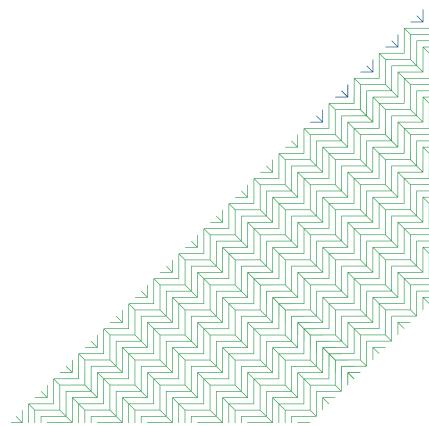




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KANOO ENERGY

A division of Kanoo Industrial & Energy



Your Reliable Solutions Provider

Diverse Industries

Diverse Applications

One Solution Provider



The Kanoo Group

From its earliest beginnings in 1890 as a single person trading operation, The Kanoo Group is today one of the most trusted and diversified family-owned multinationals in the Arabian Gulf region.

With a physical presence across the Middle East, Africa, Europe and Asia, and a large, superbly skilled workforce, the Group operates across a broad range of sectors through an extensive portfolio of complementary businesses and strategic partnerships.



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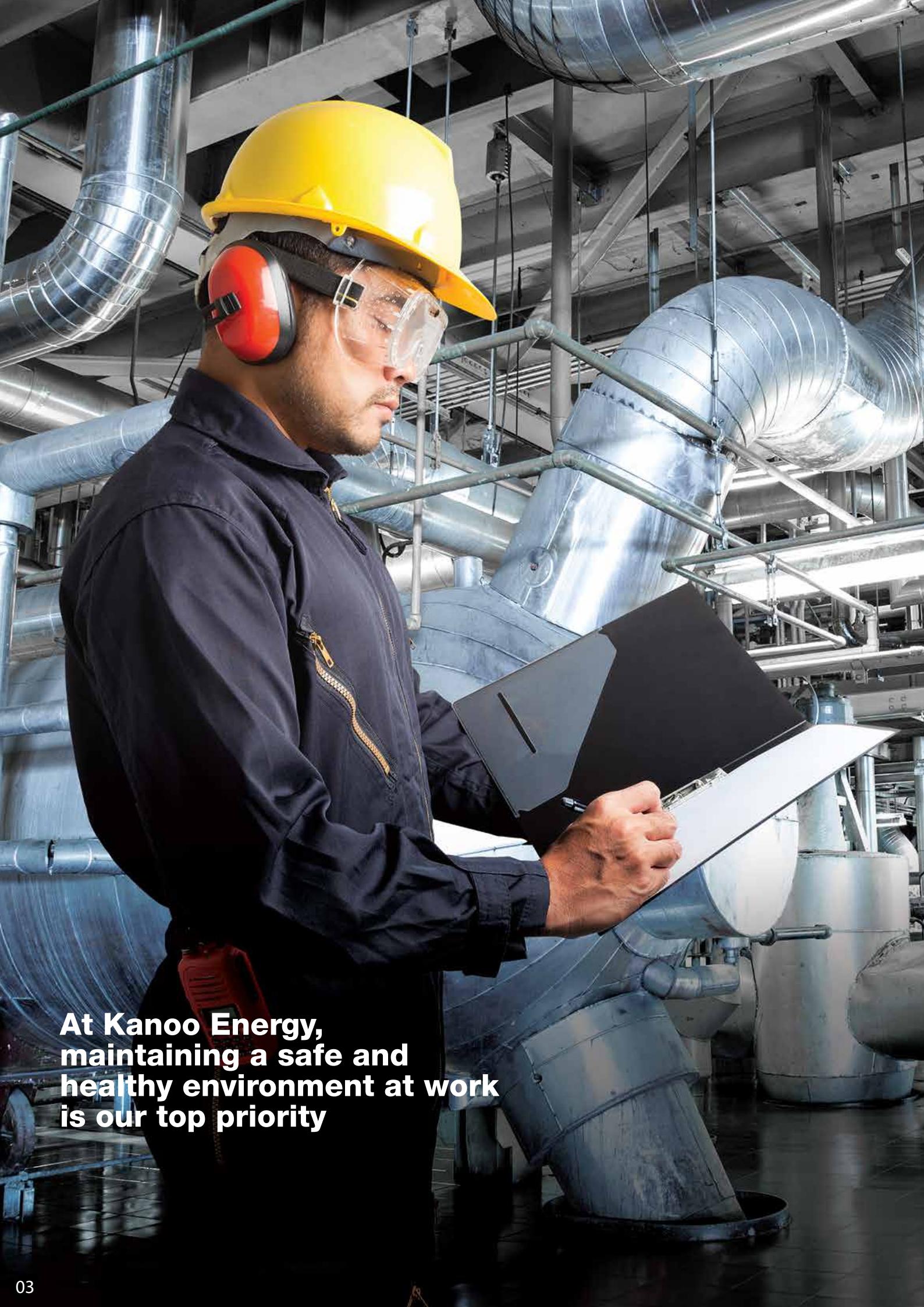
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Kanoo Energy

Part of Kanoo Industrial & Energy, Kanoo Energy has been in operation for more than 2 decades providing end to end solutions for diverse industrial applications. It provides sustainable solutions to utility companies, refineries, petrochemicals, aviation and the GCC industrial sector as a whole, through smart engineering and value-added services. It is recognized across the region for bringing customized value-added solutions through a well-developed network of reputed manufacturers worldwide and extensive relationships with international associates, supported locally by highly qualified multinational engineering staff.

The group's skilled and experienced staff provides engineered solutions that adhere stringently to local legislation, as well as fully complying with international engineering standards and best practices.



