



COMPANY PROFILE



UNOTECH is a leading Supplier and Services Provider specialized in Electro Mechanical Systems. The company focuses on providing total solutions and exclusively distribute various High Quality Brands and services in the Angolan market. The company team carried with excellence various Medium and High scale projects in many different sectors and countries.

UNOTECH Brand Promise along with Service excellence build the foundation of the company. Our mission is to provide our clients with advanced solutions according to international standards.

O Values

UNOTECH is a foundation committed to Integrity and Ethics. Supporting Honesty, confidentiality and reliability in dealing with its clients.

We provide outstanding products and unsurpassed service that, together, deliver premium value to our customers, and we are personally accountable for delivering on our commitments.

O Scope of Supply

- Steam System
- Pneumatic System
- Fire Fighting System
- Water Pumping System
- Joints and Seals
- Electrical Systems
- Automation Solutions
- Energy Management System and Analysis
- Building Management System
- Third Party Measurements
- Maintenance Contracts
- Electromechanical Designs, Surveys and Audits

O Target Industry

- Oil And Gas facilities
- Food and Beverage facilities
- Pharmaceutical Facilities
- Manufacturing Facilities
- Hospitals and Hotels
- Residential and Commercial Buildings



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Energy Managment & Automation Systems

spirax Sarco First for Steam Solutions





Spirax Sarco is synonymous with excellence in steam system engineering. We offer the industry's most extensive range of products with services, coupled with practical industry application expertise. In short, we create solutions that set the benchmark for steam-using organisations worldwide.

O Scope of Supply

1- Boiler Controls & Systems:

- O Feedtanks
- O Vent Heads
- O Level Controls
- Steam Injectors
- O Sample Coolers

- O Blowdown Vessels
- O Conductivity Meters
- O Heat Recovery Systems
- O TDS Blowdown Controls a
- Bottom Blowdown Systems

2- Metering: (Flowmeters)

O Orifice Plate

- O Control Valves
- O Vortex Meters
- o Inline Variable Area Meter ILVA
- O Flow Computers
- Target Variable Area Meter TVA

3- Control Systems:

- O Pneumatic Actuators
- Self-Acting Controls
- O Electric Actuators
- Positioners, Controllers & Sensors
- O Safety Valves
- O Pressure Reducing & Surplussing Valves



4- Steam Traps:

- O Quickfit
- O Sealed
- O Ball Float
- O Inverted Bucket
- O Thermodynamic

- Bimetallic Thermostatic
- Balanced Pressure
 Thermostatic
- O Spiratec Steam Trap
 Performance Monitors
- O Wireless Steam Trap Monitoring system



5- Pipeline Ancillaries:

- O Vacuum Breakers
- 200
- O Hosedown Stations
- O HV3 Stop Valves

Check Valves

- O Pressure Gauges
- O Ball Valves
- Sight Glasses
- O Air Vents & Air Eliminators
- O Strainers & Filters
- O Bellows Sealed Stop Valves

O Diffusers

O Separators & Insulation Jackets

6- Packaged Systems:

- Desuperheater systems
- O Pressure Reducing Stations
- O Exhaust Vapour Condenser - EVC
- Easiheat System -Instantaneous hot water systems
- O Flash Recovery Energy Management Equipment



7- Condensate Pumps & Energy Recovery:

Contracts

- O Electric Pumps
- O Pressure Powered Pumps
- Flash Steam Recovery Vessels

Reconditioning Dilatation Design

Valve



Assurance

Engineering Services

Audits

Management



Testing

7

Steam System /

& Drawings

wilo



Wilo is one of the leading manufacturers of pumps and pump systems for heating, cooling and airconditioning technology for water supply, sewage and drainage.

The company is represented worldwide in over 90 countries by more than 60 subsidiaries, including 21 production sites, and employs more than 7,700 people globally.

In 2017 Wilo acquired Scot Pump, Weil Pump and component manufacturer Karak Machine Corporation.

