focused on real-time operational parameters including bio-film levels, general/pitting corrosion rates and scaling measurement on top of normal probe measurement and timers from traditional systems. Connectivity can be with Ethernet, WIFI, Mobile – enabled controller with full alarm and reporting capability. This then links to the Metito Customer Portal where results and reports can be accessed remotely for all customer sites with full password security options.

#### **Analytical Equipment and Services**

Water testing plays a vital role in the treatment of various systems. Metito provides quick and accurate water testing solutions both on-site and in our dedicated laboratories which are the equipped with state of the art facilities to conduct all the chemical, physical and microbiological analysis. We complement this with fully accredited laboratory analysis services, and microbiological services that include legionella pneumophila analysis.

Metito also provides an extensive range of professional water test kits, chemical reagents, spectrophotometers, and dipslides which are all suitable for the microbiological monitoring of cooling water systems, natural waters, wastewaters, and industrial effluents.

Metito's range of high performance products have been developed to allow facility managers, engineers, environmental health specialists, and water treatment professionals a range of important water quality analysis procedures that are both quick and accurate.

#### **Polymer Preparation Systems**

Effective preparation and accurate dilution of the flocculants and polymers in raw water clarification and wastewater treatment is essential for obtaining the required water quality.

Metito's engineers have a vast experience in the design and development of tailored polymer feeding systems (powder and liquid) to serve unique client requirements.

#### **Disinfection Technologies**

Metito is one of the leading chlorination system manufacturers in the Middle East, offering high quality chlorinators and a complete line of water chlorination systems that encompasses all major technologies. Metito also provides full system support to equipment (chlorinators) installation and after-sales service.

#### **Product Range:**

#### Mach 4

This is a state-of-the-art chlorinator that uses the latest technology to provide the best value for money and designed for use with common chlorine cylinders and drums. It can be used indoors or outdoors undercover.

#### Chlorine Dioxide

Based on different technologies chlorine dioxide generation is also available and is developed based on defined requirements. The available system capacity ranges from 1kg/day up to 50kg/hour.

#### Ozone Generators

A wide range of ozone generators are available for commercial, residential and industrial water treatment purposes.

#### · High Quality UV Water Systems

The high quality UV water systems disinfection is yet another solution for an ever-growing range of water treatment applications.



## **Industrial Specialty Water Treatment**



Metito's expertise in industrial water treatment is unchallenged. Our engineers and technical support team take time to understand and appreciate the client's processes and key performance criteria, whether that be critical heat exchanger performance, system availability/efficiency or exacting microbiological demands. Our products and services are designed to ensure safe use, and to provide competitive advantages in terms of cost and environmental footprint.

Metito does not just sell chemicals; we are providers of intelligent water management solutions that incorporate advanced specialty chemicals. The company's integrated approach comprises chemicals, equipment, services and information management that is tailored to the specific needs of an industrial plant.

To ensure the best use of these solutions, Metito shares valuable knowledge with its clients, through its team of regional industry/ product specialists and local sales engineers. This helps clients to further focus on clear, quantifiable operational results rather than processes.

Metito's solutions cover the whole industrial range, including:

- Minerals and mining
- Pulp and paper
- Petrochemicals
- Cement
- Food and beverage
- Power (Electricity)
- Textiles
- Automotive
- Geothermal
- Chemicals
- Manufacturing
- · Primary metals
- District cooling
- Fertilizer
- Steel
- Sugar
- Thermal (Pasteurization and sterilization)

## **Commodity Chemicals**



Through Metito's worldwide sourcing and procurement capabilities of bulk commodity chemicals, the company is able to provide its customers with the most competitive prices, the highest quality material and final products in the shortest possible delivery times. Metito also stocks a comprehensive range of these industrial chemicals at our warehouses worldwide.

