Edition 8 November 2022

Global NEWS

Reprocessing business of medical devices in Norway

Norway has a semi-decentralised health system, while the health care policy is controlled centrally. Local authorities in the municipalities coordinate and finance primary care and social services. The national government is responsible for the hospital sector. All public hospitals in Norway are run by four regional health authorities (RHA) supervised by the Ministry of Health and Care Services: Central, North, South-East and West. Each RHA owns a health trust, which manages the hospital pharmacies. The South-Eastern RHA is the largest one, which covers more than 3 million of the about 5 million citizens in Norway. Private hospitals are rarely located in the southern part of Norway.

Thune Produkter

Thune Produkter started as a small industrial company in Drammen in 1815. In the first half of the 20th century, the company grew to become one of Norway's largest industrial companies with extensive experience in iron production, from boilers and tools to turbines for the power plants and locomotives for NSB (Norwegian railroad company). Up to the early 1980s, the company was one of the first to start collaborations with other industrial companies, including Kværner and Thune Mekaniske Verksted, and has gained extensive experience in the field.

The company's versatility and adaptability led the Thune group to branch out into several fields, including the production of washing machines in Hamar, which was outsourced in 1950. This branch of the group, which later produced washing machines, autoclaves, bath lifts and rinsing equipment, is the origin of today's Thune products. At the beginning of the 1980s, Thune Produkter acquired Møglestue autoclave. Ten years later, the in-house production was gradually replaced by the agencies from Matachana, Belimed and Smeg. After a change of ownership in 2014, the company has remained a one-hundred percent Norwegian family-owned company until today. This constitutes the company of today as a supplier of ISO 9001:2015-certified products and services to health trusts, universities, and laboratories throughout Norway.

Thune Produkter provides a fully automated solution for washing beds and mattresses. It consists of a disinfection unit for mattresses and a washing machine for beds. This solution can be found in several hospitals in Norway, for example in a public hospital in southeastern Norway (see Fig. 1). It reduces process time and provides a better HSE (health safety environment) situation for the staff at the same time by avoiding heavy lifting and difficult handling.

Thune bed washer system in a public hospital in southeastern Norway

A successful partnership

Since mid last year, Thune Produkter has been an important partner of Dr. Weigert. By combining our competencies, we improved the efficiency of reprocessing processes. The collaboration started during the coronavirus pandemic (COVID-19). It was a tough challenge and an excellent decision. The product range of Dr. Weigert matches the activities of Thune Produkter perfectly and expands their current portfolio. We look forward to continuing our close cooperation and achieving long-term success.

For more information about Thune Produkter, visit www.thuneprodukter.no

DR. WEIGERT
Systematic Hygiene

Hygiene safety and saving of resources in automated processing – a contradiction in terms?

The use of modern high concentrates opens totally new ways of structuring the variables of a cleaning process in such a way that a much higher capacity of processing batches per installed washer disinfector, for instance, is attained while also saving resources. In addition, the small dosing quantities reduce transportation and storage costs for the user as well as consumption of resources in the production, packaging and transportation of process chemicals.

Along with the optimisation of production processes, waste management and wastewater management, the development of innovative products makes a key contribution to environmentally sound and resource-efficient applications through increased efficiency. Modern process chemicals form the interface that enables the savings potential to be passed on directly to the user. As a result of intensive research work, specific performance characteristics of a process chemical can now be adjusted in a targeted way. This makes it possible to modify automated processes beyond the established cleaning routines while still ensuring adherence to the required hygiene standards.

Schematic diagram: Savings potential in the automated processing cycle through innovative process chemicals

Innovative process chemicals optimise standard processes

In automated cleaning processes, potential to save resources is attained directly in the reduced consumption of process chemicals, water and energy, and indirectly through shorter programme runtimes. The use of innovative process chemicals makes it possible to reinterpret and optimise the existing standard processes in instrument processing in many places – without adversely affecting hygiene and patient safety. Along with the omission of individual programme steps such as neutralisation, modern process chemicals enable a reduction of the temperature in the cleaning stage from the common 55°C by up to 20°C. The process chemicals can already be dosed at low temperatures immediately after water intake with no adverse foaming, thus ruling out the onset of protein coagulation and making full use of the consequently extended effective exposure time in the cleaning step. As a result, the holding time can additionally be reduced from 10 minutes to 5 minutes, which significantly decreases the process runtime as well as the energy consumption per batch.

In practical application with our high concentrate neodisher® MediClean advanced, using a modern method on a standard washer disinfector in the instrument programme (5-level rack dolly, 15 DIN instrument tray), in one batch, energy consumption and batch time were reduced by up to 30 % and water consumption by up to 20 % compared with the previously used standard procedure.