**At Kanoo Energy,
maintaining a safe and
healthy environment at work
is our top priority**

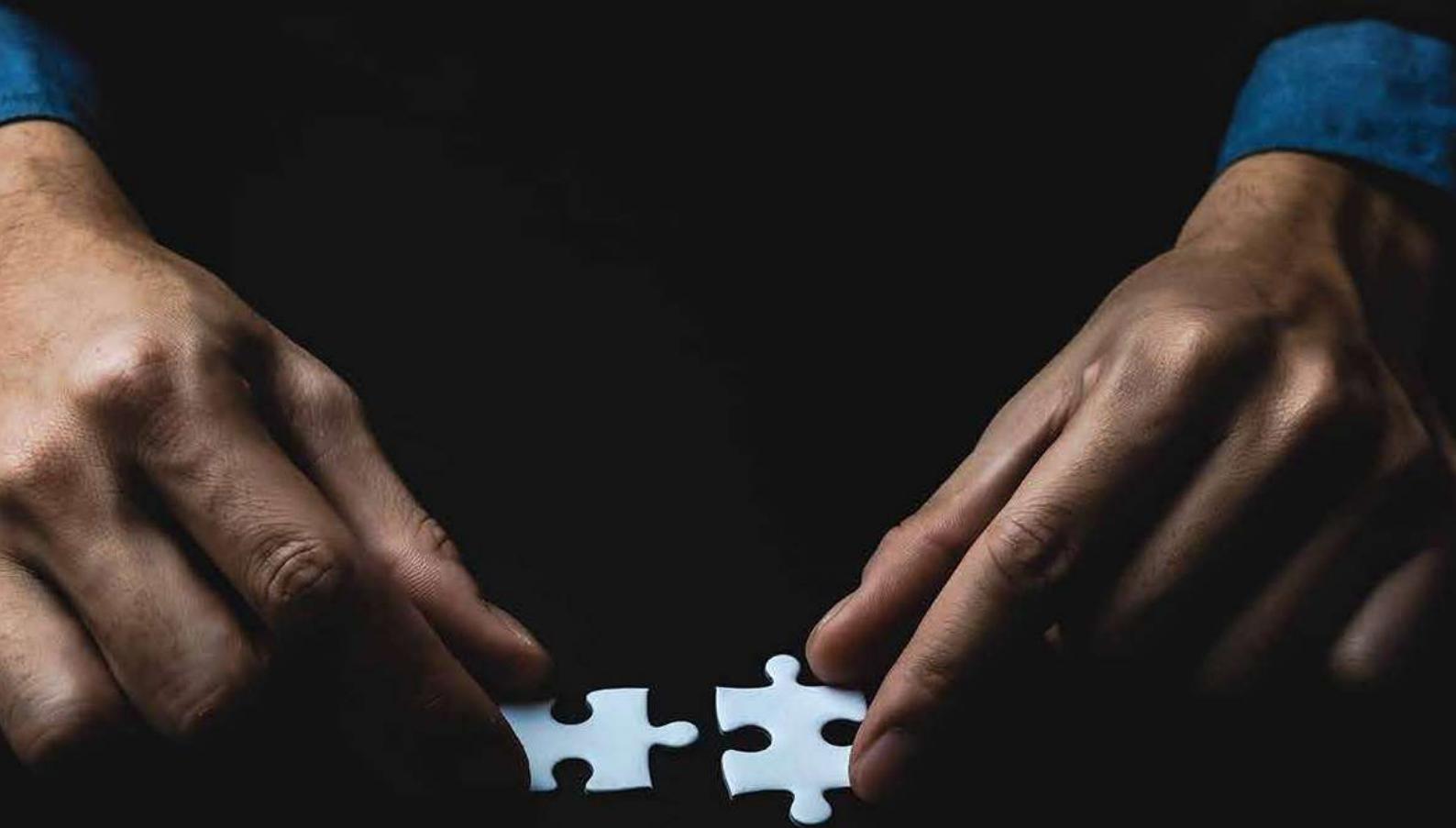


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Our Values



**Customer Focused, Ethical,
Innovative, Agile, Competent
& Intelligent, Collaborative,
Accountable**



Mechanical

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Asset Management



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Our Business **Segments**



Green Energy & Technology

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Industrial Consumables & Safety Solutions

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Mechanical

We offer a wide range of mechanical products & services to the Oil Gas, Petrochemical, Utility, Marine, General Industries & EPC Contractors

We have certified in house expertise and skilled technical teams to provide solutions for Mechanical related solutions

Partnering world renowned manufacturers, Kanoo Energy provides solutions & services to its esteemed clientele.





Piping

Expansion Joints, Hoses & Couplings, Steam & Condensate Manifolds, Steam & Air Piping Equipment and Dilating Disk Control Valves

Process

Reactors, High Pressure Vessels, Boiler Drums, Columns, Towers, Heat Exchangers



Packages

Condensate & Waste Heat Recovery for Steam, Steam Water Heaters and Compressors

Rotating & Turbo

Centrifugal Pumps, Positive Displacement Pumps, High Pressure Compressors





Mechanical





Filtration

Filters, Separators & Coalescers and Oil Filtration System

Bulk Fluid Handling & Safety Access

Metering Skids, Loading/Unloading Arms, Safety Access Systems



Environment & Safety

Oil Spill Response Equipment, Marine Fenders

Condition Monitoring, Inspection & Maintenance

Fugitive Emissions Management, Steam System Optimization





Pumps

Positive Displacement / Centrifugal / Gear Pumps

Categories

Positive Displacement Pumps (API 676):

- Progressive Cavity, Twin and Three Screw Pumps
- Propeller Pumps
- Peristatic Pumps

Non API Centrifugal pumps

- As per DIN EN 733 or DIN EN 22858/ISO 2858

Twin Screw Pumps

- Three Screw Pumps
- Gear Pumps

BLUEline Rotary lobe pumps

- High reliability and long service life
- Large range of rotors and flow rates of up to 1,500 m³ / h

ONIXline Rotary lobe pumps

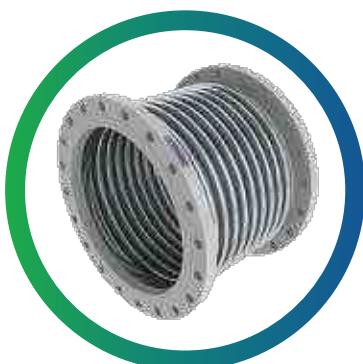
- High Pressures
- Sufficient space in the large sealing area
- Perfect complement to the BLUEline pumps.

Expansion Joints

Metal, Rubber & Fabric Expansion Joints

- In-house capabilities and certified technical expertise to execute on-site services and projects.
- Built to customer specification that outlast and outperform others
- Our OEM team of engineers and skilled personnel is the most renowned worldwide, with over 500 years of combined technical expertise and product development.
- Approved with major Oil & Gas and Utilities.

Services Offered: Design, Engineering, Supply, Installation, Commissioning and Aftermarket





Bulk Fluid Handling & Safety Access Solutions



Kanoo Energy offers the following:

- Truck Loading Arms
- Marine Loading Arms
- Metering Skids
- Safety Access Systems
- Swivel Joints
- API Couplers
- Emergency Release Couplings
- Aviation Refueling Systems

Services Offered: Design, Engineering, Supply, Installation, Commissioning and Aftermarket



STEAM TRAPS

Steam Traps, Air Traps, Condensate Recovery System, Accessories For Steam & Air Systems.

Automatic valves for the purpose of discharging condensate without venting steam.

Operating Pressure Range:

0 - 26 MPaG

Operating Temperature Range:

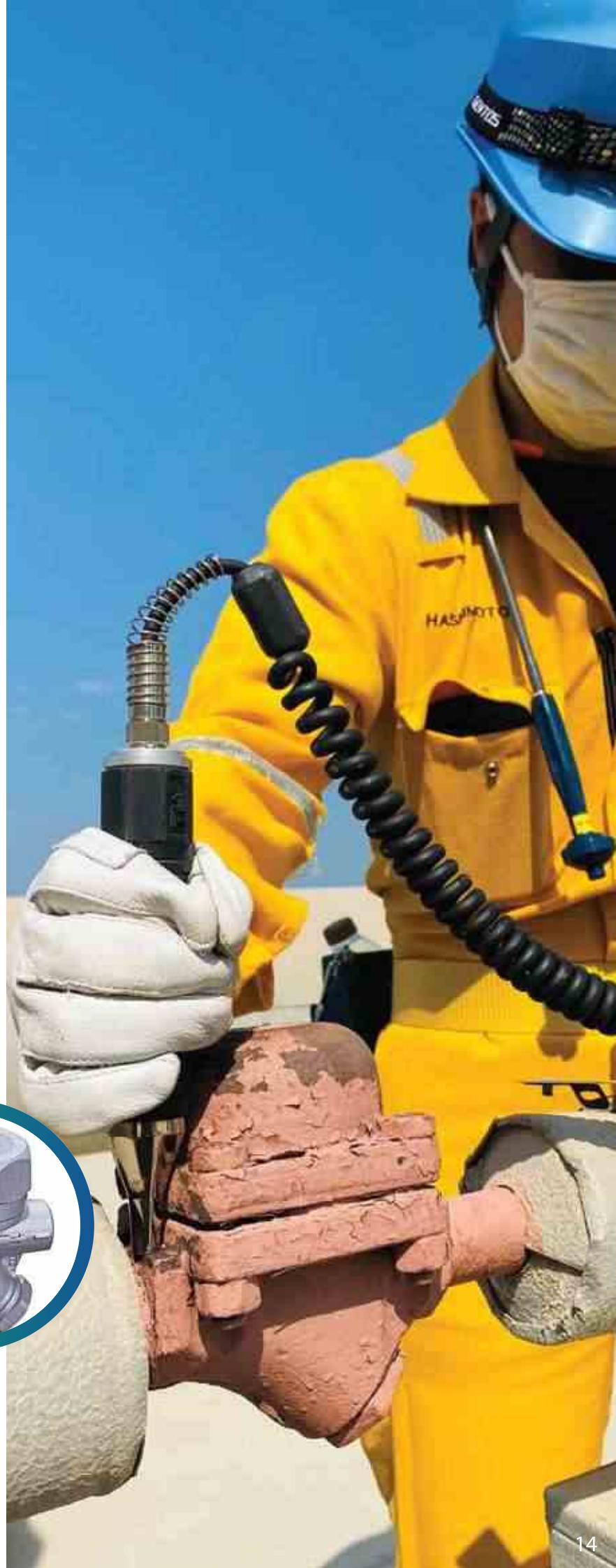
0 - 550 °C.

