

Smet Jet Africa

INDUSTRIAL CLEVER CLEANING



Chemical Cleaning Profile

Smet Jet Africa – Industrial Cleaning Solutions



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Introduction

Chemical cleaning is a specialized process using targeted chemicals to remove contaminants, scale, rust, and other unwanted substances from surfaces, equipment, and systems. This method is essential in industrial settings for cleaning boilers, pipelines, heat exchangers, and tanks. By selecting the right chemicals for the specific contaminants and materials, chemical cleaning ensures precise and effective results.

Maintaining clean equipment is crucial for optimal performance and longevity. Deposits and contaminants can hinder machinery functionality, increase energy consumption, and cause damage. Chemical cleaning effectively removes these buildups, enhancing equipment efficiency and extending its lifespan. Additionally, it serves as a vital preparatory step in processes like coating, painting, or welding, ensuring superior outcomes.

Our Chemical Cleaning Department at Smet Jet Africa is committed to providing top-tier cleaning solutions. Utilizing advanced techniques and a deep understanding of chemical properties, we offer customized cleaning strategies that maximize efficiency and safety. Our experienced team maintains the highest service standards, making us a trusted partner in industrial maintenance and performance enhancement.

Focusing on innovation, safety, and environmental responsibility, our chemical cleaning services meet the diverse needs of our clients. We excel in tackling challenging cleaning tasks, delivering exceptional results that ensure seamless operation and longevity of industrial equipment.



Our Services

Explore our comprehensive range of chemical cleaning services designed to address all aspects of equipment maintenance and enhancement:

Acid Cleaning:

Acid solutions such as hydrochloric acid, sulfuric acid, or citric acid are used to dissolve mineral scale, rust, and other deposits from surfaces. Acid cleaning is commonly used in industries like metal fabrication, mining, and oil refining.

Alkaline Cleaning:

Alkaline solutions, such as sodium hydroxide (caustic soda) or potassium hydroxide, are used to remove organic contaminants like grease, oil, and carbon deposits. Alkaline cleaning is often employed in industries such as food processing, pharmaceuticals, and automotive manufacturing.

Solvent Cleaning:

Solvents like acetone, alcohol, or petroleum-based solvents are used to dissolve and remove organic contaminants from surfaces. Solvent cleaning is effective for removing oils, grease, waxes, and some types of coatings.

Degreasing:

Degreasing agents specifically target and remove grease and oil from surfaces. They are commonly used in automotive, aerospace, and manufacturing industries to clean parts and equipment.

Passivation:

Passivation is a chemical process used to remove free iron from the surface of stainless steel and other corrosion-resistant alloys, leaving behind a passive layer that enhances corrosion resistance. Nitric acid solutions are often used for passivation.

Pickling:

Pickling involves the use of acids, typically hydrochloric acid or sulfuric acid, to remove surface impurities like scale and oxides from metals such as steel and stainless steel. It prepares the metal surface for subsequent processing or finishing.

Biocidal Cleaning:

Biocidal agents are used to remove and prevent the growth of biological contaminants such as bacteria, fungi, and algae. Biocidal cleaning is common in water treatment systems, food processing, and healthcare facilities.

Oxidation Cleaning:

Oxidizing agents like chlorine or hydrogen peroxide are used to chemically break down and remove organic contaminants. Oxidation cleaning is effective for disinfection and removing stains.

Chemical cleaning is widely utilized across various industries due to its effectiveness in removing contaminants and maintaining equipment performance. Here are some key reasons for its application:

➤ **Removal of Contaminants:**

Chemical cleaning is highly effective in removing various types of contaminants, including scale, rust, mineral deposits, organic residues, oils, grease, and biological growth. These contaminants can accumulate on surfaces over time and negatively impact the performance, efficiency, and lifespan of equipment.

➤ **Prevention of Corrosion:**

Corrosion is a major concern in many industries, as it can cause structural damage, leaks, and equipment failure. Chemical cleaning helps remove corrosive materials and residues from surfaces, preventing corrosion and extending the lifespan of equipment and infrastructure.

