

www.instrumentumgoup.com

INSTRUMENTUM GROUP

TOP-NOTCH INDUSTRIAL EQUIPMENT SUPPLIER
TOP-NOTCH INDUSTRIAL EQUIPMENT SUPPLIER

Your Industrial Solutions Partner!





- Competitive Pricing
- Efficient Sourcing
- Widest Product Range
- Fast and Best in Time Delivery



OVERVIEW

Instrumentum Group was established in 2014 by experienced engineers and experienced sales teams with various industries background that includes process instrumentation & Control, valves, pipe & fittings, warehouse solutions, renewable energy, medical devices, commodities and supplies chain management. We aimed to maintain long-term commercial relationships with our customers, who value our reputation and market knowledge. Integrity is the first and foremost criteria that form the basis of our business at Instrumentum. We have a strong commitment to meet our customer needs and application while promoting business practices that respect our employees, our customers, our suppliers and the environment.

Instrumentum group is capable of delivering wide range of solutions for our customers under one window. We work with the best niche manufacturer's to provide quality products with economical prices and expedited delivery, by which customer can fulfill their requirement on time. We are prepared to assist customer in every inquiry whether it's for single equipment or a large project that requires multiple services. Not only we can provide equipment, but also we have the capability to provide the technical consultation on selecting the right equipment and efficient design.

Best Quality Service...

Our professional team is enthusiastic to provide the highest quality of services in this very competitive industry. We maintain high international standards to fulfil the requirement of all our customer needs around the globe. Our main objective is to utilize our sales, technical & sourcing experts to select and source the customer's requirement from our principals or manufacturer to fulfill their application with quality products at economical prices on defined lead time.



Highlights of our Services

Process Measuring/Control/Calibration
Instruments Valves, Actuators, Pipe & Fittings
Design control and measuring process loop
Design total logistic solution
system Warehouse Racking and MHE's

Renewable Energy & Explosive LED
Medical Devices
Build & Design Customized Process Equipment
Marketing & Display Product.





Our logistics team can swiftly arrange to deliver spare parts or equipment with fast delivery around the world.



Petrochemical
Power Generation
Oil & Gas
FERTILIZER Precision
Engineering
Pharmaceutical **NUCLEAR**

HIGH QUALITY PROCESS & CALIBRATION INSTRUMENTS

We can supply high quality instruments for a wide range of applications and processes. Whether you need a special or a custom product, we have the product range and expertise to provide the perfect instrument to suit your individual requirements.



Pressure

Digital Pressure Gauge
High Pressure Gauges
Low Pressure Gauges
Differential Pressure Gauges
Industrial Pressure Gauges
Process Gauges
Harsh Environment Gauges
Low Cost Utility Gauges
Smart Pressure Transmitters
Differential Pressure Transmitter
Digital Pressure calibrator
Dead weight Testers & comparator

Temperature

Thermometers
Thermowells
Filled System Thermometers
Gas, Vapor, or Mercury
Glass Thermometer
Temperature Switches
Thermocouples & RTDS
Temperature Transmitters
Dry Bath Temperature Calibrator
Liquid Calibrator
Water Bath
Signal Calibrator & Simulator

Level

Point Level Switch
Multi-Point Level Switch
Continuous Mechanical Level Gauge
Ultrasonic Continuous Level Measuring System
Level Transmitter

Flow

Electro Magnetic Flow meters
Vortex Flow Meter
Mass Flow Meter & Controllers
Thermal Mass Flow Meters
Oval Gear Meters
Variable Area Flow Meters
Portable Ultrasonic Flow Meter
Flow Computers
Flow Controller and Recorder
Flow Calibrator

Recorders

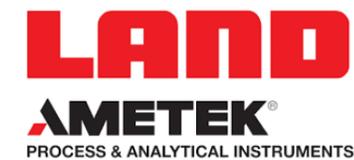
Circular Chart Recorders
Z fold chart recorder
Paperless recorders
Chart Papers & -
Pens for all types of recorder

Industrial Automation

Sensing Components
Switches
Safety Components
Relays
Control Components
Power Supplies
Programmable Logic Controllers
PID Controller
Human Machine Interface
Components of a -
Telecommunication System



We source and supply a complete line of field-proven instruments and assemblies for measuring pressure, temperature, level and flow across all liquid and gas applications as well as Calibration systems including custody transfer, check stations, control loops, batching and more. Handle the toughest conditions, analytical challenges or maintain the utmost precision across your operation with high-quality measurement and instrumentation devices from the leading manufacturers, including gauges, transmitters, recorders, Plc, DCS and more to maximize the performance, profitability and safety of your application.



Quality Products • Competitive Price • On-Time Delivery



We are a leading sourcing expert of manual and automated valves to the energy & industrial sector



Your best source for industrial valvActuators & Positioners

We are leading supplier of energy and industrial solutions, products and spares through our global networking. we can supply and source high quality industrial valves ,from light industrial services to severe services. Whether you need a special or a custom product, we have the product range and expertise to provide the perfect solution to suit your process and application.



Valves and Actuators Solutions

Globe Valve

Globe valve range covers OS&Y, Z-type, Y-type or angle-construction type
 Certificate of Compliance: API 602, ASME B16.34, ASTM, ANSI, EN, DIN, BS.
 Materials: forged and cast steel or alloys.
 Construction: screwed bonnet, bolted bonnet, pressure-seal bonnet
 Size: 1/2" up to 36" Class rating: ASME 150# to 2500# (PN, API and other Pressure Class Valves available)

Ball Valves

Ball valve range covers Floating Ball & Trunnion Ball Valves
 Certificate of Compliance: API 6D, ASTM, ANSI, ASME, EN, DIN, BS, CSA
 Materials: CS, SS, Duplex & Super Duplex Steel and Special Alloys
 Construction: Full or reduced port design
 Size: 1/2" up to 12" Class rating: ASME 150# to 2500# Floating
 Size: 1/2" up to 36" Class rating: ASME 150# to 2500# Trunnion (PN, API and other Pressure Class Valves available)

Plug Valve

Plug valve range covers short pattern, regular pattern, Venturi pattern, round port and jacketed type
 Certificate of Compliance: API 6D, API 599, ASME B16.34, ASTM, ANSI, EN, DIN, BS, CSA
 Materials: CS, SS, Duplex & Super Duplex Steel, Iron and Special Alloys
 Construction: bolted bonnet, one-two or three pieces
 Size: 1/2" up to 24" Class rating: ASME 150# to 2500# (PN, API and other Pressure Class Valves available)

Gate Valve

Gate valve: Forged Steel & Cast Steel
 Certificate of Compliance: API 600, API 602 ASTM, ANSI, ASME, EN, DIN, BS, CSA
 Materials: Carbon Steel, Stainless Steel, Duplex & Super Duplex Steel, Iron and Special Alloys.
 Obturator: Solid wedge & Operator: manual – Handwheel.
 Size: 3/8" up to 2" FSGV & Size: 2" up to 42" CSGV Class rating: ASME 150# to 2500# (PN, API and other Pressure Class Valves available)

Check Valve

Check valve Forged or Cast Steel & Alloys by split disc, swing, piston, ball, needle, nozzle construction type.
 Certificate of Compliance: API 594, API 602 ASTM, ANSI, ASME, EN, DIN, BS, CSA
 Materials: Carbon Steel, Stainless Steel, Duplex & Super Duplex Steel, Iron and Special Alloys.
 Size: 3/8" up to 36" Class rating: ASME 150# to 2500# (PN, API and other Pressure Class Valves available)

Butterfly valve

Butterfly valve range covers Concentric, Zero Offset, Double Offset and Triple Offset type
 Certificate of Compliance: API 609, ASME B16.34, ASTM, ANSI, EN, DIN, BS, CSA
 Materials: Carbon Steel, Stainless Steel, Duplex & Super Duplex Steel, Iron and Special Alloys.
 Size: 2" up to 60" Class rating: ASME 150# to 2500# (PN, API and other Pressure Class Valves available)



We pride ourselves in supplying cost-effective solutions through our world renowned manufacturer for your onshore and offshore projects .Our sourcing experts support & sold to upstream projects, midstream, downstream, transmission and maintenance, repair & operating (“MRO”) consumables used in day-to-day production. We provide & source industrial valves for petroleum refining, chemical processing, LNG terminals, power generation utilities, fertilizers, industrial manufacturing plants.





Our employees know our range of products very well. They will be at your disposal with words and deeds. We always rely on the highest quality standards in advice and work processes.

Petrochemical

Power Generation

Oil & Gas

FERTILIZER Precision

Engineering

Pharmaceutical **NUCLEAR**



TOTAL PIPING & STRUCTURAL SOLUTIONS PROVIDER

We supply high quality of piping & structural solution for the oil & gas, petrochemical, fertilizer, and other industries through our reliable and quality certified manufacturer/supplier at the most competitive price and delivery. Our experienced teams of engineers adhere to Quality Management System procedures strictly and constantly strive to meet our client's evolving needs for high-end precise solution. We ensure that the finest quality of products as per required standards API, ASTM, ASME, EN, DIN will be delivered to you in the shortest time possible. We provides pipes & tubes for the equipment involved in the production of Urea, Ammonia, Nitric acid, Sulphuric acid, Phosphoric acid ,Petrochemical and Melamine as well as for subsea application



Pipe

- Carbon Steel
- Welded Steel(ERW, HFI, LSAW)
- Seamless Steel
- OCTG
- Low Temperature Steel
- Alloy Steel
- High Yield Strength
- Stainless Steel
- Duplex & Super Duplex Steel
- Surface Finished

Fittings

- Butt weld f-Socket weld - Thread fittings
Material:SS-CS-Alloy
- Elbow
 - Tee
 - Reducer
 - Returns
 - Cross
 - Caps
 - Pipe Bend
 - Lap Joint (stub Ends)
 - Pipe -Outlets
 - Pipe Nipple
 - Coupling & Union
 - Fasteners

Flanges

- Material: SS-CS-Alloy
Facing:RF/FM/M/ TG/RF/FF/RTJ
Pressure Class: Class150-Class2500
Size: 1/2"-60" (DN15-DN3000)
- Socket Weld
 - Slip On
 - Blind
 - Screwed
 - Ring Joint,
 - Weld Neck
 - Long Weld Neck
 - Reducing
 - Spectacle

Plates

- Austenitic
- High machinability
- Super Austenitic
- Heat resistant
- Duplex
- Nickel alloys
- Ferritics: 410S
- Martensitics
- Alloy
- Carbon steel
- Mild Steel Plate Grade

Special Alloy

- We offer the pipe, fittings and plates in Special Alloy
- Nickel Alloy
 - Copper
 - Titanium
 - Aluminum
 - Duplex & Super Duplex
 - UREA Grade
 - Copper-Nickel
 - Brass
 - Magnesium
 - Super Alloys
 - Armour Steel

Steel Structure

- We offer the structural material in SS/CS
- Beam
 - Square Bar
 - Channel
 - Lip
 - Pipe
 - Angle
 - Flat Bar
 - T Bar
 - Rectangular Tube
 - Square Tube
 - Rod



STEEL PIPES & FLANGES

RECOGNIZED SKILLS:

- STAINLESS STEEL PIPES
- STAINLESS STEEL PLATES
- PIPE FITTINGS
- FLANGES
- BOLTS & NUTS

Instrumentum Group is pleased to sell products from the manufacturing of Stainless Steel, Alloy steel and Carbon Steel products with a variety of pipe, tube, beam, structural steel, for domestic and international market. The steel pipes and flanges are used in many industries ranging from petroleum and gas pipeline, water pipeline, building construction, paper mill, medical, health-care and public facilities, etc. The manufacturer of Instrumentum Group is equipped with domestic and international production and inspection facilities. Their main goal is to strictly follow the ISO quality management system, as well as the country standards and regulation under the leadership of professional engineers and production team. Instrumentum Group is capable of exporting to regions such as USA, Brazil, Germany, UK, Arab, Japan, Korea, Malaysia and Russia, etc. Our manufacturer always insist on the principle of Credit-Based, Customer First, High Quality, High efficiency, pursuing 100% customer satisfaction.

The manufacturer is one of the professional trader, which specializes in the stainless steel plate and pipes with grades of **304L, 321, 310S, 316L, 316Ti, 317L, 347H, 904L, 2205, 2304, 2101, 2507, S31803, 800H, 600, and special material on request.**

Main Products Range:

SS SMLS Steel Pipe: OD 0.06 - 32 inch (1.6-820mm)

CS SMLS Steel Pipe: OD 1/2 - 26 inch (21.3-660mm)

ERW Steel Pipe: OD 1/2 - 32 inch (21.3-820mm)

SSAW Steel Pipe: OD 8 - 120 inch (219.1-3048mm)

LSAW Steel Pipe: OD 14 - 64 inch (219.1-1626mm)

SS Plate/Sheet/Coil/Strip: WT 0.3mm to 110mm, CR/GI/GL/PPGI/PPGL



GIANT STEEL PIPES

PROFESSIONAL STEEL PIPE MANUFACTURING

RECOGNIZED SKILLS:

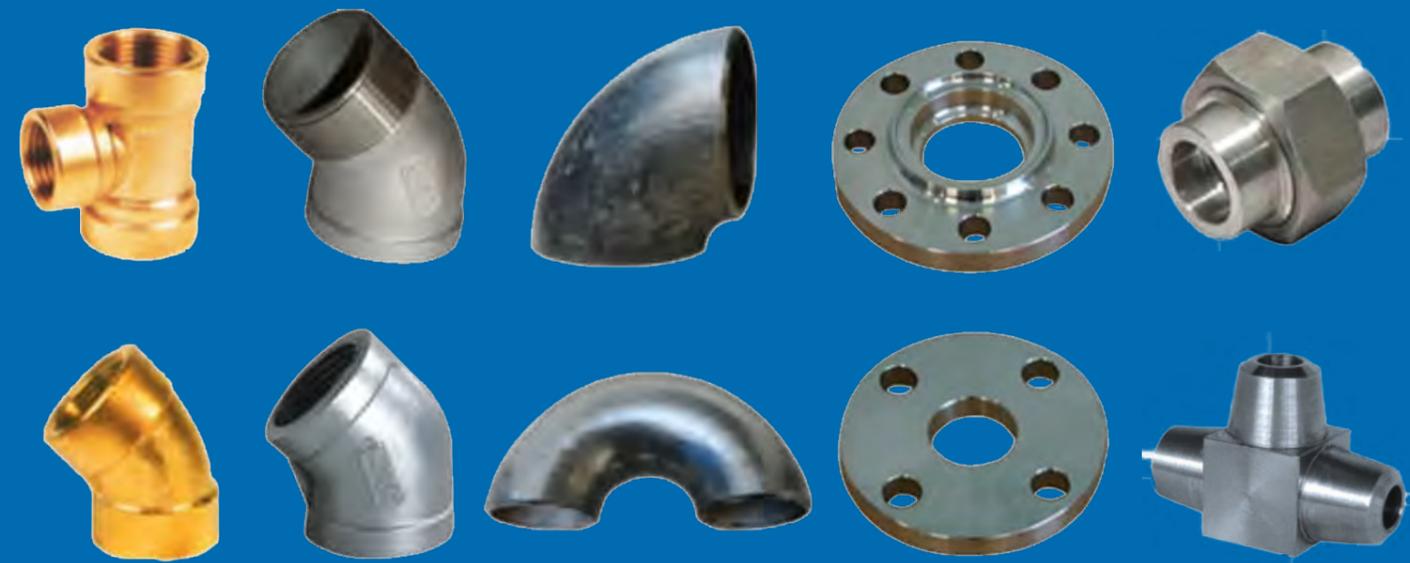
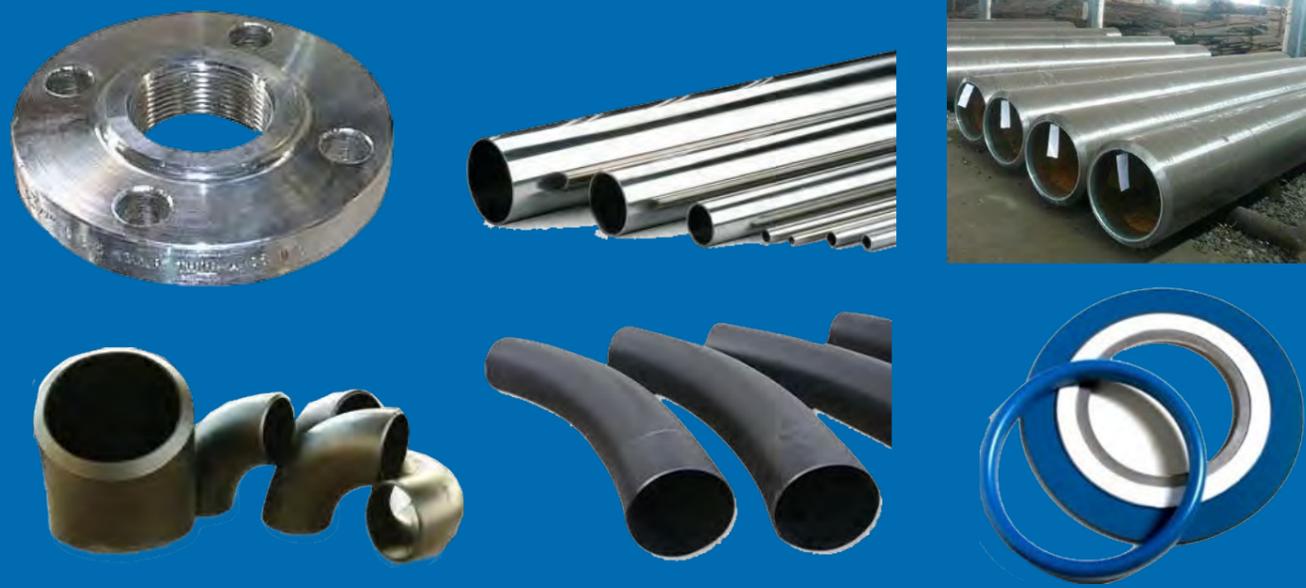
- SSAW STEEL PIPES
- LSAW STEEL PIPES
- ERW STEEL PIPES
- SEAMLESS STEEL PIPES

The affiliated manufacturer of Instrumentum Group is dedicated to provide superior quality of pipes through their continuous research in the areas of pipe engineering. They are the pioneers of China Petroleum Pipeline as well as Gas Pipeline Science Research Institute for the ongoing research and development. In addition, they strictly adhere to international standards, such as ISO certification, CE certification. Furthermore, the manufacturer is capable of offering value-added steel services, which includes hot dip galvanized, anti-corrosion treatment, pipe cutting, or other customized services.

The Giant pipe manufacturer have products that includes the following types of pipes with full range of specifications:

Seamless Steel Pipe, Structural Tube, Fluid Pipe, Boiler Pipe, Carbon Steel Pipe, ERW Steel Pipe, SSAW Steel Pipe, LSWAW Steel Pipe, Oil Pipeline, Gas Pipeline, Casing and Tubing, Rectangular and Square Pipe, and Steel Water Pipes.





PIPES, FITTINGS & FLANGES

RECOGNIZED SKILLS:

- PIPES
- STRUCTURAL STEEL
- PIPE FITTINGS
- FLANGES
- GASKETS

In the area of Pipes, Flanges, Pipe Fittings, Fasteners, Gaskets and other spare parts for industrial use, Instrumentum Group is proud to represent XL Industries that manufactures such parts in more than 50 product types available in over 400 sizes and 20 materials. XL Industries is based in Xiamen, China, and they have been in the manufacturing business since 1994 and their operations are ISO 9001:2008 certified.

There is no doubt that XL industries have quality and durable hardware that can stand up under the most rigorous of applications, and their products are API and CE (TUV) certified. XL industries customers include Shell, PDO, QP and KOC. In addition to oilrig hardware, XL industries also offer products for the gas, refined chemicals, pharmaceuticals and papermaking industries.

THE EQUIPMENT/HARDWARE MANUFACTURED BY LANDEE INDUSTRIES INCLUDES:

PIPES: Alloy Steel Pipes, Carbon Steel Pipe, Ductile Iron Pipe, OCTG Steel Pipe, Pipe Tools, Stainless Steel Pipe, Seamless Steel Pipe, and Steel Bar

FLANGES: Blind Flanges, Lap Joint Flanges, Orifice Flanges, Spacer Ring/Spade Flanges, Slip-on Flanges, Socket Weld Flanges, Weld Neck Flanges, and Custom Flanges.

PIPE FITTINGS: Bends, Caps, Couplings, Elbows, Olets, Reducers, Stub Ends, Tees, and Custom Pipe Fittings.



PIPE FITTINGS

RECOGNIZED SKILLS:

- SANITARY FITTINGS
- BUTTED WELD FITTINGS
- SOCKET WELD FITTINGS
- GROOVED FITTINGS
- FLANGES

Instrumentum Group is privileged to represent another well-known global supplier from China which manufactures and specializes in pipeline fittings. Their products range includes industrial pipe fittings to sanitary, as well as SAE standard fitting that can be produced with the materials such as carbon steel, stainless steel, alloy steel, and custom products on request.

Their fittings follows stringent quality control norms in order to ensure international standards of quality as they are ISO 9001 and ISO 9002 certified.

The products include the following: *Elbow, Tee, Reducers, Caps, Bends, Lap Joints, Weldolet, Nipple, Couple, etc.*





Dynamic in stainless

RECOGNIZED SKILLS:

- STEEL PIPES & FITTINGS
- FOOD, DAIRY & INDUSTRIAL
- MACHINING AND PICKLING
- FLANGES

The European/American manufacturer provides excellent value with fast, efficient, reliable, safe and complete deliveries for projects, maintenance and day-to-day business. The customers include the petrochemical industry, food and dairy industry, process equipment, ship building and on and offshore plants.

Material grades from stock include 304/304L, 316/316L, (Super)Duplex and various Nickel Alloys.

PRODUCTS

- Welded and Seamless Tube
- Hollow bar
- Steel and Stainless Steel Flanges
- Pipe Fittings & Threaded Fittings
- Steel and Stainless Steel Fasteners
- Valves (Gate, Globe, Check & Ball)
- Clips
- Sealings

MECHANICAL OPERATIONS

- Machining and bevelling of fittings
- Producing and machining of flanges
- Cutting up to and including outside diameter ϕ 800mm
- Pickling in our own environment-friendly production hall.
- Grinding stainless steel pipes (OD up to and including ϕ 100mm) to finish G240.
- Manufacturer of flanges, mechanical machining of fittings and client specific products.
- Technical support and service based on years of experience.

QUALITY STANDARD & CERTIFICATION

- ISO 9001:2008
- AD 2000-Merkblatt W0
- PED 97/23/EC certified for flanges
- ASTM, EN and ISO
- TÜV Rheinland stamp authority



EUROPEAN SPECIAL FITTINGS

RECOGNIZED SKILLS:

- PETRO-CHEMICAL & UREA PIPE FITTINGS
- SPECTABLE BLINDS
- DRIP RINGS

Our European Manufacturer is one of the most experienced manufacturer of Special Fittings for Pipelines, Petro-Chemical and Urea plants since 1954. They are known for machining special materials, such as Monel, Incoloy, Inconel, Hastelloy, Cupro-nickel, Titanium, Duplex, Modified S.S. and others.

OIL AND GAS PRODUCTS

- Spectable Blind
- Ring Spacer
- Paddle Blind
- Drip Ring
- Branch Connectors
- Gaskets
- Flanges
- Special Fittings

LMP manufactures components for the Oil & Gas plants and pipelines in all type of commonly used materials.

UREA PRODUCTS

- Carbamate Mixer
- Urea Fittings



The plants manufacturing Urea have severe corrosion problems due to the ammonium carbamate, as a result carbon steel and normal stainless steel cannot be used. Therefore, some parts of the process are manufactured with the use of special alloys to avoid corrosion.

SPECIAL PRODUCTS

- Cushion Tee
- Orifice Plates
- Injection Quills
- Cladding, Lining & Weld Overlay
- Anchor Flanges
- Welded Assembly
- Dismounting Joint
- Ejectors



STAINLESS STEEL PLATES & PLATE PROCESSINGS

RECOGNIZED SKILLS:

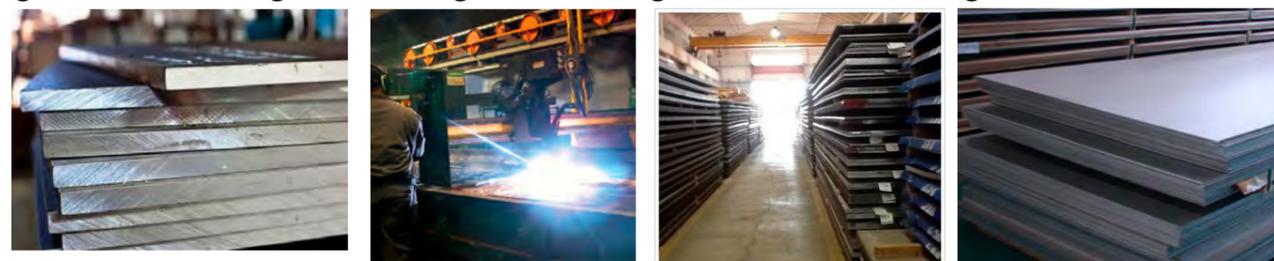
- STAINLESS STEEL PLATES
- DUPLEX STAINLESS STEEL PLATES
- NICKEL ALLOY PLATES
- COBALT-RESTRICTED STAINLESS STEEL PLATES

Instrumentum Group is capable of fulfilling the demands of stainless steel nickel alloy plates from the major Steel and Alloy manufacturers based in USA, Europe and Asia. The wide range of industries that Instrumentum Group supplies plates to are Oil/Gas and Petrochemical Industries covering 24 grades and 35 thicknesses, we can satisfy the most demanding and hard-to-find requirements.

Whether your requirement is for 3mm or 150mm thick or 3mm increments in between, we can provide you with the shape or configuration you need. And you can count on us to ship your order when promised, whether you need it tomorrow, next week, or next month. The following are the type of steel plates Instrumentum Group is capable of supplying to our customers:

- Standard plates include 304, 304L, and 316L plate
- Heat resisting and corrosion resisting grades in the 300 series
- Full line of duplex stainless grades, as well as 410 and 17-4PH

Instrumentum Group can supply cutting to size steel plates in custom shapes and sizes using the state of the art cutting systems which includes: *Plasma Cutting, Nitrogen Plasma Cutting, Saw Cutting, Laser Cutting, and Water Jet Cutting.*



STRUCTURAL MATERIAL

RECOGNIZED SKILLS:

- Floor Gratings
- Angle Bars
- Flat Bars
- Channels
- Hollow Section
- Square/Round Bars
- Plates
- Universal Beams

Instrumentum Group is capable of fulfilling the demands of stainless steel and Carbon steel structural solutions from the major manufacturers based in USA, Europe and Asia. The wide range of industries that Instrumentum Group supplies structural material to are general industries, from shipyards to engineering firms to construction companies..





Our expert engineering team committed to provide excellent design, fabrication, installation & ensure that you get the most efficient and cost-effective design

We supply Wide range of process equipment to meet industrial applications



Customize Engineering Solution Providers for your Industry

We are leading engineering company specialized in the supply of ASME 'U', 'S', 'H' & National Board 'R' Stamp Holder Technology Driven Equipment. We can carry out design, engineering, fabrication, installation and start-up of Process equipment like Heat Exchangers, Fired Heaters, Pressure Vessels, Economiser, Boiler & Heater, Finned Tubes, etc. for a wide range of applications in the Oil & Gas, Petrochemical Fertilizers, Power Plants, Pharmaceutical Industries etc. Process design, base and detailed engineering are executed by our team of experienced engineers, which take advantage from the use of the most advanced calculations and design software, which makes our company a recognized leader in providing the most sophisticated solutions to the Clients.



Build and Design Custom-made Process Equipments...

- Heat Exchanger
- Economizer
- Pressure Vessel
- Boiler & Heater
- Dryers and Spray cooling Plat
- Flue Gas Cooler
- Shot Cleaning System
- Fired Heaters
- Steam Reformers
- Heat Transfer Equipment for Refineries and Petrochemical
- Finned Tubes

Heat Exchangers

Design.

Efficiency .

Quality.

We make it Happens.



Solution Provider for Heat Transfer System

We provide Custom-designed and built shell & tube heat exchangers such as Oil-to-Oil Economizer, Steam Condenser and Cooler. We also offer a variety of heat exchanger types include Air-Cooled Heat Exchanger and high-efficiency heat exchangers such as Corrugated/ Spiral Tube Heat Exchanger and Welded Plate Heat Exchanger. Our Heat Exchangers are designed and built according to major International Codes and Standards, such as ASME, PED TEMA and API.