Each trap offers the highest level of energy conservation in its class.

- Mechanical Steam Traps
- Thermodynamic Steam Traps
- Thermostatic Steam Traps

Services Offered: Steam System Optimization Program (SSOP) Steam System Risk Management (SSRM)

Design, Engineering, Supply, Installation, Commissioning and Aftermarket





DILATING DISK CONTROL VALVES

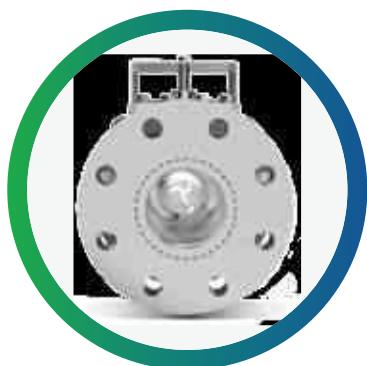
Dilating Disk Control Valve

Engineered with aerospace design principles in mind, Dilating Disk Control Valve offered by Kanoo Energy reduces fugitive emissions by 98%, while maintaining a lighter weight and smaller footprint. The Dilating Disk Control Valve has operated for millions of hours worldwide, resulting in a reliable solution for all customers' precision flow control needs

Features

- Low Emissions
- Low Torque
- Longer Lasting
- Compact and Lightweight
- Precision Throttling
- Universal Mating
- Inherent Geometric Benefits
- Designed For Safety
- Precision Rangeability
- Incredibly Compact Design
- Energy Efficient
- Versatile

Easy to Maintain



FUGITIVE EMISSION MANAGEMENT SYSTEMS

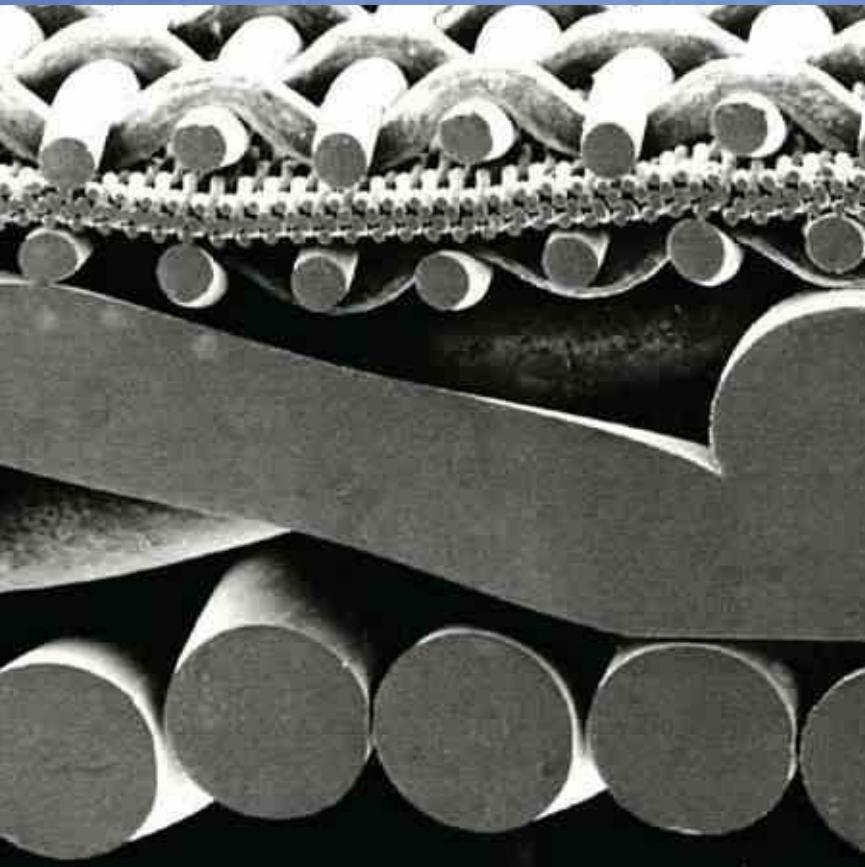
Leak Detection Monitoring & Associated Services (LDAR)

Kanoo Energy has combined experience in the fields of component integrity monitoring, maintenance risk management, emissions monitoring and reporting, data management, facility surveys and environmental and business

Services Offered:

- Complete & Smart Leak Detection and Repair (LDAR) – Inventory to Emissions report
- Pre-shutdown & Post-startup VOC leak surveys
- VOC loss estimations using FID, hydrocarbon storage tank VOC loss surveys
- VOC leak detection & gas plume visualization in operating process & storage facilities
- Leak remedial advice, Compressed-air / energy loss survey
- Hydrogen leak detection.
- Acoustic emission service for pipeline defects
- Internal Passing Valve
- Local Experience & Facility
- CIMS Software on Cloud/Client Server Using State of Art Technology.
- Satellite Leak Detection





INDUSTRIAL FILTRATION SOLUTION

Gas Filters, Process Filters, Oil Filters, Polymer Filters, Automatic Back Flushing Filters, Jet Filters, Bio Separation Systems

Applications:

Filtration solutions for oil & gas chemical, food, medical, automotive, aviation, aerospace, household appliance, IT industries and the energy industry including green energy and clean energy products.

- Absorption Column Package
- Activated Carbon Filter
- Seawater Filter
- Cooling Water Side Stream Filter
- Basket Filter

Services Offered:

Design, Engineering, Supply, Installation, Commissioning and Aftermarket

HIGH PRESSURE COMPRESSORS & BREATHING AIR SOLUTION

High Pressure Reciprocating Compressors from medium (10 to 40 bar-g) to high pressure (up to 414 bar-g). Two to Six stage compressors. Provide services & repair through global geographic footprint. Customized to meet the application.



Applications:

Industrial Air, Alternative Fuel, Offshore & Marine, Defense, Breathing Air, Power Generation, Food & Beverages.

- Seismic Survey - Air guns/Surveying the Seabed
- Oil and Gas - Well Head Cleaning
- Drilling / Semi Submersibles - Motion Compensation
- Pipeline - Cleaning Pipelines/ Checking Pipelines
- Nitrogen -
 - Drilling Deep Wells
 - Pressure Valve Testing
 - Coiled Tube for Oil Well Stimulation
 - Revitalising of Oil Wells
- Helium - Leak Testing
- Breathing Air
- Saturation Diving



Services Offered:

**Design, Engineering, Supply,
Installation, Commissioning and
Aftermarket**





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Electrical & Instrumentation





Electrical & Diagnostics Solutions

- Transformer Monitoring & Diagnostic
- Transformer Oil Filtration & Regeneration
- Substation Systems - Test and Monitoring Solutions for Electrical Assets, Partial Discharge, Wireless Critical Asset Monitoring, SFRA, Tr. Turns radio
- High Voltage Test systems - AC, DC & VLF test systems, Onsite & Offshore Testing of ultra long cables both Land and Submarine
- IR Thermal Imaging Systems - PM, Gas Imaging & Automation
- SF6 Gas Analyzers
- UV Corona Cameras
- Earth Fault Indicators
- Electrical Testing & Commissioning Services of all Substation Assets along with Electrical Health Assessment

Instrumentation Solutions

- Flow Measurement - Ultrasonic Flow Meter, Vortex Flow Meter, Coriolis Flow Meter, V-come Flow Meter, Electromagnetic Flow Meter
- Analyzers-Moisture & Oxygen
- Sampling Systems - Gas or Liquid Sample Collection for Laboratory Testing in Applications.





