

N2

Industrial parts cleaning machine with solvents



Standardized and efficient

N2 STANDARDIZED AND EFFICIENT

Thanks to its highly efficient process technology and low energy consumption, the N2 offers excellent cleaning results combined with high throughput.

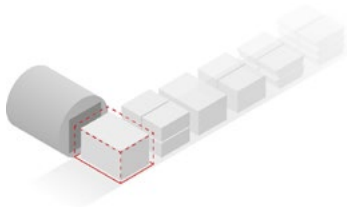
CHOOSE FROM THREE WORKING CHAMBER DEPTHS

Choose from a range of chamber depths in combination with standardised basket systems to achieve the throughput rate you need – our technicians would be delighted to advise you.

N2

Standard chamber

Length of basket holder in working chamber up to 660 mm

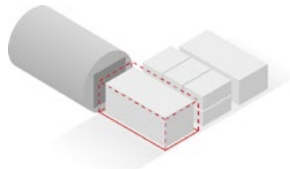


Max. load dimensions (L x W x H):
1 x 660 x 480 x 400 mm, or
4 x 480 x 320 x 200 mm

N2B

Large-volume chamber for high throughput

Length of basket holder in working chamber up to 990 mm

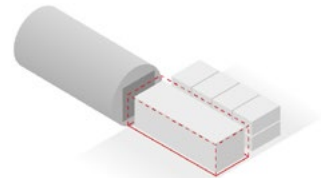


Max. load dimensions (L x W x H):
1 x 990 x 480 x 400 mm, or
6 x 480 x 320 x 200 mm

N2D

Large-volume chamber for high throughput

Length of basket holder in working chamber up to 1.340 mm



Max. load dimensions (L x W x H):
1 x 1.340 x 480 x 400 mm, or
8 x 480 x 320 x 200 mm

PROVEN QUALITY

The machines of the N2 series make use of the specific properties of solvents for the cleaning, degreasing and/or preserving of parts. Operators can choose from a range of conventional solvents that achieve optimum cleaning results, taking into account the actual level of contamination of the parts.

- **High availability** High availability thanks to top-quality, standardised and tested components from leading manufacturers
- **Perfect media treatment** with permanent full-flow and optional bypass filtration
- **Saving costs** with Pero full vacuum technology with extra low solvent and stabilizer consumption
- **Flexibility** thanks to modular machine extensions
- **Unrivalled operator comfort** thanks to automated, timer-controlled maintenance routines



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 level of technical cleanliness thanks to combined **cleaning, rinsing** and **vapor-degreasing** processes
Optional: ultrasound cleaning and/or preservation
- **Reduced footprint** thanks to roller shutter at rear (electrically operated)
- **Maximal energy efficiency:** heating output controlled by Energy Manager
- Model "Universal" for exceptional **future security:** allows optional modification from CHC to alternative solvents such as hydrocarbons or modified alcohols
- Redundant process monitoring combined with fire and explosion protection equipment **protects humans and the environment**



Compact and easily accessible thanks to roller shutters



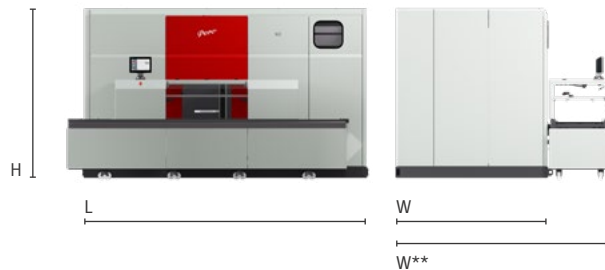
Optional: processing chamber with ultrasound unit



User-friendly control interface

TECHNICAL DETAILS – N2

External machine dimensions



	N2	N2B	N2D
H	2,4 m	2,4 m	2,4 m
L	4,0 m	4,0 m	4,0 m
W	2,2 m	2,2 m	2,2 m
W**	3,3 m	3,5 m	3,8 m

** automatic charging unit

CLEANING MEDIUM

Hydrocarbons or modified alcohols with flashpoint > 55° C; halogenated hydrocarbons; further solvents on request

BATCHES / GOODS CARRIERS

Standard-external dimensions (L×W×H), max.	N2	1× 660 x 480 x 400 mm, or 4× 480 x 320 x 200 mm
	N2B	1× 990 x 480 x 400 mm, or 6× 480 x 320 x 200 mm
	N2D	1× 1.340 x 480 x 400 mm, or 8× 480 x 320 x 200 mm

further sizes or combinations on request

Batch weight, max. 200 kg (N2, N2B), 300 kg (N2D)

Height of charging unit approx. 790–850 mm (depending on height of cleaning batch and charging method)

THROUGHPUT

Depending on chosen process up to 15 batches / h with a max. 70 kg steel

PERFORMANCE DATA

Connected load	approx. 43–82 kW
Heat output	10 / 20 / 30 kW, selectable (energy manager)
Heating-up time of machine	approx. 90 min
Sound level	< 75 dB (A)
Solvent volume 1-bath	530 l
Solvent volume 2-bath	930 l
Solvent volume 3-bath	1.320 l

OPTIONS

e.g. ultrasound, remote maintenance, preservation bath, etc.

All specifications are approximate values and may vary depending on equipment – errors and omissions excepted

N2
SCOPE

PERO SCOPE – THE NEW BENCHMARK IN PARTS CLEANING

Even in their basic configuration, Pero systems set new standards in terms of efficiency and automation. With revolutionary SCOPE technology, we are taking these standards to a whole new level: an intelligent system that drastically reduces energy consumption and significantly increases efficiency – without compromising on performance.

The result: maximum power, minimum costs. Thanks to considerable savings, the investment pays for itself in no time – and gives you a lasting competitive advantage.



(verified practical values)

SCOPE: SMART OPTIMIZATION OF THE CLEANING PROCESS

SCOPE automatically monitors the solvent bath and guarantees a consistently optimal condition of the cleaning medium. The heating power and distillation are regulated as needed, which can save a large portion of the energy requirement. This reduces operating costs and improves the ecological balance of your business.

- Solvent-based cleaning system
- Automatic charging unit

FIND YOUR CLEANING SYSTEM

We will be happy to advise you on which service package is best suited to your application.



N2 BASIC

NEW



**SMART
CONTROL FOR
OPTIMIZED
PERFORMANCE AND
EFFICIENCY**

- Solvent-based cleaning system
- Automatic charging unit
- **SCOPE technology**
- OPC UA interface + remote maintenance

- Solvent-based cleaning system
- Automatic charging unit
- SCOPE technology
- OPC UA interface + remote maintenance
- Operating data collection
- Mobile barcode scanner with program assignment
- Forming gas welded pipes
- Electropolished working chamber



N2 SCOPE



N2 SCOPE+



FOCUSED ON OUTCOMES

At our Centre of Competence in Königsbrunn, we assist you in finding the best cleaning solution for your specific needs.

More than 15 water- and solvent-based test machines are available in an area of 1000 m². We design optimised cleaning methods and programs that meet your needs by performing test runs with your own dirty parts.

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.



MAKING USE OF STRONG PERFORMANCE

- Cleaning tests free of charge, using parts provided by the customer; including documentation
- Evaluations and analyses of cleanliness according to VDA 19 in our laboratory

Contact us for advice:
en.pero.ag/contact-to-pero

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RELIABILITY YOU CAN BANK ON



Safe and reliable

High-precision production and spare parts service



Quality made in Germany

80% vertical range of manufacture in Germany



Worldwide sales and service

Global network of certified service partners

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