Our Manufacturer

ASME “U”, “H”, “S” & “R” Stamps Holder



We specialize in

- Shell & Tube Hx
- Air preheater / Cooler
- Plate & Shell Hx
- Fin Plate Cooler
- Spiral Hx
- Dimpled Plate Hx
- Steam Condenser



Wide range of Heat Exchangers to meet industrial applications

- Oil & Gas
- Petrochemical Industry
- Food Processing
- Wastewater Treatment
- Fertilizers
- Distillery
- General Industry



Boilers & Heaters



Pressure Vessels

We supply Industry Boilers those are safe to use with easier operation to achieve maximum efficiency. We offer a package of Clean Steam Generator system include feed pump, feed tank, deaerator and water treatment. Our chimneys are manufactured to comply with British Clean Air Act.

We specialize in

- HRSG-Heat Reclaimed Steam Generators
- Clean Steam Generators
- Electric Steam Boilers & Heaters
- Thermal Oil Heaters
- Imported High Pressure Boilers for Power Plant
- Hot water boilers
- Electrical Steam Boiler



Our manufacturer is one of the market leaders in fabrication of pressure vessels & they manufacture a wide range of process equipment such as Column, Fermenter, Reactor and Hot Water Tanks. We provide design and manufacturing service to serve food, petrochemical, chemical and oil-and-gas industries. Our pressure vessels and process tanks products are built in accordance with requirements of ASME 'U', 'H', 'S' and National Board 'R' Stamp.

We specialize in

- Reactors, Distillation Columns
- Fermenters
- Pressure Filters & DI Column
- Ammonia Vessels
- Short Path Distillator (SPD)
- Wiped Film Evaporator (AWFE/ATFE)
- Falling Film Evaporator (FFE)
- Calorifier
- Sanitary Tanks
- Filter Presses
- DAP



Fired Heaters & Air Coolers

We are the leading supplier of Fired Heaters, Steam Reformers and Heat Transfer Equipment for Refineries and Petrochemical Plants.

We specialize in

- **FIRED HEATERS FOR REFINERIES & PETROCHEMICAL PLANTS**
- **AIR COOLERS**

Our manufacturer has accumulated over 60 years of engineering experience in manufacturing as well as servicing hundreds of different types of heaters and reformers supplied worldwide. If required, the equipment can be engineered in accordance to the basic design of International Licensors like UOP, Axens, Chevron, Hal-dor Topsoe, Davy Process Technology, KBR, Exxon, and Stone & Webster, since has been selected as an approved constructor of their fired heaters. Equipment can be supplied worldwide either on FOB basis or on turnkey basis according to Customer requirements.

The following are the list of various type of heaters that can be supplied by manufacturer

- Refinery and Petrochemical Heaters: Reactor Charge Heaters, Reboilers, Regeneration, etc.
- Reaction Heaters: Visbreaking, Thermal Cracking, Coking, EDC Pyrolysis, and VCM.
- Steam Reforming Heaters: Haldor Topsoe, Davy Process Technology, and Kellogg Brown & Root
- Ethylene Cracking Heaters: Process Design of Stone & Webster and Lummus
- Waste Heat Recovery Units (WHRU): Gas Turbine WHRU, Waste Heat Boilers and Furnaces, etc.



Replacement-of a Platforming Furnace



Steam Reformer for 1500 MTPD Ammonia Plant



Air Coolers for Refineries and Petro-Chemical Plants.



Fully modularized Heaters for Condensate Project



Economiser, Preheater & Finned Tube



We design, and supply of Flue gas coolers, Economisers, Air-preheaters, shot cleaning systems and extended surface heat transfer tubes, spiral finned or gilled tubes, for utility power generation, industrial processes and marine applications.

- ECONOMISERS
- FLUE GAS COOLERS
- AIR-PREHEATERS
- SHOT CLEANING SYSTEM
- FINNED TUBES -L,LL,KL,GN & Extruded
- LOW & MEDIUM FINNED TUBES
- TUBE SUPPORTS
- HEAT EXCHANGER/CONDENSER TUBES
- LOUVERS
- HEAT EXCHANGERS PARTS & ASSEMBLY



Economiser



Finned Tube



Flue gas coolers



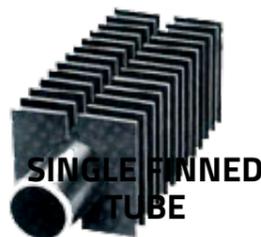
Gas-preheater



Shot Cleaning System



Parts & Assembly



SINGLE FINNED TUBE



DOUBLE FINNED TUBE



SPIRAL FIN TUBE WITH SOLID FIN



SPIRAL FIN TUBE WITH SERRATED FIN

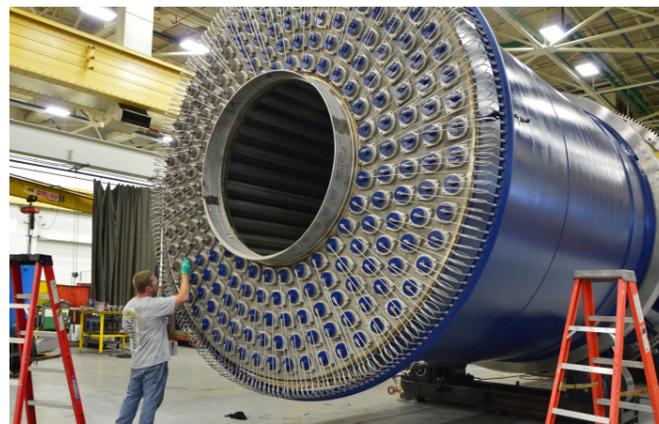
Dryers & Cooling Plant

Design & Built Plant

We provide custom design, fabrication, installation & commissioning of spray drying through our reputable manufacturer. In addition, we have a wide range of dryers such as rotary drum dryer, paddle dryer and mesh belt dryer for drying product or sludge. Application of dryer and spray cooling system is commonly used in food, pharmaceuticals, waste management and metallurgy industry. Our high quality spray cooling parts are imported from the respective countries such as Japan, Italy, Germany and USA.

We specialize in

- Spray Chamber
- Cyclone
- Bag Filter
- Fluidised Bed
- Clean Air Cooler / Heater
- Air Duct
- Anti Caking Mixer
- Nitrogen Heater
- Twisted Tube Heat Exchanger
- CIP System



Our manufacturer has tremendous records in building process plant projects like Essential Oil, Herbal, Omega-3 Extraction, Palm Food Emulsifier Plant, Esterification Plant, Solvent Plant Industrial Autoclave and heat transfer system as a turnkey solution. They provide design plant project management involving EPCC, plant analysis, 3D design and automation according to the client's requirements.

We specialize in

- ***Palm Emulsifier Plant***
- ***Reactor Plant & Co-Generation Power Plant***
- ***Waste Oil Purification***
- ***Palm Phytonutrient***
- ***Essential Oil Extraction***
- ***Tank Farm***
- ***Piping***





3P Management Philosophy

- Consulting Professional-CP
- Field Professional-FP
- Service Professional-SP

High quality racking ,shelving, MHE's & impact protection solutions for warehouse automation

Instrumentum Group supply and design a warehousing system to fit your needs considering the budget, floor space, product ,inventory management and material handling equipment. Our engineering team always make sure that our systems meet the expectations by providing safe and full reliable systems with International standards..Our goal is to help client's choose the most cost efficient and quality product to fulfill their requirements. The following are list of services Instrumentum group provides to help clients:

1. Warehouse Design & Layout
2. Select the suitable Racking System
3. Select the appropriate Material Handling Equipment
4. Design of Prefabricated Steel Warehouse Building
5. Select the Warehouse Management System (WMS)
6. Provide in-house support from design to supply and installation

We offer the most convenient high density, high throughput AS/RS (Automated Storage & Retrieval Systems) solution for your warehouse, whether storing pallets or boxes.

Racking System

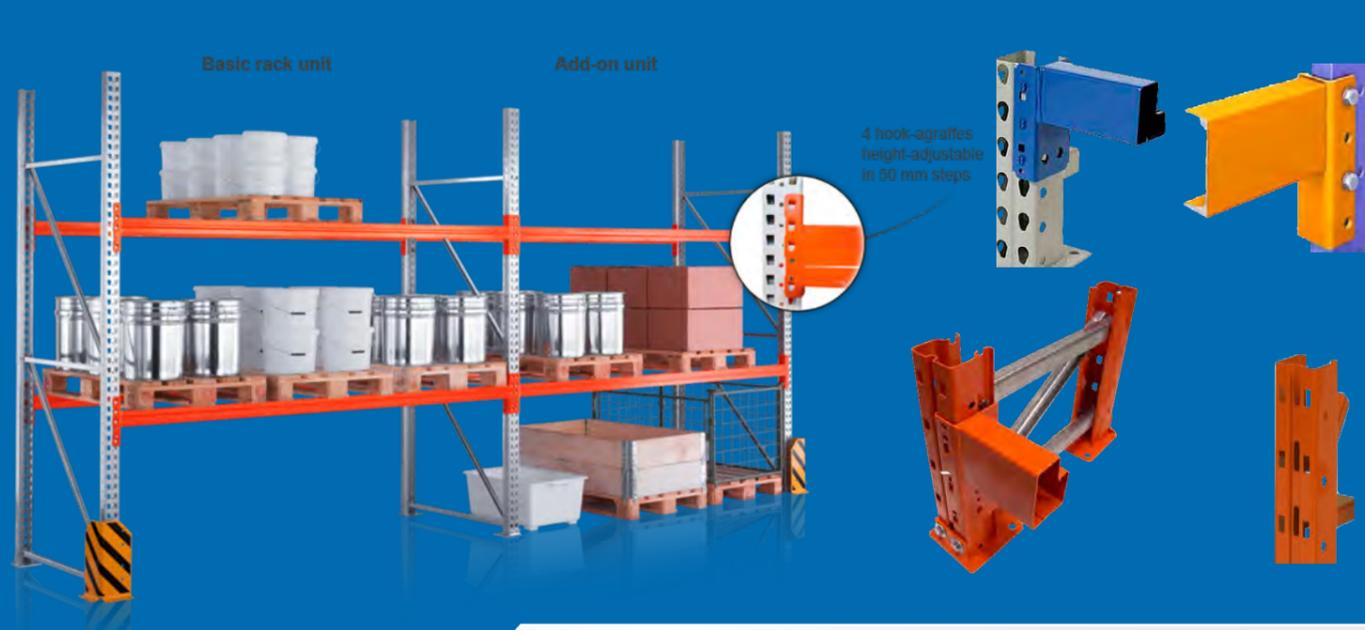
We offer the most convenient high density, high throughput AS/RS (Automated Storage & Retrieval Systems) solution for your warehouse, whether storing pallets or boxes.

MHE'S

Instrumentum Group covers full range of conventional, mechanical and automat-ed material handling systems. We help our clients implement the best possible solution for their warehouse through evaluation and selecting the right equip-ment, according to their specifications. For clients with low budget Instrumentum Group has an alternative that can provide refurbished or used machines, plastic pallets, bins, batteries, and racking systems with well track maintained record.

Prefabricated Steel W .BLDG

Warehouse Steel building are very useful for industrial warehouses to accommo-date racking systems and to utilize the space efficiently. Our experts can pre-prepare a feasibility study of the material required along with the cost to construct the building. Moreover, we can provide consulting in the design stage of the steel structure of the building to ensure strength and viability by conducting structural analysis of the beams and columns. We work along with the best suppliers of steel in North America to ensure the supreme quality product.



Obtain optimal use of floor space – get the most out of storage volume

WAREHOUSE RACKING SYSTEMS

The Best Solutions for your Business and Budget

Pallet Racking systems are the most efficient way of storage in many distribution centers and warehouses. A good warehouse racking system can cut down the overall cost of handling equipment and save time.

Instrumentum group can provide new or used racking system with the most economical prices; this sets us apart from our competitors. We have many options to assist our customers for storage solutions whether they require racking system for a small facility or a very complex multilevel warehouse.

Our design engineers convey the best solution to consumers by understanding their requirements, according to their site specific warehouse system. In addition, they can provide the racking solution based on products that either requires a FIFO (First in First Out) or LIFO (Last in First Out).

Our additional services include a feasibility report that uses a mathematical model to predict the endurance of the rack for current and future environment.



Multi-Tier Rack



Shelf Rack



High Bay VNA Rack



Drive IN Rack



Cantilever Rack



Steel Pallets

TYPES OF RACKING SYSTEMS

- Standard Pallet Racking
- Drive-In Pallet Racking
- Gravity Flow Pallet Racking
- High Density Racking
- Double Deep Racking
- Push-Back Pallet Racking
- Mezzanine Racking
- Mobile Pallet Racking
- Cantilever Racking
- Gondola Racking
- Light Shelving
- Heavy Duty Shelving
- Carton Flow
- Pallet Runner
- Roller Rack System
- Shuttle Type Rack System



STORAGE EQUIPMENT MANUFACTURE CO., LTD.

Our manufacturer was founded in 1998, which manufactures professional storage shelves. In the last 20 years, the company's outstanding achievement in engineering application has moved it to the forefront of industry. The company has passed ISO9001:2008 Quality Management System Certification and ISO14001:2004 Environmental Management System Certification, and they are a proud member of MHI and RMI of the USA. Manufacturer obtained a number of technology patents, and has been involved in the drafting and formulation of many national standards.

After 20 years of unremitting effort, the range of manufacturer products now includes: *Automatic Storage & Retrieval System(AS/RS) Rack, Shuttle Rack, Multi-tier Rack, Shelf Rack, Selective Pallet Rack, Drive-in Rack, Live Storage Rack, Push Back Rack and Canti-lever Rack, etc.*

Manufacturer is capable of producing more than 60 profiles formed by 18 rolling lines, which can fully satisfy all kinds of customer requirements. They manufacturing line incorporate multiple automatic beam welding equipment, joint welding robots and automatic spot welding to improve the welding quality and efficiency.



