

Taking control

Bunkerspot talks to Secu-Tech about BUNKCONTROL, its latest project for refueling inland navigation and sea-going vessels



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BUNKCONTROL is the outcome of the latest automation project by Secu-Tech. It carries out several key functions such as level measurement, flow measurement, overflow prevention and controlling, which can all be managed electronically on the BUNKCONTROL managing system.

Two years ago, Secu-Tech came into contact with several bunker station owners who wanted to automate their fleet and stations. They asked Secu-Tech to take care of it on one condition; they only wanted to deal with one company in order to avoid unnecessary disagreements.

Many frantic attempts have been made in the past to automatise the refuelling process but in most cases it resulted in a merger of companies who would shift the responsibility from one to another. This often resulted in incomplete automation or expensive additional investments that did not have the desired effect.

This led many to conclude that automation involved dysfunctional systems that could not intercommunicate, which resulted in a financial setback. Therefore many bunker terminal operators developed an aversion towards further automation.

Up to that moment Secu-Tech was mainly a supplier of overflow security devices. However, the company began to talk to many different automation companies that were acknowledged experts in their own fields. Secu-Tech then consulted end users to make sure their requirements and objectives were met, before launching BUNKCONTROL.

Working closely with its clients, Secu-Tech has sought out the most modern techniques in order to develop a modular system which offers each user the opportunity to only automatise the specific part which he needs, whilst providing the possibility to enable further automation at a later date. In this respect our system provides a solution to the most important and/or urgent needs of our clients, as well as offering them the possibility to spread their investment plans over a longer period of time.

BUNKCONTROL consist of:

- level measurement: *Ultra ATG* is an automated tank level gauging system, which uses capacitive measurement in

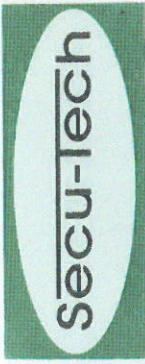
fuel tanks. Not only is it very precise, it also makes it possible to perform a density measurement which allows the client to control the quality of the fuel

- flow measurement: the *MFX4* flow computer with loading control system, which was made by **Mess und Fördertechnik**, provides applications such as temperature compensation (15°C), stamped volumetric data, network communication, valve control and communication possibilities
- mass flow meter: this mass flow meter is based on the coriolis principle and replaces the conventional mechanical measuring chamber which has no moving parts and shows little sign of wear during operation. As such the bi-annual calibration is no longer needed, saving the operator a lot of money. Only a calibration for oil products is needed every five to ten years, in agreement with the controlling organism
- overflow prevention: the system also includes Secu-Tech's fail-safe wireless system (LRC-Small and/or Remote) which is growing into the standard in inland navigation, and shipping in general, as lately it has been used increasingly in the refuelling of sea-vessels. With its 18-hour battery capacity (extendable to 36 hours) the refuelling or shipping can easily be verified in use with the over-fill-sensors programmable logic controller (PLC) managed over-fill-systems of the ship
- managing system: this refers to the processing system of the operating data on level management and/or refuelling. The system allows the data to be processed into statistics and optimising programmes either via the internet or on an internal server.

Shop activities can also be integrated into the BUNKCONTROL managing system.

By using BUNKCONTROL, all activities both on-line and on-site can be observed, processed and managed from a control centre and/or the company's headquarters, which allows optimisation of supplies and stocks. This leads to substantial savings in both time and money.

BUNK-CONTROL - Comprehensive System for Automation of Bunkering



**LRC-Small
Level Remote Control**



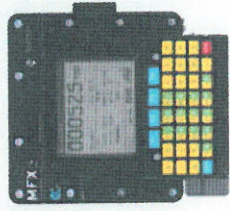
Overfill prevention
Rotational speed control
Dead-man function
Emergency stop
ATEX-certified for Ex-zones

Mass Flow Meter



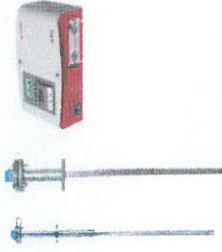
No moving components
Wear-free
Nearly no maintenance

Controller

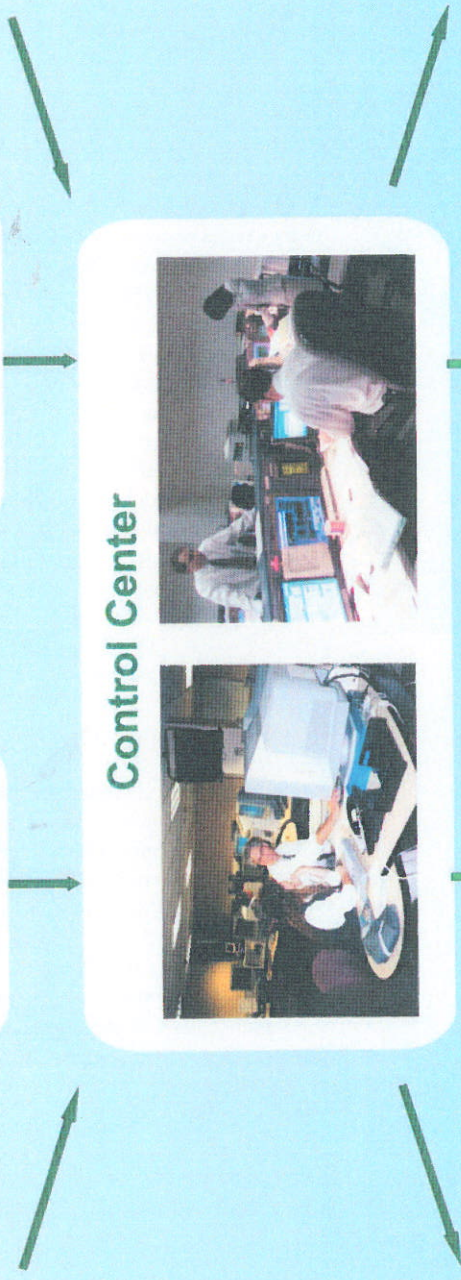


15°C temperature compensation
Alarm functions
Data control (like PC/internet)

Probes



Quality control
Accurate measurements
Different oil products



Applications:

**Bunkering
inland waterways**



Bunkering - overseas, maritime transport



Offshore platforms