Ultrasonic Flow Meters



Panametrics Ultrasonic Flow Meters are used for measurement of volumetric flow for any single-phase fluid on pipeline. We offer customized solutions based on customer requirements for Inline (with spool body), Insertion & clamp-on (fixed & portable) type flow meters

- Gas & Flare Flow Measurement
- Liquid Flow Measurement

Services Offered: Design, Engineering, Supply, Installation, Commissioning and Aftermarket



Vortex Flow Meters

Panametrics Vortex Flow Meter with its multivariable design consists of a vortex shedding velocity sensor, an RTD temperature sensor and a solid-state pressure transducer that measures the mass flow rate of steam, gases and liquids

- Steam, Gas & Liquid (Inline & Insertion Type)

Services Offered: Design, Engineering, Supply, Installation, Commissioning and Aftermarket





GET FLOW MEASURED

Worldwide unmatched in design and performance Coriolis mass flow meters

With highly accurate measurement performance and extreme capabilities, Rheonik meters are a natural choice for many applications and quickly provide payback through improved product quality and greatly reduced maintenance.

Whether used for transfer, batching, process feed or control, Rheonik meters can provide online precise flow and density measurement.

Coriolis Mass Flowmeters

Rheonik Flow Meter Technology is one of the innovation leading manufacturers worldwide of CORIOLIS mass flowmeters in precision, function and design.

Our Coriolis Technology is based on a unique torsional oscillator. Other than conventional Coriolis sensors, the Rheonik sensor offers a torsion axis enhanced oscillation translating into a better measurement.

From
1/24"
up to 12"

Sampling Systems

Crane (DOPAK Sampling Systems) has been the world's leading innovator and pioneer of practical flow control solutions addressing and exceeding our customers' needs to enable them to operate better, faster and safer. Kanoo Energy offers a comprehensive portfolio of sampling systems, products and solutions

Since 1855 Crane has been the world's leading innovator and pioneer of practical flow control solutions.



Sample Handling System



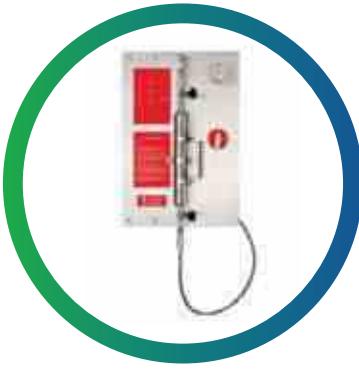
Closed Samplers For (Liquified) Gases



Closed Samplers For Liquids



Spare Parts



Sampling Express



Process Analyzers

Panametrics offers a wide array of moisture, industrial oxygen and gas analyzers that enable you to make process decisions with confidence. Reliable and stable, our products and services are backed by decades of industry experience and by knowledgeable experts to help you understand your application.

- Solid-State Oxygen and Gas Analyzer Designs use no Moving Parts
- Tunable Diode Laser Absorption Spectroscopy (TDLAS) Moisture Analyzers
- Trace Moisture Analyzers
- Dew Point Temperature of Gas Analyzer



Engineered Solutions

Kanoo Energy delivers technical superiority with a complete range of package automation solutions. Our expertise in flow measurement, analyzer system and automation control provide the broadest range of solutions complemented by global engineering, project management expertise and after-sales support in all segments of the oil and gas industry.





IR Thermal Imaging Systems

FLIR Preventive & Predictive Maintenance Systems for

- Electrical Inspections – HV, LV, MV
- Mechanical – Pumps, Generators, Motors.
- Building – Water leakage, Insulation Failure
- Fire Fighting – to identify location of fire

FLIR Optical Gas Imaging Cameras for Gas Leaks for

- GFx320 – Detection of Hydrocarbon Gas Emissions
- GF 306 – Detection of SF6 Gas Emissions
- GF 309 – Furnaces Inspections
- GF 304 – Detection of Refrigerant Gases Emissions
- GF 346 – Detection of Carbon Monoxide Emissions
- GF 343 – Detection of Carbon Dioxide Emissions

FLIR Automation Cameras for

- Critical Vessel Monitoring, Flare Monitoring, Coal Pile Monitoring, Pre-form & Casting Temperature Control
- Safety - Protect Asset and Life - Body Fever During Pandemic
- Quality Assurance (QA) - Increase Quality and/ or Throughput
- Process Monitoring Control (PMC) - Increase Quality

Services Offered: Design, Engineering, Supply, Installation, Commissioning, Consultancy, Training and Aftermarket



Transformer Monitoring & Diagnostic Solutions

- Portable & Online Transformer Monitoring Dissolved Gas Analysers (DGA)
- Single Gas and Multi Gas DGAs
- Bushing Monitoring
- Total Transformer Monitoring Solutions (TMS)

Service Offered: Design, Engineering, Supply, Installation, Commissioning and Aftermarket





Transformer Oil Filtration & Regeneration

Online and Offline Solutions

- Transformer Oil Solutions - Regeneration, Purification, Filtration, Dehydration, Degasification, Refining
- Filtervac Portable, Stationary or Mobile Systems
- Capacity upto 10,000 LPH
- Systems available for Lube Oil, Turbine Oil, Aviation Oil & others

Services Offered:

Consultancy, Design, Engineering, Supply, Installation, Commissioning Short & Long term Contracts and Aftermarket

High Voltage Test Systems

- MOHAUPT AC, DC & VLF test systems
- AC Test System for offshore application (Light weight RTS which can deliver 80 KV for load up to 7uF in a 5T container).
- Test Transformers, Parallel Compensation Reactor etc.
- Tailor made solution for customer's requirement, upgradation of existing test system.

Services Offered: Consultancy, Design, Engineering, Supply, Installation, Commissioning and Aftermarket



SF6 Gas Analyzers

Kanoo Energy offers world leading technology from MBW in designing and manufacturing of high quality, chilled mirror dew point hygrometers used in a variety of humidity calibration, humidity measurement and gas quality applications.

- Simultaneous Measurement of Humidity
- SF6 Purity
- SO2 Concentration

Services offered: Design, Engineering, Supply, Installation, Commissioning, Calibration and Aftermarket



Substation Test Systems

- SFRA (Sweep Frequency Response Analysis) with highest dynamic range
- Offering fastest test result in the market.
- Offering comparison of results with all major manufacturer.
- Contact Resistance Tester with both side grounding function.
- Transformer Ratio Tester
- Handheld Partial Discharge Surveyor



Services offered: Design, Engineering, Supply, Installation, Commissioning, Calibration and Aftermarket



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Advanced Testing and Monitoring Solutions for Electrical Assets

ISA Test & Monitoring Systems for Substation Assets

- Protective Relay Testing
- Instrument Transformer Testing
- Power Transformer Testing
- Circuit Breaker Testing
- Electric Motor Testing
- Ground Grid Testing
- Overhead Lines Fault Locator
- Line Impedance
- Battery Testing
- Surge Arrester Testing
- Meter and Transducer Testing

TECHIMP Partial Discharge Testing & Monitoring

- Acquisition
- Sensors & Accessories
- Laboratory Equipment

Wireless Critical Asset Monitoring System

Can monitor the following parameters which are the primary causes of critical asset failure using different sensors

- Temperature
- Humidity
- Partial Discharge Monitoring

Services Offered: Design, Engineering, Supply, Installation, Commissioning and Aftermarket





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Electrical Health Assessment Services