Tear Drop Pallet Rack



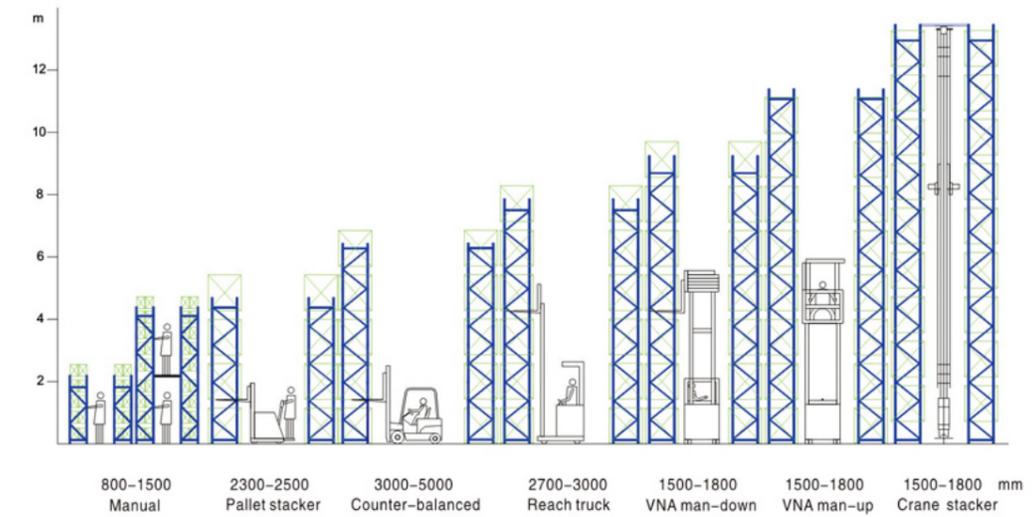
Mobile Rack



Mini-Load Type Rack

TYPICAL SPECIALITY OF RACKING

- Scientific designing and the high quality steel ensure racks safety and credibility.
- High quality powder coating make the surface treatment stable & smooth.
- Serial upright and beam sections meet different applications.
- Mounted by connector and bolt, easy to adjust and assemble.



Operating Tool	Manual	Pallet Stacker	Counter-balance Forklift	Reach Truck	VNA Forklift	Crane Stacker
Aisle width(mm)	800-1500	2300-2500	3000-5000	2700-3000	1500-1800	1300-1800
Racking Height(mm)	2500(5000)	5000	7000	9000	12000	24000
Racking System	Shelf, Multi-tier, Flow Rack, Cantilever Rack	Pallet Racking, Drive-in Racking	Pallet Racking, Drive-in Racking	Pallet Racking, Drive-in Racking	Pallet Racking	Pallet Racking, Cantilever Racking
Remarks: or reference only, detail design will be based on the application.						

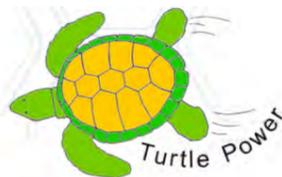


RackPro is a cost effective, easy to install protector for pallet racking up-rights against expensive and potentially life threatening structural damage. It is a highly visible upright protector with an innovative design that has been drawn from the requirements of FEM 10.2.02 for impact loads and protection for pallet upright racking.

FEM 10.2.02 draws the distinction between protection for uprights at the end of racks between cross aisles and gangway intersections which require protection from any direction as compared with inter-mediate uprights that require protection in a direction normal to the aisle.

FEATURES

- Very Tough, impact resistant, and round outer shell
- Resilient inner shock absorbing pad
- Simple clipping system to ensure fast installation at low cost
- Flexible, strong and very easy to remove
- 500 mm high standard height
- Outer shell and absorbing pad stable down to -30°C
- Does not require to fix to the floor
- The slim fit design means there is absolute minimum bay and aisle intrusion so as not to reduce any safe working clearances



Tough polyethylene rounded outer shell designed to deflect impact, and Resilient inner rubber shock absorber to spread the impact load.



RackPro is really simple to install by one person, without tools. No need to drill into the floor or the rack upright to make this protection product work properly.



High fluorescent colour gives operators notice of frame locations and thereby reduces probability of impact.

WAREHOUSE HANDLING EQUIPMENT

We are Pioneers of Providing Solutions for Storage and Material Handling Systems for any type of warehouse.

The following are the wide range of equipment we can provide :

EQUIPMENT

- Hydraulic Pallet Trucks
- Battery Operated Stackers
- Electric Counterbalanced Forklifts
- Combustion Counterbalanced Forklifts
- Narrow Aisle Turret Truck
- Machinery Movers & Rollers
- Lift Tables & Skid Lifts
- Floor Cranes
- Tow Tractors
- Dollies
- Batteries
- Barcode Scanners
- Printer and Labelers
- Wood/Plastic/Steel Pallets
- Bin and Systems
- Steel Shelving/Wire Shelving
- Wire Louvered Panels





ELECTRIC FORKLIFT TRUCK MANUFACTURER

Zowell is a self-owned brand that is part of Suzhou Pioneer Material Handling Equipment & Technology Co. which focuses on the research and development, and production of material transporting equipment.

Zowell has over 15 years of industry experience manufacturing 6 series of products, which includes: *electric counterbalance forklift trucks, electric reach truck, electric reach stacker, electric power pallet jack trucks, electric lift stacker, and electric tuggers.*

Zowell strictly adhere to ISO9001 quality management system standards as well as other industrial certification requirements to ensure all equipment meets international safety and performance standards. Zowell tests every equipment to determine whether it meets the requirements of the order prior to delivery. In addition, they adjust the moving speed of the truck to ensure the safety of the operator and the goods within. Last but not least, they check if the max lifting height of the gantry mounting is within the standard range and test the truck's ability to operate in a rigorous environment.



Electric Counterbalance Forklift Trucks



Electric Lift Stacker



Electric Reach Truck



Electric Tugger's

STEEL WAREHOUSE BUILDING

We can help you build a robust and adaptable steel warehouse building that can withstand the harshest climate. Our special prefabricated layout design is not only best for industrial warehouses, but also it's suitable for agricultural metal barns, and storage sheds.

Benefits

1. The outstanding quality of steel allows metal buildings to endure the harshest elements such as fire resistant and moisture damage.
2. Steel warehouse buildings are prefabricated that can accommodate multiple stories or large structures, with the flexibility of column-free interiors.
3. The inside walls are customizable and they can be easily moved and rearranged according to the specification.
4. The prefabricated buildings can provide a cost-effective option for a wide range of buildings such as industrial warehouse and commercial buildings.
5. To provide the best service to our clients we work with the best prefabricated metal buildings suppliers.

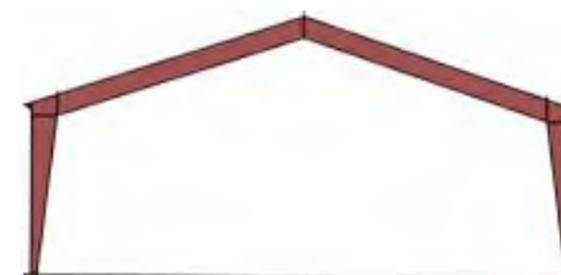
TYPES OF FRAMES



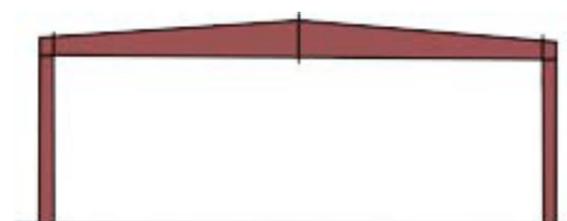
Multiple Span Straight Column



Multiple Span Tapered Column



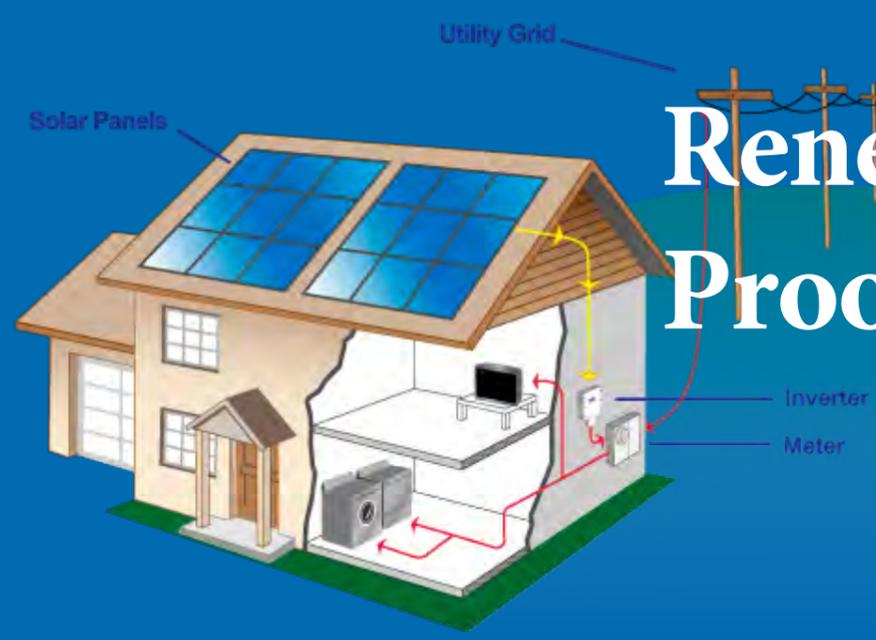
Clear Span Tapered Column



Clear Span Straight Column

Renewable Energy & Explosion Proof LED Lighting Solution

Grid-Tied Solar System is the most efficient and cost saving system that does not require battery back-ups and connectd directly to the utility grid in case of power failure.



SOLAR ENERGY

Did you know the Solar panels are capable of generating more electricity than its required to light up a home or run appliances?

The grid tied solar system lets home and business owners to take the excess electricity generated back to the utility grid and sell it to the utility companies at the same rate as they sell it themselves.

Intrumentum group is capable of providing you with all the necessary equipment for Grid-tied system connected to the utility grid, or Off-Grid system that requires batteries for storing energy for later use. We specialize in feasibility studies to ensure the efficient design for residential, commercial and industrial with the best selection of suitable equipment.

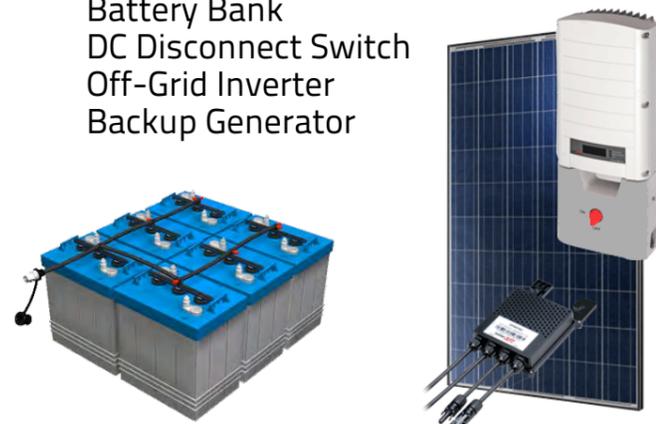
Equipment for Grid-Tied Solar Systems (Connected to Utility Grid)

- Solar PV Panels or Arrays
- Grid-Tie Inverter or Micro Inverters
- Isolation Switches
- AC Circuit Breaker Box
- Power Meter



Equipment for Off-Grid Solar Systems (Standalone Sytem)

- Solar PV Panels
- Charge Regulator
- Battery Bank
- DC Disconnect Switch
- Off-Grid Inverter
- Backup Generator



SOLAR WATER PUMP



SOLAR WATER HEATER



OTHER PRODUCTS

- Garden light
- Street Lights
- Home Light System
- Mobile Charger
- Radio
- Reading Lamps
- Motion Sensor Light
- Laptop Bags





LEDs are the preferred lighting solution of both professionals and residential users.

Commonly used in the following industries:

Aerospace, Architectural lighting, Automotive, Aviation, broadcasting, electronic instrumentation, entertainment and gaming, industrial automation and controls, the military, traffic and safety & transportation.

LED TECHNOLOGY

Benefits of LED Light Technology

LED (Light Emitting Diodes) are the most exciting invention in the lighting industry. They consist of small solid light bulbs which are exceptionally energy efficient with extended life.

Longer Life Span

LED lights have longer life span of up to 60,000 hours as compared to 1,500 hours of incandescent bulbs.

Efficiency

LED Lights typically uses 25-80% less energy as compare to a typical incandescent bulb as a result LED saves running cost.

Durability

LEDs are able to withstand shock, vibration and extreme temperature.

Safety

LED lights generate virtually no heat and reduce the potential for safety risks such as burns and fires.

Environment

LEDs are made from non-toxic materials, which can be recycled and considered 'green' or Earth-Friendly.

PRODUCTS

LIGHT BULB

TUBE LIGHT

SPOT LIGHT

STRIP

DOWN LIGHTS

BAY LIGHTS

PANEL LIGHT

ELECTRICAL MODULES

COB SPOT LIGHTS

FLOOD LIGHTS





LED EXPLOSION PROOF LIGHTING

Instrumentum Group can supply the explosion proof lights for the hazardous environment areas where a potential for explosion and/or fires exists due to flammable gases and vapors in the air, enhancing the strength of housing, offering failsafe design resistant to the open fire, spark, electric arc, hot surface, ensuring the safety and the property.

Products

- LED Explosion Proof Emergency EXIT Light
- Explosion Proof LED Highbay Light
- LED Explosion Proof Signal Light
- LED Explosion Proof Aviation Obstruction Light
- Explosion Proof LED Floodlight



Polaris Series



Firefly Series



Mickey Mouse Series

Researching Explosion Proof Lights

Our manufacturer focus on researching explosion proof lights in the hazardous environment areas where a potential for explosion and/or fires exists due to flammable gases and vapors in the air, enhancing the strength of housing, offering failsafe design resistant to the open fire, spark, electric arc, hot surface, ensuring the safety and the property.



Swordfish



Sea Anemone



Sea Anemone



Frog



Brownbear



Jellyfish



Contact Information



INSTRUMENTUM GROUP
Suite 1400, 18 King Street East,
Toronto, Ontario M5C 1C4
Phone 1: 1-416-214-7832
Phone 2: 1-365-608-4541
Fax: 1-365-608-4541

eMail: sales@instrumentumgroup.com
Web www.instrumentumgroup.com



INSTRUMENTUM GROUP
41A Bedok Ria Crescent 04-40
Stratford Court, Singapore 489929
Phone: + 65 66525843
Fax: + 65 63236062





 TE DESIGN

SHOPPING CART **DISINFESTATION** SYSTEM

THE MOST **EFFECTIVE** METHOD FOR **DESTROYING** VIRUSES AND BACTERIA.

TE DESIGN shopping cart disinfestation systems work by atomizing disinfecting liquids under high pressure to reach every point of the shopping cart in cloud form.

CONTAMINATION WAS ALWAYS THERE..

WHAT ARE THE FACTS?

