YOUR SPECIALTY
INDUSTRIAL &
ENVIRONMENTAL
SERVICES PROVIDER

CHEMICAL CLEANING

SERVICES

- Boiler Pre-Commissioning/Maintenance Cleaning
- Vapor Phase Degassing/Decommissioning
- In-Situ Exchanger Pre-Commissioning/Maintenance Cleaning
- Exchanger Bath Cleaning
- On-Stream Chemical Injection
- Oil Flushing Pre-Commissioning/Maintenance
- Oxygen System Pre-Commissioning
- Furnace Tube Foam Cleaning
- Air Cooled Heat Exchanger Foam Cleaning
- In-House Pickling & Cleaning
- Water & Glycol Heating
- Steam Blowing
- Air Blowing
- Vessel/Tower/Piping Cleaning for Commissioning/ Maintenance Cleaning
- In-House Engineering of Chemical Cleaning Circuits
- Direct Chemistry Sales
- 400 BBL Tank Rentals
- Temporary Pipeline Installation & Rentals
- Chemical Storage Neutralization
- In-House Client Foulants Testing & Analysis
- Pressure Testing

CHEMICAL CLEANING

CEDA has developed a number of procedures for chemical cleaning projects to ensure safe and efficient cleaning, and to minimize environmental impacts. Our chemical cleaning technologies remove residual oils, corrosion, hard water deposits and other items from process equipment without creating surface damage, occasionally caused by traditional cleaning methods.

Custom planned work schedules greatly minimize interruptions to facility production, and chemical formulations are carefully selected to be compatible with waste handling facilities. We diligently plan all projects and implement on-site waste treatment to reduce the disposal volume of waste products.

SPECIALIZED FLEET OF EQUIPMENT

- Self-Contained Mobile Chemical Cleaning Units with High Volume Circulation Pumps
- Mixing Tanks
- Heating Equipment
- Standby Pumps
- Portable Laboratory Equipment
- Portable Heat Exchangers
- Stainless Steel Pumping Units
- Foam Cleaning Units

PRE-OPERATIONAL CLEANING

Newly installed industrial equipment needs to be inspected and cleaned before it's put into service to remove materials ranging from oils and construction debris to mill scale and weld splatter. Pre-operational cleaning often requires several stages to complete with multiple flow circuits and connection points required.

BOILER CLEANING

This is a staged process that seeks to remove scale from the boiler internals, leaving a clean, passivized waterside system to allow for efficient heat transfer. Even with stringent control of feedwater and condensate chemistry, scale and deposition occurs. Boiler scale causes tubes to rupture and decrease efficiency and reliability. Eventually removal of scale from the boiler becomes essential if damage to the boiler is to be prevented.

VAPOR PHASE CLEANING

Vapor phase cleaners remove the hazardous materials present in industrial systems–such as hydrocarbon vapors, H2S and BTEX–to render the hazards inert and safe to open. The process involves the injection of a cleaning solvent into a flow of saturated steam. The mixture is then passed through to the system being cleaned.

ON-STREAM CHEMICAL INJECTION

When equipment is still on-line, CEDA injects a chemical cleaning solution at a desired rate and concentration into the process solution.

EXCHANGER CLEANING (IN-SITU EXCHANGER PRE-COMMISSIONING/MAINTENANCE)

