

BÖHWE

PremiumLine



PREMIUMLINE MACHINE ENGINEERING

- CrossLine** Machine design with the distillation positioned on the side of the loading door also known as wide version
- Kontiflex** Oversized reinforced condenser made in AISI 316 TI special stainless steel with Titanium
- EBS®** Electronic Balancing System that reduces imbalance and regulates electronically the extraction phase
- Multisolvent®** BÖWE trade mark 1 180 560 that indicates dry cleaning machines that use Class A III solvents
- SuperDry PDS+** Combination of temperature and volume measurement guarantees optimum drying results regardless of kind and quantity of garments
- Spraymatic** This system injects detergents and additives directly onto the textiles that are loaded into the cage (for example waterproofing)
- SlimSorba** Active carbon regenerative tank unit that allows to reach the lowest possible concentrations at the end of the cycle
- Softpad** Special technical solution that reduces dynamic forces transferred to the foundation in conformity with the EN ISO 8230
- SWS** Self-cleaning conical water separator made according to the DIN EN 8230 standard with automatic maintenance rinsing cycle



Key features



Engineering

- ⊕ PERC to Multisolvent® conversion option
- ⊕ Stainless steel piping
- ⊕ 316 Ti stainless steel with Titanium
- ⊕ Brass Conex fittings
- ⊕ Round shapes
- ⊕ Aluminium casted loading door
- ⊕ Softpad
- ⊕ Smallest footprint surface machines on the market (in relation to the loading capacity (SlimLine machines))
- ⊕ Control with large characters display (e.g. remaining cycle time)
- ⊕ Single and Multi maintenance programs
- ⊕ Jacob Jensen Design



Efficiency

- ⊕ Special Eco rotation disc filters with same density
- ⊕ Solvent cooling via refrigeration
- ⊕ Self-cleaning water separator
- ⊕ Special coatings
- ⊕ Coated button trap basket
- ⊕ BÖWE Drystat volume controlled drying
- ⊕ Capacitive overfill sensor
- ⊕ Low level sensor
- ⊕ Biggest lint filter in the world
- ⊕ Patented Dynamic drum perforation



Guaranteed quality

- ⊕ Viton® gaskets
- ⊕ Viton® flaps
- ⊕ 8 years warranty on condenser, flaps, stainless pipes, brass fittings
- ⊕ 24 months parts warranty



CrossLine & SlimLine

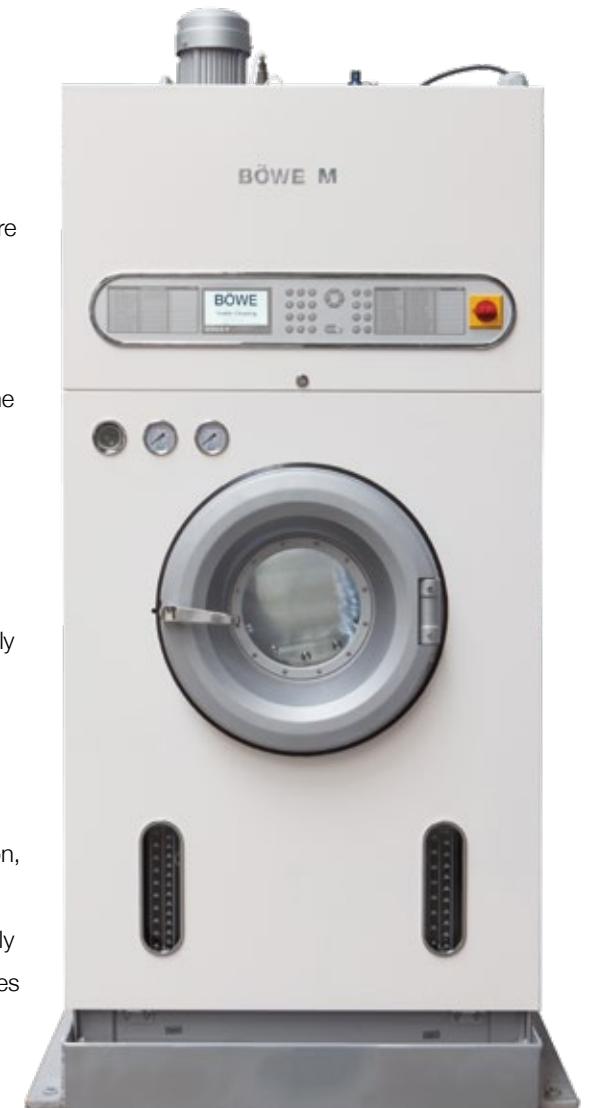


When developing the PremiumLine BÖWE primarily had one issue in mind: The limited space in dry cleaning shops. Therefore, a SlimLine (12-18kg) and a CrossLine version are available so that customers can choose the best configuration for their shop. A particular advantage of the BÖWE SlimLine is that the machine will fit through your front door with the measurement below 2.000 mm height.