Saving costs, resources and energy

This results in substantial savings potential even for a medium-sized CSSD with 4 washer disinfectors in 1-shift operation for 8 hours and with an assumed capacity of 8,000 processing batches per year (250 working days). For a CSSD of this kind, this means that a resource-efficient programme selection would save approximately 16,000 kWh of energy, 240 cubic metres of water and 1,700 hours of operation of the washer disinfector. Along with a significant increase in the capacity of the CSSD, annual cost savings of several thousand euros for energy and water can also be achieved. Of course, when structuring resource-efficient methods of this kind, it is essential to fully comply with the hygienic requirements arising from the normative standards [1, 2] and the regulatory guidelines in place in the respective country. In practical experiments, it has been shown that it is entirely possible to meet these hygienic requirements [3, 4] in practice with modern resource-efficient methods.

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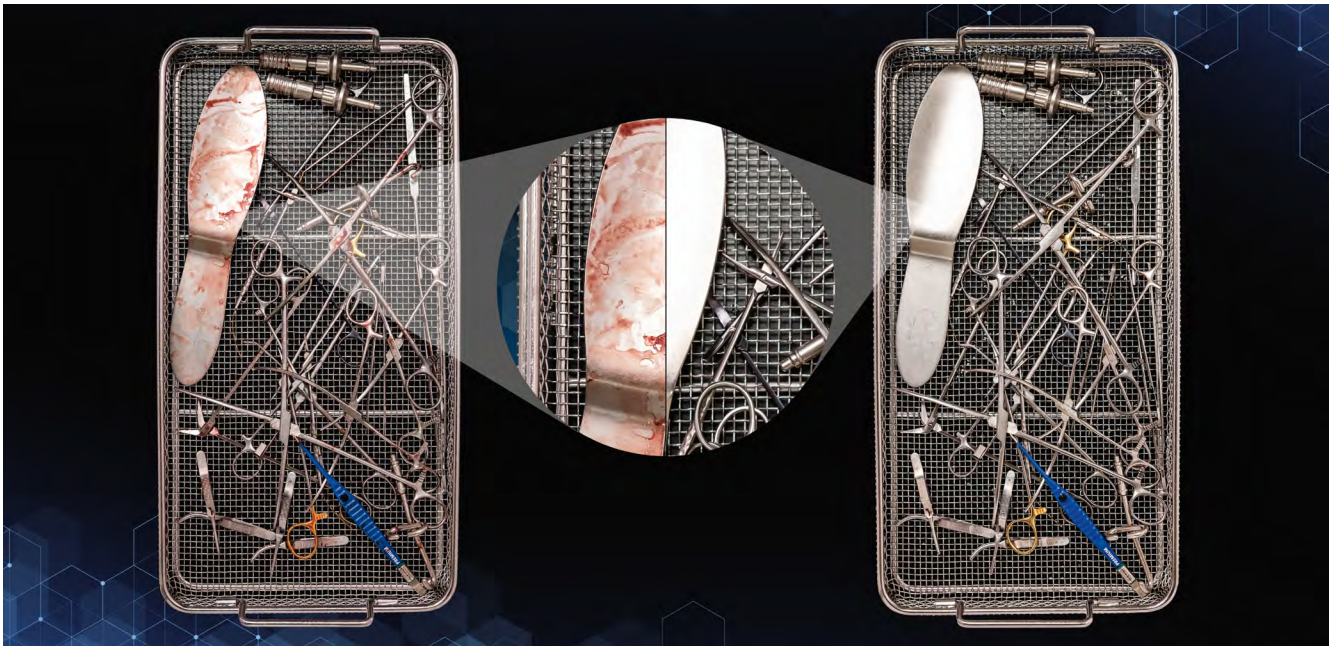
[1] ISO 15883-5:2021, Washer-disinfectors – Part 5: Performance requirements and test method criteria for demonstrating cleaning efficacy
[2] ISO 15883-1:2006/Amd 1:2014, Washer-disinfectors – Part 1: General requirements, terms and definitions and tests – Amendment 1
[3] Hygiene Requirements for the Reprocessing of Medical Devices: Recommendation from the Commission on Hospital Hygiene and Infection Protection at the Robert Koch Institute (RKI) and the Federal Institute for Drugs and Medical Devices (BfArM) on the "Hygiene requirements for the reprocessing of medical devices"
[4] Guideline compiled by DGKH, DGSV, and AKI for the validation and routine monitoring of automated cleaning and disinfection processes for medical devices, 5th Edition 2017, Zentralsterilisation Suppl. 2017

BEST PRODUCTS

neodisher® MediClean advanced – Liquid Concentrate – Detergent for reprocessing thermostable and thermolabile instruments



Impressive results: Left - Instruments with dried residues of protein and blood
Right - Instruments reprocessed with neodisher® MediClean advanced

Material-compatible cleaning with enzymes and supporting components. Residues of dried and denatured blood are removed.

