

 **scanjet**

OIL & PETROCHEMICAL

Since the Early 1990's Scanjet has been supplying the world with tank cleaning equipment, our simple concept of Best quality to Best prices has made us the world's leading and largest manufacturer of tank cleaning equipment.

Some 20 years on our concept remains the same but our product range has diversified somewhat, today Scanjet offers its customers not only a wide range of tank cleaning equipment but comprehensive tank management systems giving the customer peace of mind in knowing exactly what is going on inside their tanks.

Combining our knowledge from these two separate fields benefits both us at Scanjet and you as our customer. Firstly combining technologies allows us to take tank cleaning to the next level with our intelligent tank cleaning machines and, secondly, as a customer has become your 'one stop shop' for all your tank cleaning/ management needs.

Scanjet leads the world market for cleaning oil tanks on board ships of all shapes and sizes and now Scanjet is bringing this experience to the land based tanks throughout the energy industries.

Responsible tank cleaning requires a total evaluation of how, when and what to clean in a way that protects workers, maximises output and optimises environmental considerations. With energy costs being a major factor in businesses and also our daily lives and with alternative renewable fuels and energy sources becoming more available every provider is taking a fresh look at how their tanks are utilised in the respective processes.





Scanjet's engineers have been improving tank cleaning in energy businesses around the world for many years. We have developed technical partnerships with contractors preparing oil storage tanks for inspection. With offices and partners in EMEA, Americas and Asia Pacific we are positioned to support global companies requiring a consistently high standard of tank cleaning equipment. Our development capability extends to new tank cleaning devices which are new application specific and in some cases customer exclusive. In all of these cases our approach always addresses worker safety as our priority.

Scanjet tank cleaning units are designed for energy tanks. In a world where tanks can be very large, in exposed areas and seldom visited, the user needs to have complete confidence in reliability and when planned maintenance is required, to then service the unit without removal from the tank and without loss of tank liquid or gas contents. In addition our machine's design should be capable of ensuring complete impact coverage of all internal surfaces . in specific cases machine size has to be specially designed so that the units can be portably introduced through the existing tank top access points. Engineering drawings showing ideal positioning are part of technical support to ensure optimal performance from the minimum number of tank cleaning machines.

Whether it's supplying equipment to contractors servicing oil tanks, or designing new devices to automate manual hazardous cleaning processes or just helping the bio ethanol industry produce more from the same tank capacity... the Scanjet team will be pleased to assist.

RESPONSIBLE TANK CLEANING

Scanjet is the worlds leading supplier of tank cleaning equipment. Our people carry the most experience in applying tank cleaning equipment across industrial applications. Ranging from micro-biologists, engineers and process specialists we have been solving tank cleaning challenges for more than 20 years. During this time we have developed a leading product range that caters for tanks of all shapes and sizes in both sanitary and non-sanitary industries.

With our well proven history in the Marine markets we are now proud to offer the global industrial markets a wealth of knowledge, solid proven products and service that is shaping the future of tank cleaning.

Our team speaks many languages and travel globally to support our offices, regional partners and your applications wherever this may be located.

Our Corporate Office, Design and Manufacturing facilities are based in Sweden with local offices situated around the globe. From each local office we operate with regional sales partners to give you the fast local support you need.

Through our time spent with our customers we have gained a thorough appreciation of cultures and expectations. Our people have learnt that not every tank cleaning application is simple to solve and that we need to stay with every project until you, as our customer, are satisfied that we have delivered a responsible tank cleaning solution.



INDUSTRIES

Scanjet is active in many land based industries. If your industry is not shown here and you would like to know what Scanjet can do for your business, then do not hesitate to contact us.



BEVERAGE



ENERGY



PULP & PAPER



FOOD



TRANSPORT

THE LEADING PRODUCT RANGE FOR INDUSTRIAL APPLICATIONS

Bio 2 SB



Bio 5 SB



Bio 7 SB



BIO 10



BIO 25



BIO 50



SC 15TW



SC 45TW



SC – Custom Made

Your specific need
+
Our expert knowledge
=
Complete satisfaction

SC 20



SC 30



SC 40



SC 60



SC 90



COMPLETE CIP SYSTEMS

Scanjet is able to offer its customers full CIP systems for any application.