BÖWE PREMIUMLINE MACHINES with loading capacities from 12-30kg are either available in PERC or in Multisolvent® versions. Easy installation, compact design, easily comply with the strict requirements of environmental regulations.

READY FOR VARIOUS KINDS OF USE

The machines are designed in a 3-tank-version, with an optional second Eco-filter and an additional carbon filter. Thus, you are extremely flexible, especially when cleaning different types of garments.



Dry cleaning machines

CONTROL



MAINTENANCE MADE EASY WITH IMS

All PremiumLine machines and models are equipped with IMS – Interactive Maintenance System. This is a selection of automatic maintenance programs as well as two additional multi-maintenance programs that bundle maintenance steps and intelligently run simultaneously. The machine shows when maintenance is required for example: distillation, spin filter, Slimsorba, active

carbon unit, water separator, post water separator and tanks. In addition to that, certain maintenance cycles such as filter maintenance are performed without any manual interference. However, you do not have to worry about losing control over your machine. The machine only provides suggestions, but you decide when maintenance is performed.

Cleaning Programs

Large LCD

IMS Interactive Maintenance System



Eco friendly

Take care of yourself, your employees as well as the environment – with the BÖWE PremiumLine you will easily comply with the strict requirements of environmental regulations.

FILTER



ECO-FILTER AND SAFETY

The standard filtering system in all PremiumLine machines is a rotation spin filtering unit that uses special eco filters. 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.

The efficient Eco-filter works with the already proven multiple disc extraction technology. The filter system is monitored via the computer and pressure sensors and can be maintained easily as well as fully automatically. The robust safety trough is an impermeable barrier protecting the soil and ground water from the solvent.



BÖWE has the lowest solvent consumption in the market. (Dryclean of 100kg garment = 250g solvent consumption)

SELF-CLEANING TANK



All the BÖWE PremiumLine 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.

3 SELF-CLEANING SOLVENT TANKS

The geometrical shape and sloping bottom end of the tanks make sure the solvent is collected from the lowest dip point, allowing no deposits.

