





Professionell Textile Cleaning Machines

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BÖWE History

The history of the company BÖWE – located in the Black Forest in Germany – started in 1945 with the foundation by Max Böhler and Ferdinand Weber after the end of the Second World War.

As a supplier for several companies they had the idea of developing dry cleaning machines. Five years later Böhler and Weber presented the first dry cleaning machine for garments. From that point a success story started and until today BÖWE delivers innovative and high quality machines to the global market. In 2010 Ziermann Holding took over with CEO Frank Ziermann.

Benefit from more than 75 years' experience in the field of dry cleaning machinery.

75 YEARS COMPETENCE & QUALITY

BÖWE's innovative ideas and continuous developments are key elements of the company and have ensured its excellent reputation throughout the world.

Nowadays, BÖWE delivers high quality PERC and Multisolvent[®] dry cleaning machines all over the world.







Frank Ziermann

Max Böhler

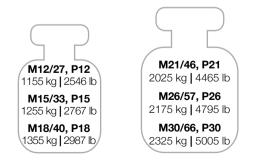
Ferdinand Weber

BÖWE PremiumLine

WITH THE PREMIUM LINE ASSEMBLY IT IS POSSIBLE TO CHOOSE BETWEEN TWO DESIGNS IN P/M12-18 MACHINES.

The versatile design of P/M 12-18 machines offers the possibility to choose between a Slim- or CrossLine configuration.

MACHINE WEIGHT (without solvent)





BÖWE Premium CrossLine

LOADING CAPACITY

M12/27 | P12 : 12 kg/27 lb M15/33 | P15 : 15 kg/33 lb M18/40 | P18 : 18 kg/40 lb M21/46 | P21 : 21 kg/46 lb M26/57 | P26 : 26 kg/57 lb M30/66 | P30 : 30 kg/66 lb

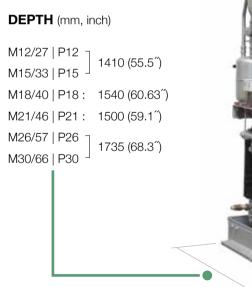
P Iremium

Photo of M18 for demonstration only P/M 21-30: 2200 mm (86.6")

BÖWE Premium CrossLine

M12/27, P12 | M15/33, P15 | M18/40, P18 M21/46, P21 | M26/57, P26 | M30/66, P30

DISTILLATION BESIDE THE MACHINE





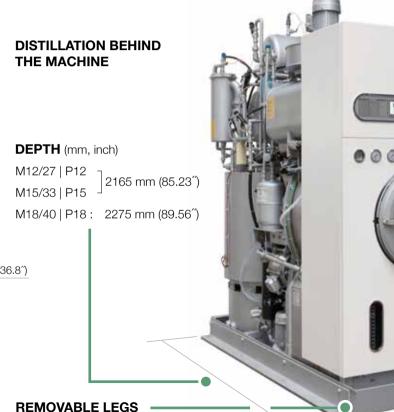
The most compact dry cleaning machine worldwide

- \oplus fits through every door
- \oplus 18 kg/40lbs capacity within 2m²/21.52 sq ft
- ⊕ distillation behind the machine



BÖWE Premium SlimLine

M12/27, P12 | M15/33, P15 | M18/40, P18



ROUND SHAPES

- ⊕ less welds
- ⊕ less fatigue breaks
- \oplus no lint balls
- ⊕ no corners and edges
- ⊕ better airflow

The BÖWE philosophy

THE ROUND SHAPE OF THE COMPONENTS IS A CLEAR BENEFIT FOR THE OPERATION OF THE MACHINES AS WELL AS FOR THE DAILY MAINTENANCE.

Round stainless steel air duct

Round stainless steel water separator

Round stainless steel distillation

Round stainless steel lint filter and button trap

BÖWE Sophisticated design

ROUND STAINLESS STEEL DISTILLATION

Using the pump circuit of the sludge pump in the distillation process with the addition of a steam injection, this azeotropic mixture that is created helps reducing the percentage of solvent in the disposal waste.

SLOPING DISTILLATION BASE

The sloping bottom of the distillation simplifies the transport of the sludge to the rake out door. As sludge creates an insulating layer, the sloping bottom of the distillation means that you can keep your distillation surface clean and save energy.