ENGINEERING

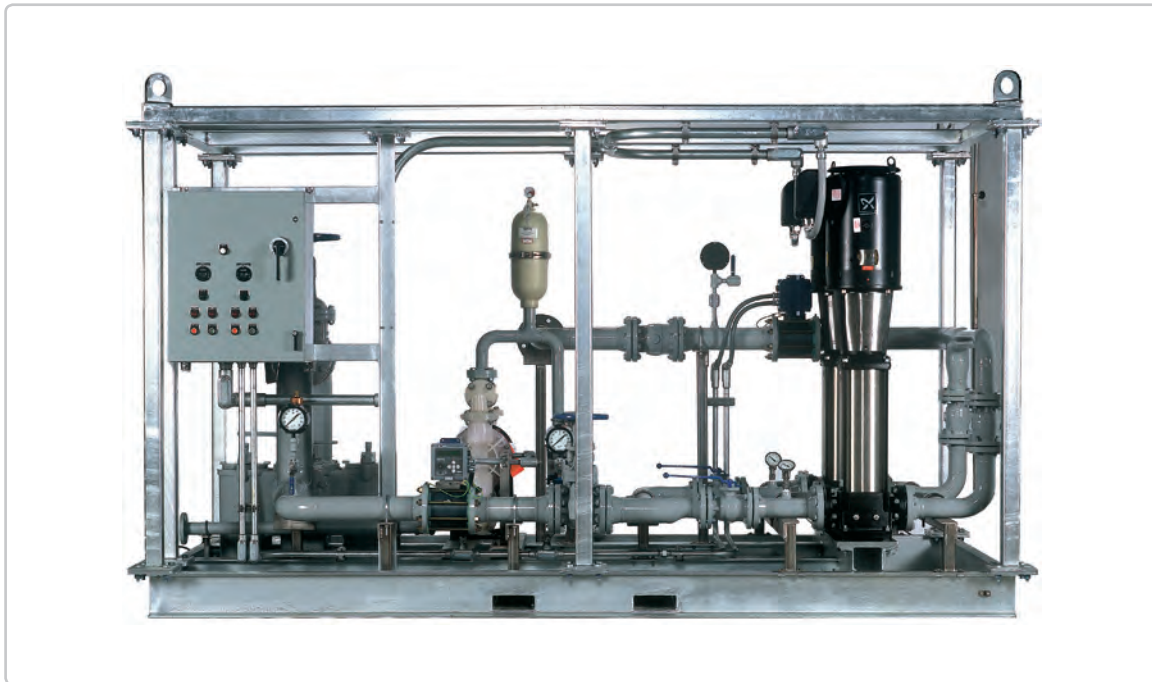
Every tank is an individual and the Scanjet engineers are always at your service.



CLEANING VALIDATION

Monitoring your tank cleaning equipment from the outside of the tank using microphone technology.

CIP SYSTEM 2546-04



CIP System 2546-04 is a skid mounted tank cleaning system designed for use in the offshore oil & gas markets. It is typically used to supply the required pressure and flow to a cleaning head arrangement. Flow control is accomplished with a bypass valve on the pump suction. The skid is transportable by lifting lugs on the top of the skid frame and via forklift. Chemical injection is accomplished via a chemical injection pump on the suction side of the primary CIP pumps. The entire skid is pressure protected by use of a safety relief valve on the CIP discharge.

QUALITY CONTROL, COMPLIANCES & CERTIFICATIONS

- ASME
- NEMA
- ISO 9001

TYPICAL APPLICATIONS

- OSV/PSV Mud Tank Cleaning
- Drilling Fluids Tank Cleaning
- Mud Pit Tank Cleaning
- Cuttings Box Cleaning

KEY FEATURES

- + Durable Skid Construction
- + Heavy Lift Frame
- + Flow Control
- + Pressure Control
- + Filtration
- + Safety Relief Valve
- + NEMA Rated Control Cabinet
- + Chemical Injection
- + Pressure Gauges
- + Flow Meters
- + Fully Conduited

CIP SYSTEM 3087



Model 3087PRJ ATEX is a skid mounted Clean In Place (CIP) System specifically designed for the cleaning of drilling fluid tanks on drilling rigs for both on and offshore and on drill ships. System 3087PRJ ATEX is a two tank system with one tank for recirculation of the cleaning fluid and one tank for the holding of cleaning chemistries.