Transformer Testing

- Oil Sampling & Oil Analysis
- Transformer Oil Filtration & Regeneration Services (Online & Offline)
- Partial Discharge Testing (Online & Offline)
- Winding Resistance Testing
- Insulation Resistance
- Sweep Frequency Response Analysis
- Tan Delta Test
- Vector Group Test
- Turns Ratio
- Percentage Impedance Test
- Infrared Thermography
- Transformer Health Assessment

Power Cable Testing

- Partial Discharge Test (Online & Offline)
- VLF Tan Delta Test
- Insulation Resistance Test
- Infrared Thermography
- Time Domain Reflectometry (TDR)
- Cable Fault Location & Identification
- Cable Health Assessment

Switchgear Testing

- Partial Discharge Testing (Online & Offline)
- Infrared Inspection
- Relay Testing
- Circuit Breaker Testing
- Switchgear Health Assessment

Motor Testing

- Tan Delta & Capacitance Analysis
- Partial Discharge Testing
- Insulation Resistance & Polarized Index
- Stator Winding Resistance Measurement
- Motor Current Signature Analysis (MCSA)
- Motor Circuit Analysis (MCA)
- Surge Comparison Test
- Infrared Inspection
- Vibration Analysis
- Motors Health Assessment



Asset Management





Inventory Preservation

Preservation of equipment such as mechanical, static, rotary, electrical, instrumentation, piping etc during transit storage, construction, temporary shut-down or long term

Mothballing

Long, medium or short-term mothballing solutions for external and internal surfaces of compressor units, gas plants, tanks, flow lines, upstream/midstream/ downstream trains, seasonal lay-ups etc



Rust Removal Solutions

Biobased and biodegradable products to prepare surface of the rusted items, heavy duty degreasers for tough cleaning paint strippers

Above Ground Storage Tank Bottom Plate Protection

Tank bottom plate protection against soil side corrosion using VpCI applied for new tanks, out of service and in service tanks





Asset Management



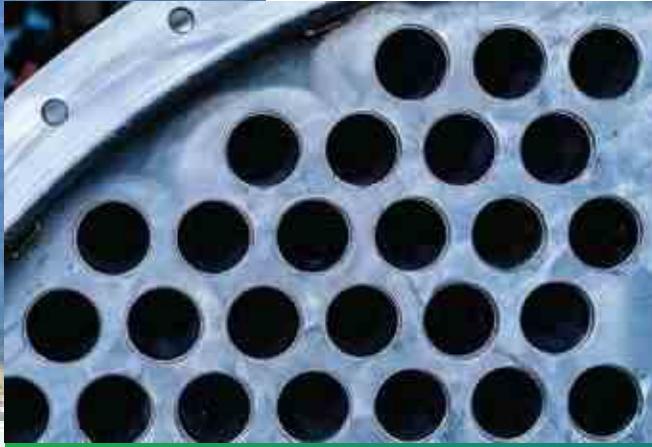


Rig Stacking

System designing, pre-stack rig surveys, warm or hot stacking, cold stacking for offshore and onshore rigs & storage

War Readiness Solutions for Military

Asset Preservation to extend the service life of defence assets



Non-Chemical Cleaning of equipment

Software guided ultrasound solution to remove fouling from industrial equipment online or offline

Consultancy

Kanoo Energy consultancy services are designed to provide custom support at every stage of the project lifecycle.





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Preservation & Mothballing

Wide Range of Asset Protection

- Companies need to protect their capital assets during planned or unplanned shutdowns and at the time of uncertainty.
- In order to ease the process at the time of start-up, equipment needs to be protected in such a manner that it can be put back into commission with minimal effort to meet market demand at anytime.
- During shutting down going into a state layup for an indefinite period, keeping these assets corrosion-free is essential to ensure they can be reinstated and made operational as quickly and as cost-effectively as possible. Corrosion is a major problem for idle equipment and assets, especially in the presence of moist, salt-laden air or fluctuating humidity that forms condensation on electrical systems, rotating equipment, hydraulics, bolts, valves, and motors just to name a few components.

Kanoo Energy provides turn key solutions by using VpCI - Vapor Phase Corrosion Inhibitor Technology that protects metal at 3 different phases i.e., Liquid, Intermediate and Vapor phase with the ability of UV stable heat shrinkable films. Most of VpCI products are environment friendly and provide long term corrosion protection against moisture, condensation, corrosive gases and humidity.

Services Offered: Asset Audit, Design, Engineering, Specification Building, Bespoke Engineered Solutions, Supply, Installation, Commissioning, Training and Inspection





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Military Preservation

- Retain Asset Value
- Reduce Maintenance Cost
- Combat Readiness

Prevention of loss due to corrosion has become a major priority for militaries. Kanoo Energy can extend asset life and enhance war readiness.

A full range of contact and Vapor Phase Corrosion Inhibitors (VpCI's) are available to solve many problems that otherwise are difficult or expensive to treat.

There's a solution whether you need temporary protection during maintenance and operations, medium-term protection for shipment and storage or extended protection for lay-up, mothballing and field service for anything from weaponry to ground equipment, vehicles to avionics.

The corrosion control solutions offered by Kanoo Energy have been tested, approved and implemented successfully by major defense equipment manufacturers and militaries worldwide.

Services Offered: Asset Audit, Design, Engineering, Specification Building, Bespoke Engineered Solutions, Supply, Installation, Commissioning, Training and Inspection

MIL-SPEC





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Reverse Engineering & Additive Manufacturing

Additive manufacturing, popularly known as 3D printing, is the production process by which a 3D CAD model is converted into a physical object by joining material layer by layer. In this process, no special tools like a cutting tool or moulds are required as the part is directly manufactured or printed onto a print bed. Additive manufacturing is used for rapid manufacturing, rapid prototyping, and rapid tooling where a master is made via 3D printing. It is primarily used for building physical models, prototypes, patterns, tooling components, and production parts in plastics, metals, glass, ceramics, composites, and biomaterials. By opting for Additive Manufacturing, companies can streamline and expedite the product development process, and use it as a product visualisation tool helping them fine-tune every aspect of the design before putting it out into the market.

Applications:

Additive manufacturing is used to make show or concept models, production parts, spare parts, rapid prototyping of a product, rapid manufacturing, and rapid tooling.

In traditional subtractive or formative technologies, an object is manufactured either by carving or shaping material into the desired objects. In Additive Manufacturing, an object is manufactured or printed directly onto a print bed via the use of CAD software. With the aid of a computer generated 3D model, the object is split into several cross sections and then built on the print bed by adding the material layer upon layer until the process is completed.

Services Offered: Survey, Consultancy, Digitization, Additive Manufacturing





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Process Chemicals





SPECIALTY ADSORBENTS & CATALYSTS

Kanoo Energy offers products used in the production of Natural Gas, Sulfur, Olefins, Hydrogen peroxide, Petrochemicals, Aromatics and Catalysts.

Kanoo Energy offers various adsorbents & catalysts with a major focus on Oil & Gas, Petrochemical and Chemical Industry.

Area of applications:

- Natural Gas Treatment
- Petrochemical Purification
- Compressed Air Drying
- SRU & TGTU Catalysts
- Refining, Chemical & Petrochemical Catalysts

Expertise offered:

Kanoo Energy offers a broad range of technical solutions for natural gas treatment based on the appropriate solvent, adsorbent and catalyst. Kanoo Energy supports its customers in the design and operation of gas treatment plants by providing process design and engineering support and a range of technical services such as debottlenecking and process optimization, troubleshooting, revamps, analytics and training.



GAS TREATMENT SOLUTION

Kanoo Energy offers customers high performance gas treatment technology for the below areas of application

Area of applications:

- Acid Gas Removal
- Sulphur Recovery & Tail Gas Unit
- Syngas and Ammonia etc.

Expertise offered:

We are an innovative leader in the field of gas treatment with proven gas treatment technologies boast about 500 references around the globe, from the deserts of North Africa to the Arctic Circle, including the world's largest gas treatment units providing customized, technologically superior gas treatment technologies. The expertise includes providing competitive advantage by increasing plant capacity and lowering investment and production cost.

