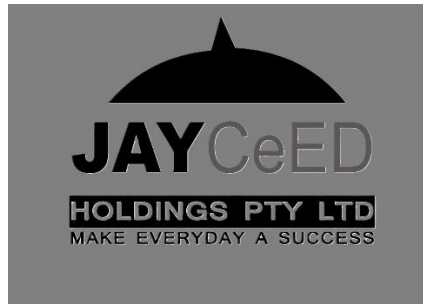




MECHANICAL & ELECTRICAL COMPANY PROFILE & SCOPE OF TECHNOLOGY

Enterprise name: JAYCEED HOLDINGS(PTY)LTD

Registration No: 2018/635486/07

JAYCEED HOLDINGS FOUNDER

CEO / Director: Jappy Masangani

Contact No:010 142 9613 / 079 966 2527

E-mail: info@jayceedholdings.co.za

OFFICE ADDRESS

2ND FLOOR WEST TOWER
NELSON MANDELA
SQUARE
MAUDE STREET
SANDTON
2196

B-BBEE: LEVEL 1 CONTRIBUTOR: 135% PROCUREMENT RECOGNITION

Jayceed Holdings is founded on a bedrock of commitment to provide our clients with processed water that is pure, safe, reliable, consistent and of a quality that not only meets, but exceeds, the legal requirements. This business harnesses cutting edge technology to create solutions for the end user.

Africa class technologies

In the industrial, pharmaceutical, mining, health care, paper, and food and beverage industry, water conservation and environmental awareness are becoming critical operational factors. At the same time, demand for product quality, product safety and economy have never been more intense.

Design Philosophy

Jayceed approaches each customer project as a unique challenge. We begin by gathering comprehensive information on the existing water conditions and the factors influencing the desired outcome. These factors include:

- Current water contaminants and processes
- Customer's specific requirements
- Regulatory requirements
- Geographical conditions
- Market demands
- Latest technologies, research and technical papers
- Collective team experience of a good experience of water treatment.

Jayceed will meet the customer's requirements in a cost effective, safe and efficient manner.

Regulatory demands are non-negotiable. Continuous monitoring and understanding of client obligations are of concern in all applications. At the same time, Jayceed is focused on creating the most cost-effective water purification solutions and provides an efficient service and maintenance without compromising quality.

Dual fired coal and gas steam boiler water treatment and service

Jayceed provides a service and maintenance for water treatment on steam boilers and condensate water plant related to boiler operations. Our service is delivered efficiently, and Quality is maintained to specification all the way, from initiation to the final required point of use.

Guarantees

All work is guaranteed, based on suitability and performance. On completion of a project, **Jayceed** offers a custom-designed preventative maintenance package to keep the plant in running order and to prevent any unnecessary, untimely downtimes. By focusing on what we do best, our customers are free to focus on their own core businesses. Our services therefore include frequent visits, detailed agreed-on performance checks and inspection on all installed equipment.

Product and Systems Validation

The Jayceed validation service ensures that the installed filtration systems perform to high levels of reliability and is capable of reproducing such standards on a continual basis.

Our Validation Service uses the Parametric Approach that structures testing in a rational and scientific way. In all cases, data provided is supported by full documentation to meet the most stringent current and anticipated regulatory requirements.

Successful Projects

The following plants have been designed, manufactured, service and maintenance by the founding members of Jayceed Customer references are available on request.

List of clients Supply Only	System purpose
Zalisile Msebenzi	High Lift Pump Station
KIR	High Lift Pump Station
- Sabie municipality - Colgate Palmolive	Chlorine dioxide sewage effluent disinfection Chemical and spares supply.
Leratong hospital	Chemical supply
Sterkfontein hospital and cooling towers.	Chemical supply, boiler water treatment and pre-treatment plant

Completed services and maintenance sub-contracted under boiler and stocker spares

- Leratong hospital (2020-2021) chemical supply

Completed services and maintenance subcontracted under Siyenza consulting services

- Dr Yusuf dadoo hospital (2019-2019) chemical supply and boiler water treatment
- Sterkfontein hospital (2019-2019) chemical supply and boiler water treatment

Completed services and maintenance subcontracted under Siyenza consulting services(2022-2023)

- Masakhane provincial laundry chemical supply and boiler water treatment
- Dunswart provincial laundry chemical supply and boiler water treatment
- Hellen joseph hospital chemical supply
- Edenvale hospital chemical supply and boiler water treatment
- Leratong hospital Cooling towers water treatment

COMPLETED PROJECTS

Leratong hospital boiler water treatment and renal water treatment (2021 to 2022)
Edenvale hospital boiler water treatment (2021 to 2022)
Charlotte maxeke academic hospital boiler water treatment
Discovere chc boiler water treatment (2021 to 2022)
Dr Jusuf dadoo memorial hospital boiler water treatment 2021 to 2022
KIR High Lift Pump 2024-2025
Zalisile Msebenzi High Lift Pump 2025-2026

ULTRAFILTRATION PLANT



REVERSE OSMOSIS PLANT



BOILER PREPARATION AND STATUATORY SERVICES



Scope of Technology and service works

Chemical dosing systems

Dosing systems are required in applications with an unfavourable Langelier Index or where scale formation occurs when the solubility of salts is exceeded. **Jayceed design** dosing systems that can be used prior to the pre-treatment process to enhance the efficiency of the impurity removal process, or in a system sanitising procedure such as periodical RO cleaning, as well as general dosing of other chemical requirements.