All tanks have overflow pipes that discharge onto and within a containment on the skid in the event of an overflow situation. The vertical multi-stage pumps can be used simultaneously or in singular mode for pump redundancy needs. The entire system is comprised of ATEX certified components and with all certificates of compliance provided with the system documentation package. All piping is constructed of carbon steel and externally coated with a 'Marine' quality paint to withstand years of non-corrosive service that is typically experienced in a Marine (Saltwater) environment which is common on Offshore Drilling Rigs and Drillships. The tanks are constructed of High Density Polypropylene (HDPE) for the chemical holding tank whilst the larger recirculation tank is constructed of Cross-Linked Polyethylene to withstand the required temperature and day to day use of this equipment.

A chemical mix can be achieved on-skid by taking the required chemistries from the chemical holding tank and transferring the calculated amount to the recirculation tank and then allowing a fill of salt or fresh water into the recirculation tank as required in the cleaning recipe. Once this is accomplished, the fluid in the recirculation tank is recirculated to mix the water and chemistry components into the proper solution. Heat up to 60°C (140°F) can be achieved on the 3087PRJ ATEX system by recirculating through the on-board electric heater for the designated number of recirculations required to achieve the ΔT needed.

The skid for system 3087PRJ ATEX is tested and ran through our frame analysis calculations to insure that it can be lifted by a crane at 4 lift points on the skid when all tanks and lines are empty. System 3087PRJ ATEX pumps are controlled by a PLC on the skid and the control cabinet also incorporates a data highway for link to an external primary control center if so wanted.

CIP SYSTEM 3106



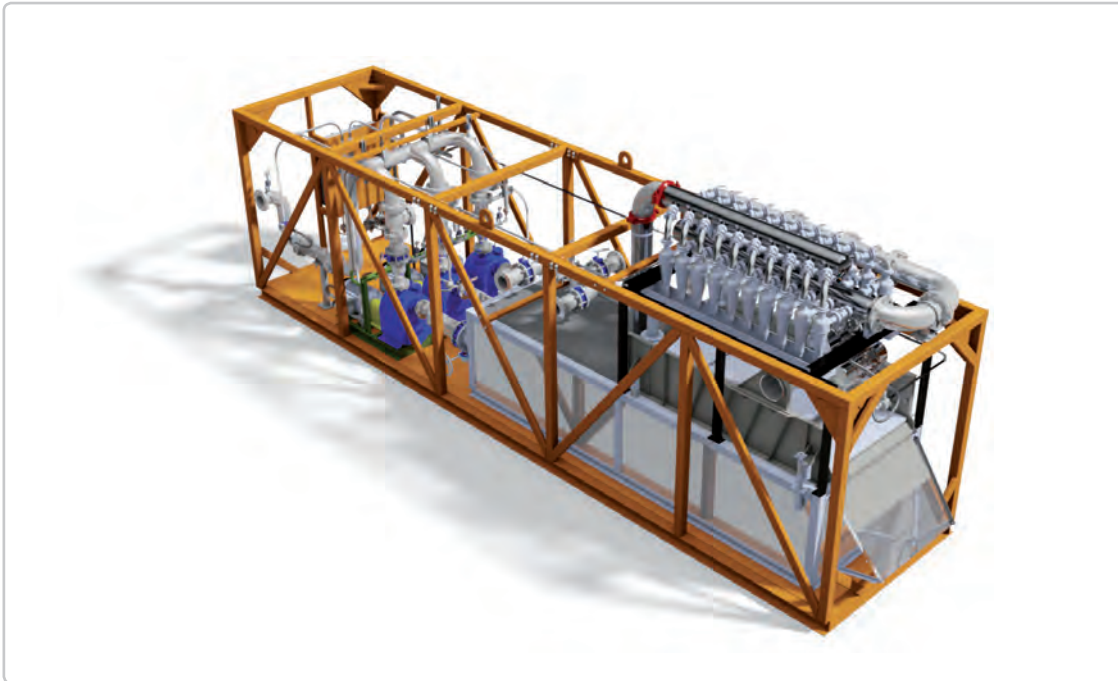
CIP System 3106 is a modular system that includes the pumping and control skid along with a solids separation system that uses weir separation technology along with in-process transfer of solids. System 3106 is designed for the cleaning of tanks where moderate to high solids loading is expected.