O Scope of Supply

- Centrifugal Pumps
- Bore Pumps
- Submirsible Pumps

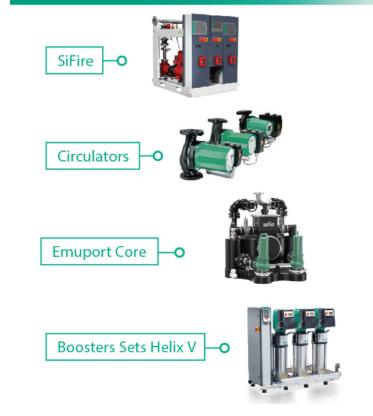
- Sewage Pumps
- Recirculation Pumps

O Pumps Series

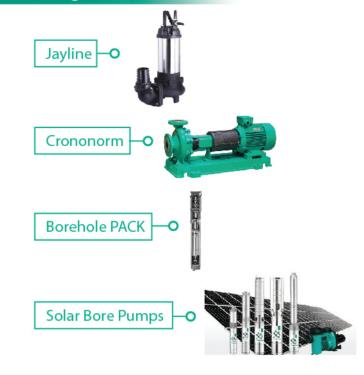
1- Residential:



2- Building Services Commercial:



3- Agriculture:



4- Industrial:



5- Sewage Waste Water:



6- Water Management Clean:





Engineering Services



Static Head Calculation & Proper Pumps Selections for each Application

Pump System
Start-up and
Commissioning

Water Supply System Design Water Metering Solutions

After Sale Technical
Support and
Spare Parts
Division



SMC was established in 1959, in Tokyo, Japan, as a Sintered Metal Filters and filtration systems manufacturer. The evolution from basic pneumatics to more sophisticated automation solutions has granted SMC a global market share of 30%, and 65% in the Japanese market.

With 12,000 basic products and over 700,000 variations, SMC offers solutions from air preparation, instrumentation, through to valves, and actuators covering practically every single step in the automation process.

O Scope of Supply

1- Actuators:

- ISO Cylinders
- Linear Actuators
- Guided Actuators
- Rotary Actuators

2- Electric Actuators:

- Rodless Actuators
- Specialty Actuators
- Actuator Accessories

Rotary Tables

Grippers

Miniature

Grippers & Escapements

Slide Tables

- Sliders
- AC Servo Sliders
- Rod & Guided Rod
- Controllers & Drivers
- AC Servo Rod & Guided Rod

3- Directional Control Valves:

- O Pilot Operated 4/5 Port Solenoid Valves
- O Pilot Operated 3 Port Solenoid Valves
- O Direct Operated 3/4/5 Port Solenoid Valves
- O Safety Pressure Release Valves (ISO 13849)
- O NAMUR Valves: 3 Port / 5 Port / Hygienic

- - Air Operated Valves

Fieldbus System

- ISO Valves
- Accessories Mufflers
- Mechanical Valves / Hand Valves

4- Airline Equipment:

- Combination Units
- Filter-Regulators
- Modular and In-line Filters
- Regulators
- Lubricators
- Specialty Regulators

- Pressure Gauges
- Air Dryers
- Main Line Air Filters
- Auto Drain Valve
- Blow Guns / Nozzles
- Silencers / Exhaust Cleaners



5- Fittings & Tubing:

- Fittings
- Manifolds
- Tubing
- Flow Control Equipment
- Quick Couplers
- Check Valves
- Accessories



6- Vacuum Products:

- Vaccum Pads (Suction Cups)
- Vaccum Ejectors
- Vaccum Filters
- Vaccum Switches
- Vaccum Regulators
- Vaccum Saving Valve
- Other Vaccum Equioment

7- Fluid Control Equipment:

- Process Valves
- Process Pumps
- High Purity Products
- Industrial Filters
- Water Equipment
- Electro-Pneumatic Positioners



8- Sensors & Switches:

- Pressure Switches
- Vaccum Switches
- Flow Switches
- O Auto Switch





NAFFCO was founded in Dubai, UAE to become the world's leading producer and supplier of life safety solutions. By recognizing the importance and convenience of having easy access to multiple safety services, we became specialized by offering complete solutions under one roof for all types of high quality firefighting equipment, fire protection systems, fire alarms, addressable emergency systems, security systems, custom-made vehicle such as fire trucks, ambulances, mobile hospitals and airport rescue firefighting vehicles (ARFF).

With the most talented and dedicated employees from around the world, NAFFCO has over 15,000 team members including 2,000 passionate engineers and over 6 million square feet of manufacturing facilities. We are currently exporting to over 100 countries worldwide.

