



Elmasolvex

Watch cleaning with certified Ex-protection



Elmasolvex[®] VA · Elmasolvex[®] RM · Elmasolvex[®] SE
elma wf pro · elma suprol pro

www.elma-germany.com

Elmasolvex® VA

Single-chamber ultrasonic vacuum technology for cleaning with solvents.
TÜV-certified safety due to intrinsic Ex-protection.



Elmasolvex® VA with wide range of accessories

The new standard for the use of flammable solvents in watch movement cleaning

- Ex-certified solvent-based cleaning of watch movements (TÜV Rheinland)
- Protection against solvent vapours and odours using extraction or self-contained filter system
- Vacuum technology also reaches difficult-to-access places and removes gas bubbles from the movements
- Cleaning and rinsing using multi-frequency ultrasound in rotation or oscillation process
- Machine can be completely rotated, media containers and connections are very easily accessible
- Media containers are easy to replace and rinse out. Integrated particle filter for increasing the service life of the cleaning and rinsing solutions
- Wide range of practical accessories; see accessories catalogue

Ultrasonic and vacuum technology guarantees

- maximum cleanliness due to removal of interfering gas bubbles
- explosion safety due to the Ex-protection measures integrated in the machine

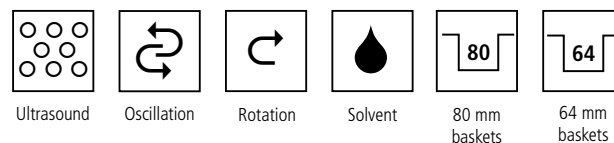
Process:

Ultrasonic / vacuum process for solvents in the rotation or oscillation process

Solvent cleaning:

ex-certified for flammable solvents with flashpoint ≥ 12 °C;
e.g. elma wf pro, 3 x elma suprol pro, drying

Processes and media



Filling cleaning and rinsing solution



Installing media containers



Connecting media containers



Controlled exhaust air routing



The quality of the mechanical watches and thus the requirements in production and service for the movement cleaning have increased continuously. Complex design of the precision engineering and continually increasing requirements for materials and surfaces require a cleaning process which satisfies these most exacting demands.

Ultrasound achieves excellent cleaning results requiring only very short process times. However, technically, ultrasound must be considered as a heater which makes explosion protection a difficult technical requirement.

Elmasolvex VA has its own self-contained intrinsic Ex-protection due to the vacuum technology used and all the measures required by TÜV and the applicable technical regulations for explosion safety. This means that the explosion protection measures integrated in the machine already rule out any fire hazard in the primary zone, operation in compliance with the manual provided. The use of ultrasound is thus legally possible and permitted. The TÜV test performed confirms the requirements for the use of the prescribed CE mark.



Filling baskets with watch parts



Selecting and starting program



Vacuum is established



Removing cleaned and dried baskets