SLIMSORBA

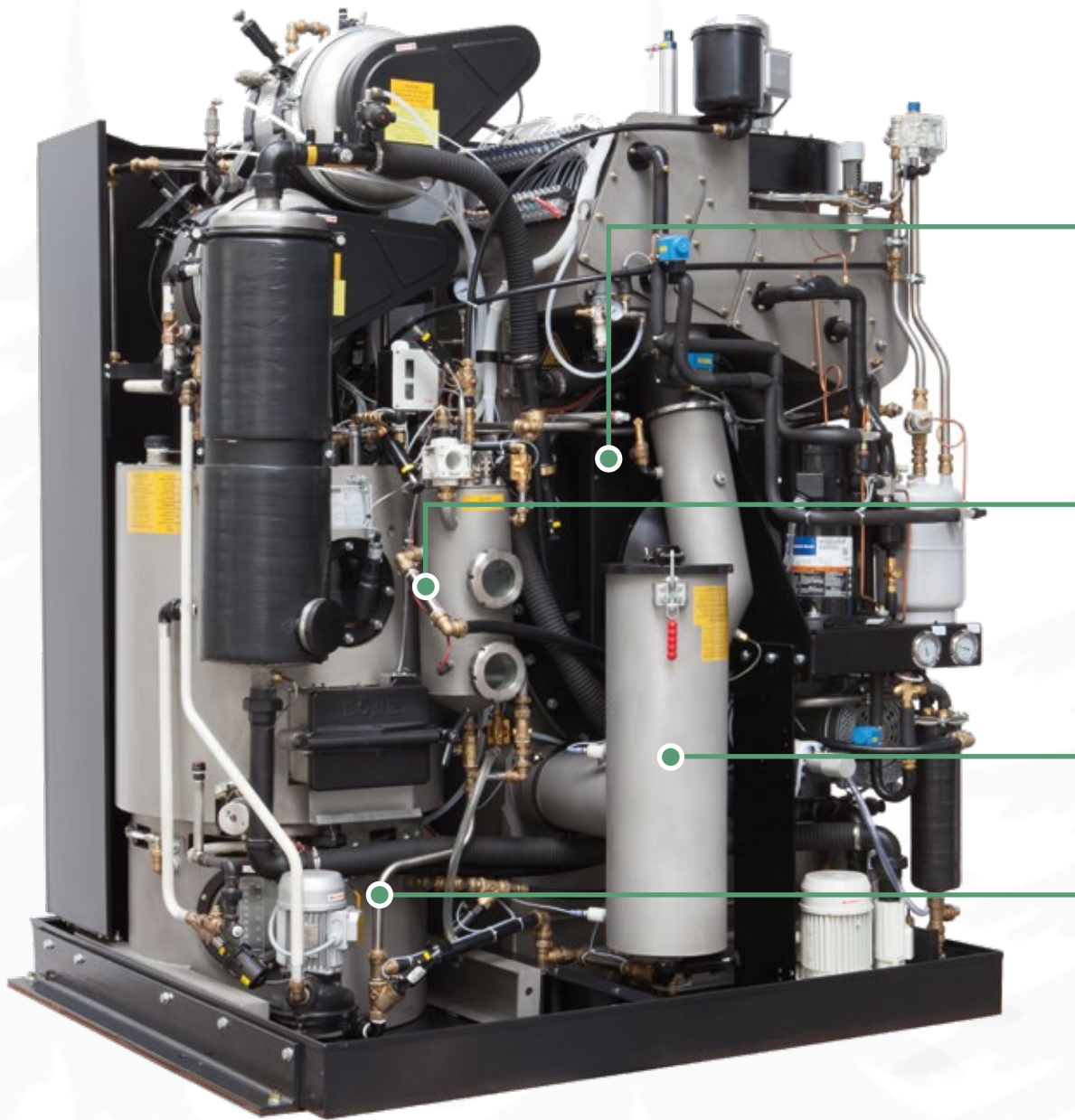


Compact - current environmental requirements and regulations can often only be fulfilled with special equipment like an Emission Free Distillation Rake Out System. As an option to the standard equipment the fully integrated adsorption unit SlimSorba produces garments free of odour and an exceptionally low residual concentration of solvent. If needed, desorption can be started by fully automatic maintenance programs. Even with these additional features the machines remain very compact.

Black Forest Edition



- ⊕ high end technology
- ⊕ low solvent consumption
- ⊕ service friendly due to smoother surfaces
- ⊕ self-cleaning water separator
- ⊕ complete stainless steel piping (without painting)
- ⊕ special coatings of e.g. back plate
- ⊕ paintless stainless steel parts
- ⊕ automatic solvent adjustment



Unique electro-phoresis metal surface coating treatments on

- ⊕ back plate
 - ⊕ distillation door
 - ⊕ sight glass flange
 - ⊕ cooling unit console
 - ⊕ fairings air duct fan
 - ⊕ button trap basket
- are special coated.

This electro-phoresis method of coat application on metal is the most advanced technology for surface treatments.

Brass conex fittings

Perl grey glass bead blasted stainless steel parts such as

- ⊕ air duct
- ⊕ water separator
- ⊕ distillation
- ⊕ button trap
- ⊕ solvent tanks
- ⊕ cage outer housing (P/M 12,15,18 only)

Paintless special stainless steel pipings:

- ⊕ AISI 316
- ⊕ AISI 316TI (Titanium) distillation, ascending pipe

BÖWE Multisolvent® CrossLine



H 2310 mm (90.95")

H 2280 mm (89.76")

H 1995 mm (83.1")

MACHINE WEIGHT (without solvent)

M12/27	1155 kg 2546 lb
M15/33	1255 kg 2767 lb
M18/40	1355 kg 2987 lb

1840 mm (70.87")

DEPTH (mm, inch)

M12 / M27: 1410 (55.5")

M15 / M33: 1410 (55.5")

M18 / M40: 1540 (60.63")

M12 M27

Drum volume	240 L	63,4 gal.
Loading capacity	12 kg	27 lb
Solvent tank 1	110 L	28.6 gal.
Solvent tank 2	70 L	18.2 gal.
Solvent tank 3	90 L	23.4 gal.



M15 M33

Drum volume	300 L	79.25 gal.
Loading capacity	15 kg	33 lb
Solvent tank 1	130 L	33.8 gal.
Solvent tank 2	85 L	22.1 gal.
Solvent tank 3	90 L	23.4 gal.



M18 M40

Drum volume	360 L	95.1 gal.
Loading capacity	18 kg	40 lb
Solvent tank 1	155 L	40.3 gal.
Solvent tank 2	100 L	26 gal.
Solvent tank 3	90 L	23.4 gal.



electric heating



steam heating



All models certified by:  Intertek

	M21	M46
Drum volume	420 L	110.95 gal.
Loading capacity	21 kg	46 lb
Solvent tank 1	200 L	52.83 gal.
Solvent tank 2	125 L	33.02 gal.
Solvent tank 3	200 L	52.83 gal.