TYPICAL APPLICATIONS

- + Cleaning of Drilling Mud Tanks
- + Cleaning of Crude Oil Storage Tanks
- + Cleaning of Product Storage Tank

System 3106 can be stacked with the solids separation system residing on the top of the control and pump module to reduce the footprint required at the cleaning site or the modules can be placed separately at ground level. Connection to the tanks to be cleaned can be hard piped or by means of using flexible hoses.

CRUDE OIL WASHING SYSTEM 2571



Model 2571 is a Crude Oil Washing system that is designed to clean large hydrocarbon storage tanks with solvents, water, and chemistry solutions such as our proprietary microemulsion chemistries. Scanjet Model 2571 has the capability to create a recirculation loop within the tank to be cleaned via the selected tank cleaning machines thus dislodging and mixing the tank bottoms to be carried away via the return pump system to our proprietary solids separation system where the fluid stream is reduced of solids to less than 300 micron.

The solids fraction is discharged to holding bins for further treatment or disposal and the aqueous phase is returned to the tank skids for continued recirculation in the tanks to be cleaned until all solids are removed from the tank. Our oil/water separation skid can be engaged for side stream polishing of the aqueous stream thus reducing the oil in water fraction for remediation of the fluid streams and recovery of the oil or microemulsion chemistries can be used for a more complete recovery of the oil and remediation of the solids.

The required heat source is supplied via our boiler skid and power is supplied via our power generation skid. Tanks are inerted with our Nitrogen Gas skid. Each skid frame is uniquely designed for on land and offshore use. The majority of the system is PLC controlled from the primary pump skid and connection to other skids are via an RJ45 data highway.

KEY FEATURES

- + Explosion Proof
- + Master Control Skid
- + PLC Controlled
- + Solids Separation
- + Oil/Water Separator
- + Inert Gas Skid
- + Power Generation Skid
- + Boiler Skid
- + Hydraulic Return Pumps
- + 2 Tank Skids
- + 10,000 Gallon Surge
- + 3,000 Gallon Chemical
- + Tank Cleaning Machines
- + Conventional
- + Programmable

SC60A

Crude Oil Storage Tank Cleaning Machine



KEY FEATURES

- + ATEX certified
- + Sector Cleaning
- + Support Leg Entry
- + Highly Durable
- + Pneumatic Drive
- + High Solids Loading
- + Stainless Steel Const.
- + Pitch Control
- + Custom Lengths

Scanjet SC60A is an advanced tank cleaning nozzle system specifically designed for Crude Oil Storage Tanks where tank entry is limited.

It has the ability to make entry into the tank via the support legs on floating roof tanks, as well as other openings that may be available on the tank to be cleaned. It can also be programmed for a specific cleaning pattern.

Sector Cleaning

The SC60A is pneumatically driven and can be programmed for sector cleaning. If the job requires that the cleaning pattern should only be focused on the tank bottom and 1 meter of the side wall, the SC60A can perform this function.

Tank Entry

The SC60A is designed to make tank entry for Crude Oil Storage Tanks as easy as possible. To this purpose, it can enter a floating roof storage tank via the support legs affixed to the roof of the tank. Just advise us of the mounting flange type (dimensions) and we will fit to your requirements.

Solids Handling

The SC60A is a master at handling solids. Crude Oil Tank Cleaning is a dirty and arduous task. Designed to use Crude Oil as the cleaning media, the SC60A handles solids several times that of conventional machines.

SC30A

Scanjet tank cleaning equipment



KEY FEATURES

- + ATEX
- + Programmable sector cleaning
- + Rugged construction
- + External drive
- + High jet impact
- + High capacity

The SC30A is a single nozzle tank cleaning machine especially developed for sector cleaning tanks/cisterns/vessels in hazardous ATEX classified areas. It gives the user the possibility to optimize the cleaning, with minimal use of time, energy and cleaning media.