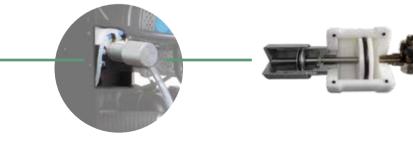
- ⊕ very quiet
- ⊕ no lint balls
- ⊕ short drying times
- \oplus no corners and edges

STAINLESS STEEL AIR DUCT

Round, efficient and aerodynamic Developed with the aviation industry

DETERGENT STROKE PUMP WITH VITON® SEALS

Regulates the dosage from 50-150ml



BÖWE Service friendly

BÖWE Drystat Drying controller

Capacitive sensors used in all BÖWE machines.

NEW CAPACITIVE SENSORS

New level sensors for checking the filling level for distillation, Drystat drying controller, the water separator and the sludge barrel. The sensors are maintenance and wear-free.

SELF-CLEANING WATER SEPARATOR

The water separator is made of high quality stainless steel together with big sight glasses so that manual cleaning is avoided.

STAINLESS STEEL PIPES WITH CONEX UNIONS AND 8 YEARS WARRANTY



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BÖWE Security – 100% save



Independent tests conducted by the former TBBG Institute in Germany certify that BÖWE Multisolvent[®] machines can be installed and used without the need of nitrogen bottles. Consequently, as defined in ISO/WD 8230-3.2, dry cleaning machines can be operated with flammable solvents.

In BÖWE PremiumLine machines, the control systems serve as explosion protection and perform automatic checks so that failures are not attributable to unsafe conditions and explosions. This unique system also makes arrangements against unintended maladjustments or manipulation of sensors and other devices during the cleaning and drying phase. Electrical devices in these machines are checked in accordance with the EN 50014 – EN 50039.

NO PPM MEASURING DEVICE REQUIRED IN BÖWE MULTISOLVENT® MACHINES.

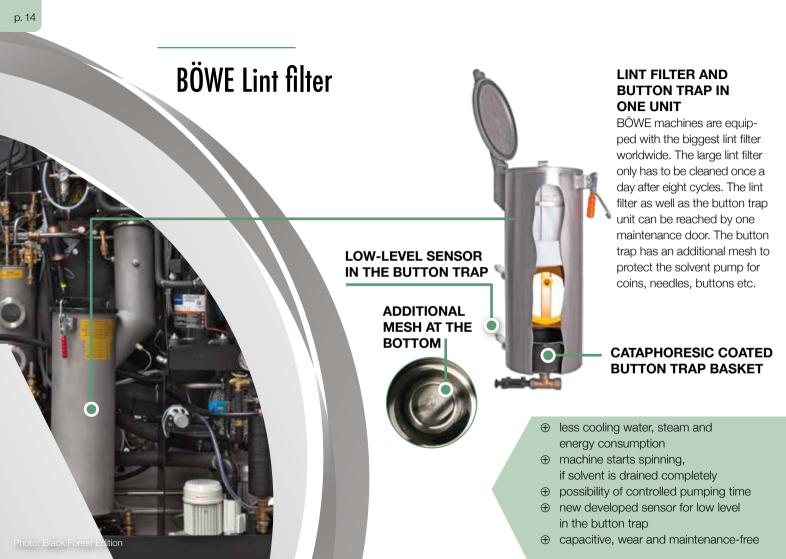


BÖWE Special coatings

BÖWE created a very smooth surface by using a special coating by ion addition in a galvanic process. Thereby, lint at the flange, back plate, cooler and fan housing, etc. are prevented. The results are shorter cycle times and less energy consumption.









8 YEARS WARRANTY ON COMPLETE CONDENSER AND HOUSING

- ⊕ stainless steel condenser housing in 316 TI stainless steel
- cooling coil fixed with metal strips, thereby no vibration, noise and fatigue breaks
- cooling coil with 70 μm zinc coating, industry standard is 7 μm
- ⊕ big oversized condenser from P/M30 also in P/M12 – 18, giving cooler solvent
- ⊕ stainless steel tubes and compression fittings

8 years warranty on stainless steel tubes and brass fittings

BÖWE Condenser | Viton® flaps and gaskets



8 YEARS WARRANTY ON LONG LASTING, PRECISE SEALING FLAPS MADE OF VITON®



Viton® is a high value material made of fluor andcaoutchouc. The expensive Viton® is well known as a technical seal with high thermal and chemical resistance. Different from other elastomers, it is resistant to hydro-carbons like oil and petrol, also at higher temperatures, it does not swell or dissolve.