### **Process Chemicals**

Metito Chemicals aims to serve the whole industry. Process chemicals improve the efficiency of the end-product and process in challenging sectors. These covers:

- Geothermal well chemicals
- Thermal process chemicals
- Mining process chemicals
- Sugar manufacture chemicals





Metito can provide significant savings in start-up time and energy costs by effective chemical cleaning of industrial equipment before start-up and during routine maintenance shutdowns. We have a team of trained personnel consisting of engineers, chemists, specialists and skilled chemical cleaning technicians, who have honed their skills to meet the stringent quality requirements and time-bound chemical cleaning schedules of our clients.

#### Our services include;

- Cleaning the full range of industrial heat exchangers
- Pre-commission cleaning

- Chemical flushing of large-scale institutional/ industrial projects
- Pickling applications
- Passivation for large heat exchangers at large desalination units
- · Desalination plant pipeline cleaning
- · Condensate return pipe cleaning
- Cleaning and preserving all types of boilers and waterborne systems
- Experience of oil and gas/marine applications

### Chlorine Dioxide

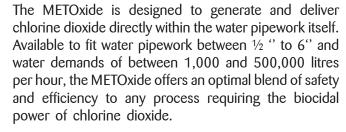
Chlorine dioxide long has been known as a biocide that adds value to the majority of disinfection applications. Many other biocides have several generally acknowledged hazards and disadvantages that chlorine dioxide does not have. The use of chlorine dioxide is increasing in the world of drinking water and sewage as chlorine dioxide is very effective against bacteria including legionella pneumophila and to prevent and remove biofilms:

- Eco-friendly biocide
- · Cost-effective, highly potent



- Excellent alternative to bleach, ozone and bromine
- Not pH dependent
- Minimal pipe corrosion
- No generation of harmful by-products

### **METOxide**



The unique in-line reaction chamber provided at the heart of the device has been designed and developed since 1999. This unique approach ensures that chlorine dioxide is generated efficiently and safely within the water pipework itself; there is no storage or pumping of potentially hazardous free chlorine dioxide solutions. The double jacketed design of the METOxide reaction chamber ensures that even in the event of catastrophic physical damage to the reactor, there is minimal risk leakage of concentrated chlorine dioxide solution into the atmosphere.



The METOxide is a microprocessor controller and offers the ability to dose chlorine dioxide directly in proportion to the signals from an industry-standard pulsed water meter. A variety of alarm inputs are provided, allowing for dosing to be started or stopped in response to alarm signals from customer processes, timers or stand-alone batch controllers.

The METOxide can also interface directly with a wide range of chlorine dioxide specific monitoring systems, such as our Sentinel Guard, which directly monitors the residuals of chlorine dioxide and chlorite within the water system. Sentinel Guard can provide a signal to cut off the dosing if higher than expected residuals are achieved.

An optional, detachable 7" touchscreen is available, allowing for easy programming and site viewing of stored data logs, alarms, and hourly water consumption figures.

# **METOxide Applications**



## Municipal drinking and wastewater disinfection

- Disinfection of drinking water
- Taste and odour control
- Avoid bromate formation in desalination seawater of potable water works



#### Fruit and vegetables

- Cleaning of fruit and vegetables
- Sanitizing of milking machines



#### Hospital

- Total disinfection
- Disinfection of surfaces and removal of Legionella



#### Livestock industry

- Cleaning of the remaining carcasses
- Disinfection of surfaces



#### Industrial wastewater disinfection

- Destruction of microorganisms
- Taste and odour control
- Destruction of phenols



#### Oil and gas industry

- Bacteriological control of drilling
- Disinfection of pipelines and tanks
- Disinfection of used water
- Used in cleaning bores



#### Fishing industry

- Use in ice production
- Disinfection of surfaces and process water



#### Maritime industry

- Disinfection of drinking water
- Removal of biofilm
- Water circuit treatment



#### Paper industry

- Disinfection of used water
- Iron control
- Effective against aerobic and anerobic bacteria



#### Environment

- Odour control
- Bacteriological reduction



#### Reverse osmosis

- Control biofilm formation
- Increased salt passage



#### Food industry

- Disinfection of process water
- THM's control
- Disinfection of surfaces

## METBiotek 100% Natural - Non-Toxic - Non-Pathogenic

#### **METBiotek OC-IND**

Controls odour and enhances degradation of difficult organic waste matter and a natural organic-based technology designed to control gas that generates odour reactions in wastewater and storage systems, lagoons, landfills and transfer stations.

