CANADIAN — OVERSEAS TRADE INC. (COTI)
GLOBAL TRADE. TRUSTED PARTNER.
OIL & GAS | MINING | STEEL & METALS | CONSTRUCTION | INDUSTRIAL SOLUTIONS | RENEWABLE ENERGY | TRADE & SUPPLY
CONNECTING CANADIAN EXCELLENCE WITH GLOBAL OPPORTUNITIES

CAPABILITY 23 / 27

Hydrogen & Industrial Supply for Clean Energy

Industrial supply support for hydrogen and clean energy.



Photo: Tiia Monto, Wikimedia Commons, CC BY 4.0 – https://commons.wikimedia.org/wiki/File:Hydrogen_station_in_Jyv%C3%A4skyl%C3%A4.jpg

OVERVIEW

Hydrogen and clean-energy projects use many of the same industrial disciplines as oil and gas, with specific material and safety requirements. COTI supplies balance-of-plant equipment, hydrogen-compatible components, instrumentation, safety and MRO materials, according to OEM specifications and availability.

CONTENTS

23.1 Hydrogen-production related equipment, components and balance-of-plant industrial supplies.
23.2 Electrolyzer auxiliary equipment and replacement components, subject to OEM specifications…
23.3 Hydrogen-compatible valves, regulators, fittings, piping components, seals, gaskets and…
23.4 Compressors, pumps, heat exchangers, cooling equipment, filtration and gas-treatment…
23.5 Hydrogen storage, handling and transfer related equipment and accessories according to…
23.6 Pressure, temperature, flow and gas-analysis instrumentation; hydrogen detection, Fire &…
23.7 Electrical, automation, control, SCADA and monitoring components for hydrogen and…
23.8 Spare parts, MRO materials, maintenance consumables and critical replacement components for…
23.9 Technical sourcing, OEM/supplier identification, documentation, inspection, expediting and…
23.10 Maintenance, commissioning, troubleshooting and specialist technical-support coordination…

23.1 Hydrogen-production related equipment, components and balance-of-plant...

SUPPLY SCOPE

Hydrogen-production related equipment, components and balance-of-plant industrial supplies.

DEFINITION

Balance of plant (BoP) is all equipment around the main hydrogen production unit: water supply, power, cooling, gas treatment, piping and controls. COTI sources these industrial supplies.

23.2 Electrolyzer auxiliary equipment and replacement components, subject to...

SUPPLY SCOPE

Electrolyzer auxiliary equipment and replacement components, subject to OEM specifications and availability.

DEFINITION

An electrolyser splits water into hydrogen and oxygen using electricity. Its auxiliary equipment (pumps, rectifiers, separators, dryers) and replacement components are supplied according to OEM specifications.

23.3 Hydrogen-compatible valves, regulators, fittings, piping components,...

SUPPLY SCOPE

Hydrogen-compatible valves, regulators, fittings, piping components, seals, gaskets and pressure-control equipment.

DEFINITION

Hydrogen is a very small molecule that can leak easily and embrittle some metals. Valves, regulators, fittings, seals and gaskets must therefore be made of compatible materials and rated for the service.



Photo: Dietmar Rabich, Wikimedia Commons, CC BY-SA 4.0 – https://commons.wikimedia.org/wiki/File:Duisburg,_Landschaftspark_Duisburg-Nord_--_2020_--_7813-5.jpg

23.4 Compressors, pumps, heat exchangers, cooling equipment, filtration and...

SUPPLY SCOPE

Compressors, pumps, heat exchangers, cooling equipment, filtration and gas-treatment related components.

DEFINITION

Compressors raise hydrogen pressure for storage or transport; pumps, heat exchangers and cooling equipment manage process heat; filtration and gas treatment purify the gas.

23.5 Hydrogen storage, handling and transfer related equipment and accessories...

SUPPLY SCOPE

Hydrogen storage, handling and transfer related equipment and accessories according to applicable project specifications.

DEFINITION

Hydrogen is stored as compressed gas or liquid. Storage, handling and transfer equipment (vessels, hoses, dispensers, couplings) follows the applicable project specifications and codes.

23.6 Pressure, temperature, flow and gas-analysis instrumentation; hydrogen...

SUPPLY SCOPE

Pressure, temperature, flow and gas-analysis instrumentation; hydrogen detection, Fire & Gas and safety equipment.

DEFINITION

Pressure, temperature, flow and gas-analysis instruments control the process. Hydrogen detectors and Fire & Gas equipment are critical because hydrogen flames are almost invisible.

23.7 Electrical, automation, control, SCADA and monitoring components for...

SUPPLY SCOPE

Electrical, automation, control, SCADA and monitoring components for hydrogen and renewable-energy installations.

DEFINITION

Electrical, automation, control and SCADA components run and monitor hydrogen and renewable-energy installations such as solar and wind power plants.

23.8 Spare parts, MRO materials, maintenance consumables and critical...

SUPPLY SCOPE

Spare parts, MRO materials, maintenance consumables and critical replacement components for hydrogen facilities.

DEFINITION

Hydrogen facilities need the same discipline of spare parts, MRO materials and maintenance consumables as other process plants, with attention to material compatibility.

23.9 Technical sourcing, OEM/supplier identification, documentation,...

SUPPLY SCOPE

Technical sourcing, OEM/supplier identification, documentation, inspection, expediting and international logistics coordination.

DEFINITION

COTI applies its full sourcing process to hydrogen projects: OEM and supplier identification, documentation, inspection, expediting and international logistics.

23.10 Maintenance, commissioning, troubleshooting and specialist...

SUPPLY SCOPE

Maintenance, commissioning, troubleshooting and specialist technical-support coordination through qualified OEMs and technical service providers.

DEFINITION

Maintenance, commissioning and troubleshooting of hydrogen equipment are coordinated through qualified OEMs and specialist partners.

Specialized services are provided and/or coordinated with qualified technical partners according to project requirements.

Contact COTI

Send us your RFQ, part numbers, nameplate photos or technical specifications. We will review your requirement and reply with a structured proposal.

Canadian Overseas Trade Inc. (COTI)
7175 rue Michelet, Suite 10, Montréal (Québec) H1S 2L8, Canada
info@coticanada.com | WhatsApp: +1 438 937 9124 | +971 54 223 8214

PHOTO CREDITS

All photographs are real photographs from Wikimedia Commons, used under the licences indicated.

- Hydrogen station in Jyväskylä.jpg – Tiia Monto, CC BY 4.0 – https://commons.wikimedia.org/wiki/File:Hydrogen_station_in_Jyv%C3%A4skyl%C3%A4.jpg
- Duisburg, Landschaftspark Duisburg-Nord -- 2020 -- 7813-5.jpg – Dietmar Rabich, CC BY-SA 4.0 – https://commons.wikimedia.org/wiki/File:Duisburg,_Landschaftspark_Duisburg-Nord_--_2020_--_7813-5.jpg