Supermarket carts are used extensively by people causing the transmission of viruses and bacteria from person to person before the Covid 19 outbreak. Since these viruses and bacteria were not deadly and did not spread rapidly, we did not care about this situation. However, since the Covid19 pandemic, we have seen that viral contamination and spread fatally threatens our health. A solution had to be devised to disinfect the shopping cart and prevent the spread of the virus from shopping carts. Many methods have begun to be applied for the cleaning of supermarket carts. Among these methods, the traditional washing method is a long and labour-intensive method. In addition, one or more personnel must work continuously. It is both an expensive and ineffective method for people to clean with personal disinfectant wipes or fluids. When using the disinfection method with UV light, unilluminated side of the carts are not disinfected, and UV light must be applied to the surface for a long time for complete cleaning. For this reason, in markets where hundreds of shopping carts are used in a short time, this method is slow and ineffective.

WHAT IS THE SOLUTION?

TE DESIGN engineers studied all disinfection systems and methods to design their system. They concluded the system required for disinfection must be quick, effective, and economical. After the atomized disinfectants are sprayed on the shopping cart, they would remain on the surface for a long time until the cart is used. The atomized spray from the nozzles allows the mist to reach every surface. For this reason, the effective method that enables the liquid disinfectant to be sprayed on the object has been applied in the design. It is also determined that this misting method is quick and economical. The TE DESIGN disinfection system is designed to operate without staff. Spraying high-pressure liquid disinfectant by atomizing reduces the liquid consumption and ensures that the liquid disinfectant reaches every surface., The Shopping Cart Disinfection System can be used economically and effectively through the photoelectric sensor. It enables rapid disinfection for multiple shopping carts at the same time.

QUICK, EFFECTIVE AND ECONOMICAL !!!

”



The SAFETY

CHILD SAFETY BARRIER

When the shopping cart disinfection system is not in use, uncontrolled passage through the disinfection tunnel is prevented by using a barrier.



LOCKED MAIN SWITCH

The control unit main panel is designed with a lock to prevent unauthorized access.



EMERGENCY STOP BUTTON

Two emergency stop buttons are placed on the tunnel and control cabinet. It is easily accessible in case of an emergency.



” Safety First



LOCKED DISINFECTION TANK COVER

It prevents unauthorized access to the tank. Flammable and irritating disinfectant liquids should not be put into the tank.



PRESSURE RELIEF VALVE

Some disinfection fluids are noted to produce gas. The pressure release valve helps in reducing the pressure in the tank to avoid danger. Some disinfection fluids may lose their properties when constantly in contact with oxygen. The valve on the tank ensures the evacuation of the trapped gas and prevents oxygen ingress. When the disinfection liquid in the tank decreases, reverse pressure will also develop, resulting in reduced disinfectant flow to the pump. This reverse pressure is reduced regularly by opening the cover of the tank.



WARNING LABELS

Visible safety warning labels are placed on the disinfection system.





STAINLESS STEEL MATERIALS

The disinfection tunnel and control cabinet are made of AISI 304 quality Stainless Steel, whereas the disinfection tank is made of AISI 316 quality Stainless Steel. Welded plumbing and environmentally friendly materials are used in our production.

ANTIBACTERIAL TRANSPARENT CURTAIN

An anti-bacterial curtain prevents the disinfection liquid from escaping the tunnel. The length can be adjusted according to the size of the shopping cart.



DEVICE SECURITY



DISINFECTANT LEVEL SENSOR

Tank level sensor protects the pump from running without liquid. When the liquid level is low, the disinfectant level light on the control cabinet turns on.



PROTECTION AND ALIGNMENT BARRIER

The protection barrier and alignment bar are made of a robust stainless-steel tube. The supermarket carts can safely pass through the center of the disinfection tunnel using the alignment bar. The sidewalls of the tunnel are also protected against accidental shopping cart bumps.



IP 65 CONTROL CABINET

The control cabinet is designed in accordance to the IP 65 protection class.

SYSTEM EFFICIENCY

NOZZLE

High-pressure nozzles atomize the disinfection liquid and spray it in the form of a fog. This atomization ensures reduced use of disinfection liquid and helps the liquid reach the shopping cart's entire surface. A total of six nozzles, two of them are on the top, two on the right-side wall and two on the left sidewall. One nozzle spray's approximately 0.05 l/min of the disinfection liquid at maximum pressure.



SENSOR

An object-sensitive photoelectric sensor is used in our design. When it senses the shopping cart entering the tunnel, the disinfection system's pressure pump powers up, and disinfection spraying begins. This feature prevents unnecessary operation of the system and reduces the consumption of the disinfection liquid. The sensing distance is adjustable through switches in the Modular Control Unit, allowing it for use on all sizes of shopping carts. The photoelectric sensor works in all harsh environments.



MODULAR CONTROL UNIT

With its wheeled structure, the control unit can be positioned anywhere within five meters from the disinfection tunnel. It allows the installation of the disinfection system even in narrow spaces. Users can place the control cabinet in a sheltered area to prevent unauthorized access.



TANK

The tank is made of corrosion-resistant AISI 316 quality stainless steel. The tank comes with a liquid level indicator and a pressure relief valve with a lock and key to prevent unauthorized access. The tank has a capacity of 10 gallons, sufficient to keep the system running continuously for approximately 120 minutes. The disinfection system's operation is so quick that 15 shopping carts can be disinfected in 10 seconds. A user can disinfect more than 10,000 shopping carts in a tank full of disinfectant.



PUMP

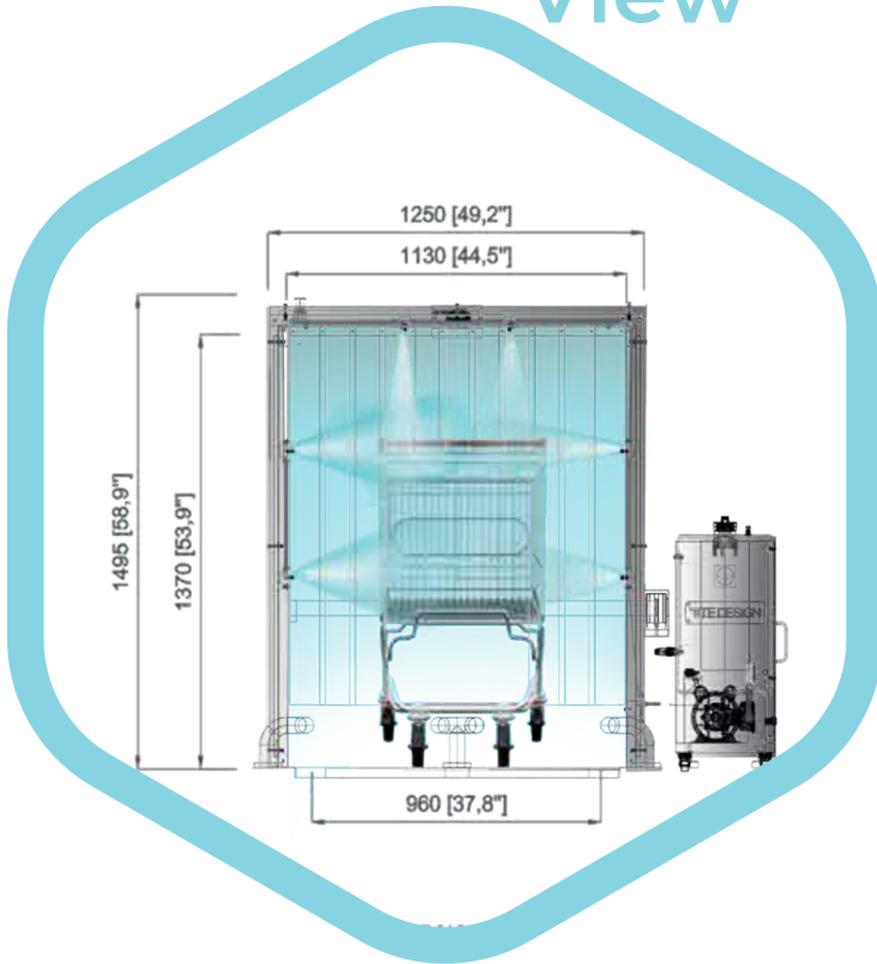
The pressure of the high pressure pump is adjustable by the pressure gauge on the pump helping technical staff. The bypass line on the pump protects the pump and the system.