O Scope of Supply

1- Fire Fighting Equipment:

- Fire Extinguishers
- O Hosese & Accessories
- Reels & Cabinets
- Valves & Risers
- Fire Hydrants







2- Extra Low Voltage Solutions:

- O Fire Detection & Notification System
- Battery Operated Detector
- Gas Detection System
- Extinguishant Control System
- Voice Evacuation System
- Emergency Lighting System





3- Fire Pumps & Controllers:

- Certified Fire Pumps
- Custom Designed Fire Pumps
- Industrial Packaged Fire Pump Sets
- O Pump House Fire Pump Units
- O Sea Water Packaged Fire Pump Sets
- O Custom Configured Packaged Fire Pump Sets
- Automatic Fuel Filtration System
- Fire Pump Cloud System



4- Fire Protection System:

- Water-based System
- Gas-based Extinguishing System
- Foam-based Extinguishing System
- Powder-based Extinguishing System
- wet Chemical Fire Suppression System



5- Passive Fire Protection:

- O Fire Retardant Paint
- O Fire / Smoke Curtains
- Fire Wall

6- Trucks & Vehicles:

- ARFF Vehicles on Custom Built Chassis
- ARFF Vehicles on Commercial Chassis
- Municipal Firefighting Vehicles
- Industrial Firefighting Vehicles
- Rescue and Rapid Intervention Vehicles
- Aerials for Rescue & Firefighting
- Aerials & Vehicles for Electrical Sector
- Special Purpose Vehicles







7- Safety & Rescue:

- Firefighting
- Industrial
- Safety Signs
- O Rescue Equipments & Accs



- Industrial HSE Training Courses
- Fire Fighting Training Courses
- Medical, First Aid/ CPR & Basic EMT



9- Fire Doors:

- Fire Rated Doors
- Fully Glazed Doors
- Acoustic Doors
- Blast Proof Doors



- Wood Finished Steel Doors
- Sliding Doors
- Access Panels
- Rolling Shutters



10- Medical:

- Ambulances
- O Mobile Medical Units
- Mass Casualty & Emergency Support Vehicles





8- Training:

- NFPA Codes Training Courses



Engineering Services



Fire Fighting Design & Specifications

Fire Fighting System Selection & Hydraulic Calculation

System **Technical** Support & Commissioning **Fire Fighting** Maintenance **Contracts**

Fire Fighting Survey

OMRON

OMRON Industrial Automation functions as a partner to help innovate worldwide manufacturing.



Through our expertise in sensing and control technology,

we enable manufacturers to operate with greater productivity and streamlined efficiency.

O Scope of Supply

1- Sensors:

- O Fiber Sensors
- O Photoelectric Sensors
- O Displacement Sensors / **Measurement Sensors**
- O Vision Sensors / Machine Vision Systems
- O Code Readers / OCR

- O Proximity Sensors
- O Photomicro Sensors
- O Rotary Encoders
- O Ultrasonic Sensors
- O Pressure Sensors / Flow Sensors
- O Contact Sensors / Liquid Leakage Sensors



2- Switches:

- O Level Switches
- O Basic Switches
- O Limit Switches
- O Push Buttons / Indicator Lamps
- O Thumbwheel Switches



3- Safety Components:

- O Safety Light Curtains / Single-beam Safety Sensors
- O Safety Laser Scanners
- O Safety Door Switches
- O Safety Limit Switches
- Safety Mats
- Safety Edges

- O Emergency Stop Switches
- O Safety Controllers
- O Safety Relays
- O Safety Drives
- O Safety Units / Safety Relay Units
- Safety Key Selector Switches / **Enabling Grip Switches**



4- Relays:

- General Purpose Relays
- O Safety Relays
- O Terminal Relays
- O I/O Relay Terminals
- O Solid-state Relays
- O Power Controllers
- O Low Voltage Switching Gears



5- Control Components:

- O Temperature Controllers
- O Timers
- O Counters
- O Cam Positioners
- Digital Panel Indicators
- O Signal Converters
- O Programmable Relays





6- Automation Systems:

- O Industrial PC Platform
- Multi-Axis Controller
- O Software
- O Programmable Controllers
- O Machine Automation Controllers

- O Networks
- O Peripheral Devices
- O RFID Systems
- O Programmable Terminals





7- Motion / Drives:

- O Inverters
- O Servomotors / Servo Drivers
- O Machine Automation Controllers







8- Power Supplies:

- O Power Supplies
- O Laser marker
- Axial Fans
- UV-Light Curing Systems
- O Uninterruptible Power Supply (UPS)

- Static Electricity Components
- O Condition Monitoring Device
- Wiring Systems
- O Measuring / Motor Protective Relays
- O Sensor I/O Connectors / Sensor Controllers







