

Tank Cleaning Magazine

SUMMER 2015

Issue 2 Volume 2



I do declare

Prior to tank cleaning, it is vital that the last cargo is correctly declared

The jury's out

Companies need to maximise product quality and minimise contamination to avoid legal implications



Tank Cleaning Magazine

SUMMER 2015

VOLUME 2 ISSUE 2

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COMMENT

Dear reader,

Welcome to the latest issue of *Tank Cleaning magazine*, which, we are happy to announce, is our largest to date. Thank you to all of our supporters and we look forward to working with you as our publication continues to grow.

The magazine is published quarterly, but with our new Twitter handle you don't have to wait to find out what the industry is talking about. So follow us @tankcleaningmag to stay abreast of the latest technological developments and projects within the tank cleaning sector, and also join our LinkedIn discussion group 'Tank Cleaning Magazine'.

If you are attending the Transport Logistic 2015/ITCO Tank Container Village exhibitions in Munich at the beginning of May, why not pick up your complimentary copy? Magazines will be available at DVTI's stand (401 in hall B4) and a member of the TCM team will also be on hand and happy to answer any questions you have. We look forward to meeting you there!

If you have an exciting new project that you'd like to see featured, or are interested in writing an article for the next issue, please don't hesitate to contact us. As always, we hope you enjoy the magazine and welcome your feedback.

Keeley Downey
Editor



@tankcleaningmag



Tank Cleaning Magazine

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Front cover
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Tank Cleaning –
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Systems BV (NL)

EFTCO

FOOD ASSESSMENT

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ITCO Tank Container Village set to be the biggest yet

This year's ITCO Tank Container Village – organised as part of the Transport Logistic 2015 exhibition taking place in Munich, Germany, in May – is set to be the biggest one so far arranged by the association.

Comprising 56 exhibition stands and over 60 ITCO members in total, the 2015 Village represents a 15% increase over 2013, which in turn was 20% larger than in 2011. Located in Hall B4 of the New Munich Trade Show Centre, the 2015 Tank Container Village will again offer ITCO members, exhibitors and visitors an important opportunity to meet their customers and partners in a dedicated and professional environment.

The growth in the size of the exhibition reflects the



growing range of products and services that ITCO is offering to its members, as well as the increasing membership of the Organisation. ITCO will be showcasing a number of initiatives that it has been developing over the past year. These include an

e-learning course, a work group focusing on 'corporate responsibility in the tank container industry', and the publication of 'Recommended Guidelines for Tracking Systems on Tank Containers'.

In addition, ITCO will publish the latest version of its annual

'Global Tank Container Fleet Survey', providing a resource for all industry stakeholders, giving data about the size, ownership and growth of the world's tank container fleet. ITCO will also re-launch its website, in time for the show.

ITCO members exhibiting in the Village will be displaying a range of equipment and services, with the majority of the world's leading tank container operators, leasing companies, manufacturers and component suppliers taking part. In addition, there will be tank container surveyors and inspection companies, together with a number of leading tank cleaning and repair facilities.

Visitors to Transport Logistic 2015 will find the Tank Container Village in Hall B4 (stand 221/322 and 225/326). ■

A returning customer

Wagon hire and rail logistics company VTG Aktiengesellschaft is exhibiting at this year's Transport Logistic event in Munich.

This year, the company will be represented by its railcar division with AAE AhausAlstätter Eisenbahn and the wagon construction plant Waggonbau Graaff, as well as its rail logistics and tank container divisions. At the beginning of this year VTG acquired the Swiss wagon hiring company AAE, thus expanding its position as the largest private wagon hire company in Europe.

At the show, AAE is presenting the latest addition to the wagon fleet: a 40' container wagon. Such wagons are approved for combined transport with a loading weight of up to 72.5 tonnes and are ideally suited for 20' tank and bulk containers or heavy 40' containers.



VTG Tank Container Logistics is exhibiting at the ITCO Container Village

Waggonbau Graaff's will be exhibiting its new 77m³ chemical tank wagon, which has been optimised in its construction in terms of weight and volume compared to both the 75m³ and the 72m³ wagon equivalents.

VTG Tank Container Logistics services will be exhibiting once

again this year in the ITCO Village. This year visitors can get a hands-on impression in the open air area with the tank container, used in continental traffic, which VOTG is displaying on AAE's intermodal wagon. A key advantage of these 'swap containers', which also carry out overseas

transport, is greater loading capacity in comparison to the conventional 20' tank containers.

VTG Tank Container Logistics (VOTG) will be in Hall B4, booth 221/322 inside the ITCO Container Village, as well as open air, platform 3/1 from 5-8 May. ■

Tank cleaning in Zone 0

Reactors and autoclaves, containers, barrels, railroad cars and road tankers from various industry branches have to be cleaned and recycled. The containers are cleaned inside and outside to remove plaster, lacquer, paints and similar substances before refilling and thus meeting the high quality requirements. Cleaning systems from URACA, a developer and manufacturer of moto-driven high pressure pumps, offer optimal cleaning results. The procedure is subject to ecological high pressure technology.

By means of high pressure water, various incrustations can be removed inside of autoclaves, reactors, spray towers and vessels. The pump unit discharges high pressure water of up to 1,600bar through the URACA tank cleaning head nozzles. The water jet cuts through the deposits, removing hard incrustations by means of precise rotating movement thus reaching the inner surfaces in an optimal way.

Thanks to its examination certificate according to EC directive 94/9/EC for category 1, URACA tank cleaning heads series TWK are permitted to be used in explosion proof areas zone 0 and zone 20. Optimised displacement circle diameter allows use of cleaning heads even with small access openings.

URACA's high pressure water cleaning of vessels is a pollution-free procedure without chemical additives, mechanical tools or boiling. The wastewater is disposed of once it has been separated from the cleaning products. Compared with former methods, the cleaning cycles are now shorter and the cleaning effect better.

In order to achieve optimal cleaning results, the correct positioning of the tank cleaning head is of great importance. Due to the positioning device and the hose reel system being adapted to the geometry of the vessel, specific cleaning operations can be carried out. Custom-made cleaning



Tank cleaning heads from URACA with EC-type examination certificate for ATEX Zone 0

systems are built for a variety of applications, e.g. TWK Trunk-O-Jet suitable for the cleaning of rail-road cars; hose

reel systems for the cleaning of reactors; and automatic systems for the cleaning of tanks, barrels and vessels. ■

Fire at Boasso America building

On 9 March a fire broke out at a Boasso America commercial building in Newark, New Jersey, US following an explosion.

Boasso America's Newark Terminal offers empty and loaded handling, cleaning heating, pressure and statutory testing, modification, empty and loaded storage, and full refurbishment of 20' ISO tank containers.

The area around the facility was evacuated and

four people were injured in the incident, according to reports. Fire departments from Newark, Nutley and Elizabeth responded to the blaze, and the state's Department of Environmental Protection and PSE & G also came to the scene.

The fire was brought under control by the evening. An investigation into the cause of the explosion is now underway. ■

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J D Neuhaus hoists give tank cleaning a lift

More and more companies are turning to air-operated hoists for effective ways to clean storage tanks. These lifting devices, which offer precise load placement control through convenient hand pendants, are also being used successfully for truck tank cleaning operations. Today, J D Neuhaus (JDN) air-operated hoists are deployed in a variety of transport tank cleaning applications, including road and rail transit tankers and marine transporters.