BÖWE Maintenance & Hygiene

SPECIAL TANK OUTLET CUP DESIGN

⊕ self-cleaning solvent tanks

AUTOMATIC MAINTENANCE FOR

- ⊕ distillation
- ⊕ spin filter
- ⊕ Slimsorba (active carbon unit)
- ⊕ water separator
- ⊕ post water separator and
- ⊕ cleaning of tanks

PREVENTING BACTERIA AND ODOUR

Sloping tank bottoms prevent dirt and water accumulation in the tank.

BÖWE Direct Connect | PLC Control

PLC CONTROL

Plain text display and advice to guide the operator. Equipped with large numbers for the time specification display, they can be seen from a distance. Several maintenance programs are combined with the multi maintenance program.

Automatic multi maintenance for distillation, spin filter, Slimsorba (active carbon unit), water separator, post water separator and cleaning of tanks working at the same time.

Freely programmable and compatible to Siemens.

BÖWE dry cleaning machines are available in many control languages.

DIRECT CONNECT

- ⊕ quick fault diagnostic without service technician at site
- ⊕ spare parts can be ordered directly
- ⊕ service avoidance in case of operator or maintenance error
- ⊕ router LAN connection required





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DYNAMIC AIRFLOW DRYING SYSTEM

The patented stainless steel drum with dynamic drum perforation, meaning less holes in the front area of the drum and more holes in the back area as well as in the back plate, forces the air to use the longest way through the garments.

This results in shorter and more efficient drying in problem zones, for example on shoulder pads.

BÖWE Drum & Loading doors

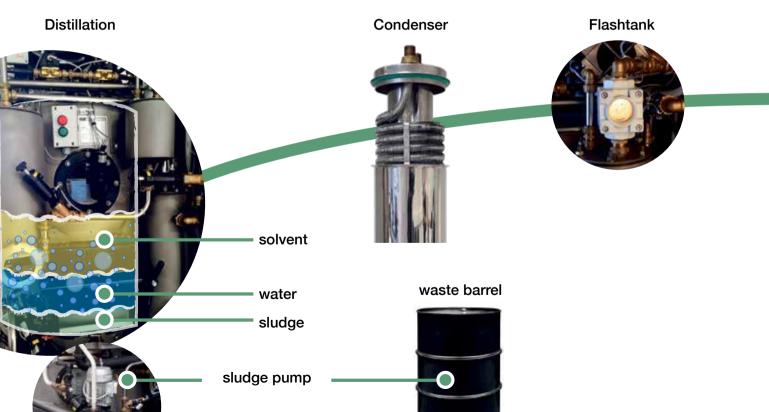
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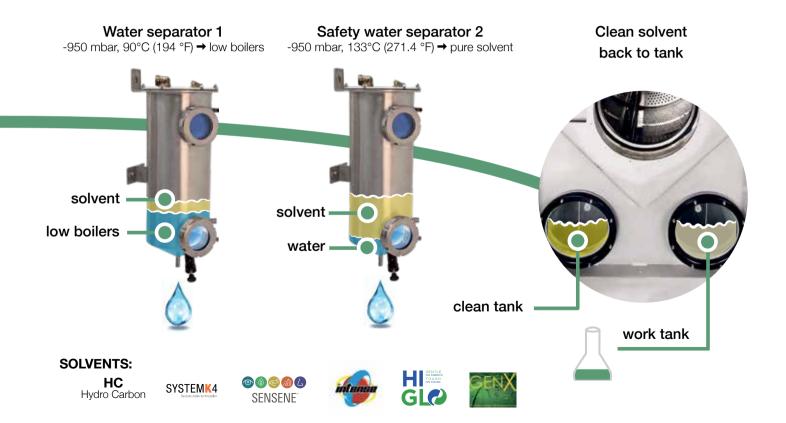
LOADING DOOR

A big loading door is not only a question of comfort but also one of efficiency when loading and unloading.