	M26	M57
Drum volume	520 L	137.36 gal.
Loading capacity	26 kg	57 lb
Solvent tank 1	225 L	59.43 gal.
Solvent tank 2	140 L	36.9 gal.
Solvent tank 3	225 L	59.43 gal.



	M30	M66
Drum volume	600 L	158.50 gal.
Loading capacity	30 kg	66 lb
Solvent tank 1	250 L	66.04 gal.
Solvent tank 2	155 L	40.95 gal.
Solvent tank 3	250 L	66.04 gal.



H 2340 mm (92.1') - only with cartridge filter option

H 2180 mm (85.8')

H 2130 mm (83.1')

MACHINE WEIGHT
(without solvent)

M21/46
2025 kg 4465 lb
M26/57
2175 kg 4795 lb
M30/66
2325 kg 5005 lb



DEPTH (mm, inch)

M21 / M46	1500 (59.1')
M26 / M57	1735 (68.3')
M30 / M66	1735 (68.3')

BÖWE Multisolvent® machines



ONE MACHINE - MANY SOLVENTS OPTIONS

Thanks to the dedicated different solvent setting available in the ConfoTronic Control it is possible to run the latest Class A III chlorine-free solvents with flash point above 55 °C. By using the parts kit you can convert your BÖWE PremiumLine machine from PERC to Multisolvent®.

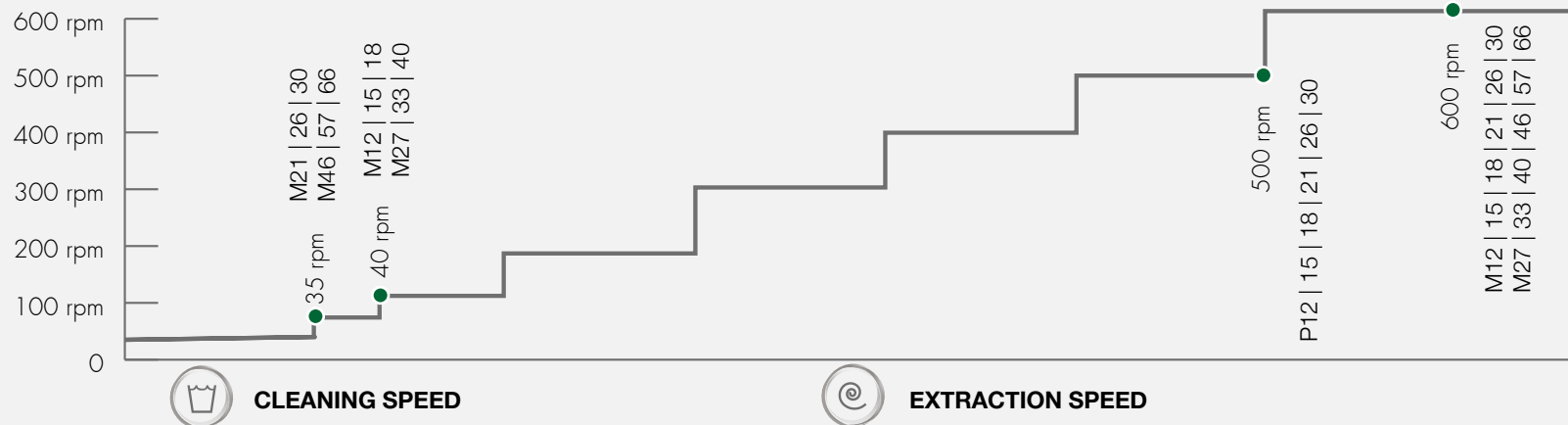
In several countries BÖWE PremiumLine machines work with many alternative solvents. By efficient drying, round air duct, dynamic drum perforation and special coatings a BÖWE M-machine is suited to use solvents lighter than water. PremiumLine Multisolvent machines only require a software update to change over from one solvent to another. Thanks to the variable drive the increased extraction speed in Multisolvent® machines reaches 600 rpm. The Electronic Balancing System (EBS) avoids electronically imbalances during the entire extraction phase determining the correct acceleration ramp.



SOLVENT

With our P2M-kit, a BÖWE PERC machine can be converted to a BÖWE Multisolvent® machine. After the conversion the below mentioned solvents can be used

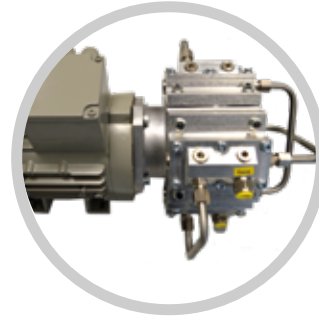
- ⊕ Hydro Carbon (HC)
- ⊕ Silicone (GreenEarth®) D5
- ⊕ Solvon K4
- ⊕ HIGLO
- ⊕ Intense
- ⊕ GenX
- ⊕ Sensene etc.





