kreussler

The innovative solution for professional clothing

** Photos: MEWA-textil-Service

* Photos: Kraehe-Versand

DERVAL ENERGY PROCEDURE

Competent and efficient in textile chemistry and hygiene

Professional clothing has been given a new look

In today's business world, professional clothing represents corporate identity and signifies status, competence and quality.

Professional clothing has evolved from simple work uniforms into high quality, fashionable gear that is often too delicate for the severe operating conditions created by standard commercial laundry processes. Over time, changes have been made in materials, style and design that in turn create the need for new and improved chemicals for processing.
This creates particular demands on reprocessing. "Hard" washing procedures required by the high soil load are in direct contradiction to the conservation of the clothing's value and future integrity. Therefore, gentle yet highly effective washing procedures are required. The goal in the development of DERVAL ENERGY was to resolve this dilemma.

Maintaining functionality is a MUST!

Particular demands apply to professional clothing used in hazardous areas. When reprocessing personal protective equipment (PPE), the protective functions must not be impaired, and the soiled textiles must be fully restored through regeneration. The gentle yet highly effective DERVAL ENERGY procedure is the key to an effective and economical reprocessing especially of PPE.

High efficiency is required

The competitiveness of textile service companies essentially depends on the conservation of the textile material value and on the costs for reprocessing. Factors that have an effect on the conservation of garment value are, besides usage from wear, overly aggressive washing procedures and insufficient washing results.
More gentle washing procedures at lower temperatures, lower pH value and shorter reaction times selected in favour of the conservation of value generally have counter-productive effects on the washing results.
At the same time, these washing conditions aspired in favour of the conservation of value are advantageous with regard to the reprocessing costs. A lower washing temperature does not only save costs but can also avoid a cool-down for blended fabrics which saves water and time. A lower pH value does not only protect colours and materials but also reduces the rinsing efforts which save more water and time. Elimination of the pre-wash bath saves even more water, time, and energy.

However, these measures aiming at value conservation and cost reduction make sense only if the washing performance fully complies with the demands on the usage-specific reprocessing of the professional clothing, and this is exactly where DERVAL ENERGY can fully exploit its advantage.

Textile after usage

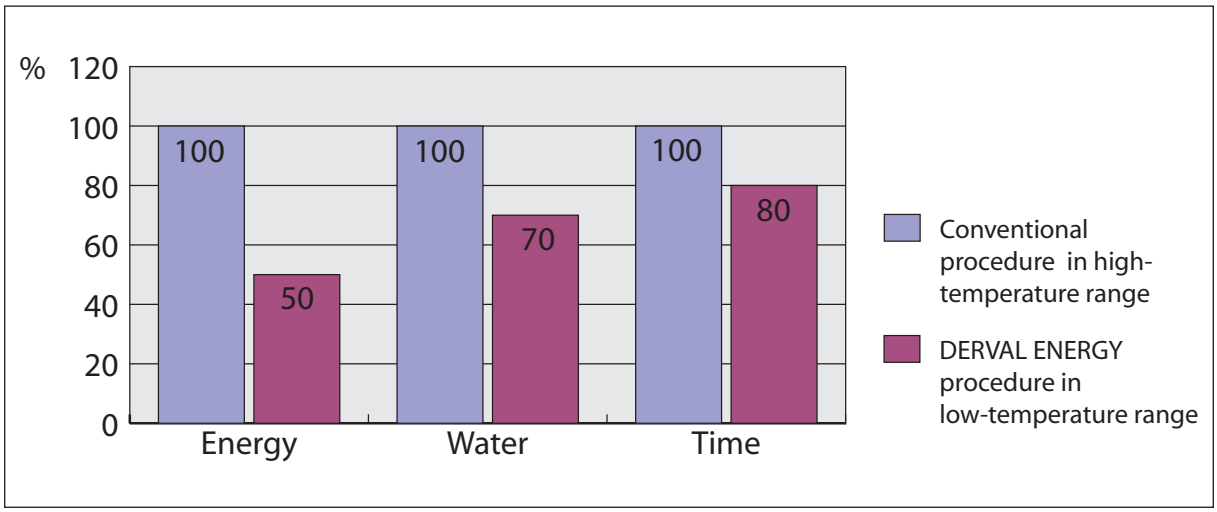
Washed with DERVAL ENERGY and TREBON COLOR at 60 °C (140 °F), single bath, 12 min., pH = 9.5