Typically, injector heads with nozzles are used to clean inside these vessels by dispensing hot/cold water or steam at high pressures. If required, sometimes solvents are also included in the cleaning solution. JDN hoists lift, support and position the injector heads to ensure a thorough clean. For ease of traversing, overhead rail trolleys are mounted to the hoists, to ensure the entire internal area of the tank is efficiently washed and cleaned.

Another reason JDN air hoists

are being used is because the compressed air power used for all operations is intrinsically safe. In fact, JDN air-operated hoists are Ex-rated, which makes them suitable for deployment wherever highly volatile liquids or chemicals are transported or stored. JDN equipment also incorporates increased spark protection for use in hazardous areas. For heavy duty applications, JDN Profi TI series hoists are fast and energy efficient. Available with different controls to suit specific customer requirements, Profi TI hoists operate at an air pressure of 4 to 6bar and are suitable for loads from 250kg to 100 tonnes. Infinitely variable speed control is supplemented by a host of features that make Profi TI hoists increasingly popular for tank cleaning duties, such as explosion protection, fail-safe starting conditions, easy operation, low headroom, sound absorption and insensitivity to dust, humidity and temperatures



J D Neuhaus air operated hoist in operation for precise handling of pressure injection head during tank cleaning operation

from -20°C to +70°C.

Furthermore, upkeep costs are alleviated thanks to design factors like the low maintenance vane motor and dust-proof, maintenance-free ball bearings. The hoists

are also suitable for lube-free operation. The standard safety rating for these products is EX II 2 GD IIA T4/EX II 3 GD IIB T4. Increased spark protection is also available to achieve EX II 2 GD IIC T4 accreditation. ■

Den Hartogh Cleaning opens second food line in Dordrecht

Den Hartogh Cleaning has opened a second food line in Dordrecht, the Netherlands. This, the company says, is in response to global developments, such as the establishment of an increasing number of major chemical factories outside Europe.

These market changes meant Den Hartogh Cleaning Dordrecht had an increasing amount of excess capacity for chemical cleaning but a shortage for cleaning food tanks.

The company's management team

raised the issue of a second food line in Dordrecht with the board of Den Hartogh and, in July last year, the project was given the go-ahead.

Ground broke on the new facility in October 2014, following the completion of preparatory work such as demolishing the existing installation and thoroughly cleaning the soil. The new line, which meets all modern requirements, was built in two and a half months under the supervision of the Den Hartogh Cleaning technical service.

Cleaning according to HACCP or SGF procedures is possible, as is working in accordance with the customer's detailed instructions. A complete monitoring system, in which all data is stored, provides complete insight into the process, such as the quantities of soap and water used, and also the procedure followed.

The doubling of capacity in Dordrecht offers Den Hartogh Cleanings' customers, such as Albert Keijzer Transport, the possibility to clean more often and with shorter waiting times. ■

Cleaning Guard receives accreditation from SGF

The Cleaning Guard system for tank container cleaning has been audited and accredited by Sure Global Fair (SGF).

Cleaning Guard was developed by Gröninger Cleaning Systems, a supplier of high-pressure cleaning systems, and Lucrasoft Solutions as a specific module within their MainPro management software, which is used by many tank cleaning companies worldwide. The development took place in cooperation with Tank Cleaning Europort, an innovator and operator in the tank cleaning industry. The system validates and controls tank cleaning processes, giving customers the highest quality of cleaning.

The Cleaning Guard module, while initially designed for the food sector, also offers solutions for other industries. A Gröninger Tank Cleaning System combined with MainPro Cleaning Base software provides operators with the key requirements for the implementation of Cleaning Guard. The system can be implemented standalone as well.

MainPro Cleaning Base is the user friendly software base that plays a pivotal role in every cleaning. The entire process – from acceptance to invoicing – is managed and fully automated in one single application that controls client data, previous products and wash programmes in one basic solution. It ensures that tank cleaning stations and their customers (carriers, shippers and end customers) are provided a high quality

of tank cleaning service.

Operational and human errors are minimised through automated programme selection and control via the PLC, by matching the pre-established programme to the tank using a unique identifying number. The programme that is selected to clean the tank includes certain (safety) regulations and sets out the requirements, by giving instructions to the operator. This information is reproduced on the cleaning instruction. Entering the unique identifying number on the control panel of the wash bay ensures the system always starts the correct wash programme (input control). As additional tasks, such as the cleaning of hoses and pipes, drying, etc. have already been established, the operator can effectively perform the tank cleaning.

Cleaning Guard ensures the correct execution of cleaning registering hardware information in the software. Data on (water) pressure, flow, dosage of detergents, disinfectant and temperature, etc. are recorded in the wash bay through special sensors and gauges (output control). This data is continuously validated through a link to the PLC. If one of the parameters does not correspond to the programme requirements or the pre-set values, the PLC will repeat the previous step in the wash programme. Based on this principle, the quality and validation of the entire tank cleaning process using the MainPro Cleaning Guard module is verified.



Tank cleaning operator at work

The values of the different parameters such as pressure, temperature, flow, etc., are constantly measured during the cleaning. A client certificate will provide both graphic and numeric data. The MainPro Cleaning Guard is proof that the cleaning has been completed as

specified. If the cleaning is performed adequately, the MainPro Cleaning Base issues a European Cleaning Document (ECD) to confirm the cleaning method has been executed in accordance with the requirements. It is also possible to design customised certificates. ■



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New acquisition for waste management group

Independent waste management company Cleansing Service Group (CSG) is continuing to expand with its fifth business acquisition in two years.

In early 2015 the company confirmed it acquired part of the business and assets of Sandycroft, North Wales-based Tradebe Refinery Services (TRS), formerly known as Willacy Oil Services. Willacy, founded in 1989, is a specialist in petrochemical tank cleaning and oily sludge treatment and recovery systems.

International environmental services group Tradebe bought a major shareholding in the business in 2003 and completed a takeover in 2006. It changed its name to Tradebe Refinery Services in 2012, but ceased trading at its Sandycroft site in December last year.

CSG says it has now acquired the one-acre site and is currently looking to re-establish the business. The company will also retain its former Willacy Oil Services trading name.

CSG managing director Neil Richards says: 'Willacy have worked on refineries in the UK and around the world and the name is well recognised in the oil industry.'

Services carried out from

A Willacy processing system located in a refinery tank farm



Sandycroft include tank cleaning, lagoon cleaning, sludge processing, equipment manufacturing and refurbishing and spot survey sludge profiling for the oil refinery industry

Fareham-based CSG views this latest acquisition as another step towards its expansion programme, especially in the valuable waste oil recovery market in which it is already a major player. CSG has invested heavily in new technology designed to treat polluting oily water

wastes which can be converted into fuel oil for industrial use, and says it already has the capacity to recover some 5 million litres of oil each year.

CSG has been growing steadily over the years. Today it owns brand names such as J&G Environmental, Lanstar, Lloyds Environmental, Sealand and Saxon Recycling. In 2014 it acquired part of Augean's waste network division as well as the waste oil collection and processing firm Oil Monster. ■

Joe Schuermann named as EFTCO president

On 19 February, members of the European Federation of Tank Cleaning Associations (EFTCO) met at the Barcelo Sants hotel in Barcelona, Spain.