Multistage Distillation in BÖWE Multisolvent®

THE FRACTIONAL DISTILLATION PREVENTS WATER ACCUMULATION IN THE SOLVENT TANK. BY AVOIDANCE OF DIRT AND WATER IN THE TANK, NO CULTURE MEDIUM FOR BACTERIA IS FORMED.





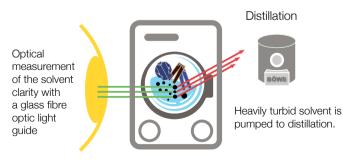
BÖWE Turbidity measurement for clarity. A global novelty.

BÖWE continuously strives for improving the energy efficiency of its already world class machines. Besides the low-level sensor, adapting the solvent quantity to the amount of garments, BÖWE developed another new energy-reduction feature in the area of environmentally friendly energy management:

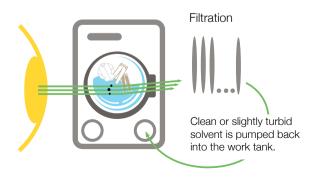
AUTOMATIC TURBIDITY MEASUREMENT

Combined with the Siemens control the degree of contamination of the garments and the solvent is measured optically with a glass fibre light guide. With the aid of the measured contamination, the solvent of the first bath is pumped to distillation in the case of strong turbidity (first picture). At low turbidity, the machine decides independently to pass on to the second bath (second picture). In this case, additional solvent is pumped up to a high level and then passed back through filters into the work tank. The dry cleaner can himself set the degree of contamination of the solvent via the computer control and thus determine when the machine is supposed to pump to distillation.

SOLVENT: HEAVILY CONTAMINATED GARMENTS



SOLVENT: SLIGHTLY CONTAMINATED GARMENTS





- ⊕ Reduced cycle time
- Decrease of energy consumption and cooling water
- ⊕ Reduced environmental impact

BÖWE Siemens computer control with touch screen

NEW SIEMENS CONTROL WITH 12" COLOR-TOUCH-DISPLAY

In the course of industrialization 4.0, BÖWE has set new standards by collaborating with Siemens and developing its new touch screen control. The new PLC computer control has a 12^e color touch screen, integrated circuit diagrams and spare parts catalogs, an energy clamp for digital recording of energy consumption, new remote maintenance capabilities and control by smartphone and tablet.





THESE ARE SOME RECENT INSTALLATIONS IN THE USA, GREAT BRITAIN, SWITZERLAND, GERMANY,



THE PHILIPPINES, INDIA, THE UNITED ARAB EMIRATES, THAILAND, MOZAMBIQUE, SRI LANKA,



THE MALDIVES ETC... WITH PREMIUM LINE, ILINE MACHINES & INDUSTRIAL INSTALLATIONS.



BÖWE Customers | Partner

Worldwide over 6000 satisfied customers rely on BÖWE machines

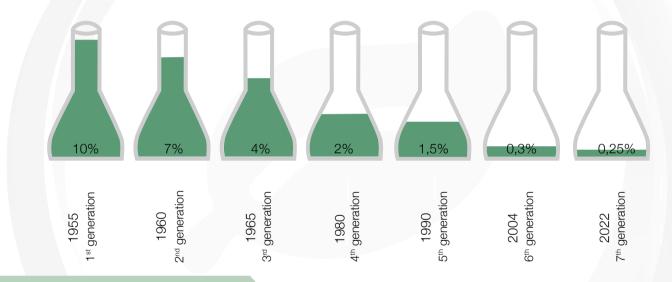
AIDA CRUISES | P & O CRUISES | LÜRSSEN YACHTS | ROYAL CARIBBEAN CRUISE LINE | HILTON | SHERATON | LAGUNA PHUKET | INTERCONTINENTAL | JEBEL ALI GOLF RESORT | SHANGRI-LA | HYATT | LE MERIDIEN | ROYAL PHUKET | KEMPINSKI | MARRIOT | SKI DUBAI | KINGDOM OF BAHRAIN MINISTRY OF INTERIOR | HERMÈS | EMIRATES AIRLINES | BALAKOVSKYA | NUCLEAR POWER PLANT RUSSIA | REGAL DRY CLEANERS | SPARKLE DRY-CLEANERS | LUFTHANSA | MARC CAIN FASHION CLOTHES | HOHENSTEIN INSTITUTE | etc.

