

Criteria for the application of foreign cleaning agents for 1000 ESR and 1000 ESE devices

In general, cleaning accelerators (cleaning agents, detergents) can be used with our low pressure hot cleaning devices. For this purpose, we offer a wide range of alkaline cleaning agents which have been tested extensively in our company and work optimally with our technology.

If you want to use other products, below we have listed some criteria that these cleaning agents should meet. Due to the variety and complexity of the cleaning agents available on the market, this can only be a non-binding orientation.

Please note that using third party cleaning agents will cause the loss of our warranty due to misuse for damages caused by wrong cleaning agents.



When using cleaning accelerators by third party providers (foreign cleaning agents, foreign detergents) please ensure that these are:



1. Suitable for V2A stainless steel (1.4303, AISI 304) and can be alkaline or acidic. Also, de-mineralised water can be used.
2. High temperature resistant – the products will be heated to approx. 95°C in the flow heaters;
3. Contain a temporary anti-corrosion protection, depending upon the specific task;
4. Have a demulsifying effect. Otherwise, by using such cleaning agents, oil is bound in the cleaning water (emulsified) which leads to the following problems:
 - a. The oil separator concept in the collector of the 1000 ESR does not work any more.
 - b. The fine filter cartridges are clogged extremely quickly.
 - c. The device tank is soiled very quickly.

The total contents in the device resp. the concentration of the cleaning agents can vary due to evaporation, filling, and splashing. We therefore recommend to check the pH-value on a regular basis resp. at the latest after each refill.

Too high a chemical concentration can lead to the destruction of components in the device and will cause the loss of our warranty due to misuse.



The following products must not be used:



1. Inflammable fluids. Spraying these may result in fire, resp. an explosive air mixture can be produced!
2. Cleaning agents which release the gas hydrogen as a reaction product with aluminum.