During the meeting, members voted for Joe Schuermann to succeed Erwig Seliaerts as president of the federation.

Schuermann has thanked the former president for his 'excellent work over the years'. Seliaerts will continue as a board director and remain the EFTCO contact to CEFIC and ECTA.

Going forwards, EFTCO says it will continue to:

- Further protect and promote the ECD
- Establish rules and guidelines for cleaning stations concerning environmental protection and saving natural resources
- Implement standards relating to operational safety for cleaning stations
- Establish guidelines for the cleaning station concerning the requirements of the local authorities. ■

Control of tank cleaning stations

SGF International (SGF) has added a Voluntary Control System (VCS) for tank cleaning stations offering food cleaning, closing the control gap in the fruit juice supply chain. The VCS includes the cleaning of tank cars, containers and intermediate bulk containers for liquid foodstuff only. Cleaning stations must apply for SGF 'extraordinary membership' before the certification process can begin.

Cleaning stations are only recommended to apply for certification if they fulfil the following requirements:

- A complete HACCP analysis must be present
- A suitable process data monitoring and traceability system must be installed
- The food cleaning must be exclusively carried out with water in compliance with the EC Directive 98/83
- Food cleaning and chemical cleaning bays must be clearly separated

Certification is not possible until these requirements have been fulfilled. Visit www.sgf.org for more information. ■

Efficient and sustainable tank cleaning

GEA Breconcherry offers a range of tank cleaning equipment, designed to meet the varying requirements within the brewing and beverage industries.

The cleaners can be used in tanks with diameters of up to 33m at flow rates of up to 66.7m³/h. The operating pressure range varies between 0.5 and 90bars.

The latest additions to GEA Breconcherry's range of equipment are the orbital cleaner Tornado 4, with a cleaning diameter of up to 33m, and the compact orbital cleaner Twister, fitting through tank openings of just 100mm in diameter.

In the hygienic process industry, requirements in tank cleaning have changed over the past few years. Today, efficiency and sustainability are of the utmost importance. At the same time processors also demand continual improvements of cleaning results as they pay ever-increasing attention to the critical importance of hygiene in their product processing, and its impact on sales and profits.

The specially designed cleaning heads of GEA Breconcherry's tank cleaning equipment require the minimum use of cleaning liquids and achieve a strong, mechanical spray pattern for best results. Almost all units can be



GEA Breconcherry orbital, rotating and static cleaners

optionally used in hazardous areas.

The majority of cleaners are driven entirely by the cleaning fluid without the need for external energy. A specially developed sensor system that can be mounted to the vessel is used for monitoring the function of orbital cleaners. If within

a defined period of time no change of liquid passing the sensor is detected, the output signal of the sensor changes and gives a malfunction as feedback. ■

NewPort opens new office in India

Earlier this year NewPort announced the opening of its new office in Mumbai, making it the first global tank container operator to have an office in India.

The new office, NewPort said in a statement, supports the company's global growth strategy, allowing it to provide 'best in class' service to its Indian customers and further develop the local market.

'Opening NewPort India Pvt. supports our global growth strategy,' explains Michael de Rijk, CEO of

NewPort Tank Containers. 'Our goal is to get closer to our customers, especially in key markets around the globe. Through our own global office network, we're able to develop a stronger relationship with our customers which allows us to support their strategic initiatives.'

Headquartered in the Netherlands, NewPort has offices in the US, Mexico, Brazil, France, Germany, Dubai, Saudi Arabia, India, Korea, China, Singapore and Australia. ■

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Time for a standardised certificate?

Demand for qualified tank cleaning facilities around the world continues to grow. A major challenge is to develop a standard cleaning certificate system. ITCO explains the key issues

Tank container operators and tank cleaners have a mutual interest. The growth and development of tank container operations globally is dependent upon there being suitable cleaning stations available in the many – and diverse – locations and routes where tank containers trade. The more tank containers that are in, the more economically viable it is to provide tank cleaning services. Uniform standards are paramount to the successful operation of the tank container.

Last year, the International Tank Container Organisation (ITCO) published a Code of Practice for both depots and clients, with the purpose of encouraging both parties to agree on industry standard procedures and processes. Time and money are both lost when non-standard procedures are required.

Cleaning certificates

One of the 'non-standard' issues facing the tank container industry is the cleaning certificate – an important safety and operational document that is a prime requirement of safe tank operations. However, it is a document that the tank container industry continues to struggle to standardise.

It starts with the problem that there are differing cleaning documents that are often referred to as a 'cleaning certificate', but are in reality one of the following:

- A 'cleaning receipt' (also known as a wash ticket) – issued by the cleaning contractor
- An EFTCO document – issued in Europe by an EFTCO approved contractor
- A cleaning document (or cleaning certificate) – issued by a qualified surveyor after inspection. This may correspond to the ITCO ACC (Acceptable Container Condition) format
- An 'entry certificate' – issued by a qualified person in order that personnel may safely carry out required tasks. (NB: There are regulations which govern entry certificate requirements.)

Last cargo

Crucial to a safe and efficient process is access to full and proper information about the last cargo. Without this information no action relating to cleaning should take place. The following is essential:

- The information must be in writing and in a language(s) that all parties understand
- Regional regulations might apply governing language requirements that concern safety
- UN number and proper shipping name (PSN) must be reported.

Details of the required reporting of cargo names are indicated in the table below. One important thing to note is that UN numbers do not apply to non-regulated cargo (commonly referred to as 'non-dangerous' or 'non-hazardous'). Nevertheless, such substances may be dangerous, albeit below the requirements for classification, and should be handled with appropriate safe procedures.

Where the PSN is 'NOS' (not otherwise specified), it should be supplemented by the technical name (the recognised chemical name of the constituents of the substance). This also applies where the PSN is not fully descriptive.

It is cause for concern that tank cleaners might not record the full PSN on the cleaning document.

Different standards

Cleaning may be undertaken to one

Cargo name reporting	Required
UN number	YES
Proper shipping name	YES
Technical name (if PSN is N.O.S.)	YES
Abbreviation	NO
Common name (in addition to PSN)	YES
Brand name	NO
Proprietary name	NO
Under pressure or inert gas	YES

of a number of standards according to client needs and the tank cleaner needs to be informed in advance:

- 'Clean to standard' defined by an industry body (e.g. EFTCO or a specified alternative)
- Visually clean and verified by full interior inspection
- Clean to lease off-hire standard ACC
- Toxic clean (top outlet only)
- Food grade clean
- Action in event of cargo residue
- Valves and fittings cleaned in-situ as standard. Inform depot in the event of special requirements
- Man-lid seals are cleaned as standard or if not cleanable (due to condition/last cargo) replaced at tariff cost.

It is important that, if the tank is under pressure or inert blanket, or has contained an inert gas, the tank cleaner must be informed in advance. Each clean tank must be issued with a cleaning document detailing at least the minimum requirements.