This novel organic technology contains reactive constituents that have a macromolecular sponges function that permanently binds and stops odour in its tracks. It works in a wide range of temperatures and is effective in pH level of 5.0 to 9.5.

#### **METBiotek ALGAWAY 60**

Specially formulated for industrial and municipal wastewater systems:

- Effective in both acidic and alkaline pH ranges
- Reduces the algae population and digests floating and suspended organic matter that clouds the water column
- Effective in killing green, blue-green, mustard, black and over 20,000 strains of algae

#### **METBiotek SA**

Specially formulated for sludge reduction:

- Improves Aerobic and Anaerobic digester efficiency
- Enhances settling/supernating in digesters and clarifiers

#### **METBiotek DGTT**

Treatment for fog fats, oil and grease:

- Designed specifically for industrial, institutional and municipal effluent
- Eliminates odour and provides a significant reduction in line and trap maintenance

#### **METBiotek IND**

Specially formulated for industrial and municipal wastewater systems:

- Improves BOD and COD removal efficiency
- Solves your most difficult waste management problems when used as part of a controlled maintenance program
- Reduces Hydrogen Sulfide which causes strong, offensive odours
- Digests solid organic waste, grease, fat and oils

#### **METBiotek LL&P**

Specially formulated for fishponds, decorative lakes and lagoons:

- Creates a healthy aquatic environment
- Contains Photosynthetic Bacteria and Heterotrophic bacteria which help clarify cloudy water by promoting flocculation and settling of in-organic particles
- Digests organic sludge, reducing the frequency of cleaning
- Reduces build-up of waste from fish and waterfowl



## Customer Excellence

Customer satisfaction is Metito's philosophy and commitment to surpass customer's expectation. It is up to the highest level of Metito's product, services and customer service. Our philosophy and commitment to the highest possible customer satisfaction are formalized in our Metito Customer Excellence standards.

#### **Managing Contracts**

Metito believes that communication is the key to the success of any long term partnership. Our documented management of your business includes an overview of your operation with focus on your business drivers, goals and priorities. We focus on understanding your organization to ensure you know how we are meeting your needs.

#### **Engineering Survey**

Delivering what you need starts with a full understanding of your site, systems, and processes. Safety is at the forefront of all we do. We capture all this in our Engineering Survey. It is important to have knowledge of our impact on your critical processes, past and current challenges, the treatment regimens and equipment/chemistries utilized. We focus on evaluating the cost impact of current regimes so that we can identify clear, quantifiable benefits using Metito programs. Our Technical Support Engineers, and Industry/Product Specialists review engineering, surveys with our Sales Engineers to ensure we select the most appropriate and cost-effective treatment to ensure maximum plant efficiency.

#### Timetable for Service

We are a completely dedicated and service oriented organization. Our commitment to you is in writing. We develop with you a service plan which covers all the expected routine system assurance testing and inspections. In addition, we commit to planned reviews of operational results, agreed Key Performance Indicators, value-added projects and constant review of safety and environmental performance.



#### **Information Reports**

The work we do is all captured in comprehensive service reports covering all test data, recommendations for improvement (including safety) and summaries the value in your terms of what we provide.

#### **Technical Manual**

We ensure that the documentation on-site supports all that we do with the customer. Our technical manual covers – Metito contact information, ordering information, safety information, Metito, and customer responsibilities, Overview of Metito programme and products, engineering survey information, required test procedures, control limits and troubleshooting guide, MSDS and product bulletins.

#### **Overall Review**

We ensure to review our performance with our customers at least once a year so that we cover QHSE, review of system assurance, program KPIs, value added projects, programme financials, future project priorities, and goals and to discuss satisfaction survey feedback and plan for training.

metito.com
Design and Build | Utilities | Chemicals
Intelligent Water Management