WATER TREATMENT CHEMICALS

Kanoo Energy using specialized products helps customers manage their water and measure success one drop at a time.

Area of applications:

- Influent Water Clarification
- Boiler Water Treatment
- Cooling Tower Treatment
- Desalination
- Waste-water Treatment

Expertise offered:

Kanoo Energy provides engineered water and process treatment packages with tailor made solutions for our customers needs.





UPSTREAM CHEMICALS

Kanoo Energy offers various upstream chemicals.

Area of applications:

- Drilling Fluid Additives
- Production Chemicals
- Cementing
- Stimulation & EOR

Expertise offered:

We offer a broad range of high-performance chemicals for HPHT wells, with temperature stability and contamination tolerant. Our products range are best in class with consistent product quality for maximizing the recovery of oil, while minimizing impact on the environment.



ACTIVATED CARBON

Kanoo Energy helps protect people and the environment from contaminants in water, air, food and industrial processes.

Area of applications:

- Water Treatment
- Environmental Air Treatment
- Industrial Processes
- Food & Beverage
- Precious Metal Recovery

Expertise offered:

We are pioneer in supplying activated carbon with more than 100 types of activated carbons for all purification system. We back our products with comprehensive analytical support including feasibility studies and cost evaluations together with complete system design, service and troubleshooting.





FUEL AND LUBRICANT ADDITIVES

Kanoo Energy offers the following range of fuel and lubricant additives

Range Offerings:

- Refinery Additives
- Fuel Performance Packages
- Industrial Lubricant Additives
- Engine & Transmission Fluids
- Brake Fluids
- Engine Coolants
- Tailored Additives to meet the Customer Expectations

Expertise offered:

We have a comprehensive expertise along the oil value chain of conversion of crude oil to fuel with high performance, having a global network and committed team helping our customers to be more successful with best product performance in this fast changing environment.

INDUSTRIAL SOLVENTS

Kanoo Energy offers high-performance industrial solvents to be supplied for the following industrial applications.

Area of applications:

- Polymer Industry
- Refining Industry
- Gas Treatment Industry
- Fertilizer Industry
- Oil Field Chemicals
- Paint Industry
- Coating Industry





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Green Energy and Technology





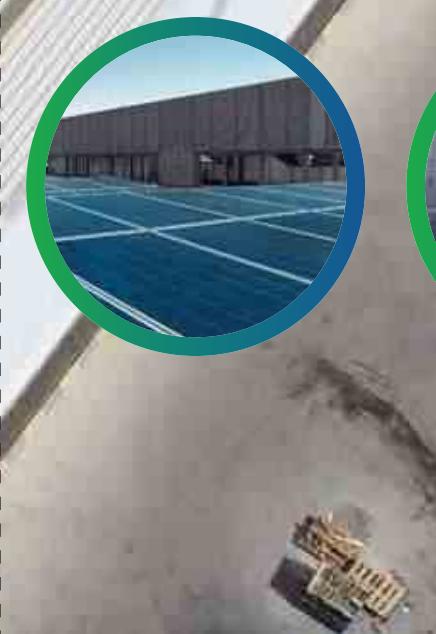
Solar Roof Top Solutions

Kanoo Energy offers a complete solution for the implementation of renewable energy generation with customized solutions that bring the power of solar within your reach. From installation to maintenance, we bring our cost-effective and superior asset management approach to cater to the client's solar needs.

Distributed Solar Solutions

Our Distributed solar energy solutions are in a pay-as-you-go model, by which corporates pay for solar electricity at a rate lower than grid tariffs - in fact, up to 20-40% cheaper.

There is zero investment, no capex and the user does not take on any of the performance risk of the plant. This translates into considerable savings for companies, without the risk. Our team will take care of the entire operation and maintenance for the 25-year life of the system. All you need to do is sign a Power Purchase Agreement (PPA) and sit back and enjoy the benefits.



Gas Based Power Solutions



Kanoo Energy offers solutions for clean & reliable power generation to clients across the regions. Our gas based power solutions empower the transition to net zero with energy solutions and services that are flexible, scalable, and resilient. We deliver innovative technology driven by decarbonization, decentralization, and digitalization to help lead the way to a greener future.

As a leading provider of renewable, natural gas, and hydrogen-rich solutions, our offered solutions help to provide

communities, industry and the public access to sustainable, reliable and economical power with the following unique features of our generators:

- Compact & Easy to Service
- Greater Reliability & Serviceability
- Technology & Proven Innovation

Our proven technology is helping industries and communities generate and manage energy sustainably while navigating the fast-changing landscape of traditional and green energy sources. Accelerating a



cleaner tomorrow with leading energy solutions and services that work today.

Globalizing Clean Energy & Growing Sustainability

Kanoo Energy through its world class partners offers the below bespoke solutions:

DBOOM,
BOOT,
EPC Model - GT & Gas Engines based

Solutions Offered:
Embedded / Captive Power Solutions
(Simple Cycle/Combined Cycle/CHP)



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Projects & Services

Committed to 100% HSE





Projects & Services

Kanoo Energy provides onshore and offshore Engineering, Procurement, Construction and Maintenance Services (EPCM).

Range of solutions offered includes

- Design and Engineering
- Procurement
- Construction & Installation
- Testing & Commissioning
- Maintenance Services
- Turnkey Projects

EPC Projects & Services

- Design, Engineering, Procurement & Installation of Electrical & Instrumentation Systems
- Supply & Installation of Lighting Systems
- Fiber Optic Cable Installation & Termination
- HV/MV/LV Electrical Cable Installation, Termination and Testing
- Instrumentation & Control System.
- Cable Management System
- Design, Supply & Installation of Overhead Crane System
- Electrical & Instrument Maintenance
- Overhead Crane Repair & Maintenance
- Turnkey Solutions & DG based Captive Power Plants including Design, Supply & Installation.
- Design, Supply & Installation of Analyser System and Maintenance Services



كانو للطاقة
KANOO ENERGY

A division of Kanoo Industrial & Energy



Modular and Scalable
Cost - Effective
10 Times Smaller
Straightforward to Install



Carbon Capture

Kanoo Energy through its partnership with global leaders provides carbon capture solutions for hard-to-abate industries such as Oil & Gas, Petrochemicals, Cement, Steel, Utilities, Manufacturing and Energy from Waste etc. segments.

Technologies offered allow you to capture more carbon at the lowest cost, all while meeting strict environmental criteria

Modular solution

Most industrial sites are already optimised in terms of layout and traditional carbon capture solutions can be almost as big as some of the plants already on site, so a reduced footprint is critical to making carbon capture viable for more sites.

Benefits of our Carbon Capture Solution include:

- CapEx and OpEx are reduced by up to 50%
- Mass transfer equipment is 10 times smaller and its overall footprint is more than 50% smaller than conventional carbon capture units
- Modular and scalable so units can be added over time
- Simpler and safer installation as the pre-fabricated, skid-mounted unit is delivered ready to install, there is minimal site disruption and faster permitting

Modular units offered have been successfully pilot tested at 1 tonne per day (TPD) and is currently being commercialised at 10 TPD and 100 TPD.

Breakthrough Technology for Cost-Efficient Carbon Capture



Leak Detection Solution

Kanoo Energy with its partners offers a patent protected award winning machine leak detecting technology for sewer and water services network.

This propriety technology helps detect leaks whether or not water leaks are occurring at the time; not possible with any other currently available evaluation method.