The use of the EFTCO cleaning document is in part a benefit but there are issues. The certificate is brief in its content compared with the detailed ITCO document. Nevertheless shippers are known to insist on this specific EFTCO document. This can mean that a properly cleaned tank supporting a detailed ITCO document that is issued after a thorough internal inspection by an authorised and independent surveyor is required to be re-cleaned simply to obtain the EFTCO format document. Since this invariably requires the tank to be transported from a tank storage depot to an EFTCO cleaning station it results in costs of tracking, cleaning and lost time and not least environmental costs. ■

For more information:

Examples of cleaning documents can be found in the appendix of the ITCO Depot/Client Code of Practice Appendix; www.itco.be/download/CodePractice-GuidingPrinciplesDepot-ClientManagement-v1-March14.pdf

This article was written by Colin Rubery, ITCO technical secretary. Visit: www.itco.org

Food safety and defence

Information about the EFTCO Food Assessment

The EFTCO (European Federation of Tank Cleaning Organisations) Food Assessment is the result of an international work group within EFTCO. This work group was supported by the national associations of the tank cleaning stations under the leadership of DVTI (German association of tank cleaning stations) and was first implemented in September 2013.

The EFTCO Food Assessment is a supplementary part of the Safety & Quality Assessment System (SQAS) tank cleaning assessment. Over the years, quality demands from the loading industry and its related associations have steadily grown in relation to food safety and food defence.

The EFTCO Food Assessment provides a worthwhile supplement and a European solution to the

SQAS assessments for the wash bays which handle foodstuff cleaning.

The aim of the work group was to integrate the European legislation into the EFTCO Food questionnaire. During the compilation of the questionnaire, it had to be taken into consideration that there were no special legal requirements for foodstuff cleaning. For that reason the general legal requirements are listed in the comments of the questionnaire.

The aim was to achieve a practical solution which would benefit all parties, i.e. the loading industry, the transport companies and the tank cleaning stations.

A complete EFTCO Food Assessment consists of three parts:

1. SQAS core with general management, quality and safety questions
2. SQAS tank cleaning with general tank cleaning questions
3. EFTCO food assessment questionnaire with food specific questions

The EFTCO Food Assessment documentation does not include a rating. It does, however, include all the information necessary for the food industry and its transport logistics partner to arrange a rating based on the individual demand for food cleaning.

The audit results are available to all registered and authorised parties on EFTCO's internet platform for individual quality rating. The quality rating of the

audit results are subject to individual/specific standards of the food industry and can only be executed by the industry and/or their logistic partners.

All food cleaning stations carrying out this assessment across Europe are authorised to use the EFTCO Food logo.

EFTCO represents approximately 500 European tank cleaning stations, which are members of one of the 22 national tank cleaning associations. All cleaning stations which are members of EFTCO-related national associations use the standardised European Cleaning Document (ECD) for the documentation of cleaning.

The ECD is widely accepted across Europe and uses cross-linguistic EFTCO codes, which provide a documentation of progressed tank cleaning and equipment accessories.

Food related codes provide the documentation of food cleaning and the preparation of the tank transport equipment for loading food.

With feedback from the food industry, cleaning stations and transport service providers, EFTCO is currently working to improve this assessment and make the EFTCO Food Assessment the industry standard. ■

For more information:

This article was written by Lutz Harder, general manager at DVTI and work group leader for EFTCO Food. Visit: www.eftco.org

EFTCO FOOD CODES

Foodstuffs

F01	Cleaning with potable water only
F50	Food approved detergent
F51	Food approved sanitising agent
F60	Turbidity measurement
F61	Conductivity measurement
F62	ATP measurement
F63	pH-value measurement
F64	Membrane filter test
F65	Allergen test
F85	Sanitising with hydrogen peroxide
F86	Sanitising with peracetic acid

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Looking behind the headlines

The food industry has been hit hard over the years, with bad press ranging from the BSE outbreak to the more recent horse meat scandal. And with good reason – when it comes to food safety, there is no room for compromise

Standards for food safety must be upheld throughout the supply chain and transportation plays a significant role in this. Nowadays perishable goods such as fresh meat and vegetables can be transported hundreds of miles to reach their final destination.

The potential risks of cutting corners are far higher than just hitting the headlines, the consequences can ruin a company and in some cases may even be fatal.

Back in 2011 an E.coli outbreak killed 53 people, mostly in Germany. The source of the infection was later traced back to fresh vegetables and was blamed on transport equipment that had not been cleaned properly. Instances like this show just how important it is to control and monitor tankers throughout the supply chain.

Cleaning regulations

Policy in this area has been evolving over the past few years. The first step was made by ATCN, the Dutch tank cleaning association, who created the ATCN Hygiene code in 2003. It was and still is a

proper standard and guideline for cleaning equipment used for food transport.

The German tank cleaning association DVTI then created a working group in September 2007 to integrate food cleaning into the complete cleaning process.

One of the main reasons behind this initiative was that the legislation had a very vague definition about the hygiene requirements for food transportation equipment. The aim of the work group was to establish a proper international standard, specific to food cleaning.

Many chemical companies use the European Chemical Industry Council (CEPIC's) safety and quality assessment systems (SQAS) to evaluate their logistics service providers. However, food specific items are not integrated into SQAS tank cleaning, so a new system was required.

In 2012 the European Federation of Tank Cleaning Organisations (EFTCO), which represents 468 tank cleaning stations around Europe, introduced a new food assessment tool, which can be rolled out all over Europe.

A lot of the information in SQAS is appropriate for food cleaning so the SQAS Tank Cleaning assessment was supplemented with some additional food-specific questions. EFTCO cleaning codes can also be added to cover the needs on the European Cleaning Document (ECD).

Just like in SQAS, assessors will use a 1 or 0 to indicate if

an item has or has not been implemented, respectively. The assessor can also add comments or upload files. After their report is complete, the tank cleaning station can add comments or upload an improvement plan if desired.

Certain requirements are now essential for tanker cleaning operators: A separated cleaning bay is an absolute must. A curtain cannot be seen as a separation because it can and will be removed in the daily business. A door in a wall also cannot be seen as a separation because it can and will be opened and contamination is possible. Cleaning personnel also have to wear specific clothes.

There are still many cleaning stations that fail to fulfil these minimum criteria, which is why a special EFTCO food logo has been developed to acknowledge those that do. The food logo provides a clear differentiation between food and chemical cleanings.

Implementing the new assessment

EFTCO finished the initial assessor training last year and a new website, which is easily accessible and simple to use, has been set up.

As EFTCO has no income other than member fees two young Belgian partners agreed to help with the website's development: Zologie, which designed it and Multimedia, which dealt with the technical aspects.

The new website has a public





and private section, protected by a username and password. Tank cleaning stations can now keep their data up to date. A list with the names of SQAS assessed companies or EFTCO food assessed companies is published in the public section, so companies can search for a tank cleaning station local to them. It is also possible to look for additional services, such as nitrogen purging, steam or hot water heating etc.

The whole food assessment process can be managed online. The assessor can accept or decline the assessment request or change the date. The tank cleaning station can then complete the report online, add comments or complete it offline and upload it again. When the assessor has completed the report the tank cleaning station is informed via email that their report is available to view.