It consists of two main parts; one washing unit that is installed in the tank and one portable air driven drive unit SC100, SC100 PW or SC180 for operation. The drive unit can be exchanged or removed without exposing the tank to the outside atmosphere. As option it can be provided with a free selection of single nozzle levels giving a tailor-made installation for each specific need.

Quality Control, Compliances & Certifications

SC30A is produced in accordance with ISO 9001 Quality Standards and our certificate of conformity and accreditation is available on request. Additionally, the SC30A conforms to United States ASME standards for construction and European, CE and ATEX standards for design, construction and safety.

Typical applications:

- + Crude oil storage tanks
- + Large process vessels and fermenters
- + Large silos and dryers
- + Large reactors
- + Large Uni-Tanks

SC90A

Scanjet tank cleaning equipment



KEY FEATURES

- + ATEX
- + Programmable sector cleaning
- + Rugged construction
- + External drive
- + High jet impact
- + High capacity

The SC90A is a single nozzle tank cleaning machine especially developed for sector cleaning tanks/cisterns/vessels in hazardous ATEX classified areas. It gives the user a possibility to optimize the cleaning, with minimal use of time, energy and cleaning media.

It consists of two main parts; one washing unit that is fixed installed in the tank and one portable air driven drive unit SC150 for operation. The drive units can be exchanged or removed without exposing the tank to the outside atmosphere. It is the product of choice when long jet-lengths and/or a high level of jet impact is required.

Quality Control, Compliances & Certifications

The SC90A is produced in accordance with ISO9001 Quality Standards and our certificate of conformity and accreditation is available on request. Additionally, the SC90A conforms to United States ASME standards for construction and European, CE and ATEX standards for design, construction and safety.

Typical applications:

- + Crude oil storage tanks
- + Large process vessels and fermenters
- + Large silos and dryers
- + Large reactors
- + Large Uni-Tanks

SC15TW

Scanjet tank cleaning equipment



KEY FEATURES

- + Rugged construction
- + Adjustable turbine
- + ISO 9001 Quality
- + Exceptional jet lengths
- + Easy maintenance
- + 316 SS construction
- + Optimized cycle times
- + Flow through gearbox

The SC15TW is a 1.5" dual or four nozzle automated tank cleaning machine constructed of 316 stainless steel and other highly corrosion resistant materials. It has a fixed to moving gear ratio of 47 to 49 allowing it to produce a homogenous 360° pattern that is superior to that of any other rotating jet head in it's class.

It is an integrated turbine class type of tank cleaning machine and employs an adjustable turbine and flow through gearbox. The adjustable turbine allows the rotation speed of the SC15TW to be adjusted without the need of changing costly starters and/or gearing found in other similar cleaning devices.

Quality Control, Compliances & Certifications

The SC15TW is produced in accordance with ISO9001 Quality Standards and our certificate of conformity and accreditation is available on request. Additionally, the SC15TW conforms to United States ASME standards for construction and others are available upon request.

Typical applications:

- + Road and Rail tanker cleaning
- + Portable cleaning for contractors
- + Fermenter tank cleaning
- + Storage tank cleaning
- + Wine storage tanks and fermenters
- + Brewery storage tanks and fermenter

SURVEYOR™ Multipurpose Monitoring & Control System

FOR OIL DEPOTS, OIL TERMINALS, PETROL STATIONS, DRY BULK STORAGE

The heart of all SURVEYOR™ Systems

Due to virtually unlimited expansion possibilities the system can handle a variety of sensors, adding or removing monitoring points when required. Configuration of a new monitoring point, or update of the configuration, is possible on-site by connecting the control unit TCU to a PC via serial line. The TCU control unit performs all the processing of the signals from the I/O cards and supplies power to the I/O cards and the display unit. The control unit supports communication protocols to the majority of makers' automation systems.

The system is automatic on multiple levels: data presentation, data preservation, power backup, local and remote logging, with data is stored in encrypted format making it possible only to authorized personnel to have access to it. Tank monitoring data can be transferred wirelessly via radio serial line or via GPRS.

