

Gröninger *news*

Cleaning Systems for transport, logistics, offshore, industrial and environmental services companies Winter 2012/2013



Jerrycans Tank Trucks
Bulk Trucks Barrels IBCs
Railcars **ISO containers**

Intro

Europe is experiencing turbulent times, with uncertainty being the only certainty. On the one hand, this situation will obviously lead to a worsening investment climate, but on the other hand, the increasing pressure to implement savings and efficiency programs, with the increasing awareness in the field of sustainable entrepreneurship, creates additional opportunities for Gröninger and its customer base.

Outside Europe, in particular in the Middle East and Asia, major investments are being made in production facilities and related infrastructure projects. For the latter, tank cleaning plays an important role and Gröninger is facing an increasingly strong demand for cleaning solutions from this region.

This newsletter describes a number of high profile and unique projects that we have completed over the recent months. With this newsletter we would like to thank all our customers

for placing their trust in us, and as always, we always remain available to respond to questions on any queries related to the bulk liquid transport cleaning industry.

The Gröninger team



In Memoriam

On 19 December 2011, Ralph Gröninger died at the age of 66. His commitment and technical enthusiasm partly laid the basis for the company as it is now.

Ralph was the first mover in the tank cleaning world and he was responsible for many technical developments that led to the present product range. His characteristic appearance and dry sense of humour did not only make him a person who was much appreciated for his technical skills, but above all a pleasant person to work with. The Gröninger staff still draws from his extensive legacy every day. We won't forget him.

IBC Cleaning for Schütz in Shanghai

The German company Schütz GmbH from Selters is known world-wide for the manufacture of IBCs. It has a branch in Shanghai where returned IBC's are cleaned and reconditioned. Schütz asked Gröninger to develop a system for the cleaning, vacuuming and drying of IBCs. One of the criteria in the system design was that the rinsing water must be reused.

The design of the final cleaning system design incorporated the use of three containers in which the various process equipment was installed:

- One 20 ft. container held the equipment for cleaning the internal and external cleaning of IBC's.
- One 20 ft. container held the equipment for the vacuuming and drying of IBCs.
- One 40 ft. container held the built-in high-pressure pumps, dryer, PLC control cabinet and water treatment system.

After a four week transit by sea, the system arrived in China where roller conveyors and a leakage test system were added. Cleaning technology constructed in containers so that the system can be used anywhere in the world is the future trend for the industry! □





Fourcee takes an enormous step forward

In August 2010, Gröninger entered into a contract for the phased delivery of four cleaning systems to Fourcee Infrastructure & Equipments Pvt. Ltd. in India.

Fourcee is one of the most progressive logistic service providers in India and a pioneer when it comes to intermodal solutions. The company is specialised in the transport of fluids, such as non-petroleum oils, lubricants, fatty acids, palm oil, molasses and chemicals, by rail, tank truck and tank containers. The four systems were built and tested in Schiedam, with the first system for Kandla (Ghandidham) now having been delivered and in use. Kandla is an important hub and the most important port in the West of India, being a transport corridor for export and import goods. The other three systems are intended for depot operations in Hazira, Mumbai and Jamnagar.

These new systems can perform approx. 75-100 container and tank truck cleanings per day depending on the shifts worked. The equipment specified featured pumps that are fed with cold as well as hot water. Hot water is created by steam injection into a hot water buffer tank, which is located on the roof of the technical container. The complete suite of washing programmes provided are fully automatic but can also be manually operated. The on-site work was carried out in close collaboration with Fourcee and a group of local contractors who when supplied with a detailed set of information and drawings were able to provide the civil and technical support together with the construction of the complete piping system. As all technical equipment was contained in a 40 ft. sea container, the complete system could be installed as a “plug and play” concept within a fortnight. The service and support from the Schiedam technical support division worked exceptionally well through the



use of modern electronic communications such as Skype and VPN connections, which allowed remote access of the operations.

Fourcee is experiencing dramatic growth and the company already handles of thousands of tank containers. These are efficiently and effectively used through a network of depots as logistic hubs. We wish the management great success in their effort to turn these turbulent times into a profitable venture and look forward to being Fourcee's main cleaning partner for many decades to come □

CSA Amsterdam renovates and expands

At the end of 2011, the Amsterdamse Tank Reiniging was taken over by the Simadan Group and its name was changed into Cleaning Services Amsterdam (CSA). With this purchase Simadan was further able to expand



its portfolio of services. Together with various other companies, Simadan is active in the area of collecting and processing organic residuals, trade in vegetable oils and animal fats, producing biodiesel from second-generation feedstock and operating a tank park. The various processes are incorporated under the "Greenmills Concept" in the port of Amsterdam. This concept integrates process technology and industrial processes to allow high levels of use of each other's (residual) products and raw material needs. In short, they aim for maximum returns from organic waste.

After the take-over, CSA instructed Gröninger to expand the existing cleaning system and to thoroughly refurbish it. The purpose was twofold, first to reduce the waiting times and second to ensure a reliable system for the next few years. The reduction of the waiting times was

achieved by the addition of a high-pressure feeding pump and an additional washing bay. With this change, CSA was able to create four washing bays in total, which will significantly reduce waiting times. In addition, a brush wash system was installed in the additional washing bay to enable trucks to be externally cleaned. Drying times have been reduced from 15 to 8 minutes by replacing the dryer system.