POWERED BY



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BÖWE Solvent consumption



Lowest solvent consumption on the market. Approx. 0.25% (100kg/220lb garments = 250g/0,55lb solvent consumption)

Solvent comparison

	PERC	HC Hydro Carbon	GreenEarth	SYSTEMK4	Image: Sensene [™]	intense	HI DUGH GLO	\diamond
Characteristic	Perchlor- ethylen	Hydrocarbon	Silicone D5 GreenEarth	Solvon K4	SENSENE	Intense	HIGLO	Water
Density (kg/dm³)	1.62	0.7-0.8	0.95	0.835	0.84	0.79	0.78	1
Boiling point (°C)	121	170-195	210	180.5	180	183	184	100
Evaporation heat (kJ/kg)	209.8	265	N/A	246.6	266	250	250	2257
Flash point (°C)	not flammable	55-65	77	62	65	64	62	not flammable
Explosion limit	-	0.6 - 7.0 %	0.7 % (LEL)	0.65 23 %	0.6 - 7.0 %	0.6 - 7.0 %	0.6 - 7.0 %	-
Kauri-Butanol value	90	22-30	13	75	161	73	43	N/A
Legal requirement	2. BlmschV/ VOC	31. BlmschV/ VOC	31. BlmschV/ VOC	31. BlmschV/ VOC	31. BlmschV/ VOC	31. BlmschV/ VOC	31. BlmschV/ VOC	N/A
BÖWE machine type	P-series	M-series	M-series	M-series	M-series	M-series	M-series	laundry machines, wet cleaning

(no reponsibility is taken for the validity of this information)

MULTISOLVENT® - EASY CONVERSION TO OTHER SOLVENTS

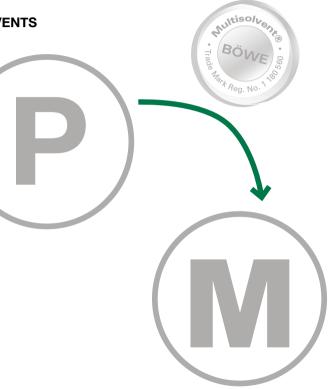
By using the parts kit, BÖWE PremiumLine machines can be converted from PERC to Multisolvent[®].

After the conversion the below-mentioned solvents are suitable:

- Hydro Carbon (HC)
- ⊕ Silicone (GreenEarth®), D5
- ⊕ Solvon K4
- ⊕ SENSENE
- ⊕ HIGLO
- ⊕ Intense
- ⊕ GenX etc.

BÖWE PremiumLine machines work with many alternative solvents in several countries. By efficient drying, round airduct, dynamic drum perforation and cataphoresic coating a BÖWE M-machine is suited to use solvents lighter than water.

The conversion to other solvents in PremiumLine Multisolvent[®] machines only requires a free software update without mechanical conversions.



BÖWE Showroom | Academy



BÖWE APP

The BÖWE App serves for providing all information a professional dry cleaner must know. Here you will find useful as well as practical things for your daily business, including technical data of fibres, garments, solvents etc.. The App is available for Android and APPLE.







PANORAMA

VIFW

BÖWE ACADEMY

For customers, service technicians and business partners we brought the BÖWE showroom and academy to life. You can visit regularly workshops and education courses.

BÖWE In our Sh

BÖWE SHOWROOM

In our Showroom you have the possibility to test various BÖWE dry cleaning machines in combination with different solvents. Thanks to digital electricity and water meters, the current consumption values of all machines can be read in a real working environment.









BÖWE Black Forest Edition

SPECIAL EDITION BÖWE PREMIUMLINE – HIGH QUALITY

The BÖWE Black Forest Edition is a special model of the BÖWE Premium-Line series with additional equipment features. The high-quality machines are electric or steam heated, with loading capacities of 12-30 kg/27-66lb and

available in PERC and Multisolvent® versions.