SURVEYOR™ Automatic Cargo Tank Monitoring

(LEVEL, WEIGHT, TEMPERATURE, PRESSURE) WITH REMOTE DATA TRANSFER VIA GPRS

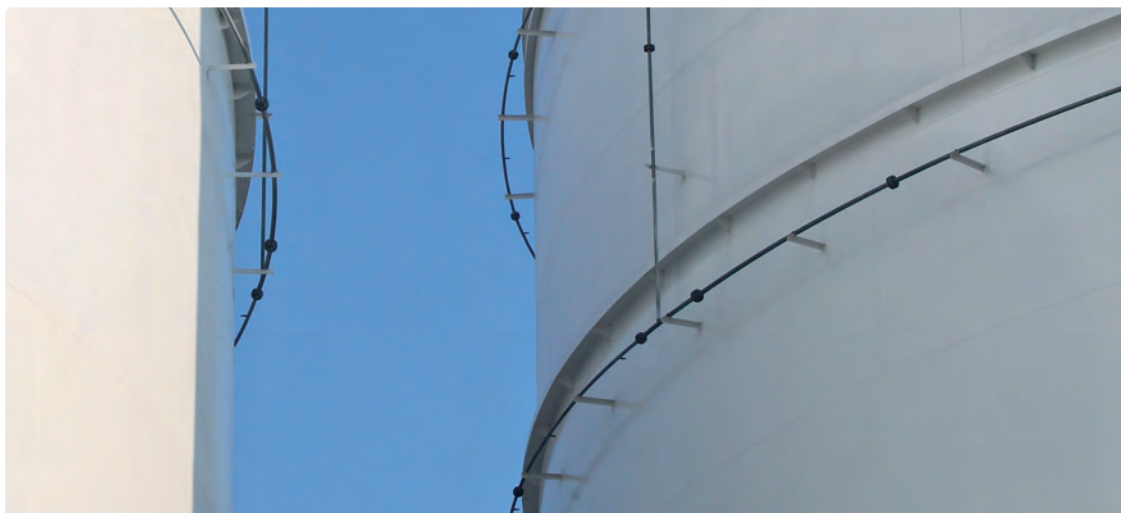
Sensors based on proven non-contact microwave radar technology featuring power and signal on a two core cable, thus providing a simple, fast and cost effective installation for both new-build and retrofit projects. Its unique compact design and technology means there is no need for large and tall adapter trunks in order to fit radar to the tank, and they can be fitted to existing flange openings on top of any tank.