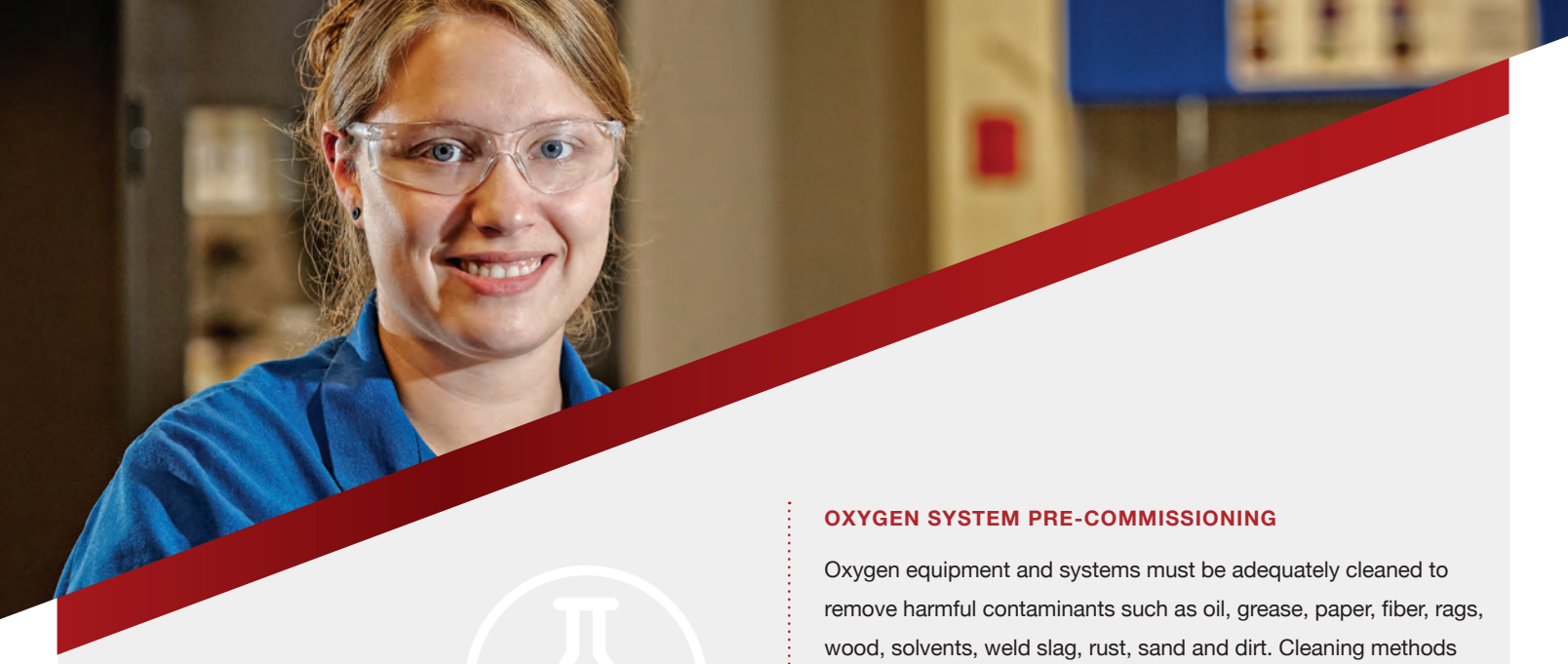
The benefits of cleaning in place includes decreased cost, time, manpower and it limits the risk of damaging equipment. Chemical cleaning solutions are based on the scale contaminants and metallurgy of the system. The process involves creating a circulating loop using a pump. Solutions are monitored by flow rates, chemical concentrations and temperatures.

EXCHANGER BATH CLEANING

To improve efficiency and performance, exchangers are cleaned by creating a circulating loop or by soaking the exchanger in a bath. Both methods involve chemical cleaning solutions based upon metallurgy and fouling material. Bath cleaning is optimal if the tube bundles contain fins or soft metals as high pressure may cause tube damage.

OIL FLUSHING

Oil flushing removes foreign material by providing a higher than normal flow rate creating a higher velocity within pipes. While a number of factors contribute to the success of an oil flush, high oil velocity used in a sequential flush, accompanied by pipe vibration, is most important. Portable analyzer units are also available to perform on-site particle counts to ensure that all client lubricating oil specifications are satisfied. Oil flushing standards are usually ISO 4406 and NAS 1638.



IN-HOUSE PICKLING & CLEANING (LOCATION SPECIFIC, CONTACT US FOR DETAILS)

Pickling is the most common chemical procedure used to remove oxides and iron contamination. Pickling success depends upon the complete removal of all foreign substances from the surface of a metal followed by treatment of the clean metal surface to produce a continuous film of oxide on the surface.

WATER & GLYCOL HEATING

CEDA has the required equipment to heat chemical solutions using tex steam heaters and heat exchangers. Our equipment is specifically designed to heat corrosive and pump flammable material safely without creating any hazards. Possible flow rates achieved are less than 10,000 L/min. Solutions are heated using 2.5 mil btu to 15 mil btu heaters.