As compared to a traditional two-bath procedure at a washing temperature of 80 °C (176 °F), the DERVAL ENERGY procedure at 60 °C (140 °F) with at least comparable washing performance offers enormous advantages.

Due to the performance development, even under excessive soil load, pre-washing is not required. The ideal washing temperature is 60 °C (140 °F). A further increase in temperature at more than 70 °C (158 °F) makes sense only in the case of contamination by wax with a high melting point. Due to the washing temperature below the glazing point of polyester fibres, the full machine capacity can be used even with blended fabrics. Cool-down is not required.

Due to the colloid-chemical performance characteristics, high alkalinity is not required for the performance development. The ideal pH range is between 9 and 9.5, which ensures perfect protection of the material and lower rinsing effort.

The diagram shows the advantages that can be achieved



The DERVAL ENERGY procedure

For washer-extractor machines, the following sequence has proved its efficiency as a basic procedure for making best use of the achievement potential of DERVAL ENERGY:

12 – 16 minutes	**Main washing cycle** 2 g/l (0.3 oz/gal) DERVAL ENERGY and 3 g/l (0.4 oz/gal) TREBON SI*, water inlet: 3 l/kg (0.4 gal/lbs), temperature: 60 °C (140 °F), liquor drainage
3 – 5 minutes	**Rinsing** water inlet: 1.5 l/kg (0.2 gal/lbs), temperature: 50 °C (122 °F) (occurs without heating), liquor drainage
3 – 5 minutes	**Rinsing** water inlet: 1.5 l/kg (0.2 gal/lbs), temperature: 30 °C (86 °F) (occurs without heating), liquor drainage
2 minutes	**Intermediate spinning**
3 – 5 minutes	**Rinsing** water inlet: 2 l/kg (0.3 gal/lbs), temperature: cold, liquor drainage
3 – 5 minutes	**Final spinning**

* Alternatively: TREBON COLOR or DERVAL SOLO

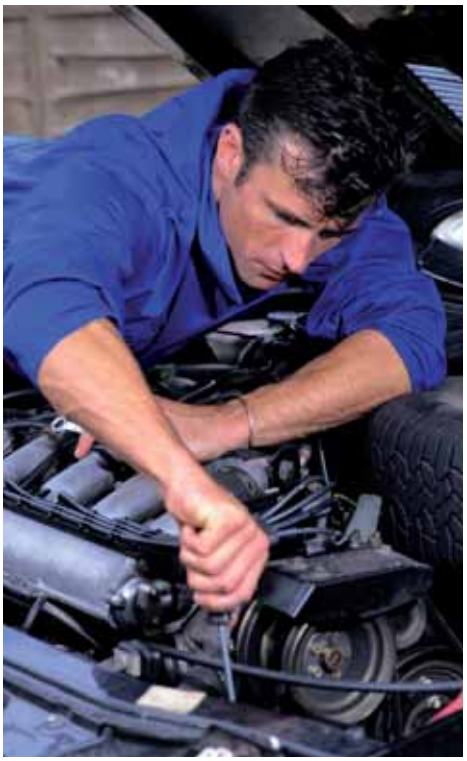
With the new DERVAL ENERGY procedure and suitable products, a considerable reduction of the factors TIME, COSTS and ENERGY could be achieved in the care of modern professional clothing.

What is so special about DERVAL ENERGY?