EXAMPLE OF AN APPLICATION

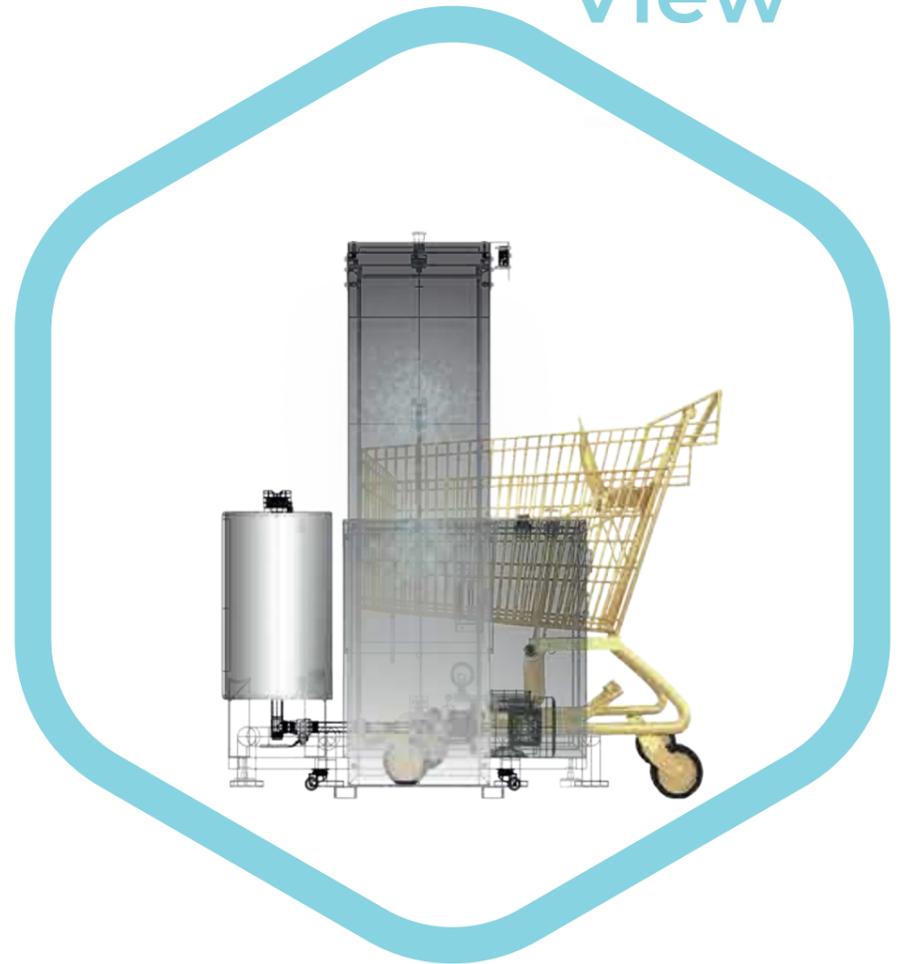


Technical Drawings

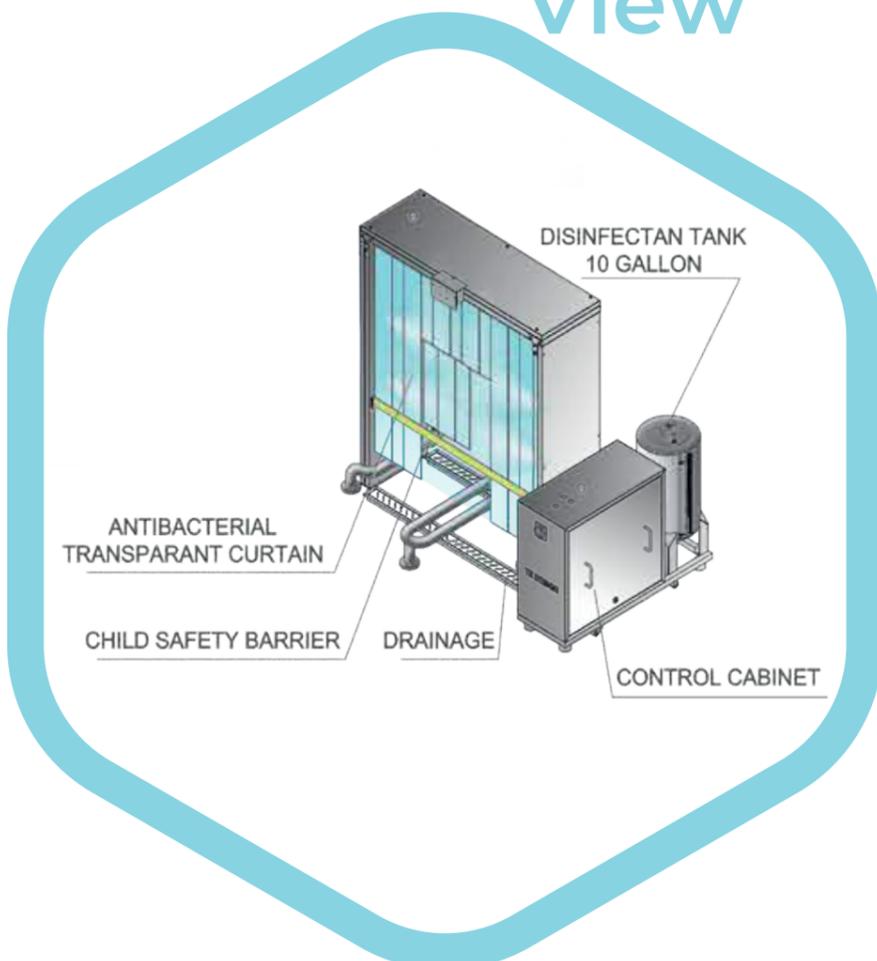
Front View



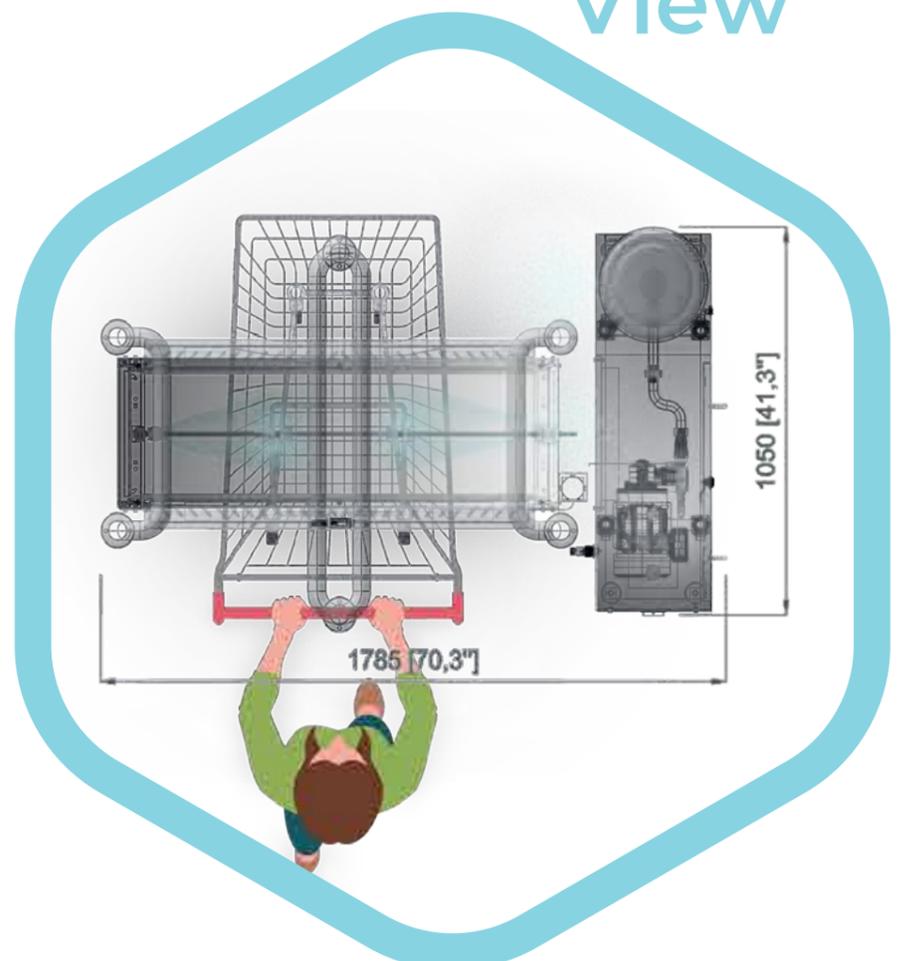
Side View



Perspective View



Top View



Certificates

BENART
SERTİFİKA
CERTIFICATE

Bu Sertifika,
This is to certify that the Management System of:

TUNCA ÇIPLAK - TE DESIGN

MERKEZ ADRESİ (HEAD ADDRESS): OSTİM ÖZÇELİK İŞ MERKEZİ 14. SOKAK NO:89
YENİMAHALLE / ANKARA
FABRİKA ADRESİ (FACTORY ADDRESS): OSTİM OSB UZAYCAĞI CAD. 1155. SOKAK NO:8 OSTİM
YENİMAHALLE / ANKARA

OTOMATİK DİZEL PARTİKÜL FİLTRE TEMİZLEME MAKİNESİ, MANUEL DİZEL PARTİKÜL FİLTRE TEMİZLEME MAKİNESİ, MİKRO DİSK FİLTRE, DEZENFEKSİYON SİSTEMLERİ MAKİNESİ, BANT FİLTRE, KOMPAKT İZGARA, YAĞ FİLTRE MAKİNESİ TASARIMI, İMALATI VE TEKNİK SERVİS HİZMETLERİ
DESIGN, MANUFACTURING AND TECHNICAL SERVICES OF AUTOMATIC DIESEL PARTICLE FILTER CLEANING MACHINE, MANUAL DIESEL PARTICLE FILTER CLEANING MACHINE, MICRO DISC FILTER, DISINFECTION SYSTEMS MACHINE, BAND FILTER, COMPACT SCREEN, OIL FILTER MACHINE

Kapsamında
with the scope below
ISO 45001:2018

Uluslar arası kalite sistem standardına uygun bir İş Sağlığı ve Güvenliği Yönetim Sistemi kurmuş ve yönetmektedir.
It has set up a business health and safety management system in line with international quality standards and manages.

Belge No Certificate No	: ISGYS-002920
İlk Belgelendirme Karar Tarihi First Certification Decision Date	: 14.12.2020
Belge Yenileme Karar Tarihi Certificate Renewal Decision Date	: -
Revizyon No Revision No	: 00
Revizyon Tarihi Revision Date	: -
Geçerlilik Tarihi Expiry Date	: 13.12.2021
Belge Periyodu Certificate Period	: 3 YIL 3 YEARS

Bu sertifika yukarıda adı geçen firma, adres(ler) ve kapsam (bu sertifikada belirtilen) Benart Uluslararası Teknik Kontrol ve Belgelendirme Ltd. Şti. tarafından istenilen belgelenme alanları için değerlendirilmiştir. Bu sertifikasyon süreci için Benart.com.tr adresinde belge başvurusu belgelenme sürecini takip edebilirsiniz. Bu belge, kuruluşun BENART Belgelendirme Uluslararası Sistem ve Yönetim Sistemleri için yapılmış olan yönetim sistemlerinde başarıyla çalıştığına dair kanıtlanmıştır. Bu belge, kuruluşun ISO 45001:2018 standardına uygun olarak çalıştığına dair kanıtlanmıştır. Bu belge, kuruluşun ISO 45001:2018 standardına uygun olarak çalıştığına dair kanıtlanmıştır. Bu belge, kuruluşun ISO 45001:2018 standardına uygun olarak çalıştığına dair kanıtlanmıştır.

This certificate has been registered for the above mentioned company, address(es) and scope. The certificate has been given in accordance with the requirements of the given certification system and Benart International Technical Control and Certification Ltd. The validity of this certificate can be queried at the document inquiry section of www.benart.com.tr. This document is valid for 3 years from the date of publication if it complies with the BENART documentation rules of the organization and is successful in surveillance audits for the conditions of best practice.

GENEL MÜDÜR / GENERAL MANAGER
BENART
INTERNATIONAL TECHNICAL INSPECTION AND CERTIFICATION LTD.

Adres / İletişim: OSM. Mah. Güneş Bulvarı 001/002 Kat: 1414 Yenimahalle/ANKARA/TÜRKİYE
Tel: +90 312 442 40 35 Faks: +90 312 442 40 32
www.benart.com.tr info@benart.com.tr

ZERTIFIKAT • CERTIFICATE • CERTIFICADO • CERTIFICAT

UNICERT

QUALITY MANAGEMENT SYSTEM CERTIFICATE

Universal GmbH

This certificate is granted to the organization,

TUNCA CIPLAK - TE DESIGN

Center: Ostim Ozcelik Is Merkezi 14. Sokak No:89 Yenimahalle/ANKARA/TURKEY
Factory: Ostim OSB Mahallesi Uzaycagi Cad. 1155. Sok. No:8 Ostim - Yenimahalle/ANKARA/TURKEY

by review of IA2-2-6138 numbered report for the scope

DESIGN, MANUFACTURING AND TECHNICAL SERVICES OF AUTOMATIC DIESEL PARTICLE FILTER CLEANING MACHINE, MANUAL DIESEL PARTICLE FILTER CLEANING MACHINE, MICRO DISC FILTER, DISINFECTION SYSTEMS MACHINE, BAND FILTER, COMPACT SCREEN, OIL FILTER MACHINE

to certify that a management system in accordance with standard's clauses is established and being implemented

DIN EN ISO 9001:2015

Certificate No : QMS 1220 003491
Original Certification Date : 14.12.2020
Issue / Revised Date : 14.12.2020
Expiry Date : 13.12.2021
Certification Period : 3 years (1st year)

UNICERT

IAF **DAKKS**
Deutsche Akkreditierungsstelle
D-ZM-16058-01-00
Universal GmbH

The authenticity of this certificate can be confirmed online or by e-mail to the Head Office via
UNIVERSAL GmbH Wilfried Diekmann Str., 20b, 44536 Lüthen Germany T: +49 (0) 231 9931 8960 info@uni-cert.de www.uni-cert.de

BENART

BENART Uluslararası Teknik Kontrol ve Belgelendirme Ltd. Şti.
Alınteri Bulvarı Gül 86 Koop. 1151. Sok. No:1/66 Ostim Yenimahalle/ANKARA/TÜRKİYE
Tel: +90 312 442 40 35 Fax: +90 312 442 40 32
www.benart.com.tr info@benart.com.tr

UYGUNLUK SERTİFİKASI
CERTIFICATE OF CONFORMITY

Firma Adı Company Name	: TE DESIGN-TUNCA ÇIPLAK
Adres Address	: OSTİM OSB. ÖZÇELİK İŞMERKEZİ 1170. SOKAK NO:4/89 YENİMAHALLE ANKARA/TÜRKİYE
Ürün Tanımı Product Description	: DEZENFEKSİYON SİSTEMLERİ DISINFECTION SYSTEMS
Ürün Markası/Modeli/Tipi Product Brand/Model/Type	: TE DESIGN/TE-DZN-001, TE-DZN-002, TE-DZN-003, TE-DZN-004, TE-DZN-005, TE-DZN-006, TE-DZN-007
Referans Yönetmelik(ler) Reference Directive(s)	: 2006/42/AT Makine Emniyet Yönetmeliği Ek-1 2006/42/EC Machinery Safety Directive Annex-1
Referans Standart(lar) Reference Standard(s)	: EN ISO 12100:2010, EN 60204-1:2018, EN ISO 13850:2015, EN ISO 14120:2015
Test Raporu Test Report	: Benart Uluslar arası Teknik Kontrol Ve Belgelendirme Ltd.Şti. : LVD-3595
Sertifika No Certificate No	: 3824
Yayın Tarihi Issue Date	: 22.04.2020
Geçerlilik Tarihi Expiry Date	: 21.04.2021

BENART Uluslararası Teknik Kontrol ve Belgelendirme Ltd. Şti., yukarıda adı ve adresi belirtilen firmaya, ürün ile ilgili Avrupa'da düzenlenmiş olan yollarla belirlenen referans yönetmelik ve / veya referans standartları için inceleme, uygunluk ve sertifikasyon işlemlerini gerçekleştirmektedir. Ürünlerin referans yönetmelik ve / veya referans standartlarına uygunluk ve sertifikasyon işlemlerini gerçekleştirmektedir. Ancak yukarıda belirtilen yönetmelik ve / veya referans standartları, ürünün belirli bir şekilde yönetmelik ve standartlara tabi olması durumunda diğer yönetmeliklere ve standartlara tabi olarak da firmaya yerli üretimde üretilen CE uygunluk işaretleri ürün üzerine işlenebilir ve uygunluk beyanı düzenlenebilir. Bu sertifika firma için düzenlenmiştir.
BENART International Technical Control and Valuation Inc. has inspected the documentation presented concerning the product of the company whose name and address mentioned above according to the reference directive and/or reference standards. Suitability of product and documentation to the directive and standards are under the responsibility of the company. However, in case the product is subject to more than one of the directives and standards which are mentioned above, when the company fulfills conditions of other directives and standards, then it can attach CE conformity marking and arrange conformity declaration. This certificate has been issued as per company request.

Genel Müdür/General Manager

BENART
INTERNATIONAL TECHNICAL INSPECTION AND CERTIFICATION LTD.

CE

Bu belge için değerlendirilme hakkı BENART Uluslararası Teknik Kontrol ve Belgelendirme Ltd. Şti. 'ne aittir ve kullanılabilirliği sadece edilmelidir. BENART her zaman kontrol tarihini için belgeyi beş yıl süreyle tutar. Bu belgeyi geçersiz kılan BENART Uluslararası Teknik Kontrol ve Belgelendirme Ltd. Şti. tarafından istenilen belgelenme alanları için değerlendirilme alanlarıdır. Bu belge, kuruluşun ISO 9001:2015 standardına uygun olarak çalıştığına dair kanıtlanmıştır. Bu belge, kuruluşun ISO 9001:2015 standardına uygun olarak çalıştığına dair kanıtlanmıştır. Bu belge, kuruluşun ISO 9001:2015 standardına uygun olarak çalıştığına dair kanıtlanmıştır.





99,9% hygienic



Customer-friendly



Practical & easy to use



Cost-saving



OTHER DISINFECTION SYSTEMS

LUGGAGE DISINFECTION SYSTEM



CARGO DISINFECTION SYSTEM



STRETCHER DISINFECTION SYSTEM



HealthGate

PROTECTION | SYMPTOM DETECTION | IDENTITY MANAGEMENT



elenium
AUTOMATION

Elenium Moves You Faster and Safer

Our self-service products are used by millions of people across aviation, healthcare, aged care and government infrastructure. Winner of the Frost & Sullivan 2020 Airport Self-service Technology Innovation Leadership Award, our team has capabilities in robotics, mechanical engineering, physics, machine learning and data science.

HealthGate

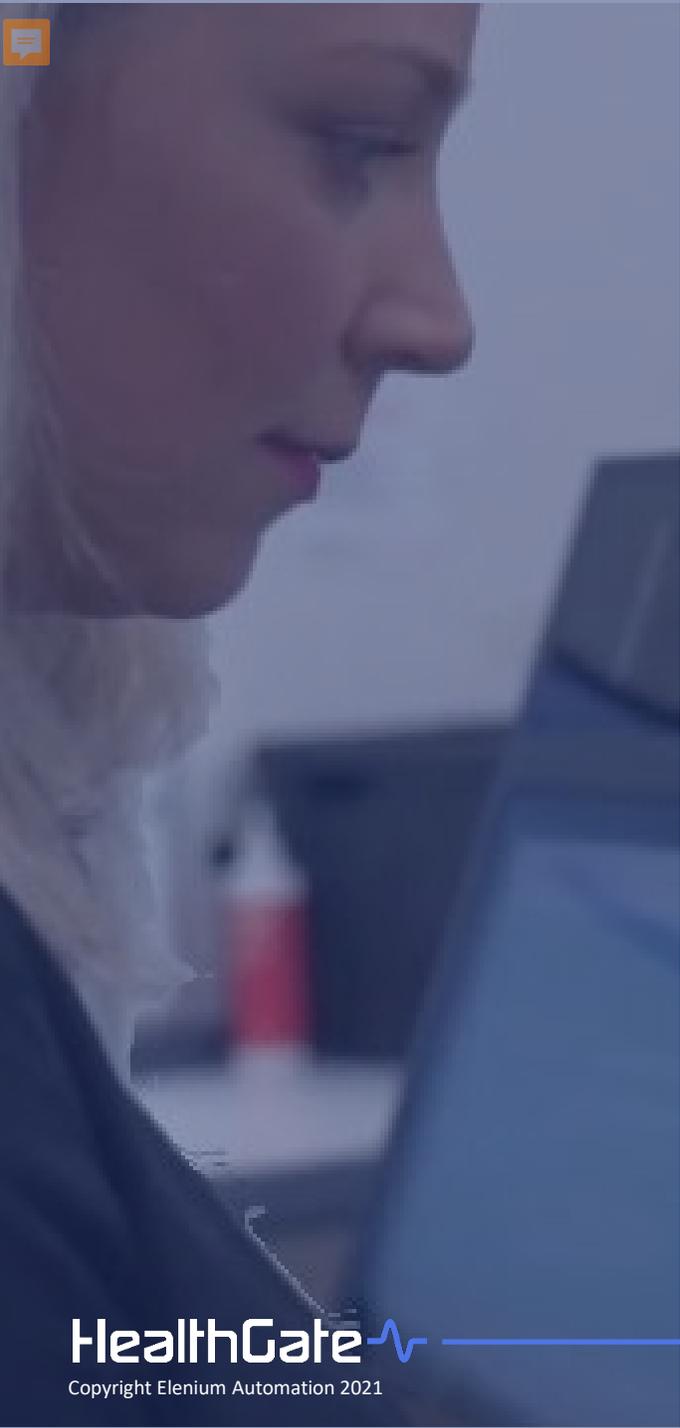
The HealthGate medical device uses touchless fever detection to provide health screening and visitor safety for workplaces and public spaces such as medical centers, transportation hubs and at events.