TANK CLEANING

CEDA's tank cleaning process eliminates the need for vessel entry until almost all of the tank bottom sludges are removed. Each tank cleaning project is carefully evaluated to determine the specific job requirements and any limitations. This method sees a typical hydrocarbon recover up to 99% and leaves any residual sludges as oil free solids.

OXYGEN SYSTEM PRE-COMMISSIONING

Oxygen equipment and systems must be adequately cleaned to remove harmful contaminants such as oil, grease, paper, fiber, rags, wood, solvents, weld slag, rust, sand and dirt. Cleaning methods used by CEDA include neutralization/passivation, an alkaline cleaning solution for removing organic material and an acid solution for removing iron contamination, organic foulants and weld slags. The goal is to meet or exceed ASTM G93-96 standard.

FOAM CLEANING (FURNACE TUBE & AIR COOLED HEAT EXCHANGER)

To improve heat transfer and operational efficiency, CEDA uses a foaming system to remove unwanted foulants in certain types of process equipment. Detergent foam can offer an inexpensive, safe, low waste and effective means of removing surface oils, dust and dirt.

AIR BLOWING

High velocity pre-engineered air blowing is designed to remove loose rust, liquids, construction material and other contaminants from process piping. This process can be used with targets to confirm cleanliness and silencers to mitigate noise levels produced.

STEAM BLOWING

Clean piping is essential for successful startup after construction. Steam quality and system reliability are adversely affected by the presence of mill scale, weld slag, construction debris and other foreign materials in the interior of the piping and other system components. Damage to turbine valves and blade paths can occur along with problems such as plugged steam traps and control valve cages.

Specializing in industrial maintenance, turnaround and environmental services.

CEDA's talented and experienced team is committed to providing world-class solutions to help clients maximize production, mitigate risk and avoid costly outages, always with safety top of mind.

We operate across North America delivering more than 120 distinct services and products to support oil and gas, pipeline, power, pulp and paper, chemical, mining and steel industrial facilities. For over 45 years, CEDA has been bringing innovative technologies, equipment and processes into the field to ensure the success of our clients' projects.

CEDA PROVIDES INTEGRATED SOLUTIONS FOR

Commissioning & Startup

CEDA's pre-commissioning, commissioning and startup services for new build or facility expansion projects are multi-disciplinary, where we interface between construction and operations to verify work based on project specifications. We manage the relevant punch list across hydro-testing, cleaning, commissioning and remaining mechanical activities. CEDA is able to complete the static testing of equipment up to the issuance of ready for commissioning certificates.

Turnarounds & Outages

CEDA has the experience and expertise to support the supply and management of integrated turnaround and outage related services including mechanical, chemical cleaning, pressure and vacuum, fabrication, heat exchanger cleaning and repair, or any combination thereof. We support the most demanding schedules with multiple dayshift and nightshift crews in various locations.

Operations & Maintenance

CEDA offers a wide range of comprehensive operation and maintenance services focused on the breadth of mechanical and industrial cleaning activities. Our experience and footprint across Canada has resulted in effective strategies to address the ever-changing needs of our clients. We are capable of working on-site as well as providing maintenance and repairs to live operating units in a safe and timely manner without unplanned disruptions.

Sustaining Projects

CEDA is a complete service provider for sustaining project activities from off-site fabrication of piping, pressure vessels, modules, and packaged equipment to site installation, commissioning and startup. What sets CEDA apart is our ability to provide multiple mechanical and industrial cleaning services, therefore, limiting the number of subcontractors.

Integrated or Stand-Alone

CEDA's service and product lines work as an integrated offering or independently.

CEDA'S CORE SERVICES & PRODUCTS

- PRESSURE, VACUUM & FLUID TRANSPORTATION
- CHEMICAL CLEANING
- TANK MAINTENANCE & CLEANING
- PIGGING & DECOKING
- EXCHANGER SERVICES
- MECHANICAL & FABRICATION
- MANUFACTURING & PROCESS EQUIPMENT
- PROJECT SERVICES
- DREDGING & FLUID MANAGEMENT

CEDA | CANADA BEST MANAGED COMPANIES