The complete switchboard with PLC command, including all control panels and cabling, was replaced in order to guarantee reliability. This job required significant preparation and tight project management. To achieve this, the washing bays were brought into the new operating system one by one and the work was carried out over the weekend, so that daily activities could continue without any hindrance. □

Van Vliet Contrans

Refuse collection company Van Vliet Contrans in Wateringen (NL) has, for years, used many trucks, dumpers and cranes for its recycling activities. Van Vliet Contrans' vehicle fleet is maintained in house. Cleaning is an important part of maintenance of the vehicle fleet. Van Vliet Contrans realised that major savings could be achieved in the maintenance of its vehicle fleet, by modernising its existing washing facilities.

In the past, cleaning was always done by 12 people who cleaned all vehicles, one after each other. Thanks to the newly installed professional cleaning system six people now clean the same amount of vehicles.

The system installed consists of two high-pressure pumps, which are each separately fed with cold or hot water. Hot water is produced by an industrial tap water boiler. Road grime, general dirt adherence from recycling activities or that attracted



by static, is effectively removed by the thick foam of the Gröninger Foampack. The Foampack delivers great savings on detergents for Van Vliet Contrans, as its use is minimised through the use of process controlled dosing equipment.

We wish Van Vliet Contrans great success with their new system. □



Tank Services Pernis (TSP)

Traditionally the main focus of Tanks Services Pernis' (formerly Vos Logistics) was on the cleaning of chemically polluted tank containers. After its take-over in 2007 by the Belgian Tack Group, a review of the activities was undertaken. This showed that the cleaning of food would result in even stronger growth. For that reason TSP decided to give Gröninger instructions to undertake the construction of three additional food washing bays.

As TSP could not meet the increasing demand in the Rotterdam area with only one special food washing bay, it was decided to rebuild two existing repair bays into three new food washing bays. The new washing bays were fully equipped to perform cleaning in compliance with the ATCN Hygiene Code and HACCP standards. Four separate cleaning programmes can be performed at the same time in the new washing bays.

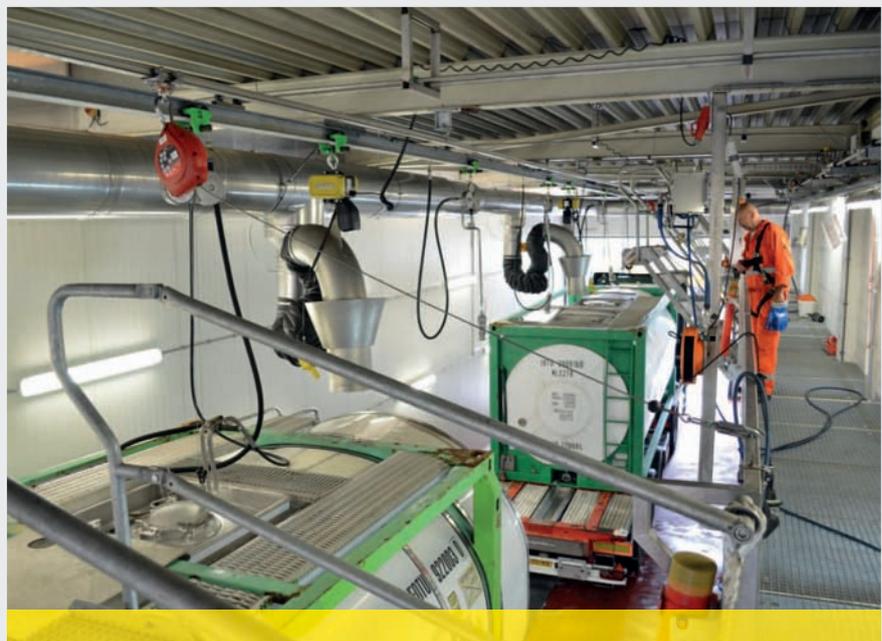
One of TSP's new requirements is the transparency and traceability of cleanings completed. Various sensors and valves in the system are connected to the central PLC. This data is then interpreted by the underlying analysis software. This software makes it possible to view which parameters (pressure,

volume, temperature, chemicals, time) were used for each cleaning. These parameters are also available live to the operator so that immediate action can be taken if deviations are detected. Also, various parameters can be automatically monitored to meet the customer's quality requirements. The customer-specific procedures are tailor-made programmes and are also fully automatically monitored.

The use of water is significantly reduced by injecting steam through the washing heads, and also the sterilisation/ disinfection process of the tank can be incorporated into the programme.

This important step can be fully validated as a result. The new drying system is equipped with food grade filters and has sufficient power to operate four washing bays at the same time.

TSP is ready for the future with the new expansion of its food washing bays, together with the incorporation of an independent repair centre and the previous installation of a Gröninger automated latex recirculation unit. We wish them every success with their future. □



Shipbuilders choose Gröninger

Systems designed for use at sea require different standards than those that apply on land. As ships are at sea for a longer time periods, systems must be solidly designed. Gröninger have delivered a great number of high-pressure ship units in a short time to shipyards and ship owners, including Van Oord en Vroon.