They can add comments to each question also (without changing the score or the comments of the assessor) or add improvement plans or other documentation. Finally the tank cleaning needs to authorise EFTCO for publishing their report on the website and send their SQAS report in pdf format to EFTCO. Both reports together with other matching documents will be published in the secured part of the EFTCO website when the knock out questions are met (separate food bay(s), exclusive use of potable water, data monitoring system in place). The tank cleaning station will receive an EFTCO Food attestation and the allowance to use the EFTCO Food logo on their

documents as long as their food assessment is valid.

A company wanting access to the EFTCO food reports must register as a user. This can be done via the website and a username and a password will be mailed after a control of the company by EFTCO to avoid phantom companies getting access. The user can change this password as soon as he is logged in.

Registered users can ask online a tank cleaning station to get access to their report and when this is granted by the tank cleaning station, they can see the complete questionnaire with all comments and additional files uploaded.

The user has the possibility to create different templates which can be saved on the site so that the same template can be used on different reports. This allows the user to review reports in an easy way for the questions he finds important to be implemented. Making different templates allows him to highlight other questions depending on the needs of different departments in his company. When desired, he can contact the cleaning station to tell them what they need to implement before they can be accepted as an approved cleaning station for their company. ■

For more information:

To request a username and password to access the new food assessment tank cleaning tool email secretary@eftco.org or contact EFTCO via the website: www.eftco.org



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I do declare

Prior to tank cleaning, it is vital that the last cargo is correctly declared

A correct tank cleaning operation starts with the correct declaration of the last carried product by the tank's owner, usually the transporter or the tank container operator. This is important because of the stringent laws detailing what work must be carried out before the tank cleaning process begins.

For instance, the cleaning personnel must be made of aware of all dangers they will be exposed to, and this includes information about the last carried product. Product residues that remain in the tank must be removed via internal cleaning. If a worker comes into contact with this last carried product (inhale, skin contact, etc.), it can cause serious health issues. A number of fatalities occur every year in the petrochemical and food industries as a result of workers being misinformed about a particular product.

There are a number of reasons for this misinformation:

- Ignorance
- Incorrect information
- Lost in translation
- Incomplete information
- Deliberate wrong information

For the purpose of this

article, we will focus on the final reason – deliberate wrong information.

There have been a number of fraudulent cases surrounding the European Cleaning Document (ECD) over the last decade. Why?

- The last cargo will be a prohibited product if it will contaminate the next product to be loaded. If so, the tank operator arriving at the cleaning depot could declare that a different last cargo was transported. In order to obtain an official ECD, the tank owner shows a last cargo manifesto of another transport that same day.
- The tank owner may have discharged a 'nuisance' product as its last cargo. If this is not compatible with the next cargo, loading will be prohibited. E.g. switching from a chemical to a food product.
- The tank owner or container operator wants to load his tank at the next loading point, bypassing the standard procedure of tank cleaning. Instead, he cleans the tank himself, avoiding payment and usually discharging the effluent where it is not permitted.

A tick list to prevent such an incident happening again

1. A loaded tank is waiting at a depot for unloading

- a. Check the transport software is not indicating that the tank has been unloaded
- b. Contact the customer that is waiting for the product that has been ordered

2. The driver has been instructed to bring an empty tank into a cleaning station

- a. The chassis will descend if a loaded tank is lifted on
- b. Is the person at the terminal informed about the situation?
- c. Is the driver experienced and educated? If yes, the driver should note that he is moving a loaded tank by driving to the cleaning station.

3. In a regular cleaning station the tanks are not cleaned directly on the chassis that brings the tank container (driver has another job to do with his own equipment).

- a. The tank will be lifted off and placed on a special chassis for cleaning. In this case the forklift will refuse to pick up a loaded tank.
- b. If a crane is used the load capacity will be indicated as well.
- c. If the tank container is to be cleaned directly on the transport chassis the procedure is the same as on a chassis for cleaning.

4. Visual control from the top of the tank to check for any remaining product

- a. Opening of the manhole cover for a first visual check
- b. If the product is pale or transparent the liquid product will still move. Check for any movement in the compartment and in the tank itself.
- c. The next step will be the emptying the remaining product using a bucket (I have removed 10 buckets of product – why is there still some left?)

5. The control of the personnel during the cleaning process is also important:

- a. Why it is possible that there is more outlet of liquid than the spinner is able to produce?
- b. Why does it smell (the product has a strong smell) and why does the smell persist?
- c. Why does the cleaning process (usually about 20 minutes) not stop?

6. The control of the CPT (stationary liquid wastewater processing system) is also important:

- a. Why is there a strange smell in the CPT?
- b. Why is there a tremendous rise of the pH value?
- c. Why is there more material than the CPT can handle?
- d. Does the CPT stop automatically if the limit is exceeded?
- e. Is the CPT controlled regularly by a PC control system?

7. In the case of realising one of these errors an intervention into the cleaning process is necessary

- a. Close of bottom valve and butterfly valve (this will save the rest)
- b. Close the afflux to the CPT
- c. Close the afflux into the internal sewage system
- d. Close the afflux into the external sewage system
- e. Ensure that enough storage volume is available.

8. Report to the relevant persons

- a. Commissioner of water pollution control (internal report)
- b. Commissioner of safety at work (internal report)
- c. Report to the local authorities

These are just a few examples of when fraud may occur within the tank cleaning industry. The tank cleaning station relies on the tank owner/operator to provide the correct information about the last cargo. Trust is vital between the transporter, tank cleaner and product owner, as is a well-managed supply chain.

It is important that the last product is declared and checked prior to starting the next operation. However, as demonstrated below, miscommunication (for whatever reason) does occur and this leads to disastrous consequences.

Case study

In a European cleaning station (SQAS assessed) an incident occurred which could, and should, have been prevented.

Around 25 tonnes of a class 8 product, Water Hazardous Class (WHC) 2, was sent to a municipal wastewater treatment plant, yet 15 tonnes of the product could not be stopped in time and went into the next river.

What went wrong?

A loaded tank container appeared in a cleaning station and requested a cleaning of the last carried product. The tank was 'cleaned' as ordered and the product went through the stationary liquid wastewater processing system into the sewage system and directly into the municipal wastewater treatment plant.

The case has now been looked at by the prosecution. It turns out the cleaner ignored an internal instruction and was ordered to pay 60 times his regular daily income. But can it be blamed entirely on one person?

There are a lot of ways to avoid such terrible

incidents that will ruin the good reputation that the tank cleaning business has achieved over the last few years by the work of EFTCO and the national associations. There is an organisational deficiency that is not normal for a regular cleaning station.

Every cleaning has to be monitored by checking for any remaining product that needs to be removed. No personnel should be

in charge of doing three cleanings at the same time. Always keep an eye on the current process.

An SQAS assessed cleaning station should be able to protect personnel using regular equipment (PPE, mask, etc.). If a mask is used there should be enough light to control the tank and check it has been cleaned properly. These principles must be followed:

- Operating license by the local authorities
- Use of a database with information about the products and the handling
- Regulatory supervision
- Membership of a national tank cleaning organisation
- SQAS
- ISO

The reputation of the tank cleaning business relies on the activities of every single cleaning station. ■

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Operation reconnect

Why reconnecting tank cleaning and cargo owners is important to secure quality

Tank cleaning is an essential element in the bulk liquid and powder supply chain, and is unique in that the product comes into direct physical contact with the transport equipment. If the tanker is not cleaned well, it can cause unspecified cross contaminations and a broken traceability chain.