Fields of application:

- Automated cleaning of thermostable and thermolabile instruments including MIS instruments and micro-instruments, dental instruments, anaesthesia equipment, containers and other medical utensils
- Manual cleaning of thermostable and thermolabile instruments in immersion baths or ultrasonic baths
- Suitable for the manual and automated cleaning of da Vinci EndoWrist instruments and other instruments used in robot-assisted surgery

Performance spectrum:

- Reliably removes residues of dried and denatured blood, protein, fat, mucus, secretion and bone meal with a simultaneous high degree of material protection
- Supports the removal of biofilms
- Suitable for instruments, optics and utensils made of stainless steel (e. g. 1.4301), instrument steel (e. g. 1.4034), titanium, glass, ceramics, reprocessable plastics, materials of anaesthesia equipment and anodised aluminium
- Anodised aluminium must be tested first for suitability due to differing qualities

Special properties:

- Highly concentrated: maximum yield for optimum economy and conservation of resources
- Excellent cleaning performance with minimised dosing amounts
- Low-foaming; dosing possible directly after the water inlet of the cleaning stage
- Increased efficiency when removing dull discolourations and deposits
- Gives brilliance to the instruments
- The reduction of biofilms has been tested and confirmed in accordance with ISO/TS 15883-5:2005
- When used for manual pre-cleaning, no rinsing of the cleaner solution is necessary for subsequent mechanical reprocessing

Application and dosage:

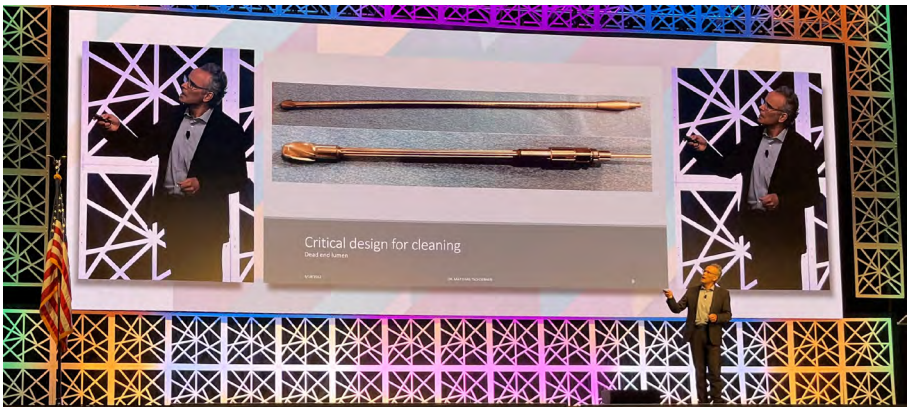
neodisher® MediClean advanced can be used in washer disinfectors as well as in immersion and ultrasonic baths. The dosing amount can be adapted to the area of application, the degree of soiling of the instruments and the requirements of the operator for the process used.

LIVE CONGRESS

The HSPA Annual Conference 2022 in San Antonio, Texas

The annual conference of the Healthcare Sterile Processing Association (HSPA) took place in April 2022 in San Antonio, Texas. After a long break due to the pandemic and virtual conferences in 2021, this was one of the first live events where Dr. Weigert was present since COVID-19 changed our lives.

From 23rd to 27th April 2022, nearly one thousand participants had the chance to attend a variety of conferences and workshops in the Henry B. Gonzalez Convention Center on the main current topics of the cleaning and sterilisation summit as well as new trends in the industry.



Dr Matthias Tschoerner on the main stage at Lila Cockrell Theatre

Our highlight of the event was the presentation by Dr Matthias Tschoerner on the main stage at the Lila Cockrell Theatre. Under the title “Challenges for Processing: Robot-Assisted Surgery”, he spoke about the way to master the challenges that the processing of highly complex instruments present. Showing examples from laboratories, surgeries, and sterile processing departments (SPDs), Dr Tschoerner reviewed numerous cases and demonstrated how best practices can be achieved in compliance with the relevant regulations.

The next HSPA Annual Conference 2023 will be held in Nashville, Tennessee, and we are already excited to see what news we will get from the North American CSSD activities there!

IMPRINT

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You can find the edition at hand as well as further flyers, prospectuses, product information, and an overview of our international retail partners at www.drweigert.com.

EcoVadis assessment concluded with a silver rating

To supplement the 14001 environmental audit, Dr. Weigert has formed a “Sustainability Team” to promote the subject of sustainability even more intensively and to support our customers in their sustainability efforts in the best way possible. At the end of 2021, following discussion and analysis of different providers, our “Sustainability Team” opted for the rating from the agency EcoVadis.

EcoVadis is a global provider of sustainability ratings/strategies. The global network includes over 90,000 companies. Through combined efforts and working according to a tight schedule, a questionnaire with 80 main questions and countless subquestions was answered and 55 documents were uploaded to the EcoVadis platform. The aim of the CSR (Corporate Social Responsibility) rating is to assess the quality of a company’s CSR management system. The assessment concentrates on 21 criteria, divided into 4 subject areas:

- Environment
- Work practices and human rights
- Fair business practices
- Sustainable procurement

The EcoVadis assessment concluded with a highly welcome silver rating. This places Dr. Weigert among the best 25% of companies assessed by EcoVadis! It shows that Dr. Weigert has reached important milestones with its sustainability strategy. At the same time, it is also an incentive to think even bigger and be even more ambitious as we proceed with the implementation of the sustainability goals. For this reason, this groundbreaking element for assessing and portraying our sustainability strategy will continue to be an important component of our company policy in future.

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