3 in 1: Safe, Simple and Legal Check-In Device



Government QR Code Check-In
Certified Health Screening
Contact Tracing



Peace of Mind Through Behaviour Change

70%

Of people are more comfortable entering a public space that has **health screening** technology

Want additional health screening in place alongside a vaccine

88%

Will be honest on pre-arrival health screening questions if they knew they would be screened upon arrival

Of people with viral infections have fevers ¹

"People don't do what you expect, they do what you inspect" Lou Gerstner



¹ Source: <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>



Tested and Certified Accuracy

HealthGate is tested and certified to make sure you can confidently keep your employees and business safe

14 day sprints of laboratory drift testing, every 5 seconds, proved the accuracy and consistency of HealthGate

9 million test cycles completed as part of our development phase

Globally, one of the few medically certified thermographic fever detection devices

- Entered in the ARTG (355032), Class IIa medical device in Australia
- Class IIa medical device in Europe

HealthGate includes the CDC return to work guidelines for pre-arrival screening

Why Did Elenium Certify HealthGate?

It's the law

In many jurisdictions, including Australia and Europe, Thermal Imaging Systems are classified a **medical device**

Selling or implementing non-certified devices is illegal in these jurisdictions. Organisations which distribute or implement non-certified devices can be fined.

Board directors and senior management are personally liable for the health and safety of their employees under the new workplace legislation in Australia

It's best practice globally

Elenium complies with ISO13485:2016, the globally recognised quality management system requirements for manufacture of medical devices

Elenium received the highest compliance rating (A1) for our quality management system as assessed by the Therapeutic Goods Administration (TGA), Australian regulator for medical devices

People expect it

70% of people are more comfortable entering a public space that has health screening technology and expect it alongside vaccines

More than half of the people surveyed are not confident to return to offices citing health and safety concerns





Traditional Model of Access Control

\$240

Daily cost of minimum wage staff temperature screening at a facility with 3 entrances

\$2,500

Daily cost of nursing staff temperature screening at a healthcare facility with 3 entrances

HealthGate Access Control

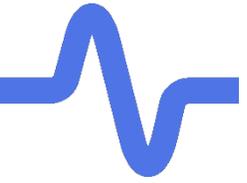
\$20

Daily cost of HealthGate deployed at a hospital with 3 entrances in year 1

Value

Keeps staff safe. Trained nurses can focus on essential duties of care.

HealthGate, a touchless certified medical device, proven to protect your customers and business while changing behaviour



Multidimensional Protection

Touchless

Interact at a distance with self-service devices, designed for loud environments.



Certified Medical Device

Accuracy is tested. ARTG, 355032. EC Certified.

Change Behaviour

People tend to respond to health declarations more honestly.



Health Declarations

Enable visitors' self-declaration about symptoms & history.

Biometrics Recognition

Highly accurate, fast and secure facial recognition to authenticate and authorize.



Body Temperature Screening

Audible alarm and notifications for exception cases



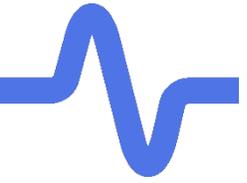
Mask Detection

Configurable option prompting visitor for action in line with mandated process.



Integration and Scalability

Simple integration into 3rd party system or access control system

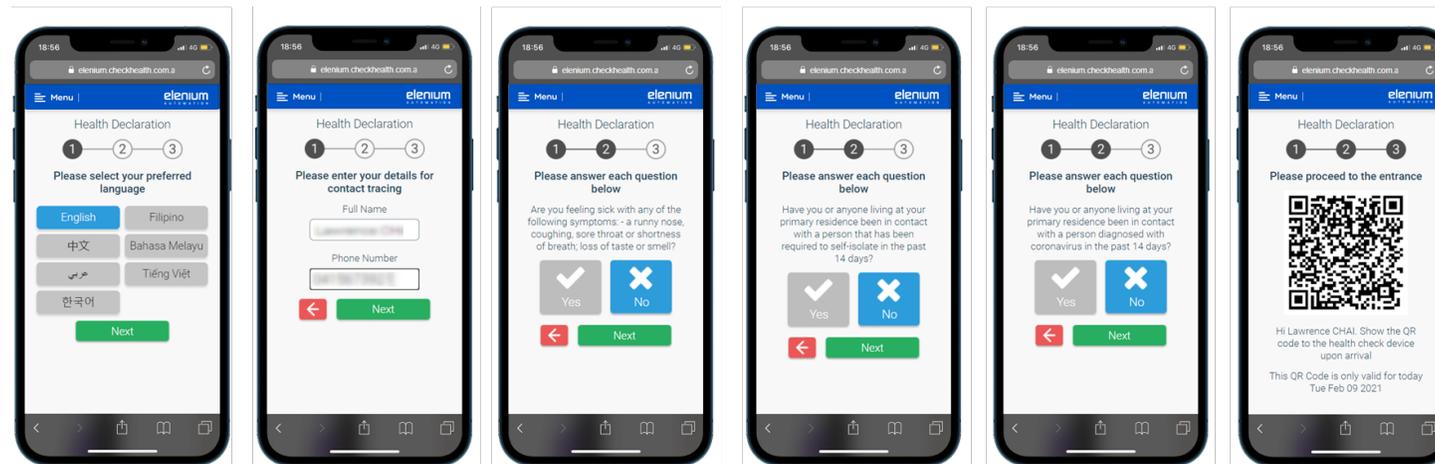


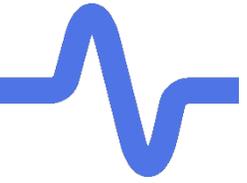
Verify Health Status before Arrival

Register visitors and record health declarations, ensuring they are pre-screened and healthy with HealthGate Declare.

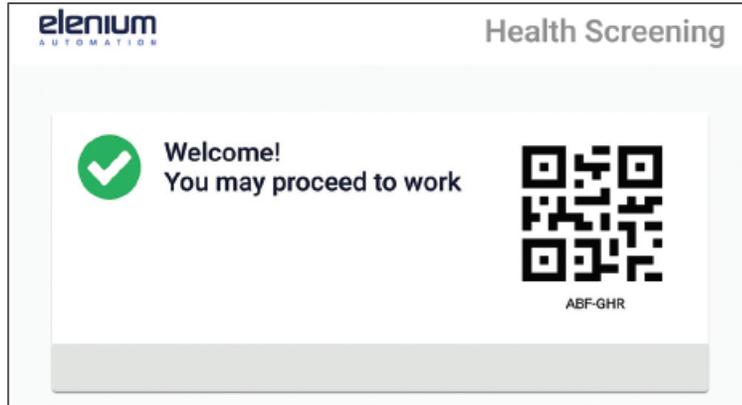
A multi-language online application allowing a user to register their attendance to a site and submit a health declaration to be used with HealthGate device.

HealthGate Declare, based on customisable business rules, will advise the user if they can enter the facility or to seek further advice minimising the risk of transmission and encouraging social responsibility.





Support QR Code and Biometric Check-In



Contact tracing will most likely remain part of our daily lives in a post-pandemic world. Even with a successful distribution of vaccines, contact tracing will deal with outbreaks of variants when international borders re-open.

HealthGate supports the display of government QR Codes.

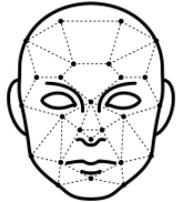
A Seamless Experience

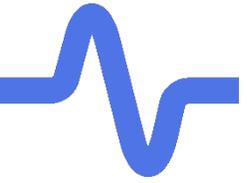
Biometric Recognition enhances the check-in experience by using highly accurate facial recognition.

The entire biometric process takes less than one second. It can be integrated into government systems and can be added to the HealthGate as a software upgrade.

Better for your Staff and Customers

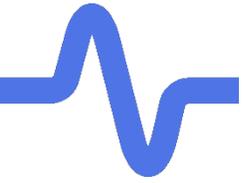
Biometric Recognition enables a simple, secure and authenticated process that will make entry to your premises easier for staff and customers.





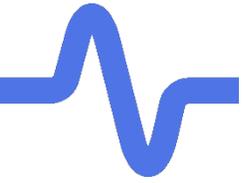
Common Use Cases



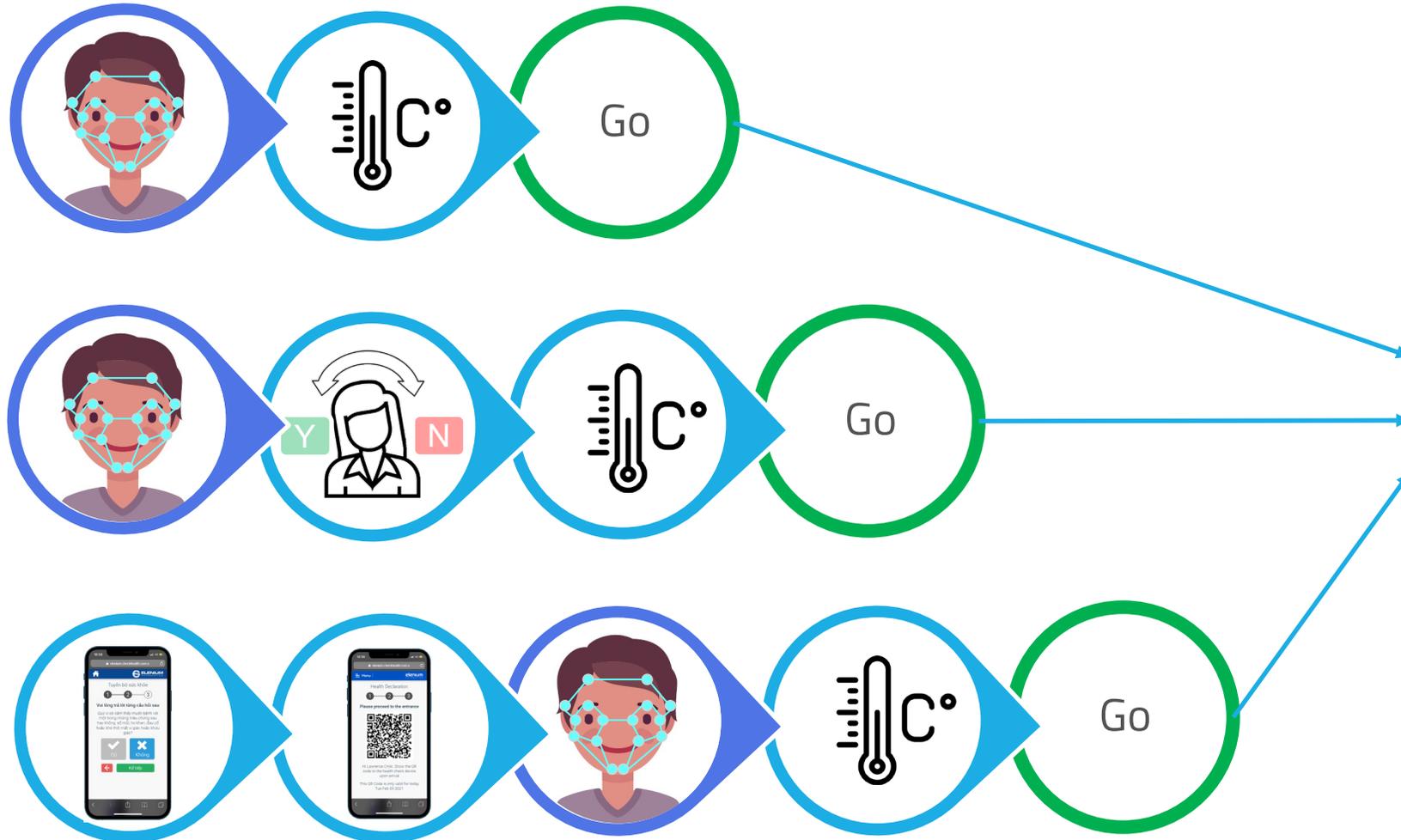


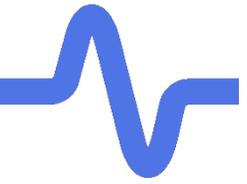
Use Cases with Biometric (Facial Recognition)



