Quality is our top priority.

We are making all kinds of efforts to maintain, improve and develop the highest quality continuously for customer satisfaction. Based on these comprehensive QA procedures we make sure you receive impeccable products.

QUALITY SYSTEM CERTIFICATIONS

ISO 9001 : 2015 ISO 14001 : 2015 ISO 45001 : 2018















Sustainability Management

Scantec practices ESG management. We build a sustainable future where companies and society coexist. We are striving to fulfill the economic, social, and environmental responsibilities of a company, and become a sustainable company to respond to the demands and expectations of various stakeholders. We will sincerely push ahead and are building great workplaces with sustainable management such as EHS, ethical management, and social contribution so that all stakeholders including members, customers, and local communities can be happy.







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Scantec Co., Ltd/EN/CAT-08-2025

The contents of this publication are presented for information purpose only. We reserve the right to modify or improve the designs or specifications of our products at any time without











REMOTE CONTROL SYSTEM TOTAL SOLUTION PROVIDER

Your partner since 1998





EC Leader of Marine and Offshore Equipment Business



We have been producing and supplying the Valve Remote Control System (VRCS) which is a vital part of all ships from general merchant ships to specialized vessels such as FPSO, etc. since **Scantec** was established in 1998 as the name of Scana Korea Hydraulic Ltd. Especially, when it comes to special ships like FPSO, FSO and FLNG, we boast unparalleled capabilities among the world.

We have been fulfilling customer satisfaction by providing the best quality and service on the basis of the rich experience and technical skills, expertise which is well respected by the shipbuilding and offshore / marine equipment industry.

Our prior aim is to offer our customers the highest level of reliability, efficiency, differentiated quality and price competitiveness that can generate continuous profits. Accordingly, **Scantec** will continue developing and strengthening our R&D capabilities as a company that follows the VISION 2030 slogan as your trustworthy partner.

VISION

- · Leader of Remote Control System
- Company of Co-existence
- First-class Company in the world

BUSINESS SEGMENTS

Scantec remote control system is used in Marine, On/Offshore industries, Power plant, Defense industry, Machinery, etc. and especially, is designed for the use on any kind of vessel and offshore industry. We are top-tier company in this field when it comes to our production capacity of remote control systems. Our unrivaled product competitiveness has been proven time and again by our rock-solid partnerships with most prestigious shipbuilders in the world.

MARINE

Scantec remote-control system is standardized and manufactured in accordance with applicable technical specifications, thereby enabling safe and efficient operation with overall cost reduction in Marine VRC system.

- ·HPU
- · SVC/SVB
- · Various CONTROL CONSOLEs on the Bridge, in Engine control RM
- · ACTUATORS / Local Self-Contained Power pack



OFFSHORE, OIL & GAS

Remote control system in this segment requires the highest level of technology and know-how. We can provide industry-leading techniques and total solution to satisfy comprehensive production requirements.

- · Tailor made HPU and Ex-VCP
- \cdot Various CONTROL CONSOLEs on the Bridge, in Engine control RM
- · Quarter-turn & Linear ACTUATORS



MACHINERY, INDUSTRIES & POWER PLANT

Scantec hydraulic system is qualified to meet complicated requirements from large scale plant such as thermal power plant etc. and can be manufactured according to customer specifications.

- · Tailor made HPU
- · ACTUATIONS / Local Self-Contained Power pack
- Many kinds of CONTROL CIRCUITS



ARCTIC TECHNOLOGY

We also provide Remote Control system qualified to meet extreme conditions in arctic environments such as down to -55°C

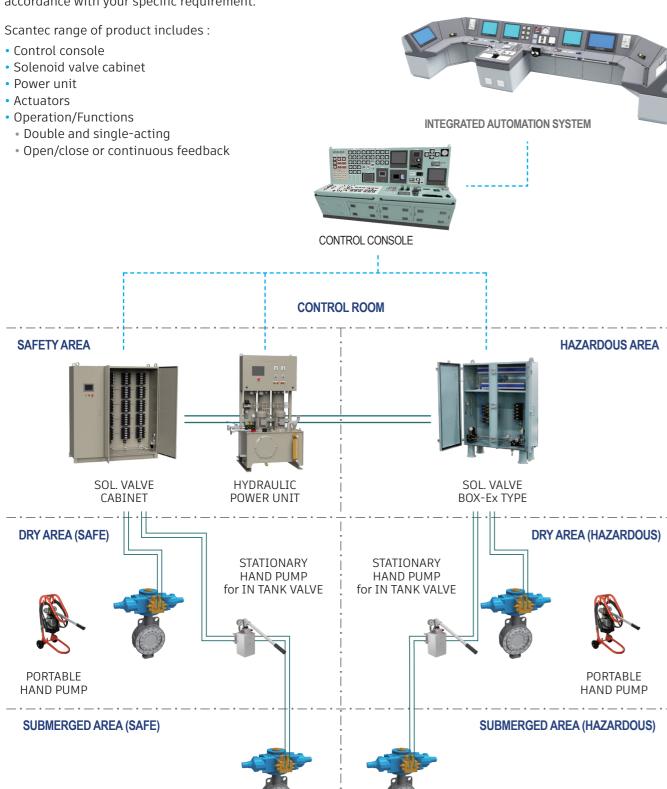
- · HPU with heat system
- · Various CONTROL CONSOLEs on the Bridge, in Engine control RM
- · Low temp. ACTUATORS



