

pero



Cleaning with
solvents

R1 CLEANING PLANT

THE FASTEST IN ITS CLASS



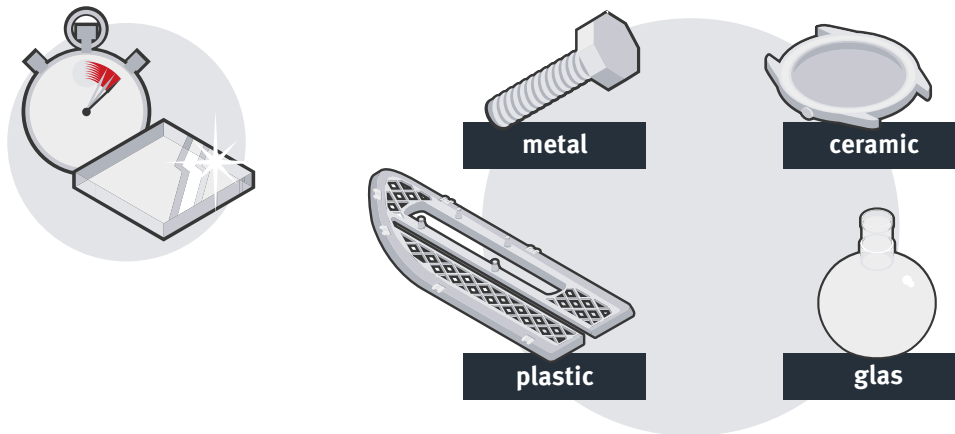
**FAST AND
ECONOMICAL**

Exemplary illustration

FAST AND ECONOMICAL

The R1 series cleaning plant comes with high performance.

Short cycle times along with reproducible cleaning results. The proven process technology also meets the highest quality requirements among parts cleaning.

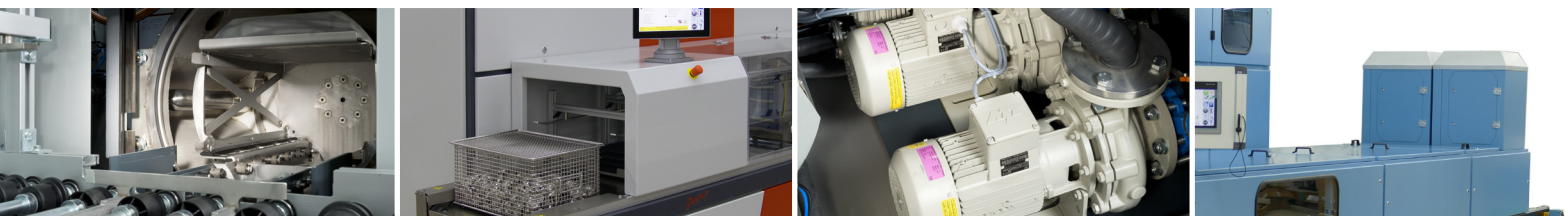


In the R1 plants the whole range of machined and formed metal processing can be optimally cleaned. And, just as metal parts, plastic, ceramic or glass, workpieces either individually positioned goods, bulk material or single components are efficiently cleaned under full vacuum. Efficient operation under full vacuum protects the cleaning medium and minimizes the solvent consumption.

EASY & COMFORTABLE

The TouchPanel control offers maximum flexibility to quickly and simply create individual cleaning programs.

- + Clear user interface, understandable symbols and process visualisation
- + Weekly timer for programming switch-on and switch-off time
- + Program preselection and automatic shift for automated maintenance of bath, distiller and filter
- + Profinet for remote maintenance and data transmission
- + Storage of status messages and errors for efficient service visits
- + Process schematic visualisation for monitoring the program execution



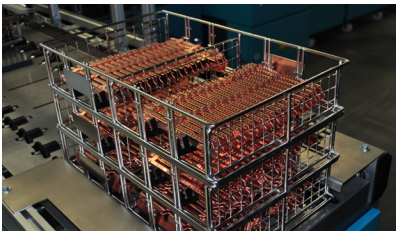
ECOLOGICAL & ECONOMICAL

All process steps take place under full vacuum. This supports cleaning in solvents, reduces energy consumption and allows short cycle times with maximum safety.