SURVEYOR™ Independent High Level & Overfill Alarm System

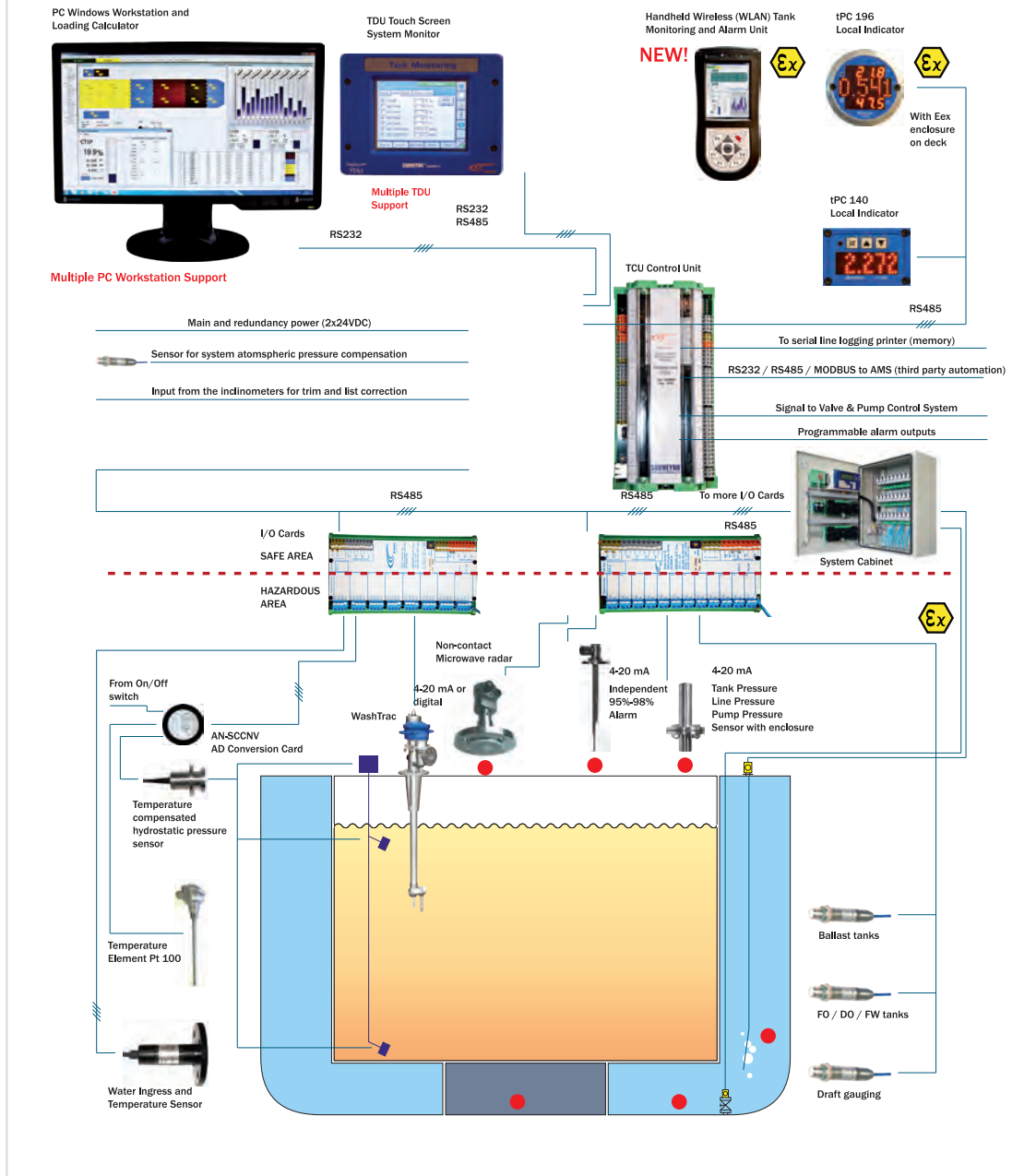
A complete system can be delivered either as a single or as a dual point system for high level and overfill (high-high) level alarm detection for any kind of liquid, including any hydrocarbons and chemicals. Visual and audible alarms will display on the alarm panel as well as via external Eex alarm lights and sirens. The high level (95% and overfill 98%) alarms are totally electrically independent from each other. System sensor test for verification of alarm function is integrated. The system features a built-in function for preventing false alarms.

SURVEYOR™ REMOTE Pump & Valve Control

Pump & Valve Control software is set up in a dedicated control room that connects to an uninterrupted power source. The system can interface with a wide range of pumps and valve actuators using a variety of connection possibilities. The PVCS is fully integrated with the Multipurpose Monitoring & Control System, automatically acquiring tank gauging and alarm data from TCU. The system features excellent user interface through detailed graphics presentation of tanks and tank plan, and can be configured to display individual or group of tanks with colour coding of liquid type, position of valves - binary or proportional, and pumps operation on/off, with alarms. Continuous communication with SURVEYOR™ Tank Monitoring enables the Pump & Valve Control System to also present crucial tank information like level/volume/weight, pressure and temperature.



Multipurpose monitoring & control system



SURVEYOR™ Water-in-Oil Detection & Dewatering System

Based on digital microwave sensors with temperature elements WIS, which operate continuously submerged in the liquid. It is based on detection of water through the dielectric properties of the liquid allowing distinguishing of water from oil. Sensors are submerged (fixed or movable) providing for detecting of water at a predefined level and to detect oil-water interface and follow the changes of level of that interface continuously, if required.