SELF-CLEANING WATER SEPARATOR

The water separator is designed to avoid manual cleaning. The unit is made of high quality stainless steel together with big sight glasses.



VACUUM PUMP

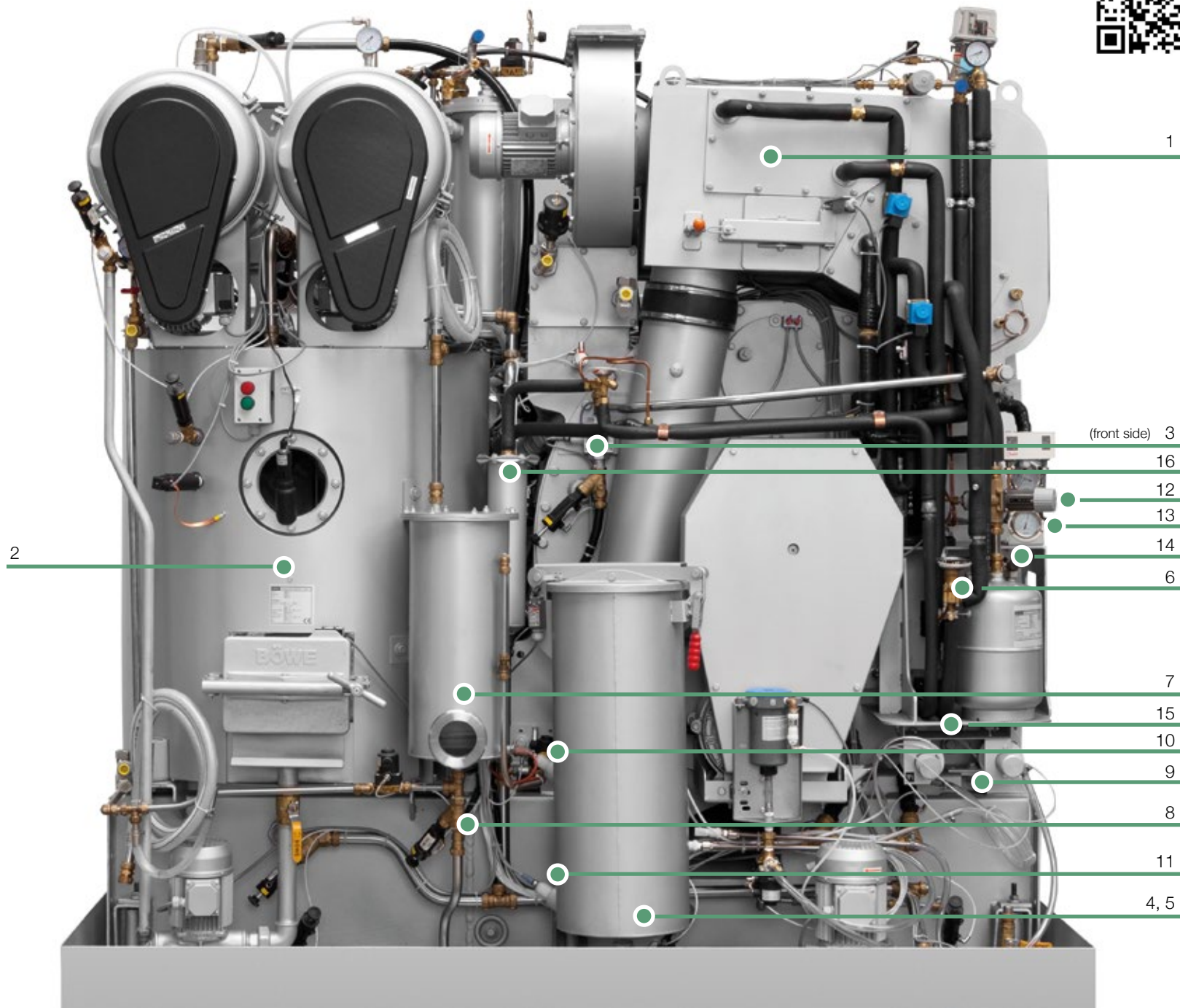
In M-series machines BÖWE is using very high performance vacuum pumps that are designed, engineered and tested in Germany to provide the maximum results when using Class A III alternative solvents. The robust construction and features like the oil-free lubrication working chamber and the low noise and minimal vibration set a very high standard in Multisolvant® dry cleaning machines.

VARIABLE SPEED DRIVE AND EBS®

BÖWE has increased the extraction speed of Multisolvant® machines. Extraction is now done at a speed of up to 600 rpm as a standard.