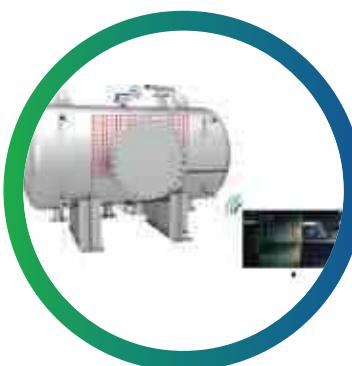
Predictive Corrosion Under Insulation & RBI Monitoring

Kanoo Energy with its award winning partner helps design and supplies the world's longest range Corrosion Under Insulation (CUI) monitoring technology for pipelines, refineries and more. The patented system enables the move away from manual inspection to automated monitoring and from reactive to predictive corrosion management. Earlier detection aids with corrosion prevention, lowering costs and risk.

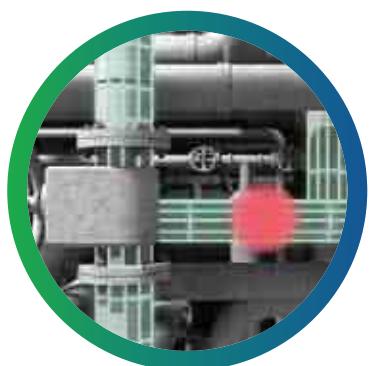
Permanently embedded, distributed corrosion and moisture sensors are installed adjacent to pipelines or vessels, under any insulation. These sensors provide real-time data on asset health in relation to corrosion or moisture presence. The system can localise corrosion under insulation, minimising corrosion damage and allowing for early repair. The system enables focused, efficient inspection and maintenance programmes - a significant improvement over standard **Risk-Based Inspection (RBI)** approaches.



Detect



Connect



Predict





Projects & Services

Gas Turbine Packages

We fulfil your needs when it comes to Power Generation facilities. We collaborate with you, understanding your needs to design, build, install and maintain your unique solution to keep you running. Refurbishment, Repair or Retro-fit for:

- Air Filtration Systems
- Combustion Intake Systems
- Enclosure Maintenance, Repair and Replacement
- Ventilation System Maintenance & Repair
- Combustion Exhaust and Stack
- Waste Heat Recovery Unit (WHRU) & Damper Systems
- Emissions Reduction – NOx and CO

Off Shore Pedestal Cranes

With a worldwide reputation for its innovative offshore solutions, the engineering team at our partner Seatrax supplies the offshore oil and gas and commercial industries with the most reliable, safe and easily-maintained cranes.

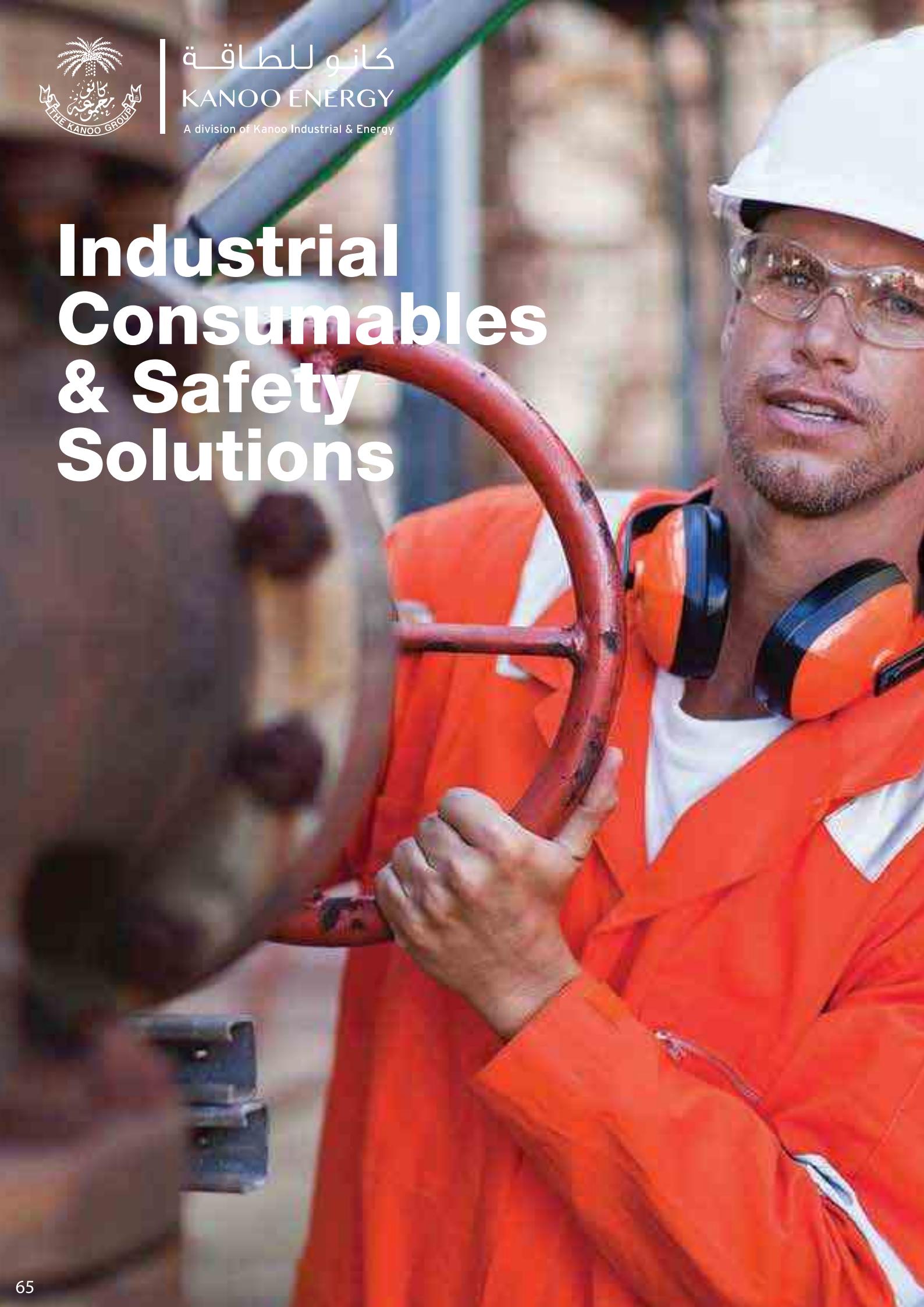
All our offshore cranes are based on the well proven kingpost concept. This basic design consists of a stationary or fixed kingpost and a revolving superstructure, which fits over and revolves around the stationary post. The boom, machinery house, operator's cabin, hoist and slewing machinery are all fitted to the revolving superstructure.

Services Offered:
Design, Engineering, Supply,
Installation, Commissioning and
Aftermarket



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Industrial Consumables & Safety Solutions





Air & Power Tools

Pneumatic Tools, High Performance Cordless Tools & Workshop Equipment

Electric Tools, Cordless Tools, Batteries & Battery Chargers & Accessories

Mechanical Tools

Hand Tools, Automotive Tools, Tool Storage & Accessories



MRO & Aviation Lubricants

Aviation Turbine Oils, Hydraulic Fluids, Aviation Solvents, MRO Lubricants & Industrial Skincare

Machine Tools

Conventional Machines, CNC Machines & Accessories





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Industrial Consumables & Safety Solutions





Fall Protection Solutions

Anchorages, Body Support, Connecters, Descent and Rescue / Confined Space

Personal Protective Equipment

Head Protection, Eye Protection, Hearing Protection, Respiratory Protection, Hand Protection & Safety Footwear

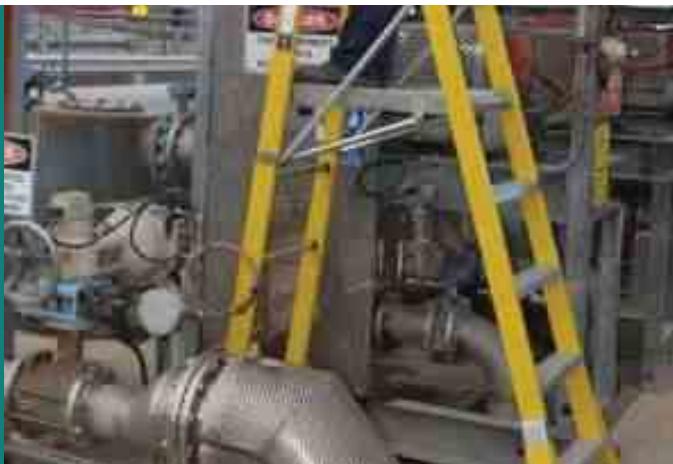


Safety Workwear

Customized Coveralls, Shirts, Trousers, jackets, Cotton, FR, Inherent FR, Arc Flash Resistant