Many cargo owners and shippers entrust cleaning stations and transport companies with the responsibility of tanker cleaning. However, there are risks associated with delegating this critical step in their quality chain to a third party. The cleaning certificate/document is even a risky document when misused. For example, the CMR legislation states that under IV art.17.4b the transportation company cannot be held liable for unpacked cargo.

In daily practice many cargo owners are unaware or ignore these legal responsibilities and force

transporters into commercial responsibility. Insurance companies have created products to cover these commercial risks. However if damage is too large, it appears that CMR suddenly comes to the table again.

In addition to legal risks, the transport company may not be the most suitable actor to secure high quality cleaning services for other reasons:

- Transporters are strongly driven by costs due to a highly competitive and professional buyer's market; they acquire the cleaning certificate as a ticket to load cheap and fast. Customer requirements are taken for granted/can hardly be managed. The acceptance at the gate of the factory is considered to be the quality test.
- The transporter is absent during the actual cleaning, which is carried out in a remote location. Only the driver is on site but is often not allowed in the cleaning

hall. Even so, the driver is not profiled to know if the correct customer procedure was followed, e.g. water temperature, additives, etc. The driver's signature for correct cleaning is therefore useless for quality assurance purposes.

- There is a structural lack of educated quality specialists in tanker transport companies compared to the level of QA specialists in the industry. This is caused by the typical size and operational focus of transport companies.

SQAS

Whilst it is in the interest of cargo owners to take responsibility for their cargo, they are frequently based far away from the cleaning station and they themselves are often not directly buying the cleaning services.

To secure and improve the quality of cleaning, reconnecting the cargo

owners with the cleaning stations is essential. This can be done partly with audits. Audits give a good indication if a cleaning station can fulfil certain requirements. They do not, however, assure that a particular cleaning was done accordingly. Audits are also time-consuming.

So that every cargo owner need not visit the cleaning station and carry out their own audits, the European Chemical Industry Council (Cefic) initiated a generic Safety and Quality Assessment System (SQAS). During this assessment, an independent auditor asks over 300 questions and the answers – provided by the individual cleaning stations – are entered into a Cefic database.

Essential in this system is valuation of the answers by the user. Each individual user determines what questions are important to him and as such determines what cleaning stations pass their requirements as suitable. The SQAS system



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is not a quality assurance, but an assessment system to enable users to value individual cleaning stations.

Today, the SQAS is mandatory in order to issue the European Cleaning Document (ECD), which is released by the European Federation of Tank Cleaning Organisations (EFTCO). As such the ECD itself does not assure a quality level; it is about standardising communication. Requesting an ECD without acknowledging the SQAS responses of the individual cleaning stations is futile.

The SQAS system is only available to companies in the chemical space and unsuitable for food companies – it has a heavy focus on safety aspects, while the topic of hygiene is not covered.

Food

After concluding that tank cleaning also poses a risk for the food supply chain and can break the traceability in the quality chain, Sure Global Fair (SGF), the control body for the global fruit juice industry, introduced a certification for tank cleaning in the food industry.

EFTCO, which was part of the SGF working group, has also developed a new initiative for the food sector: the EFTCO Food Assessment. This system is comparable to the SQAS system and requires valuation from the users. Different to the SGF system, it is not a certification, so a cleaning station is not judged on its food suitability. Instead, the user must value the answers given in the database for each cleaning station to determine if this certain station matches his requirements.

Monitoring and recording every cleaning operation is a new concept for many cleaning stations. It requires the installation of in-line sensors to enable detailed process-recording of individual

cleaning jobs. Innovative validation algorithms allow the data to be translated against specific customer demands.

“The SQAS system is only available to companies in the chemical space and is unsuitable for food companies. It has a heavy focus on safety aspects while the topic of hygiene is not covered”

Monitoring offers many benefits to professional cleaning stations:

- Better control over the operation in terms of quality and cost awareness
- Helps to evaluate the financial contribution of each individual cleaning operation
- Commercially, a transparent process monitoring helps in cost discussions with direct customers and connections, and appreciation from the remote cargo-owners.

For cargo owners, remote process monitoring...:

- Offers traceability of the tank cleaning process for a particular load and is an essential link in the traceability chain
- Helps to avoid discussions with remotely-based suppliers about loading decisions
- Helps to improve cleaning requirements as results and incidents can be related to real process data
- Helps to improve tanker-reception procedures at factories as the tank cleaning data is validated against the QA requirements set by the cargo owner. This is certainly the case where tanker reception is done at the gate, frequently by third party security companies.

In addition, transparency helps to avoid shorter cleaning cycles as the result of price pressure. However, if cleaning stations provide transparency but the cargo owner also

allows non-traceable competing cleaning stations, the committed cleaning stations suddenly have a

competitive disadvantage. Asking for traceability should therefore be a clear choice from the cargo owner. It is also in the interest of the cargo owner to have sufficient choice and competition. Encouraging the cleaning market to invest in traceability is therefore in the interest of both the cargo owners and the cleaning industry itself.

Reconnecting the cargo

owner and tank cleaner is essential in order to secure this remote but critical process, which directly impacts the cargo. CleanSecure, a tank cleaning quality monitoring company based in the Netherlands, has developed innovative technology which enables remote process-validation of individual cleanings. Printing a CleanSecure barcode on the cleaning document upgrades it from a cleaning document into a true cleaning process certificate. Instead of risky cost-cuttings by short-cleaning, reconnecting the cleaning station with the shipper now stimulates innovation and improvement. First results show there is a lot to be gained. ■

For more information:

This article was written by Wilko Scholtens, founder of CleanSecure. Visit: www.CleanSecure.com

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The jury's out

Companies need to maximise product quality and minimise contamination to avoid legal implications

The issues of competition and price are not new ones within the tank cleaning industry. The claim of incorrectly issued cleanings, however, is a new challenge facing the sector today.

Increasingly stringent regulations have seen litigation rise over the last few years, significantly impacting cleaning stations in particular. In accordance with current regulations, transport companies within the loading industry need to prioritise product quality and the interests of the consumer to ensure out-of-court settlements remain the preferred option, if a disagreement arises.

Regulations now specifically affect cleaning stations. If, for example, the last carried product is declared as a fat and the next product is contaminated with fatty molecules, insufficient cleaning is obviously to blame for the contamination, and not the loading company who will bore no responsibility or liability. The legal

validity will depend on the statement of the cleaning station, but in such cases, an objective statement is necessary.

A large number of transport companies not only use the cleaning facilities but also operate their own cleaning stations. This has led to increased specialist knowledge within the sector in recent years. If a transport company with its own cleaning facilities uses a third party and contamination is later found to be present, it will be easier to make a claim on the issued work as the supply chain will be smaller and therefore any problems will be easier to resolve. However, the third party cleaning station that has been sub-contracted out by the transport company may argue that it uses similar processes at its own facilities, which the court will not accept as a valid argument.

Often, judges do not possess the technical expertise to understand the intricate and complex processes that

exist within a tank cleaning station. The difficulties experienced are therefore overlooked, oversimplified or misunderstood entirely. The process operations of various factors, however, including hoses, pressure relief valves, and connecting pieces must be taken into account during the outcome of a trial.