DERVAL ENERGY is a cleaning booster that has been optimised consistently for the removal of oil, grease, and pigment dirt from textiles. The interaction of the special active ingredients ensures an extremely dynamic interfacial surface activity in the temperature range between 40 °C (104 °F) and 60 °C (140 °F) so that the oil and grease are dispersed together with lipophilically (oil bonding) stored pigments in the washing liquor. This colloid-chemical action has been perfectly balanced for the performance characteristics of the detergents TREBON SI, TREBON COLOR, and DERVAL SOLO.

The design of the entire system ensures that the dispersing power remains active even under high soil load of the washing liquors and that it is transferred specifically into the state of disorption upon liquor dilution so that the first rinsing bath performs two functions: continuation of the washing process and concentration reduction.

Which benefits does the DERVAL ENERGY procedure offer?



With their new DERVAL ENERGY procedure, Kreussler managed to combine cost minimization with washing performance and conservation of the clothing's value.
For each type of stain and degree of contamination, Kreussler offers efficient and economic procedures that make textiles perfectly clean at low energy and water consumption.

- **Very good material protection and textile wear reduction**
- **50 % less energy consumption**
- **30 % less water consumption**
- **20 % less time**
- **For blended fabrics, higher utilization of machine capacity due to the removal of the cool-down**

The DERVAL ENERGY procedure is particularly favourable for all types of professional clothing, personal protective equipment (PPE), mats, caterers' and butchers' clothing.
Kreussler service technicians coordinate optimised procedures exactly with the individual applications so that the previously mentioned conflict with regards to the conservation of the textile value can be solved by DERVAL ENERGY with gentle, cost-efficient washing procedures on the one hand and excellent washing characteristics on the other.

Competent and efficient in textile chemistry and hygiene

Kreussler is a medium-sized German traditional company of the chemical industry that has been family-owned since its foundation in 1912. Today's branches, textile chemistry and pharmacy, have envolved from the original business.
The field of interest for the textile chemistry branch is the commercial textile cleaning in its entirety: dry cleaning, wet cleaning, and industrial washing. The global operation of Kreussler is geared to the making of highly effective products in combination with competent applications engineering.

Optimal support and consulting

Working closely with you and your team, we will develop a system that ensures productivity and safety for your business. The applied products and procedures will be customized perfectly to suit your company and your needs giving the highest regard to efficiency and safety.

Absolute cost transparency

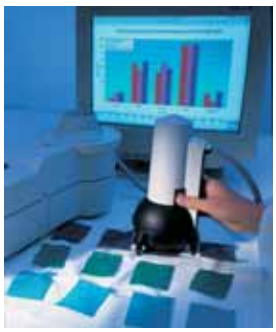
From the offer to products to procedure – the customer can always keep track of the exact costs and his savings.

Quality

Specially trained employees, the Quality Management System ISO 9001:2000 as well as the Environment Management System DIN-EN 14001 ensure consistent, traceable quality.

Procedural safety

The procedures developed by Kreussler are reviewed at regular intervals in order to ensure procedural safety and to achieve optimal results. During the service calls, the parameters of the washing process are chekked and optimized.



All changes are documented; they are always traceable and up-to-date. The use and evaluation of standardized test strips ensure the validation of the procedure with regard to safety and quality.

Dosing equipment

The exact dosage of the products during the procedure constitutes an essential factor for its efficiency.

The dosing equipment of Kreussler is customized for your business and ensures a dosage that harmonizes perfectly with the procedure and the textiles.

Eco conscious washing

With their highly concentrated products, Kreussler ensures savings in product, water, and energy consumption. The products have been dermatological tested; they are exactly dosable as well as biodegradable and have been designed according to the most recent legal requirements.

Reliable service … by telephone

For ordered goods, a short delivery time is often of essential importance. Emergency orders are processed expediently. Our service department ensures straightforward, smooth processing and delivery of each order whether it is a rush or standard order.

And for absolute emergencies, we have logistic solutions at hand.

… personally

Our trained service technicians are on the spot whenever they are needed: quickly and without delay. Depending on the laundry's size and type of textiles, our field representatives compile a periodical service schedule for you to ensure trouble-free operation.

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