Installation of sensors is devised in a manner that allows placing them in already full tanks, without need of hot works, tank wall penetrations, etc. Sensors are designed to continuously operate without need for scheduled maintenance or re-calibration, which results in significant savings of maintenance and service costs during the operation time of the system. Automatic detection of water and the de-watering process are done on a continuous autonomous basis, which reduces the time necessary to detect and drain the water in the tanks. This results in extending the life of tank coatings, protecting the tank itself and reducing the risk of uncontrolled spill of contaminated waters outside the tank.

SCF150W

Scanjet Water Driven Gas Freeing Fan



The SCF150W Portable Water Driven Gas Freeing Fan is suitable for use on all sizes and types of vessels. The fan is designed as a High Performance, Deep Penetration Unit. Constructed from Stainless Steel and Aluminium it is lightweight and easily moved around the deck.

Quality Control

The SC F150W is produced in accordance with 9001 Quality Standards and our certificate of conformity and accreditation is available on request.

Typical applications:

- + Land STORAGE TANKS
- + Product Tankers
- + Crude Oil Carriers
- + Offshore
- + Bulk Carriers
- + FPSO
- + OBO carriers

KEY FEATURES

- + High Performance
- + Lightweight
- + Deep penetration
- + Reversible
- + 'Sealed for life' lubrication
- + Easy Handling
- + Safe Operation

TRIPOD



Scanjet Tripod is a lifting device specially developed for lifting up tankcleaning machines.

There are three standard versions of the Tripod:

- + Tripod 3 meters
- + Tripod 4 meters
- + Tripod 6 meters in split version

The size of the tripod is depends on the size/length of the machine. The tripod consists of two main parts, the tripod and a lifting block. The lifting block is manually operated and has a maximum lifting capacity of 500 kg.

Typical applications

- + Crude oil carriers
- + Chemical carriers
- + Bulk carriers
- + OBO carriers
- + Industrial applications

KEY FEATURES

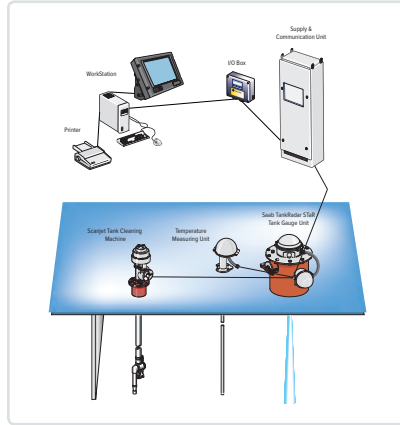
- + Easy to use
- + Capacity 500 kg
- + Enables rapid overhaul
- + Safe operation
- + Aluminium
- + Split version (option)
- + Non-corrosive materials

Service Kits



For easy maintenance Scanjet can provide a complete package including all parts needed and instructions for the work. This ensures that the planned maintenance will be easy and effective.

WashTrac™



The innovative tank cleaning monitoring system WashTrac™ improves the efficiency and control of the tank cleaning procedure.

Hoses



Available in various lengths and qualities suitable for any requirements. The standard hoses are made in EPDM rubber and come with two stainless steel bonding wires, incorporated in the hose core for electrostatic protection. Scanjet can also supply hoses in stainless steel for special services.

Hose Saddle



The hose saddle is designed to minimise the deck opening for the supply hose during a tank cleaning operation and gives a stable fixation of the hose.

Rubber Bumpers



For cleaning in coated tanks close to the tank walls Scanjet recommend the use of rubber bumpers that minimises risk for coating damage.

Connections & Adapters



To suit any type of connections, various types of adapters and couplings are available in suitable materials for the marine environment.

Service



Skilled service engineers are ready to serve wherever and whenever you need them.

Engineering

Our areas of expertise cover:

- Piping & mechanical design
- Various instrumentation and system integration
- Process design
- Instructions and specifications of various kind

Examples of what we can provide are:

- Perform complete product development
- Print or manufacture product models of various sizes
- Perform conceptual & detailed design
- Deliver P&ID:s with component lists
- Calculate pressure losses & make dimensioning of fluid systems
- Project support

SALES AND SERVICE



Scanjet has a test plant at your service with facilities for full scale testing of machines.



Spare parts and service kits are produced in our own factory and are available within 24 hours.



Scanjet exhibits all over the globe bringing our products and knowledge directly to you.



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