The BÖWE Multisolvant® machines are equipped with a variable speed drive and EBS® (Electronic Balancing System) as standard, so imbalances during extraction are avoided electronically. You can perform extraction without any problems, even if the machine is not fully loaded. The variable speed drive with its infinitely variable speed control provides a gentle cleaning cycle that can be individually adjusted for any type of garments.

System features Multisolvent®



Electronic Balancing System (EBS) for a better balancing of garments by electronically controlled spinning ramp	
System features	Patented Stainless Steel dynamic drum perforation
1	Round recovery section made of stainless steel, with flow optimized aerodynamic design and cleaning openings, optimum interaction between recovery section, fan, refrigeration unit and cage perforation. Cleaning openings for an easier control and cleaning of the cooling unit.
2	Round distillation , ascending pipe and big condenser made of special stainless steel (AISI 316 Ti) Highest quality stainless steel AISI 316 Ti (traditionally specified by German engineers and users with the Werkstoff number V4ATI) used for distillation and ascending pipe. This grade is essentially a standard carbon 316 type with titanium stabilisation. The addition of titanium is made to reduce the risk of intergranular corrosion. Most competitors use the low-grade 316 L or 304 for the distillation and partly carbon steel for the ascending pipe.
3	SuperDry , drying time controller by volume measurement. Combination of temperature and volume measurement guarantees optimum drying results regardless of kind and quantity of garments.
4	Round button trap made of stainless steel and large lint filter combined in one maintenance opening. Easy to maintain, usually only once a day due to the large filter surface by a special format of the lint filter bag.
5	Lint drying in the button trap. No solvent exposure to operator or environment during maintenance.
6	Gentle drying and cooldown via refrigeration valves. Highest concern for most delicate fabrics in special programs. Bypassing the preheater without recovery section flaps, the best cool down effect of the garments is achieved, and the garments leave the machine wrinkle-free.
7	Round water and safety (post) water separator made of stainless steel with large sight glasses mandatory with DIN ISO 8230; additionally better separation of solvent and water; self-cleaning by conical shape and rinsing pipes to avoid manual cleaning.
8	Round water and safety (post) water separator. Automatic maintenance program for rinsing of the water separator to avoid bad smell.
9	Dosing unit , precision controlled, infinitely variable pump for dosing of additives.
10	High level sensor to adjust the optimum solvent level.
11	Low level sensor. Optimum solvent balance with the low level, depending on garments, saving energy with distillation. Automatic monitoring if solvent hasn't been fully pumped out before extraction; avoids damaging of garment.
12	Cooling water control , 1 for distillation and drying to save cooling water through a controlled flow rate.
13	High and low pressure gauge for refrigeration unit to easily read off the operating condition of the refrigeration unit and adjust the condensate pressure.
14	Quick-release couplings for refrigeration unit for fast installation and dismantling of registers to exchange cooler and pre-heater quickly and easily without losing refrigeration agent.
15	Vibration dampers on refrigeration unit to avoid metal weariness of copper piping.
16	Solvent cooling system via refrigeration.

SOLVENTS

Hydro Carbon HC

SYSTEMK4
solvent made by Korochem



PERC SlimLine

Most compact dry cleaning machine worldwide.



DEPTH (mm, inch)

P12 } 2165 mm (85.23")
P15 }

P18 : 2275 mm (89.56")

2280 mm (89.76")

1995 mm (78.5")

Housing width
935 mm (36.8")

1076 mm (42.5")

MACHINE WEIGHT (without solvent)

P12:	1240 kg 2733 lb
P15:	1240 kg 2733 lb
P18:	1340 kg 2954 lb

	P12
Drum volume	240 L / 63,4 gal.
Loading capacity	12 kg / 27 lb
Solvent tank 1	110 L / 28.6 gal.
Solvent tank 2	70 L / 18.2 gal.
Solvent tank 3	90 L / 23.4 gal.



	P15
Drum volume	300 L / 79.25 gal.
Loading capacity	15 kg / 33 lb
Solvent tank 1	130 L / 33.8 gal.
Solvent tank 2	85 L / 22.1 gal.
Solvent tank 3	90 L / 23.4 gal.



	P18
Drum volume	360 L / 95.1 gal.
Loading capacity	18 kg / 40 lb
Solvent tank 1	155 L / 40.3 gal.
Solvent tank 2	100 L / 26 gal.
Solvent tank 3	90 L / 23.4 gal.



electric heating



steam heating



PERC CrossLine

H 2340 mm (92.1") - only with cartridge filter option

H 2180 mm (85.8")

H 2130 mm (83.1")



DEPTH (mm, inch)

P21 : 1500 (59.1")

P26 : 1735 (68.3")

P30 : 1735 (68.3")

P21

Drum volume	420 L / 110.95 gal.
Loading capacity	21 kg / 46 lb
Solvent tank 1	200 L / 52.83 gal.
Solvent tank 2	125 L / 33.02 gal.
Solvent tank 3	200 L / 52.83 gal.