The following unique selling points must be highlighted

- ⊕ high end technology
- ⊕ low solvent consumption
- ⊕ service friendly due to smoother surfaces
- ⊕ self-cleaning water separator
- ⊕ complete stainless steel piping (without painting)
- ⊕ special coating of e.g. back plate
- ⊕ paintless stainless steel parts
- ⊕ automatic solvent adjustment
- $\oplus\;$ electro-phoresic metal surface coating on e.g. button trap basket, cooling unit console, fan housing, etc.

Moreover the special edition possesses perl grey glass bead blasted stainless steel parts such as air duct, water separator, distillation, button trap and solvent tanks.



THREE CONVINCING ARGUMENTS AT A GLANCE: SHOWROOM, INSPIRING SOLUTIONS & ALL IN ONE SHOP CONCEPT BÖWE OFFERS TWO OWN PRESENTATION FACILITIES TO TEST MACHINES IN REAL-TIME.

BÖWE is the only manufacturer in the field of dry cleaning machinery offering its customers the possibility of testing eight types of BÖWE dry cleaning machines with six different solvents in the in-house showroom. After choosing the desired combinations, the customers can read on digital meters the environmentally friendly consumption values in realtime.

The new BÖWE Showroom "Inspiring Solution", providing laundry equipment, and the ALL IN ONE BÖWE shop concept with a special emphasis on environmentally friendly energy management, will assist customers in selecting the right machine and features. A steam meter is depicting the actual consumption values of each machine in real-time.

In the new BÖWE Showroom, the customer will find a wide range of machines and equipment for textile care, ironing and spotting solutions, conveyor systems, packaging solutions and all other accessories with the possibility to test them.

BÖWE and innovation

BOWE - HINSPIRING SOLUTION

BOWE - TEXTILE CLEANING SYSTEMS.

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BÖWE iLine PERC & Multisolvent[®] dry cleaning machines



The new iLine series of dry cleaning machines sets a new standard in the range of products BÖWE can offer to customers worldwide. This new range combines and shares the same technology used in the well-known Premiuml ine. However, a specific emphasis was put on costs and well proven BÖWE quality when developing the iLine series. Due to its cost-effectiveness as well as high quality, these machines are a new option for the dry cleaning industry. The new iLine machines are available in three sizes from 12, 15 till 18 kg (27, 33, 40lb) drum capacity.

Thanks to a mix of implemented components used in the Premium-Line series, the new iLine is a great solution for every need in the middle-price range.



Eco friendly

TAKE CARE OF YOURSELF, YOUR EMPLOYEES AS WELL AS THE ENVIRONMENT – WITH THE BÖWE ILINE YOU WILL EASILY COMPLY WITH THE STRICT REQUIREMENTS OF ENVIRONMENTAL REGULATIONS.

FILTER



Eco-Filter and Safety - Each unit is comprised of special BÖWE filter discs made of PETEX material that has a filtration density of 30 µm and a strong supporting tissue. A genuine BÖWE Eco filter disc is only made in Switzerland and patented on-site.

DISTILLATION SYSTEM



The round shape without corners or edges at the heating surface allows residue-free emptying of all sludge. In conjuction with the distillation rinsing, the heating surface and the sight glass are kept clean and sludge cannot burn into the heating surface.

SELF-CLEANING TANK



All BÖWE PremiumLine and iLine machines are supplied with three tanks as a standard version. This solution permits the dry cleaner extreme flexibility, especially when cleaning different types of garments. The geometrical shape and sloping bottom end of the tanks make sure the solvent is collected from the lowest dip point, allowing no deposits.

CAPACITIVE SENSORS



The capacitive sensors like the BÖWE Drystat for drying enable a computer control by measuring the effective loads of garments into the machine. The aim is avoiding an overdrying which results in shorter cycle times and energy efficiency.