Carbon filters and vessels

Jayceed offers our customers the additional service of design and manufacturing of carbon filtration systems in compliance with customer requirements. Activated carbon is effective for the removal of numerous elements from water through catalytic action or absorption. These include taste and odour, chlorine and chlorination by-products, volatile organic chemicals and inorganic chemicals such as lead.

Water softening plants

Softeners are widely used to treat boiler feed make-up and pre-treat RO feed water to prevent the formation of scale in RO modules. **Jayceed** also design and assemble these softener plants, supplied as complete systems.

Ultra-violet systems

Jayceed provides ultra-violet process equipment, either as stand-alone UV systems or upstream of our membranes, with additional effective final filters for the removal of microbes destroyed by ultra-violet (UV) rays. The removal of pyrogens from process water before it enters production guarantees the customer bacteria and pyrogen-free water.

Membrane filtration systems (MF, UF, NF, RO)

Jayceed selects the appropriate anchor technology, and in consultation with our customers we build the complementary processes and products to fulfil the requirements. Determining the appropriate technology depends on the quality of the feed source and the customer's specifications and budget, as well as the footprint normally available in existing processes

Medical GAS Equipment and oxygen bank

Repairs and maintenance of the Medical Air, Gas and Vacuum plant

- Major service of air driers 10.5 kW - 20kWd
- Major service on Nitro Oxide Bank 12 bottles
- Major service on Medical Air Compressors Screw type
- Major service on Medical Air and Reticulations gas points, nitro oxide, medical air low pressure, high pressure and vacuum points 2000 point and above
- Major service on Oxygen Gas banks 24 bottles - and above
- Filters E0295 AA
- Change over device medical gas bank

Air compressor and HVAC systems

Servicing, repairs, maintenance of the Refrigeration Installations

- Supply, installation and services of high-pressure compressors

Air conditioning and ventilation installations

- Honeywell controls systems
- Valve Actuator (heating and spring to close motorise valve)
- L C D temperature and humidity comptroller 36 universal input/output
- Supply of Filter Microcell 95% dust spot 62 pleats with seal
- Highwall split under roof and top roof air conditioning system supply and service
- HEPA filters

Chillers and steam works and pipes

- Supply and installation up to 3000 litres vertical calorifiers
- Maintenance and service of chiller systems

Kitchen and laundry equipment's

- Jayceed provides a Service, repairs and maintenance of the Mechanical and Electrical Kitchen Equipment and Laundry Equipment and includes the supply of the following spares.
 - Convection ovens
 - Heavy duty stoves
 - Tilting pans
 - Dishwashers

Steam boilers

- Boiler Service and treatment related to boiler and supply of general spares
- 36 months boiler inspection
- 12/24 months boiler inspection
- Pump House/Pumps and Motors(Including Reservoirs and Water/Sewer Treatment Plant)

Chlorine dioxide generators

Chlorine dioxide is used extensively throughout industry as the preferred oxidant and **Jayceed** supplies the most efficient generator at 97% efficiency and little or negligible by-products. The generator uses two chemicals design. Dilute system and concentrate Chlorine dioxide generators, using only sodium chlorite and hydrochloric acid.

Oxidation processes for iron and manganese

Jayceed designs systems for the oxidation of iron and manganese. This can be any oxidant permitted by the customer process and by the efficiency of the technology and can range from a manganese greensand unit with potassium permanganate as regenerant, ozone, air diffuser systems or chlorine dioxide.

Multimedia filtration units

In some applications a multimedia sand filtration unit will be adequate for solids removal. **Jayceed** designs these units for maximum efficiency and minimal water loss in the backwash cycle.

Flocculation and pH adjustment processes

Jayceed has formulated a unique solution to underground water treatment, where the control of pH and flocculation is critical in the solid liquid separation process. The polymer product comprises a gel type polymer inserted into baskets to control the feeding or dissolution of polymer according to variation in flow. This is complemented by pH adjustment blocks on the same principle of controlled dissolution up to a pH range of +8,5 or higher to pH 10,0.

Filter cartridges and vessels

Jayceed offers the full spectrum of nominal and absolute filtration cartridges and vessels to complement the processes we design — from a normal ten-inch cartridge and vessel to high flow cartridges and vessels typically used in large operations.

Chemical supply

Jayceed offers a variety of chemicals used for water treatments plant, sewage plant and for a wide range of applications.



Supply of water treatment spares

Jayceed supply a wide range of spares for water and wastewater treatment plant, measuring instruments, sensors related to water treatment application.