Scantec VALVE REMOTE-CONTROL SYSTEM

CENTRALIZED REMOTE-CONTROL SYSTEM OVERVIEW

Remote control system including power unit, solenoid valve cabinet and control panel as a standard product or tailor-made unit can be built in accordance with your specific requirement.



DECENTRALIZED LOCAL SELF-CONTAINED POWER PACK SYSTEM OVERVIEW

The electro-hydraulic system is based on decentralized local power pack and comprised of the interface box, SCP(Self-Contained Power pack) and actuators, which open and close the valves.

- Requires only electric power.
- No hydraulic piping needed.
- Installation costs down.

INSTRUMENTS

- · Minimal energy and oil use.
- Possible to use in conjunction with a conventional central remote control system.
- System can be used on lots of ship types with hazardous environments as well.



HAZARDOUS AREA

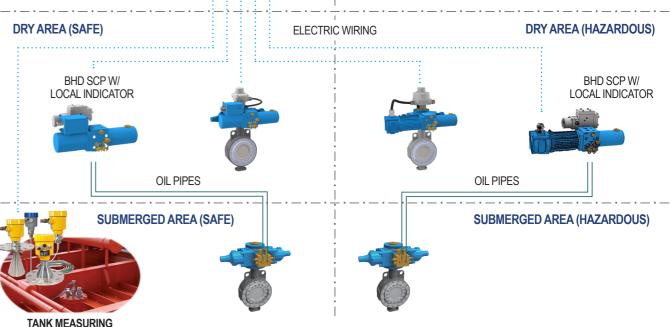
ICMS(AMS) / WORKSTATION CARGO CONTROL R/M, ENGINE CONTROL R/M

ETHERNET / MODBUS (RING TOPOLOGY)

CONTROL ROOM

PORTABLE
HAND PUMP
FOR EM'CY

: : : : ;



MARINE, LNGC



including the steering gear and communication tools.

FCC is to control and monitor the main and auxiliary engines with their related equipment. It has the function

ECC is to control and monitor the main and auxiliary engines with their related equipment. It has the function of monitoring and alarm for the main & auxiliary engines, machinery equipment and safety protection. It includes remote control unit.



CARGO CONTROL CONSOLE(CCC)

Control Console is provided for centralized control of all valves included in the system. The Control Consoles are often designed and manufactured to include other Cargo Handling and Monitoring system. The Control Console can be replaced by a computerized package.

SOLENOID VALVE CABINET(SVC) & SOLENOID VALVE BOX(SVB)

The electro-hydraulic SVC, SVB receive control signals from the control console or computerized valve control station such as IAS which controls the directional solenoid valves for distribution of pressurized oil to the actuators.

SVC consists of:

- · Solenoid operated directional valves.
- Throttle valves for adjusting actuator operation time.
- High-pressure filter.
- Quick connectors for portable hand pump.
- In case the valve position indication is of indirect type, flow switches and/or volumetric flow meter are also installed in this SVC.

SVB additionally configured:

- IS type solenoid operated directional valves.
- Flow control valve to ensure consistent speed of operation by compensating the differences caused by various temperature and pressure.



HYDRAULIC POWRER UNIT(HPU)

The hydraulic power unit with oil reservoir, hydraulic pumps and accumulators generates and delivers pressurized hydraulic oil to the Solenoid Valves Cabinet(SVC) and Box(SVB), which through solenoid valves distributes hydraulic pressure to actuators mounted on the valve for opens and closes the valves.

HPU capacity of :

- 120L / 300L as normal application.
- 1200L ~ 1500L as LNGC application.

OFFSHORE, OIL & GAS



INTEGRATED AUTOMATION SYSTEM (IAS)



VALVE CONTROL PANEL(VCP)

Stainless steel control circuits are delivered as panels All are designed and built to meet the client's specification. High quality components are chosen to secure the best possible safety and performance.

The electro-hydraulic VCP with junction box of Exereceives control signals from the computerized automation system which controls the Ex-solenoid valves for distribution of pressurized oil to the actuators to open and close the valves.

Stainless steel VCP consists of:

- Ex type solenoid operated directional valves.
- Throttle valves for adjusting actuator operation time.
- High-pressure filter.
- Quick connectors for portable hand pump.
- Pressure regulator for positive pressure.
- · Individual pressure gauge.