Engineering Services









Electric Panel Design & Assembly

Technical Support

& Surveys

TEC50N

2- Compressed Fiber Gaskets:

Tecson, a leading manufacturer of industrial sealing products in China, has been committed to providing customers with a full range of complete solutions

for sealing and insulation products from R&D, product application, manufacture and supply, to plant monitoring, and on-site maintenance. The main products include gaskets, packing seal, flange insulation kits, rubber elastomers, engineering plastics and mechanical seals which are exten-



sively applied in petrochemical, oil refining, nuclear power, semiconductor, food and pharmaceutical, and equipment manufacturers. Relying on the advanced internal testing center and the ERP management software, our system, which has been efficiently and perfectly operated, has obtained the ISO9001-2008 and API 6A certification.

O Scope of Supply

1- Sonflon Virgin PTFE Products:

- Expanded PTFE Sheets
- O Sonflon 7800 White
- O Sonflon 7810 Blue
- O Sonflon 7830 Fawn
- ePTFE Tape Gasket
- Spring Energized PTFE Seals
- PTFE Joint Sealant
- Salvon Gaskets
- PTFE Envelope Gaskets
- Sonflon Virgin PTFE











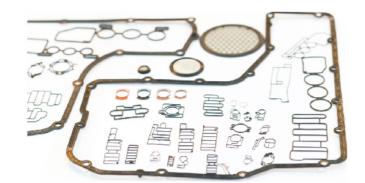


Material code	Sonseal 9000	Sonseal 9100	Sonseal 9200	Sonseal 9400
Description	The economic style. Manufactured from mixture of organic fibres with mixture NBR binder.	High quality gasket jointing containing mixture of temperature resisting mineral and aramid fibers with special NBR binder.	High quality gasket jointing, with wire reinforced. The sheet has excellent mechanical properties.	Premium quality carbon fiber reinforced material with a high quality NBR binder.
Service	All of industries at lower parameters.	A general material suitable for sealing oils, non-aggressives gases and basic chemicals.	This style is suitable for oils, fuels, lubricants, gases, hydrocarbons, and most diluted acids and alkalis.	A universal grade is suitable for all kinds stardard industry applications.
Colour	Blue	Yellow	Green	Black
Maximum Temperature	200°C	380°C	380°C	450°C
Maximum Pressure	60 bar	80 bar	120 bar	100 bar

Material code	Sonseal 9450	Sonmica 9900	Sonmica 9950
Description	Premium quality Manufactured from mixed of graphite, aramid fibers with high quality NBR binder.	Flexible Mica sheet bonded with special resin and a tanged insert of SS316L.	Sonmica 9950 is a high performance sealing material containing exfoliated mica with bio soluble fibers bonded to a SS 316L tanged core.
Service	Suitable for all kinds stardard industry applications.	Recommended for high temperature application.	Recommended for high temperature application. SONMICA 9950 is also a good material for flange insulation solution.
Colour	Black	Gold brown	Gold
Maximum Temperature	450°C	900°C	950℃
Maximum Pressure	100 bar	60 bar	200 bar

3- Semi-Metallic Gaskets:

- O Spiral Wound Gasket
- O Spiratec LST Gasket
- Kammprofile Gasket
- Metal Jacketed Gaskets
- Corrugated Metal Gaskets
- Metal Eyeletted Gaskets
- Heat Exchanger Gaskets









4- Metallic Gaskets:

- Ring Joint Gaskets
- O Specialized Ring Type Joints
- Lens Ring





5- Rubber & Elastomers:

- FEP encapsulated Gaskets
- O Rubber O-Ring
- O Rubber Metal Gaskets
- O Rubber Sheet & Gaskets
- Mechanical Joint Gaskets
- Custom Molded Rubber



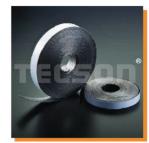




6- Songraf Graphite Material:

- Songraf graphite Sheets
- O Graphite Foil
- O Songraf Graphite tape
- EasySeal Gasket Tape







7- Compression Packing:

- O Carbon & Graphite
- O PTFE & ePTFE
- Aramid
- Synthetic
- Vegetable
- Mineral
- SonGraf Moulded Rings







8- Mechanical Seals:

- Cartridge Seals
- Gas Seals
- Bellow Seals
- Component Seals





Energy Managment & Automation Systems

Engineering Services and Management Systems

Energy management systems (EMS) are automation systems that collect measurement data from the field and making it available to users through graphics, online monitoring tools, and energy quality analysers, equipment monitoring and many other applications. The logged information from various applications gives a competitive advantage since useful information data are analysed and used to optimize the use of all energy resources for different applications.