Specialized Ladder Systems

Extension Ladders and Safety Step Platforms, Single Ladders & Fiberglass Corrosion Series Step Platform Ladders





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Pneumatic Tools by Chicago Pneumatic

Product lines:

- Pneumatic Tools
- High Performance Cordless Tools
- Workshop Equipment

Applications:

- Bolting & Assembly
- Grinding, Scaling & Chipping
- Sanding & Polishing
- Specialty & Cutting
- Fastening
- Low Voltage Electric Assembly
- Industrial Smart Hub

Services Offered: Supply, After Sales Service

Mechanical Tools By BAHCO (SNAP ON-EUROPE)

Product lines:

- Hand Tools
- Air Tools
- Tool Storage
- Accessories

Applications:

- Tool sets & Tool Trolleys
- Automotive Tools
- Insulated Tools
- Tools @ Height
- Non Sparking Tools
- Battery Power Outdoor Tools
- Aviation Tool Kits
- Gardening
- Inspection Tools
- Measuring Tools
- General Tools

Services Offered: Supply, After Sales Service





Machine Tools

Excel Machine Tools

Product lines:

- Conventional Machines
- CNC Machines
- Accessories



Applications:

- Metal Working Lathes
- Grinding Machines
- Wood Working Machines
- Drilling Machines
- Sawing Machines
- Fabrication Machines
- Press Brake Machines
- Workshop Presses
- Shearing Machines
- Lifting Moving
- Sand Blasting

Services Offered: Supply, Training, Installation & Commissioning, Aftermarket

Aviation Oils

Eastman Aviation Oils

Product lines:

- Aviation Turbine Oils
- Skydrol Hydraulic Fluids
- Skykleen Aviation Solvents

Applications:

- Aeroderivative Turbine Engines
- Aviation Hydraulic Systems
- Aviation Cleaning Solvents



BOEING



AIRBUS





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MRO Lubricants

LPS Laboratories

Product lines:

- Cleaners/Degreasers
- Corrosion Inhibitors
- Lubricant
- Penetrants
- Greases

Industries served:

- Fabricated Metals
- Aviation
- Foodservice
- Secondary Industry
- Transportation
- Marine
- Railroad



 BOEING

 AIRBUS

Personal Protective Equipment

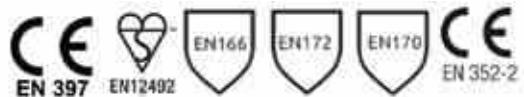
UVEX & Globus Group

Services offered:

- In House Awareness and Training Sessions
- Site Survey and Risk Assessments
- On Site Demonstration of Products

Product lines:

- Head Protection
- Eye Protection
- Hearing Protection
- Respiratory Protection
- Hand Protection
- Safety Footwear





Safety Work Wear

Kanwear

KANWEAR is a Premium Garment Manufacturing brand of The Kanoo Group. Kanwear is expert in supplying specially customized garments that protect individuals against high hazards in various industries.

We expertise in the following:

- Flash Fire Safety Workwear
- Arc Flash Safety Workwear
- 100% Cotton Safety Workwear

Available in Multiple Colors

Our Workwear Range Includes:

- Safety Coveralls
- Jackets
- T-Shirts
- Pants
- Winter Jackets
- Bibs & Braces



Fall Protection

3M DBI SALA



Anchorages



Body Support



Connectors



Descent and Rescue /
Confined Space

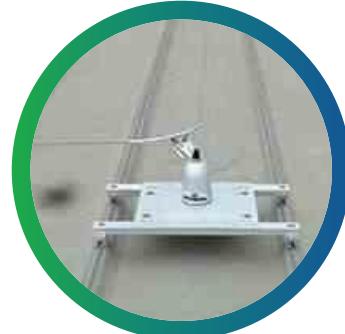




Lifeline System 3M DBI SALA



Vertical Lifeline
LAD SAF Systems



Horizontal Lifeline
Systems

KANOO

3M DBI SALA Authorized Service Center

The Kanoo Group has been successfully running two Certified Service Centers which is authorized and approved by the 3M DBI SALA for the servicing and recertification of all 3M DBI Sala Fall protection equipment in UAE for the last 15 years.

- In House Certified technicians for servicing the 3M DBI Sala Fall protection equipment
- Serviced more than 600 fall arrestor blocks in 2021 alone.
- Work At height Awareness campaign
- Site Surveys on onshore and offshore with professional reports
- Confined space awareness campaign
- 3M DBI SALA Certified In House technicians available for installation of Horizontal and Vertical life line systems

Kanoo Fall Protection Service Center





3M DBI SALA

Training & Demo Truck

- Live Fall Protection demo at the customers site
- Basic awareness for various aspects of fall protection like anchorages, body supports, connecting devices, descent and rescue, education and fall protection for tools
- Importance of inspection of equipment before every use
- Interactive demonstration to end users to highlight the importance of using the right equipment for the right purpose/application
- Live illustration of drop tests using different lanyards and SRL & identifying the force generated on each fall using different connectors and its impacts.
- All types of audience ranging from the top management personnel to the end user using the equipment benefitting from the session
- Duration of the session ranging from 30 min to 1 hour, depending on the requirement of the client
Demonstration of using different equipment of confined space also can be provided

Branach Ladder Systems

Step Platform Ladders

- Larger Deck = Greater Movement
- Load Rating of 150 Kgs
- High Strength and Stability
- Railing for Protection
- Quick Setup, Portability and Easy Store



All Terrain Step Platform

- Built for any Terrain
- Individual Adjustable Legs
- High Stability



Extension Ladders

- Lightweight and easy to deploy
- Strongbox Construction
- High Rigidity
- Minimum Twist and Sway



Fall Control System

- High Worker Safety
- Increased Base Support
- Secured Ladder
- Both hands free to work with
- Integrated Rescue by Second user





Our Commitment and Vision

As a responsible player within the energy sector, Kanoo Energy is building solutions that dovetail with the global and regional attempts in harnessing technology driven by innovation. A key pillar in this journey is a 15% reduction of carbon emissions by 2030.

The 2021 UN IPCC report reiterates that collectively the world needs to halve global greenhouse gas emissions by 2030 and reach net zero before 2050.

We are also conscious of our role in supporting the UAE to achieve its goals to limit global warming to 1.5°C above pre-industrial levels.

At Kanoo Energy, we recognize the need for transformational change to address the climate crisis - a transformation that will require extensive cross-industry collaboration by sharing best practices.

Sustainability

Renewables

Globally and in our region, the targets are that over 80% of power in 2050 will need to come from renewable & gas. This will mean a huge transformation for energy generators and distributors who



will need a paradigm shift in the control architecture of their generation & distribution networks. This will also require dynamic real-time commercial solutions delivering energy to their consumers at an optimal cost and with a low carbon footprint.

Transport

The transport sector contributes 21% of total global emissions & is a key focus area for delivering sustainability goals. Key drivers are EV chargers, fuel cells, data analytics, management of autonomous vehicles and optimizing route planning and traffic using Artificial Intelligence (AI).



partners / innovators to implement solutions that will enable industry here in UAE to move towards a low-carbon economy - A move that is central to the sustainability Goals.



Digitalization & Innovation

Within the technology sector, we will attract International / Local Specialist

Our Commitment to Quality





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