TAILOR MADE HYDRAULIC POWER UNIT(HPU)

The tailor-made hydraulic power unit with starter and alarm panel, oil reservoir, hydraulic pumps and different back-up accumulators generates and delivers pressurized hydraulic oil to the VCP. Various control and monitoring solutions are available.

HPU range of product :

- 3000L 10000L oil reservoir.
- Shut down at high-high & low-low oil pressure and level.



ACTUATORS

FOR OPERATION OF ANY QUARTER-TURN(90°) VALVES

DOUBLE ACTING HYDRO-LOCK ACTUATOR

is designed to secure the valve hydraulically locked in its last order positions if there is any failure of hydraulic oil pressure. Actuator is specifically designed with a compact rack and pinion configuration. It provides simple construction and constant output torque throughout the stroke.

Nominal torque: 180 to 12,000 Nm at 135bar working pressure.



SINGLE ACTING ACTUATOR

produces spring ending torque up to 23,000 Nm. This hydraulic actuator provides reliable valve shutdown capability when an external power source is not available by spring return operation.



SCP (Self-Contained Powerpack)

is an electro-hydraulic local power pack directly mounted on the valve/actuator for remote control purpose. This type does not require hydraulic pipes, needed solely electrical installation.



AMBIENT TEMPERATURE

RAP actuators are designed for operating temperature of -20°C to +80 °C as normal applications. Optional high and low temperature of -45°C to +120 °C, respectively are available. Special requirements can be supplied on request. For higher and lower temperature applications, consult us.

VALVE INTERFACE

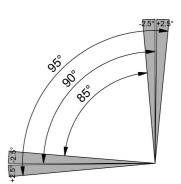
Valve mounting adaption in accordance with ISO 5211 mounting pattern.

RAP HYDRAULIC DOUBLE-ACTING ACTUATOR

ACTUATOR

Actuator type RAP is a double acting quarter turn and rack & pinion type actuators designed for all types of butterfly-, plug-, and ball valves. A compact rack and pinion design provides simple construction and constant output torque throughout the stroke. Full stroke adjustment screws are fitted to both end and turning in the stroke adjustment screws allows precise angular stroke adjustment between 85° and 95°





MAIN DATA

NORMAL-WORKING PRESSURE

TEST PRESSURE

ROTATION(Clockwise closing)

DESIGN TEMP.(min./max.) S

H -20°C / +120°C, PTFE/Viton

90° ± 5°

L -45°C / + 80°C, PU/NBR

-20°C / + 80°C, PU/NBR

INDICATION

VISCOSITY OF HYDRAULIC OIL

ACCESSORIES

Visual on top 15 to 200 cSt, acid-free hydraulic oil.

Control blocks with Double pilot check valves
Double release valve, Double throttle valve,

1.5 x system max. working pressure of 160 bar

Quick connection for em'cy operation

For further information, please see separate data sheets for other actuator mounted control components. **Scantec** actuators are manufactured in accordance with the quality system stated in the ISO standard and each actuators, after assembly, is cleaned to NAS 1638/10 (ISO 4406 21/19/16) standard and plugged. Another flushing grade available on request.

MATERIAL

HOUSING GCD 450 / GCD 350-22L-L VERSION GCD 450 / GCD 350-22L-L VERSION

PISTON Hardened steel
RACK High tensile steel

PINION Surface treatment high tensile steel

SEAL NBR, VITON, PTFE

CLASSIFICATION

Meets all requirements to: ABS, BV, DNV, LR, KR, RS, etc.



COMMISSIONING, SERVICE & SPARE PARTS

Scantec principle is to deliver all system solutions in good working order including functional inspection of electric, hydraulic and mechanical performance.

SERVICE, 24/7, ALL OVER THE WORLD

We provide a total service concept anywhere in the world on systems. A staff of well-qualified service engineers, also with the safety courses required for work, will, at short notice, be able to perform necessary maintenance and service on board, offshore, or onshore worldwide.



SPARE PARTS

We recommends you to buy spare parts directly, to assure correct quality, dimensions and materials. We have spare parts in stock at all time. Our online technical support services will give your staff the best professional support, knowledge via e-mail or phone calls.



SERVICE AND SUPPORT - WORLDWIDE

A staff of well-qualified service engineers, also with safety course required for offshore, will at short notice be able to perform necessary maintenance and service; on board, onshore or offshore worldwide.



UPGRADE AND RETROFIT

We provide professional repair and maintenance work and recommend the best tailor-made systems to meet your specific needs with sensible advice and full reports. Renovation and modification of old, outdated or damaged systems and components give them a new lease of life. The most cost-effective and reliable solutions have been used in many upgrade and retrofit project worldwide.

We are ready to serve you, just contact us or visit www.scantec.co.kr

MAJOR REFERENCE OFFSHORE PROJECTS

