

Salvico for Tankers



When Safety Matters



Gas Detection Systems

Reliable and Customized Solutions

Salwico Gas Detection System

Unique loop configured system design - Sampling solutions

Salwico Gas Detection System solutions for demanding customers.

Efficient gas alarm systems are of vital importance for the protection of lives and assets at sea.

To meet these demands Consilium offers state of the art gas alarm systems, developed for the most demanding marine environments.

Consilium offers the widest variety of solutions in the market to care for all needs and requirements concerning the subject of gas detection. We have developed and produced our well known Salwico Gas Detection Systems since late 1950's and have today the most competent and experienced staff of all makers.

We provide standard as well as custom-designed solutions for COT's, CHEM/PC's, LPG's and LNG's using our different system families;

- The compact GS-4 is used for continuous measurement of for instance HVAC
- The SW2020 is used for scanning sampling detection in various applications
- The GS3000 - our totally unique loop-configured analogue addressable system which has been the preferred choice for previous, current and future LNG installations.



Salwico Gas Detection Systems are designed and developed to meet the requirements of all major Classification societies as well as the EN-54 rules, which is applicable for the addressable type and in time the new European standard MED. The systems are designed with user-friendliness in mind and when software-based with self-instructing control panels with clear and easily understood menus on the display.

Customer orientation

Having been a major supplier of Fire and Gas Detection Systems for all these years has given us valuable experience how to best serve our customers; yards worldwide as well as ship owners operating all over the globe. Lessons learnt from working with yards in all parts of the world is very much based on local presence and support as these customers have high expectations on local service from their preferred suppliers, a service that is tried and proven year round still.

Consilium Marine & Safety's expertise in equipment development is therefore focused on simplifying the work in the field, where the installation and commissioning work is done under time pressure with little margins for unwanted surprises.

Our belief is that if we are the most effective supplier to work with the yards will they by themselves find that the efforts necessary to put in when choosing a Salwico gas detection system for their projects are reduced when comparing us with others.

Some solutions made a real impact in these aspects and for instance our unique counter-pressure design for the scanning sampling Salwico SW2020 system, when released back in 1998, cut down radically on equipment as well as installation time, yet offering the highest level of system performance in the market.

This design is still the most sold worldwide as we have refined it over the years and even if some of its features have found their way into competing suppliers products it is still the most relied upon system around.

Typical applications

All things considered experience is an important factor and the difference between success and failure simply because one is learning from one's mistakes and the more experience you have gathered the lesser mistakes you are making.

As a natural result of all our installations in the past five decades, we have learnt lots of things and have also developed our equipment with that as the main basis together with valuable user inputs naturally always looking at current and coming rules and regulations adapting these to the systems.

We will below exemplify some typical designs for Salwico gas detection systems to give you an idea of how we can solve your needs; starting with a typical set up for a crude oil tanker followed by a couple of other examples.

COT

Here can a requirement demand the supplier in an effective way to monitor the air contents in the pump room together with a system for monitoring the atmosphere in the water ballast tanks and void spaces in the cargo area. Since regulations state that the \bar{v}/\bar{r} system shall be independent it will result in a solution with two separate systems, still mounted in the same cabinet for space saving reasons.

Our choice of equipment will be to have a scanning sampling Salwico SW2020 for each area, however slightly different even if based on the same type of system.

\bar{v}/\bar{r} : The pump room set up will most often nowadays have a requirement for detecting more than $CxHy$'s and we add the necessary detectors for O_2 as well as H_2S and will have a system that can analyze all gases in one air sample at the same time.

WBT: For the WBT area we will have a slightly simpler detection requirement, however now making full use of

the counter-pressure function to keep the system at peak performance level.

By using the same system in both environments the user is facing exactly the same operator's panels hereby minimizing any mishaps in systems handling as well as reducing the number of system specific spare parts.

PC's and other specialized tanker vessels

For these applications we have been asked to supply a number of different solutions, incorporating different detectors, individual designs for specialized cargoes and so on.

Here is a range where experience really is put to the test; - you simply have to know what this is about to be able to propose a working solution. Typical for these specialized vessels are that the specifications are charterer/operator specific due to cargo types, range and operating area.