Benefits of EMS:

- 24/24 Remote and onsite Monitoring and Control.
- Reducing operation and maintenance cost and improve facilities performance.
- Track and allocate energy use by Section/System/Equipment.
- Analysis of past reports to predict future costs and report key equipment indicators.
- Track costs for budgeting purposes and increase the return on investment.



List of Applications:

- Generators Set & Fuel System (Tanks, Fuel Pumps, Generators)
- Gas Systems
- Refrigeration Rooms
- Energy Management
- Data Centres





Services for Electro Mechanical systems (Industrial Plants, Buildings)

- 1) Preventive and Corrective Maintenance contracts and Services.
- 2) Utility and Facility Management systems integrator (including BMS, IMS & EMS).
- 3) Design, Consultancy, Operation Audit, and third-Party measurements.



Kieback&Peter

Kieback&Peter is an internationally leading family company for intelligent building automation. We optimize efficiency, safety, and comfort in buildings worldwide with customized, smart solutions and strive to be the most trusted and innovative partner for our customers. We view buildings as the most important social spaces in which we live and work. These are made even more livable with our smart, "Made in Germany" solutions, which create real added value for society.

A building management system **(BMS)** is a control system that can be used to monitor and manage the mechanical, electrical, and electromechanical services in a facility.

Kieback&Peter BMS Monitoring and Controls can include power, heating, ventilation, air-conditioning, physical access control, pumping stations, elevators, light, and various integrated applications.



HVAC Systems Monitoring and Controls:

- Chilled Water System Manager Monitoring & Control
- Air Handling Unit Monitoring & Control
- Fan Coil Unit Monitoring & Control
- Supply of Variable air Volume Terminals (VAV BOX + Controllers) Monitoring & Control
- Variable Refrigeration Volume System Integration
- Roof Top Units System Integration
- Heat Recovery Units Monitoring & Control
- Parking Ventilation System Monitoring & Control
- Rooms Exhaust and Toilets Exhaust Monitoring & Control

Water Distribution Systems Monitoring and Control:

- Water Transfer Pumps Monitoring
- Water Booster pumps Monitoring
- Submersible Pumps Monitoring
- Circulation Pumps Monitoring
- Water Chemical treatment Systems Monitoring

Fire Fighting Systems Monitoring and Control:

- Fire Fighting System Monitoring
- FM200, Foam and Deluge Systems Monitoring

Power Distribution Systems Monitoring and control:

- Medium Voltage software Integration
- Main Distribution Boards (QGBT), Automatic Transfer Switches, Motor Control
 Panels and Centres. Monitoring & Control
- Generators Monitoring
- Fuel Oil Systems Monitoring and Control
- Uninterruptible Power Supply Monitoring

Cow Current Systems Integration:

- Emergency Central Battery System Monitoring
- Fire Alarm system Monitoring
- Lighting Systems Monitoring and Control
- Power, water, BTU, and Fuel Systems Metering & Billing solutions

O Scope of Supply

Air, Water, Fuel, and Gas Sensors and Switches:

- Temperature
- Relative Humidity
- Flow
- Absolute and Differential Pressure
- O Leve
- Leak Detectors
- O Carbon Monoxide & Carbon Dioxide
- Air Quality
- Light Level



Pressure Independent and Pressure Dependent Water Control Valves and Actuators:

- 2 Way Control Valves
- 3 Way Control Valves
- 6 Way Control Valves
- Butterfly Control Valves
- Hydraulic Balancing Valves





Room Automation:

Integrated Thermostats with lights and Blinds
 Control for Room Control Optimization.



Protocol translation gateways:

- Open Protocol Gateways
- Proprietary Protocols Gateways



Automation Stations:

- Neutrino GLT
- Oanteon



Direct Digital controllers and operator panels:

- O DDC4200
- O DDC420
- Service Bus/Field Bus Expansion Modules





Damper Actuators:

- Non-Return Damper Actuators
- Spring Return Damper Actuators
- O Fire Rate Damper Actuators



Accessories:

- Transformers
- Power Supplies
- Protection Relays









Engineering Services



BMS Design & Tendering Material Selection & Project planning

Panel Assembly, Installation, Commissioning, Programming, & Technical Support Operation,
Optimization,
Reporting
& Maintenance
Contracts