P26

Drum volume	520 L / 137.36 gal.
Loading capacity	26 kg / 57 lb
Solvent tank 1	225 L / 59.43 gal.
Solvent tank 2	140 L / 36.9 gal.
Solvent tank 3	225 L / 59.43 gal.



P30

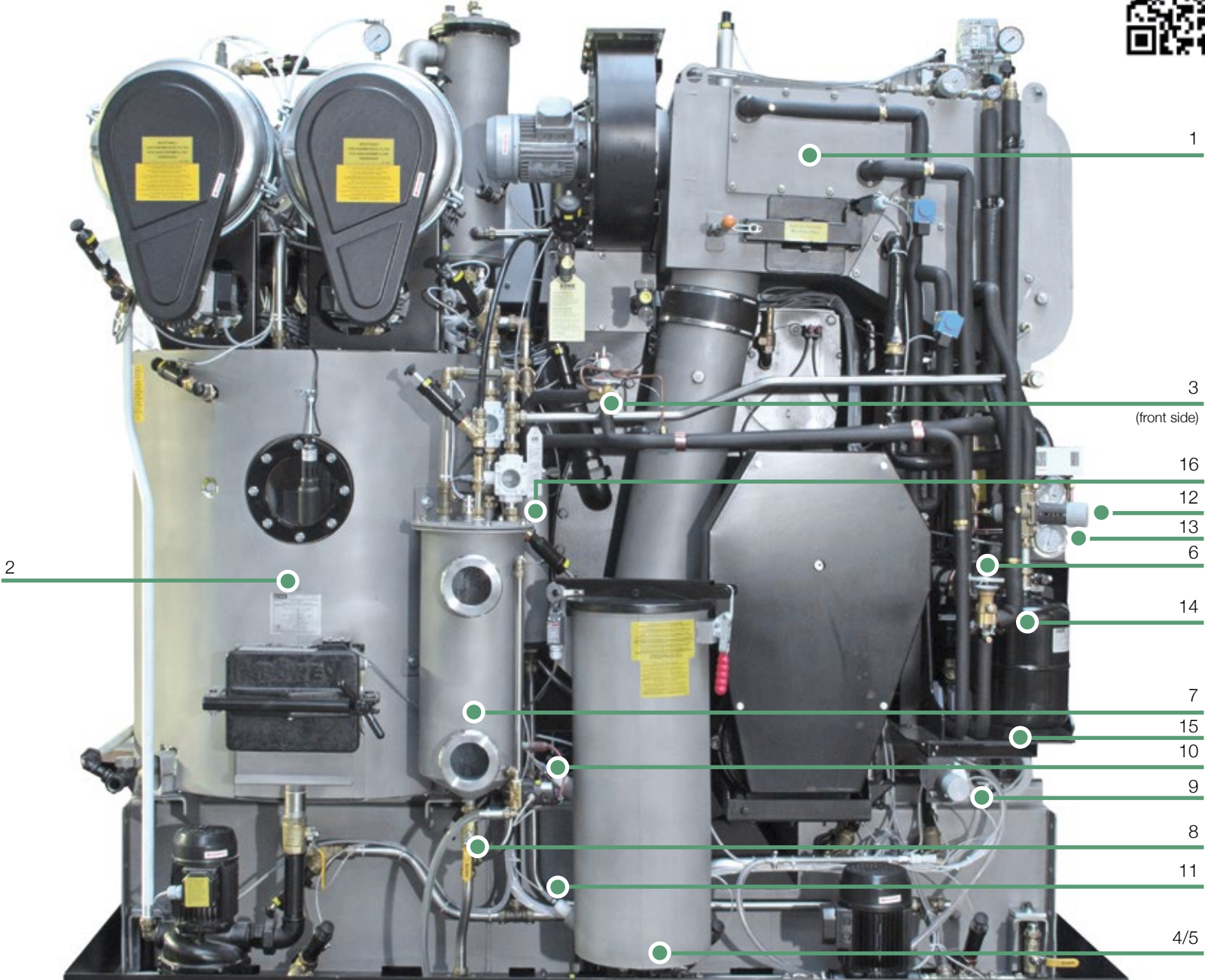
Drum volume	600 L / 158.50 gal.
Loading capacity	30 kg / 66 lb
Solvent tank 1	250 L / 66.04 gal.
Solvent tank 2	155 L / 40.95 gal.
Solvent tank 3	250 L / 66.04 gal.