CARGO AREAS: Certain types of vessels have for instance a pipe tunnel on deck, which can require a gas detection system of continuous measuring type.

Here you can also find operator requirements for detecting hydrogen leakage, which is done through oxygen detectors.

WBT: For the WBT area we will use the proven SW2020, possibly with the addition of an O_2 detector.

The recent boom in LNG and to a certain extent LPG orders has caused quite some concerns about safety.

This has for several reasons raised concerns about the design and performance of gas detection system solutions, as the older designs were bulky, noisy in some parts and less accurate also requiring a considerable amount of maintenance.

To meet the tough requirements we have specialized solutions purpose designed for these types of vessels. You will find this described in a separate brochure.



Consilium worldwide



SWEDEN

Consilium Marine & Safety AB

Fire & Gas Marine Division
 Gothenburg
 Phone: +46 31 710 77 00
 cmsab@consilium.se

Navigation Division
 Stockholm
 Phone: +46 08 563 05 100
 cmsab@consilium.se

Storm & Co Skeppsradio AB
 Gothenburg
 Phone: +46 31 51 35 10
 stormco@stormco.se

BELGIUM

Consilium Marine Systems BV
 Zeebrugge
 Phone: +32 50 70 30 97

CHINA
Consilium Shanghai Co. Ltd.
 Shanghai
 Phone: +86 21 5152 22 60
 sales@consilium.cn

Dalian
 Phone: +86 411 8386 4460

FINLAND
Consilium Marine OY
 Helsinki
 Phone: +358 405 25 28 25
 info@consiliummarine.fi

GERMANY
Consilium GmbH
 Hamburg
 Phone: +49 40 822 22 95-0
 consilium@consilium-hamburg.de

GREECE
Consilium Marine Hellas
 Piraeus
 Phone: +30 210 428 7097/8
 info@consiliumhellas.gr

INDIA

Consilium India Pvt. Ltd.
 Mumbai
 Phone: +91 2267935150-53

Vishakhapatnam:
 Phone: +91 891 301 03 20
 consilium.vizag@consilium.ae

ITALY
Consilium Marine Italy Srl.
 Florence
 Phone: +39 0571 68121
 cm1@consilium.it

Genova
 Phone: +39 010 5533900

Naples
 Phone: +39 081 54 23122

JAPAN
Consilium Nittan Marine Ltd
 Tokyo
 Phone: +81 03 5465 1881
 info@consilium-nittan.com

NETHERLANDS
Consilium Marine Systems BV
 Rotterdam
 Phone: +31 182 382 422

NORWAY
Consilium Scandinavia AS
 Oslo
 Phone: +47 22 30 90 30
 mail@consilium-norway.no

SPAIN

Consilium RMI Spain S.A.
 Bilbao
 Phone: +34 94 404 2121
 atcliente@consiliumrmisspain.com
 Algeciras
 Phone: +34 94 404 2121

Las Palmas
 Phone: +34 94 404 2121

Barcelona
 Phone: +34 94 404 2121

Valencia
 Phone: +34 94 404 2121

SINGAPORE
Consilium Marine
Singapore Pte. Ltd.
 Singapore
 Phone: +65 6570 8998
 mail@consilium.sg

SOUTH KOREA
Consilium Marine Korea Ltd.
 Pusan
 Phone: +82 51 740 5869/71-3

QATAR
Consilium Qatar LLC
 Doha
 Phone: +974 466 53 32

UAE
Consilium Middle East (FZC)
 Sharjah
 Phone: +971 6 55 70 740

UAE cont

Consilium Middle East
General Contracting LLC
Consilium Middle East Equip
& Spare Parts LLC
 Abu Dhabi
 Phone: +971 2 622 93 46

UK
Consilium Marine UK
 Folkestone
 Phone: +44 1268 41 77 45
 info_uk@consilium.co.uk

Glasgow
 Phone: +44 1268 41 77 45

USA
Consilium Marine US
 Fort Lauderdale
 Phone: +1 954 791 7550

Long Beach
 Phone: +1 954 791 7550

VIETNAM
Consilium Vietnam JSC
 Hanoi
 Phone: +84 4 37 93 14 31

Ho Chi Minh City
 Phone: +84 8 410 13 38



www.consilium.se