The court will identify the cleaning station as a specialist with expert knowledge in the sector, and will therefore assume its cleaning techniques and performance will be an accurate testimony. First and foremost it is necessary to avoid any trial.

Companies have third party liability insurance that may prevent a court claim being made and as a result reduce costs, but only if straightforward negligence can be proven. The area of issued work presents a grey area, legally, as this negligible intention is not accepted and will therefore be denied. ■



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Strength in numbers

Software company collaborations are proving beneficial to the tank cleaning sector

The development of software for tank cleaning stations has become more and more complex over the years. The days of simple hardware, operating systems and processes are long gone. Instead, high customer demands and expectations mean tank cleaning software must provide invoicing capability, detailed product information, safety information and PLC control – to name just a few.

The time when one company delivered the entire software solution is also a thing of the past. Today, cooperation between a number of specialists is the key to success. Clusters of suppliers, each with their own abilities and skills, are crucial to providing software at an acceptable cost to clients.

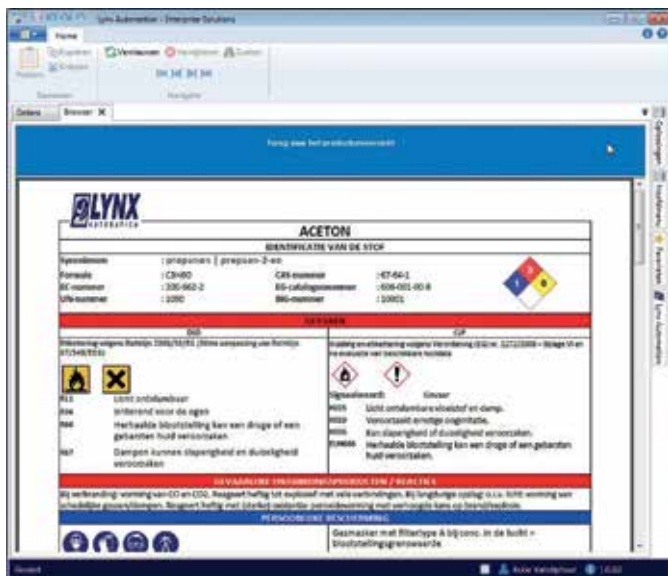
Lynx Automation, a software solutions provider based in Belgium, understands the importance of such clusters. By partnering with other specialist companies, Lynx Automation has developed a complete solution for tank cleaning. The technology comprises an invoice module, ECD printing, safety information, PLC control, container handling. It is offered and integrated in an open environment and accessible by any other supplier.

Companies such as CTW-Dibo are able to connect their installations to this open platform to monitor the cleaning

parameters and to control the settings of the PLC. Any other supplier is able to integrate their competences into one solution, while any end user is able to analyse and to create reports.

Due to the cooperation of different companies in different countries, solutions are offered in many European languages.

Erik Baetens, owner of Lynx Automation, explains: 'I see a competitor as an opportunity to work together; to increase functionality and bring more information and automation to the customers.' ■



By partnering with other specialist companies, Lynx Automation has developed a complete solution for tank cleaning



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How one tank cleaning service provider is overcoming challenges within the tank cleaning industry

Staying ahead of the game

Tec Concept is a Belgium-headquartered, family run company which specialises in cleaning road tankers and trucks. Such vehicles require periodical cleaning to ensure the next product transported remains free from contamination.

Despite being a niche market, tank cleaning is nevertheless extremely important due to the key role road transportation plays in national and international trade in this era of globalisation.

When the company was founded in early 2000 it focused on the cleaning of the exterior of tanks and trucks. But following its acquisition of Vic System in 2008, the company expanded and today it also cleans tanks internally that are used in the food and chemical sectors, complying with the most stringent environmental standards. Tec Concept's director, Bernard Cloet, has been working in this industry for more than 30 years.

Washing gantries for any vehicle

While portable washing systems are widely used, Tec Concept explains

that a fixed system can be installed for tanks that are cleaned frequently.

Portable washing systems use high pressure equipment or brushes which are mounted on a motorised chassis. The vehicle enters the washing building, stopping at a predetermined position. It then remains stationary while the gantry moves back and forth over the entire length of the vehicle performing various wash cycles.

Typically, a gantry carries out two or three rounds. The first phase applies chemicals, the second comprises high-pressure (or brush) cleaning, and the third phase rinses the truck. The advantage of this type of system is that the speed of the cleaning operation is controlled by the speed of the gantry. Generally, the size of the necessary buildings to contain such equipment is limited to the size of the largest vehicle fleet.

Environmental responsibilities

Of course truck washing businesses consume large volumes of water and electricity. This drives up the costs of operation, which

are then passed on to the client. In order to drive down outgoings for its customers, Tec Concept recycles and uses wastewater, for example that which was used for exterior truck cleaning.

To clean the wastewater, the company uses a physicochemical treatment. This removes heavy metals, oils and greases, floating parts, organic emulsions, and phosphorous, aiding the recovery of between 70 and 80% of body wash water.

Additionally, Tec Concept is working to recover energy from wastewater and use it to heat water for the next wash, and has also decided to develop a range of chemical-free cleaning detergents.

Traceability

Traceability is one of the key challenges that Tec Concept has had to overcome. European and national standards state that the cleaning of vehicles used for food transportation require a clear record be kept of what cleaning products were used, when, in what concentration, at what temperature, etc.

To carry out this monitoring, Tec Concept offers its clients

computerised procedures and automatic cleaning processes which record and save all the data ready for inspection.

A predominantly European clientele

The majority of Tec Concept's clients are based in France, however it also sells its services in the Netherlands, Spain and Lithuania. Cloet says he is keen to continue to develop in Eastern Europe, including Poland, given the strong market demand there. The company is also eyeing Canada as a potential new market in the future.

A new home

Earlier this year, the Tec Concept team of 14 relocated to new premises that have been designed to the highest environmental standards, including those relating to sustainability that will come in effect within the next couple of years.

To celebrate its new offices Tec Concept held an open day in March, welcoming more than 400 people. ■

For more information:
Visit: www.tecconcept.com



Tec Concept's new office building in Belgium

Reaching new heights

With companies balancing their investments based on price, quality and quantity, CTW is helping its clients realise the best possible concept according to their needs

Car- & TruckWash NV (CTW) is a Belgian firm specialised in the washing of cars and trucks, and tank cleaning. The company is currently installing a new tank cleaning station in Minsk, Belarus for Proliv, a group of six transport enterprises focused on the transportation of liquid goods.

The installation, which is designed for the food sector, was custom-built for Proliv and features:

- One lane equipment and five cleaning heads
- Fully automated controlled cleaning process in conformity with the HACCP standards
- Temperature assurance
- Disinfection, follow-up and validation of the entire washing process
- The whole installation is being prepared and tested in Belgium

The project in Minsk involves a new kind of sustainable high pressure skid. The compact frame exists of two high-pressure pumps (100bar and 215l/min), directly connected (flange) to an



CTW utilises the latest management systems

electric motor. It also includes frequency regulation, filters, pre-pressure pump, product injection and monitoring.