Van Oord

In 2011, the cutter suction dredger Athena was put into service. With its length of 130 meters, it is the largest cutter suction dredger ever built in the Netherlands for a Dutch dredging company. The Artemis, the sister ship of the Athena, is currently being built. A cutter suction dredger is a machine that loosens material on the soil with its rotating cutting head. This material is sucked up by centrifugal pumps.

Dirt will release during this process, which will be sprayed away with high-pressure pistols. Gröninger supplied the central high-pressure units for both ships. The pump delivers 200 bar and can feed up to three pistols at the same time. Thanks to the

self-cleaning filter the system can both be fed by both sea water and fresh water.

Vroon

Livestock Express B.V. is part of Vroon B.V. in Breskens (NL). The company has nine so-called livestock carriers in service for the shipment of livestock such as cows, sheep, goats and pigs. In the coming years, four additional livestock carriers will be put into service with a capacity of approx. 4,000 animals of 350 kilos each.

The animals are kept in stables on three different decks during the journey. The stables are cleaned with high-pressure during and after the journey. Gröninger will supply three high-pressure units for each ship. These ships are being built in China. The systems are completely manufactured in stainless steel to allow sea water to be used. □





From left to right: Berthold Schaap, Pasupathy, Asif Mohamed, Henk Klein and Orlando Dulay

Latex cleaning

In recent times another two companies choose to install the Gröninger latex cleaning system. They are Tank Services Pernis (TSP) and Joint Tank Services FZCO (JTS), a Joint Venture between Stolt-Nielsen and Yusuf Bin Ahmed Kanoo.

As one-stop-shop service providers both these depots focus on tank containers in Rotterdam and Dammam respectively. Besides repair, storage and heating services, cleaning services also form an

important part of their operations. Much manual labour was traditionally involved in the cleaning of latex polluted containers. To reduce the costs, both companies choose to invest in an automated Gröninger solution.

The latex systems operate using the principle of recirculation, which is assisted in the cleaning process by the use of a chemical detergent. By heating the chemical solution up to 90°C the cleaning performance is substantially increased.

To maintain constant temperature and reduce cooling during cleaning the system employs the use of a steam heat exchanger.

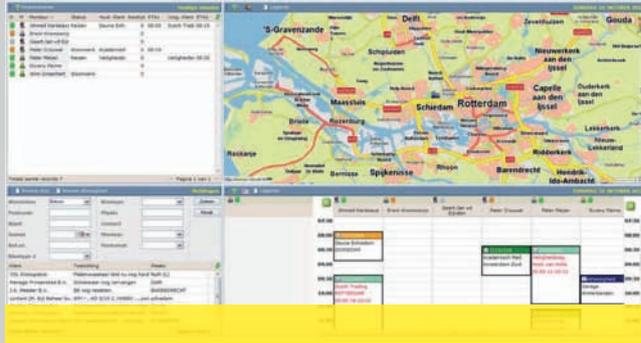
During engineering of the system design, attention was not only paid to the system's cleaning effectiveness but also the operators' safety which was ensured with load cells and armoured hoses being specified to minimise any risks of working with dangerous substances. □



News items

Digital service

Since 1 January 2012, our service department has been operating digitally. Service calls and maintenance appointments are entered into our service system and workslips are dealt with digitally by a smartphone. The new system is fully integrated with our SAP business One system and is expected to improve the planning and availability of components for our customers – and provide a reduction in administrative work. Our service organisation will increasingly be able to focus on its core task, namely to provide good service to our customers. Communication tools such as Skype, VPN connections and remotely taking control of operations will be used more and more. □



New activity in Greup

Activities were restarted with the take-over of the tank cleaning in Greup (NL) by Overmeer Transport. These activities were halted because the Reedijk brothers had stopped in 2011. However the system was still in excellent condition after 12 years, which allowed for the equipment to be easily started and commence operations again.

Apart from tank cleaning, Overmeer Transport also provides depot and repair services for tank containers. Five extra steam points have been provided to heat up the containers. As these are equipped with temperature controls, containers can be maintained at a preset temperature.

The company also specialises in providing services to flexitanks where the products carried are often sensitive to temperature. For that reason Overmeer Transport chose to invest in a hot water heating unit, which circulates hot water across the container to gradually warm up the contents. □



Ongoing projects

NTC tank cleaning – Rotterdam Botlek (NL)

Cleaning station at a tank container depot

Roger Heinen – Eupen (B)

Tank cleaning for a growing family business

Samco / Samsung engineering – Damman (KSA)

On site cleaning unit for acrylic acid plant

Kanoo Terminal Services – Damman (KSA)

Tank container cleaning in a depot

Stalduinen – Maasdijk (NL)

Tank cleaning at an existing location

Marine Services – Vietnam

Tank Cleaning in Ho Chi Minh

Lehnkering – Axel (NL)

Latex cleaning system

Stolt Nielsen – Moerdijk (NL)

Cleaning station at a tank container depot

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