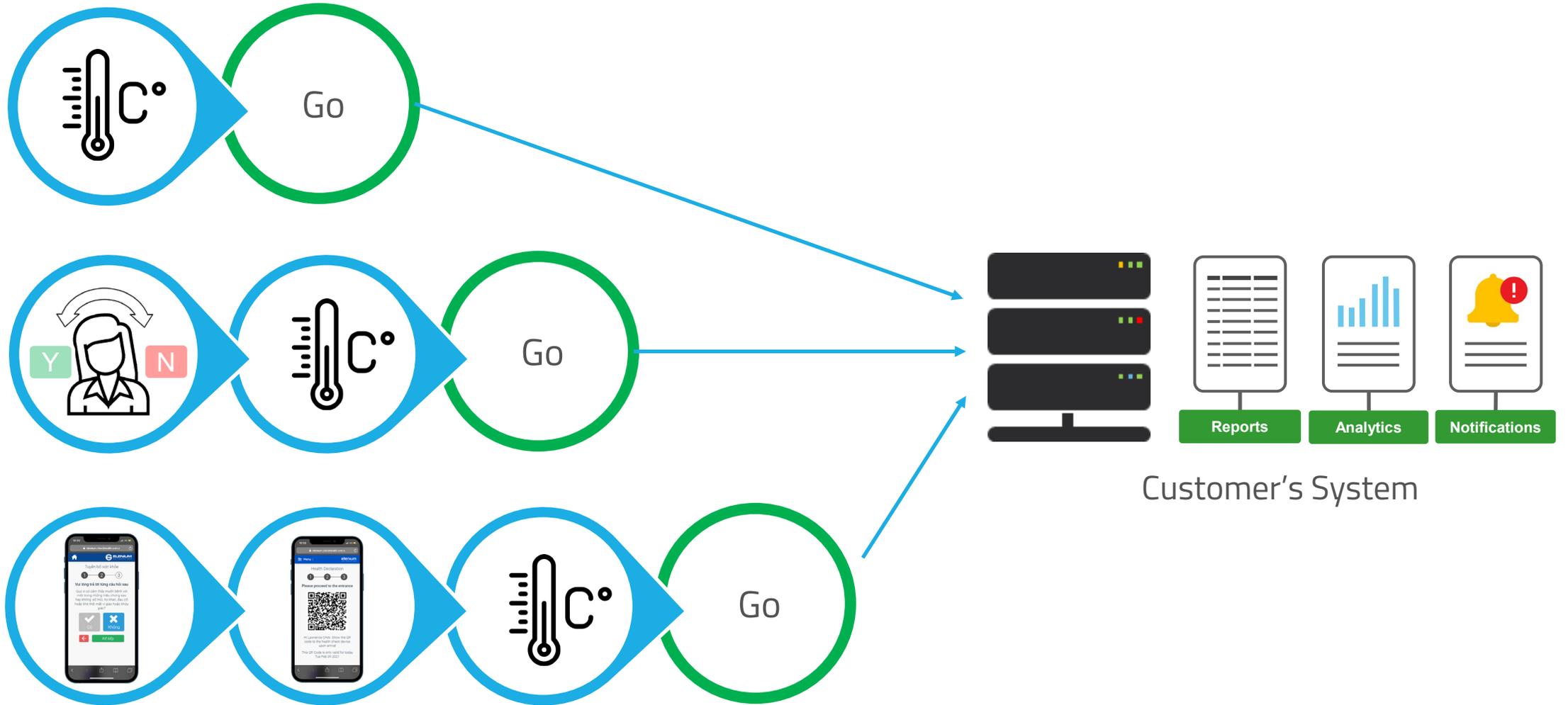


Use Cases with Biometric & Automatic Gov. QR Code Check-In

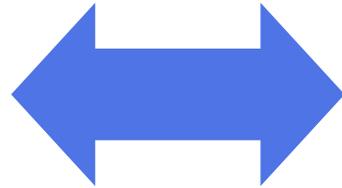
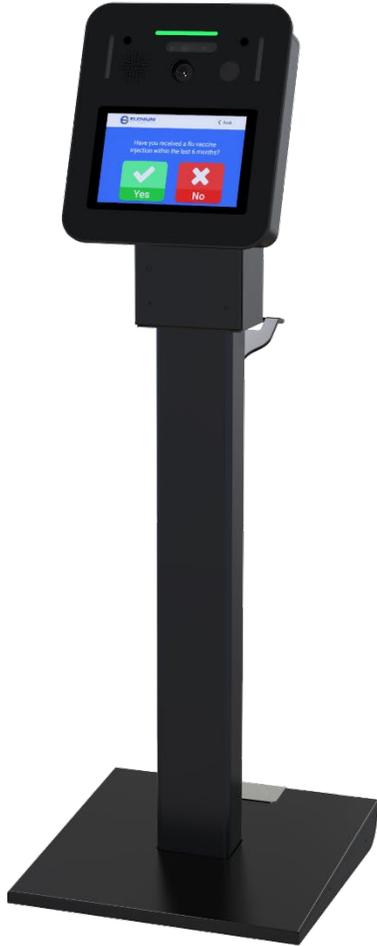




Common Use Cases with Outbound APIs



Accessories



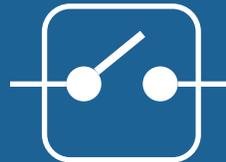
4G WiFi Modem

Provide HealthGate with internet access



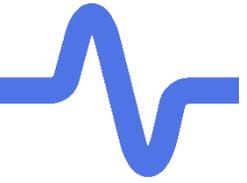
Label Printer

Print label sticker with triage outcome



Low Lever Interface

Integrate with a wide range of access control system



Intuitive and Reassuring

"Intuitive to understand and easy to use, even for people with limited technical skills"

Recent State Government trial employee feedback



"HealthGate has already saved us considerable time, but it has also given us and our team great peace of mind, which is priceless"

Retail chain management feedback

Video Links:

<https://www.youtube.com/watch?v=ROSoVZ588M4>

<https://www.youtube.com/watch?v=-c9fQAtHJbA>

<https://www.youtube.com/watch?v=aeMryq4-pV8>



COTTON:ON



intel



sayers



Certified Medical Device

ARTG Certificate

ARTG EC Certificate

HEALTH CANADA IO




Australian Government
 Department of Health
 Therapeutic Goods Administration

Australian Register of Therapeutic Goods Certificate

Issued to
Elenium Automation Pty Ltd
 for approval to supply
Elenium Automation Pty Ltd - Thermography system, infrared

ARTG Identifier	355032
ARTG Start Date	16/02/2021
Product Category	Medical Device Included Class Ila
GMDN	40803
GMDN Term	Thermography system, Infrared
Intended Purpose	The device is a self-serve contactless interactive Desktop kiosk which uses infrared thermography of the face surface for the purpose of screening potentially FEBRILE individuals.

Manufacturer Details	Address	Certificate number(s)
Elenium Automation Pty Ltd	7 Challenger Court Essendon Fields, VIC, 3041 Australia	DV-2021-MC-02674-1

ARTG Standard Conditions
The above Medical Device Included Class Ila has been entered on the Register subject to the following conditions:

- The inclusion of the kind of device in the ARTG is subject to compliance with all conditions placed or imposed on the ARTG entry. Refer Part 4-6, Division 2 (Conditions) of the Therapeutic Goods Act 1989 and Part 5, Division 5.2 (Conditions) of the Therapeutic Goods (Medical Devices) Regulations 2002 for relevant information.
- Breaching conditions of the inclusion related to the device of the kind may lead to suspension or cancellation of the ARTG entry; may be a criminal offence; and civil penalties may apply.

Products Covered by This Entry
1. Thermography system, Infrared

Product Specific Conditions
No specific conditions have been recorded against this entry.

Therapeutic Goods Administration PO Box 100, Woden ACT 2606 Australia Phone: 1800 020 653 Email: info@tga.gov.au	ARTG Identifier: 355032 ARTG Start Date: 16/02/2021
---	--


Australian Government
 Department of Health
 Therapeutic Goods Administration

EC Certificate
Annex V of the Council Directive 93/42/EEC on Medical Devices

Certificate Number
 MRA Q00096

Notified Body
 Identification number
0805

Issued to
Manufacturer Name: Elenium Automation Pty Ltd
Manufacturer Address: 7 Challenger Court
 ESSENDON FIELDS VIC 3041
 Australia

For the Manufacture and Final Inspection of device categories specified on page two of this certificate.

This is to certify that the quality management system described below conforms to the relevant provisions of Annex V of the Council Directive 93/42/EEC on medical devices. Certification is based on an examination of the Quality Management System for production and final inspection to ensure that each medical device to which the system is applied conforms to the product described in the Type Examination or the technical documentation as applicable.

This certificate has effect at all times from the commencement date, until the end of the period specified in the certificate (expiry date), or unless it has been suspended or revoked.

Commencement Date: 11 February 2021
Certificate Expiry Date: 26 May 2024
Associated CA Certificate: AU Q00471

This certificate is issued by:

Jie ZHOU
Signed electronically
Delegated of the Secretary
Medical Devices Branch
Therapeutic Goods Administration
PO Box 100, Woden ACT 2606 Australia

Page 1 of 3


Health Canada
 Santé Canada

Medical Devices Directorate
 Direction des instruments médicaux

COVID-19 Medical Device
Authorization for Importation or Sale

Autorisation d'importation ou de mise en vente d'un instrument médical relatif au COVID-19

Authorization Reference Number : 332509 **Numéro de référence de l'autorisation**
Issue Date: 2021-10-06 **Date de délivrance:**

Device Class/Classe de l'instrument : 1

Pursuant to section 5 of the Interim Order Respecting the Importation and Sale of Medical Devices for Use in Relation to Covid-19, made by the Minister of Health on March 18, 2020, the medical device listed below is now authorized for sale or importation in Canada.

Conformément à l'article 5 de l'Arrêté d'urgence concernant l'importation et la vente d'instruments médicaux relatifs au Covid-19, réalisé par le ministre de la Santé le 18 mars 2020, les instruments indiqués ci-dessous sont présentement autorisés pour la mise en vente ou l'importation au Canada.

Each shipment of a COVID-19 medical device that is imported into Canada must be accompanied by a copy of this authorization document. **Please ensure to highlight the authorization reference number during the import declaration process to facilitate port entry without any delays.**

Tout envoi d'un instrument médical relatif au COVID-19 doit être accompagné d'une copie de la présente autorisation. **Veuillez vous assurer de souligner le numéro de référence de l'autorisation durant le processus de déclaration d'importation pour faciliter l'entrée sans délais aux points de contrôle frontalier.**

This authorization is only valid for so long as the Interim Order Respecting the Importation and Sale of Medical Devices for Use in Relation to COVID-19 is in effect.

Cette autorisation est uniquement valide tant que l'Arrêté d'urgence concernant l'importation et la vente d'instruments médicaux relatifs au Covid-19 est en vigueur, ou l'autorisation est annulée.

Device Name(s) Nom de l'instrument
ELENUM AUTOMATION: HEALTHGATE DESKTOP

Name & Address of Authorization Holder/Nom & adresse du titulaire de l'autorisation
 ELENUM AUTOMATION PTY LTD.
 7 CHALLENGER COURT
 ESSENDON FIELDS, VICTORIA
 AUSTRALIA
 3041

David Bourdram, ing., Director General, Medical Devices Directorate
 Directeur général, Direction des instruments médicaux

Application Number: Numéro de la demande:	332509	Manufacturer ID: Identificateur du fabricant:	165299
--	--------	--	--------

Feature	Elenium HealthGate
ARTG Entered	Yes (355032)
14 day drift test compliant (-59)	Yes
Sensor Resolution	320 x 240
Sensor Sensitivity	0.7
Accuracy	0.3 – 0.5 degrees
Frame Rate	8.7hz
Elenium Air Shield	Yes
Nvidia GPU	Yes
Client OS	Windows or Android
HD Camera	Yes - 13mp with mechanical focus
Near Infrared Camera	Yes
Touch Screen	Yes
Voice Recognition	Yes (optional SaaS)
Virtual Touch (Head control)	Yes
Barcode reader	Yes
Facial Recognition	Yes (optional SaaS)
Monochrome Printer	Optional
Multilingual support	Yes
Portable	Yes
Operating Environment	Indoors (Ambient Temperature 18°C to 24°C)



The Elenium HealthGate complies with the following standards

Standard	Description
ISO 13485	Medical Device – Quality Management Systems
IEC 62304	Medical Device Software – Software lifecycle Processes
IEC 60601-1	Medical Electrical Equipment – Part 1
IEC 60601-1-2	Medical Electrical Equipment – Part 1-2
IEC 60601-1-6	General requirements for basic safety and essential performance Collateral Standard: Usability
IEC 62366-1	Medical Devices – Part 1: Application of usability to engineering to medical devices
ISO 14971	Application of risk management to Medical Devices.
ISO 15223-1	Medical Devices – Symbols to be used with medical device labels, labelling and information to be supplied
IEC 80601-2-59	Medical electrical equipment – Particular requirements for the basic safety and essential performance of screening thermographs for human febrile temperature screening
ISO TR 13154	Medical electrical equipment – Deployment, Implementation and Operational Guidelines for Identifying Febrile Humans Using a Screening Thermograph

CONTACT US:

Canada

5 Stonebridge Dr.
Markham, ON
L6C 2C3, Canada
PH: 1-365-608-4541
Mobile: 1-647-787-8561

Display & Sales Office
800 Denison St Markham
ON L3R 5M9
PH: 1-905-475-2483

 Health
Canada AR: 332509

Asia Pacific Region

41A Bedok Ria Crescent 04-40
Stratford Court,
Singapore 489929
PH: +65 66525843

Middle East Region

Sharjah Media City,
SHAMS United Arab Emirates
PH:+971568001478

Asia Region

Plot B-65, First Floor,
Block 2, Gulshan-e-Iqbal,
Rashid Minhas Road, Karachi
PH:+92 21 38890877

Email: medicalsupplies@instrumentumgroup.com
Website: www.instrumentumgroup.com

HealthGate 



Instrumentum Group

5 Stonebridge Dr. Markham Ontario L6C 2C3, Canada
Phone: 1 (365) 608-4541
Mobile: 1(647)787-8561
Web: www.instrumentumgroup.com
Email: medicalsupplies@instrumentumgroup.com

North America Region

Instrumentum Group
1801-1 Yonge Street, Toronto, ON, M5E 1W7
Phone: 1 (416) 214-7832, 1 (365) 608-4541
Email: sales@instrumentumgroup.com
Web: www.instrumentumgroup.com

Asia Pacific Region

Instrumentum Group
41A Bedok Ria Crescent 04-40 Stratford Court,
Singapore 489929
Phone: +65 66525843
Fax: + 65 63236062
Email: sales@instrumentumgroup.com
Web: www.instrumentumgroup.com

Pakistan

Instrumentum Group
Plot B-65, First Floor Block 2 Gulshan-e-Iqbal
Rashid Minhas Road Karachi Pakistan
Phone: +922138890877
Email: sales@instrumentumgroup.com
Web: www.instrumentumgroup.com

Middle East Region

Best Sourcing Solutions LLC (Instrumentum Group's Partner)
Sharjah Media City, SHAMS United Arab Emirates
Email: bss@instrumentumgroup.com
Web: www.instrumentumgroup.com

Display Centre

Instrumentum Group, 800 Denison St Markham, ON L3R 5M9
Phone: 1-905-475-2483
Email: sales@instrumentumgroup.com
Web: www.instrumentumgroup.com