Today, CTW utilises the latest management system. The use of a touchscreen, for example, enables the client to oversee and monitor factors such as pressure, flow, temperature, water consumption, chemicals, etc.

The tank cleaning system can work on both steam boilers and central heating water. For chemicals and food cleaning, CTW prefers a

steam boiler with high pressure steam heat exchangers.

The washing path comes standard equipped with between four and six cleaning heads, which are either pneumatically, hydraulically or electrically driven. Proliv has opted for the cleaning head 'Rotojet A80R hydraulic'.

The landing platform's equipment can be offered depending on the client's choice: a length of 4, 6 or 10m with automatic rollers, brackets or rail system with fall protection, hydraulic drawbridges and safety lines, built according to the safety standards.

CTW offers a well-considered automatic management system. Each program is adjustable in combination with steam and water recuperation. The PLC-system is connected to a PC by a LON-connection. The PC contains a full customer- and wash program database and can be used for printing documents such as washing vouchers and EFTCO certificates. ■



CTW is installing a new tank cleaning station for Proliv

For more information:
Visit: www.ctwcleaning.com

Behind the scenes

A rundown of what happened at the latest ECTA annual meeting, held on 18 November 2014 at the Düsseldorf Plaza in Düsseldorf, Germany

The European Chemicals Transport Association (ECTA) annual meeting kicked off with an early morning session for association members only. What followed were several presentations, of which the below are of particular interest to the tank cleaning industry.

Intermodal operations

Peter Marshall, director of supply chain operations, EMEA, at Dow Chemical, spoke about the importance of intermodal rail. He said that intermodal operations have a role to play in reducing road traffic congestion, improving environmental performance and mitigating the shortage of truck drivers.

Dow itself makes use of intermodal transport, Marshall said, with 80% via road and 20% short sea. Dow also contributed to the Cefic Chemical Trends report about intermodal transport network development issues, which was published in June 2014.

DEKRA's head of competence center dangerous goods, Joachim Freck, gave a presentation about road transport regulations, focusing on the changes to the IATA Dangerous Goods Regulations 2015. These standards change bi-yearly, and the next update will take place this year.

ISO 9001 / SQAS

Following on from Freck's presentation, Marc Twisk, project manager at Vervaeke Transports, took to the floor after a two-hour networking lunch break to speak about the ISO 9001 and SQAS (Safety & Quality Assessment System), and how these impact logistics service providers (LSPs).

Twisk brought to the attendees' attention the 'multitasking' expectations of the loading industry, whereby the transport company must ensure the highest levels of quality, safety, regulatory compliance, environmental care and timely delivery, all the while keeping costs to a minimum.

He also touched on a ISO 9001/SQAS study which revealed that 65% of the 50 companies surveyed make the ISO 9001 certification compulsory, while 60% enforce the SQAS. Nevertheless, while they are trained, Twisk remarked that ISO

9001 and SQAS assessors are no experts when it comes to social responsibility and accountability (legislation), and called into question the integrity of the evaluations carried out by the customers themselves.

Furthermore, certification schemes such as the ISO 14001, OSHA 18001 and SA8000 are not mandatory and are instead voluntarily requested by the customer. They are, however, appearing more frequently on requests for information (RFIs).

Responsible care

Judith Kleinen, manager land transport and spot shipping, Sabic Europe, explained why responsible care (RC) of LSPs is of extreme importance to chemical companies.

RC covers the chemical industry's environmental, health and safety (EHS) initiative to drive continuous improvement in performance. RC, she said, seeks to build confidence and trust in an industry that is essential to improve living standards and the quality of life.

Middle East focus

The focus of the meeting then moved away from Europe when Alan Izzard, senior advisor at Borouge and GPCA director of the Gulf SQAS, highlighted the latest industry developments in the Middle East. The Gulf Petrochemicals & Chemicals Association (GPCA) is the sole petrochemical trade association in the Middle East and the voice of the chemical industry in the Arabian Gulf region.

According to Izzard, specific considerations for the Gulf Region with regards to tank cleaning are:

- European legislation: Establish a link with Gulf Cooperation Council (GCC) regulators
- Language: English with questionnaires and PR material in Arabic
- UN dangerous goods recommendations: GCC solution required
- Greater emphasis on sustainability topics will be included in future phases
- Driver welfare (working hours, conditions and salary) legislatively enforced in Europe: Future considerations

- Poorer initial SQAS assessment results: Pilot results promising, collective industry focus on continuous EHSS&Q improvement
- Emergency response: Regional industry solution to be examined.

To date, the progress of the SQAS in the Middle East is impressive and demonstrates GPCA's commitment to continue on this path. The future plan is to gain support from European assessors, work on stakeholder awareness and launch a cleaning station pilot project in the region next year. SQAS will soon become a mandatory requirement.

A modular approach

Before the meeting came to a close for another year, Stephan Kessler, project manager of logistics and engineering at Bayer Technology Services, took to the floor to discuss logistics for modular production.

He explained that modular logistics will play a significant role in future value chains. Benefits of modular design are:

- Flexible extension of existent production facilities to manage seasonal-related issues and small product quantities
- Close vicinity to the customer allows for short delivery times
- Small-scale production increases plant and process safety. ■

Upcoming events

17 September 2015

**ECTA Responsible Care Workshop
Brussels, Belgium**

2 October 2015

**EFTCO General Meeting
Gdansk, Poland**

7-8 October 2015

**SGF Juice Summit
Antwerp, Belgium**

13-15 October 2015

**World Efficiency Show and Congress
Paris, France**

20-21 October 2015

**ITCO General Meeting
Frankfurt, Germany**

26 November 2015

**ECTA Annual Meeting
Düsseldorf, Germany**

International Tank Container Organisation



ITCO's mission is for Tank Containers to be the preferred method for transporting bulk liquids, focusing on quality, safety and environmental issues.

ITCO is working to promote operational safety, harmonise national/international regulations and improve market education.

- 135 Member Companies from 20 Countries
- Representing over 70% of Global Tank Container Capacity
- Five Divisions: Manufacturing, Operating, Leasing, Service Providers and Inspection/Surveyors
- Promoting the Tank Container to Industry, the Public and to Regulatory Authorities

I trust in you



The complexity of our supply chain is high, and it is good to remember how fragile it is.

When transporting foodstuffs in tankers tankcleaning is essential as the product comes into direct contact with the transport equipment. However this process is often underestimated, under-valued and the responsibilities misunderstood.

Industry specialists concluded from an HACCP perspective Tankcleaning is a high risk:

- it concerns direct unpacked product contact.
- contaminants are diverse and undefined; what to test for?
- it is a remote process often done by a 3rd party; often not known by the cargo owner.
- the process itself is often untraceable afterwards.
- the cleaning certificate is not a certificate in sense of traceability, liability and process-control.

At CleanSecure it is our passion to (re)connect cargo owners and remote cleaning stations.

Connection creates appreciation and understanding. Traceability creates control and quality improvement.

With modern process monitoring technology we help the food industry to secure this essential process. The technology helps the shipper with validation of the true cleaning process when accepting tankers prior to loading. Also we help the cleaning stations to improve their own process- and cost control.

Please visit us at www.CleanSecure – or contact info@CleanSecure.com



CleanSecure
TANK CLEANING QUALITY MONITORING



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