- + High degree of technical cleanliness by combining the processes of cleaning, rinsing, vapour degreasing and optional ultrasound cleaning and/or preservation against corrosion
- + Integrated maintenance programs automatically maintain the cleaning medium and filter and thus ensure high cleaning quality and availability
- + Heat output is adjustable as needed via energy manager – maximum energy efficiency
- + Future proof reliability for the Universal model: can optionally be modified easily to alternative solvents
- + Protection of staff and environment due to redundant process monitoring. Benefits of solvent used in a circuit



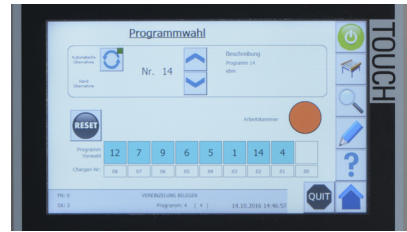
Filter monitoring and drying



Example for cleaning with defined surface tension



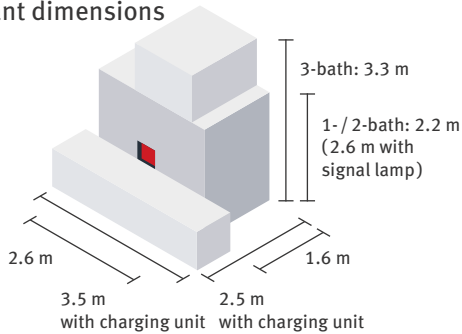
Example for cleaning according to defined cleanliness requirements



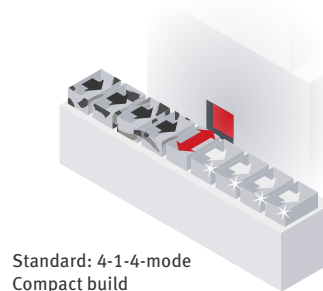
Plants with automatic charging unit (option) come with a standard 12" display

TECHNICAL DETAILS

External plant dimensions



Automatic charging unit (option)



Standard: 4-1-4-mode
Compact build

| Cleaning medium | |
|--|--|
| Hydrocarbons or modified alcohols with flashpoint > 55° C; halogenated hydrocarbons; further solvents on request | |
| Batches / Goods carriers | |
| Standard external dimensions (LxWxH), max. | 480 x 320 x 200 mm or 530 x 320 x 200 mm (std.) 530 x 365 x 250 mm (A chamber) |
| further sizes or combinations on request | |
| Batch weight, max. | 80 kg |
| Height of charging unit | approx. 795 – 845 mm |
| Throughput | |
| Depending on process chosen | up to 20 batches / h with a max. of 35 kg steel |

| Performance data | |
|--|--|
| Connected load | approx. 19 – 25 kW |
| Heat output | 3.3 / 9.9 / 13.2 kW, selectable (energy manager) |
| Heating-up time of plant | approx. 60 – 80 min |
| Sound level | < 75 dB(A) |
| Solvent volume 1-bath | 210 l |
| Solvent volume 2-bath | 330 l |
| Solvent volume 3-bath | 450 l |
| Options | |
| e.g. ultrasound, remote maintenance, preservation bath, etc. | |

All the data are approximate figures - Errors and omissions reserved

COMPETENCE CENTRE

FOR THE TECHNICAL CLEANLINESS OF COMPONENTS

More than **15 demonstration machines** available in our 1,100 square meter Competence Centre, allowing you together with our Pero engineers to develop the optimum cleaning process for your company.

Cleaning process with

Water based media

- + Batch facilities for quality carriers up to 660 x 480 x 300 mm
- + Tunnel cleaning plants
- + Cleaning systems for large components up to a width of 2,100 mm and a weight of 1,500 kg

Solvents

- + Comparing different media
- + Testing alternative cleaning processes
- + Seeing the appropriate handling of parts

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MAKING USE OF STRONG PERFORMANCE

- + Free cleaning tests on original dirty parts including documentation
- + Evaluations and analyses of cleanliness according to VDA 19 in **our laboratory**
- + Technological insight and valuable data for your company

Even before you have decided about the investment, assessing the profitability of the future process can be carried out. The defined technical cleanliness of the components reliably reached and maintained.

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