75 years of BÖWE – 12 years warranty

In combination with our warranty package



⊕ Welding lines





⊕ Computer board



- \oplus Condenser coil and tank
- \oplus Viton seals
- ⊕ Brass compression fittings
- ⊕ Stainless steel pipework



- \oplus Technology for the future
- Modern energy standard
- ⊕ Reliable service & quality
- \oplus High quality materials
- ⊕ Long warranty periods for BÖWE PremiumLine Machines





Environmental protection - No Micro-Plastics in the wastewater

ABRASION OF TEXTILES

Micro-plastics are created by abrasion during the washing of synthetic textiles. The micro-plastic particles enter the oceans via rivers by direct discharge into the wastewater.

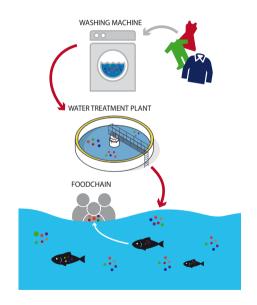
BÖWE - CLOSED CLEANING CYCLE

Through the closed cleaning cycle in BÖWE dry cleaning machines, the micro-plastic particles are collected in a container and disposed of separately. So they are not discharged into the sewage, as with a conventional washing machine.

BÖWE TEXTILE CLEANING MACHINE

BÖWE DRY CLEANING PROCESS

CONVENTIONAL CLEANING PROCESS



Prevention of micro-plastics in the water by closed textile cleaning cycle with BÖWE

BÖWE - washing, drying, ironing

WASHER EXTRACTORS

BÖWE front-loading washer-extractors offer a wide range with load capacities from 10 to 120 kg. The **FILLER**series combines high spin performance with built-in BÖWE WET TRONIC for wet cleaning.

TUMBLE DRYER

The new generation of self-service tumble dryers with loading capacity from 11 to 75 kg is available with electric, steam or gas heating. The **Control Control Con**

FLATWORK DRYING IRONERS

The BÖWE FLATWORK DRYING IRONERS series offers a wide range of machines for processing all types of bed linen, tablecloths, napkins, etc. The range includes ironers with a roller diameter of 325 and 500mm, electrically or gas heated. The 500mm version is also available in rear return feed.







FINISHING EQUIPMENT

The BÖWE IRONING BOARD series meets the high demands of textile care. The IB14 ironing board is equipped with a built-in stainless steel steam boiler, sensor-controlled LED lighting, automatic suction function by lifting the iron and pneumatic height adjustment of the ironing surface. The IB15 ironing board is designed for forced steam heating.

SHIRT MATE

The BÖWE SHIRT MATE is easy to operate and smoothes shirts in the shortest possible time. To avoid shiny spots on dark shirts, the press plates are coated with Teflon. Sleeves and back of the shirt are inflated, the chest and shoulder area is pressed. With cycle times of 20 seconds high productivity is guaranteed.















BÖWE SI70 / M70 Industrial solutions for all solvents

Loading capacity: 70 kg / 160 lb Heating: steam Free programmable control Options: double distillation, self-cleaning button trap etc.

RANGE OF APPLICATION

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SENSENE

- \oplus work wear
- \oplus cleaning clothes, rags
- \oplus gloves
- ⊕ fur degreasing
- ⊕ carpets

- ⊕ textile production
- ⊕ aviation, seat covers
- \oplus tannery
- ⊕ etc.

Abb.: M70 Multisolvent®

GLC



HC Hydro Carbon

SYSTEMK4

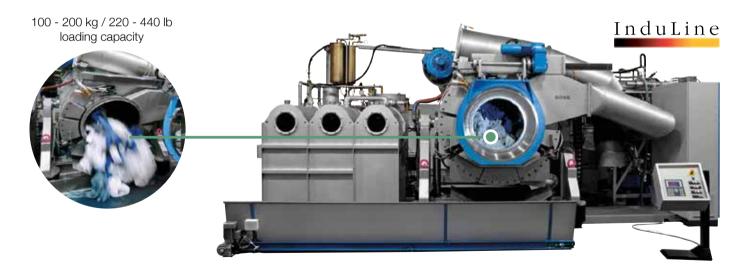
Abb.: SI70

SOLVENTS: PERC



Industrial machines

BIGGEST AND LATEST DRY CLEANING MACHINE WORLDWIDE UNIQUE AND MODULAR 100 - 200 KG / 220 - 440 LB LOADING CAPACITY PERC AND MULTISOLVENT®









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