➤ **Improved Efficiency:**

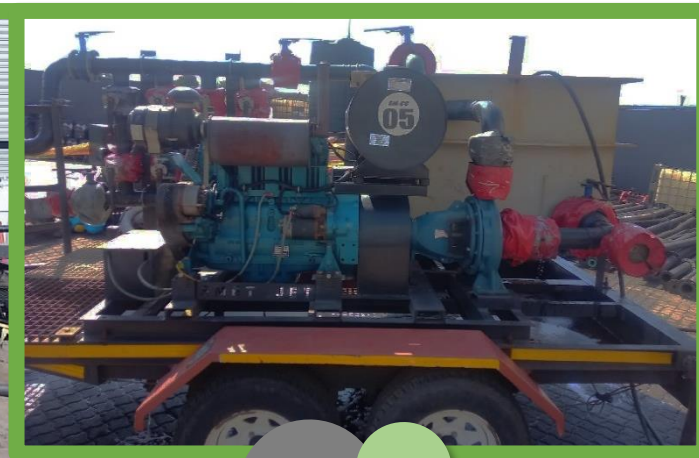
Clean surfaces allow equipment to operate more efficiently by optimizing heat transfer, fluid flow, and other processes. Removing deposits and contaminants from heat exchangers, boilers, pipelines, and other equipment can improve energy efficiency and reduce operating costs.

➤ **Maintenance and Overhaul:**

Chemical cleaning is often used as part of routine maintenance or during equipment overhauls to restore performance and functionality. It can help revitalize aging equipment, remove buildup, and prepare surfaces for inspection, repair, or coating applications.

➤ **Compliance with Regulations:**

Many industries are subject to regulations and standards regarding cleanliness, safety, and environmental protection. Chemical cleaning helps ensure compliance



Key Benefits

Precision and Efficiency: SJA's skilled professionals employ a meticulous approach to ensure comprehensive cleaning and maintenance of equipment. We actively listen to our clients, maintain transparent communication, and leave no stone unturned. Our unwavering focus on detail aims to consistently surpass expectations.

Advanced Techniques: SJA leads the industry in innovation, continuously exploring and adopting innovative equipment and advanced cleaning methods. Our commitment to staying at the forefront ensures that our techniques deliver consistently exceptional results, providing added value to our valued clients.

Trustworthiness: Professionalism is the cornerstone of our operations at SJA. We prioritize exceptional service, open communication, and strong client relationships. Our highly trained team ensures compliance with industry standards, fostering trust and confidence in our services.

Tailored Solutions: At SJA, we prioritize client satisfaction with round-the-clock availability and a two-hour response time, ensuring prompt attention to needs and minimal disruption to business operations. Efficiency is paramount as we deliver high-quality service swiftly, minimizing downtime and recognizing the critical importance of time in our clients' operations.

Cost-effectiveness: SJA excels in delivering cost-effective solutions through meticulous and efficient project management, effectively reducing both time and expenses associated with equipment cleaning and maintenance. Our steadfast commitment to minimizing downtime not only ensures the durability of your equipment but also yields substantial reductions in operational costs.

Enhanced Safety: Safety is paramount at SJA, as we prioritize the well-being of our employees, clients, and the environment. With an impeccable safety record in a hazardous industry, we adhere rigorously to stringent safety protocols and leverage automation wherever feasible to mitigate risks effectively.



Get in touch!

Ready to experience the power of chemical cleaning for your cleaning needs? Contact us today to schedule a consultation and discover how our environmentally friendly and efficient solutions can benefit your business.

Contact Information:

 Phone:

- Business Hours @ (+27) 66 065 7719 || (+27) 61 532 3810
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Don't wait—take the first step towards cleaner surfaces and enhanced efficiency now!





Additional information

At Smet Jet Africa, we offer a diverse range of services tailored to meet your needs. In addition to Chemical Cleaning, our comprehensive solutions encompass a variety of specialized services that includes:

- Water Jetting (HP Cleaning)
- Vacuum Cleaning
- Automatic Tube Cleaning Systems
- Lazer Cleaning
- SME's (Subject Matter Experts) On Project Request

Embrace the transformative power of chemical cleaning with SJA. Our advanced chemical cleaning services offer unparalleled precision, efficiency, and effectiveness. With a focus on innovation, safety, and cost-effectiveness, we deliver exceptional results across a wide range of applications. Trust SJA for superior chemical cleaning solutions tailored to meet your unique needs, backed by our commitment to excellence and client satisfaction.

Experience the difference with
Smet Jet Africa
Target Zero