MACHINE WEIGHT
(without solvent)

P21	2025 kg 4465 lb
P26	2175 kg 4795 lb
P30	2325 kg 5005 lb

System features PERC



		Electronic Balancing System (EBS) for a better balancing of garments by electronically controlled spinning ramp.
System features		Patented Stainless Steel dynamic drum perforation
	1	Round recovery section made of stainless steel, with flow optimized aerodynamic design and cleaning openings, optimum interaction between recovery section, fan, refrigeration unit and cage perforation. Cleaning openings for an easier control and cleaning of the cooling unit.
	2	Round Distillation , ascending pipe and big condenser made of special stainless steel (AISI 316 Ti) Highest quality stainless steel AISI 316 Ti (traditionally specified by German engineers and users with the Werkstoff number V4ATi) used for distillation and ascending pipe. This grade is essentially a standard carbon 316 type with titanium stabilisation. The addition of titanium is made to reduce the risk of intergranular corrosion. Most competitors use the low-grade 316 L or 304 for the distillation and partly carbon steel for the ascending pipe. For the condenser, a lower quality stainless steel is used; most competitors here use synthetic material (nylon).
	3	SuperDry , drying time controller by volume measurement. Combination of temperature and volume measurement guarantees optimum drying results regardless of kind and quantity of garments.
	4	Round Button trap (made of stainless steel) and large lint filter combined in one maintenance opening. Easy to maintain, usually only once a day due to the large filter surface by a special format of the lint filter bag.
	5	Lint drying in the button trap. No solvent exposure to operator or environment during maintenance.
	6	Gentle drying and cooldown via refrigeration valves. Highest concern for most delicate fabrics in special programs. Bypassing the preheater without recovery section flaps, the best cool down effect of the garments is achieved, and the garments leave the machine wrinkle-free.
	7	Round water and safety (post) water separator made of stainless steel with large sight glasses mandatory with DIN ISO 8230; additionally better separation of solvent and water; self-cleaning by conical shape and rinsing pipes to avoid manual cleaning.
	8	Round water and safety (post) water separator Automatic maintenance program for rinsing of the water separator to avoid bad odours.
	9	Dosing unit , precision controlled, infinitely variable pump for dosing of additives.
	10	High level sensor to adjust the optimum solvent level.
	11	Low level sensor . Optimum solvent balance with the low level, depending on garments; saving energy with distillation. Automatic monitoring if solvent hasn't been fully pumped out before extraction; avoids damaging of garment.
	12	Cooling water control , 1 for distillation and drying to save cooling water through a controlled flow rate.
	13	High and low pressure gauge for refrigeration unit to easily read off the operating condition of the refrigeration unit and adjust the condensate pressure.
	14	Quick-release couplings for refrigeration unit for fast installation and dismantling of registers to exchange cooler and pre-heater quickly and easily without losing refrigeration agent.
	15	Vibration dampers on refrigeration unit to avoid metal fatigue of copper piping.
	16	Solvent cooling system via refrigeration.

BÖWE dry cleaning machines

STANDARD FEATURES

SAFETY TROUGH

An integrated solvent safety trough with underlay rails is provided in all machines in conformity with the highest German 2nd BlmschV/VOC standard, regardless where the machine is installed.



CAST ALUMINIUM LOADING DOOR

A big loading door is not only a question of comfort efficiency and reliability during loading and unloading the machine but also a question of Design.



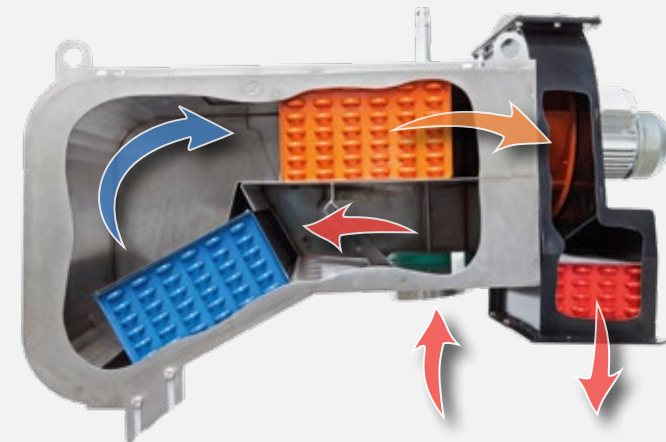
DYNAMIC DRUM

Unique patented BÖWE Dynamic drum perforation with less holes in the front area and more holes in the back area and back plate forces the air through the garments. This efficient drying is ideal in problematic zones like for example shoulder pads and pockets. A characteristic only BÖWE PremiumLine machines can offer.



POWER DRYING SYSTEM

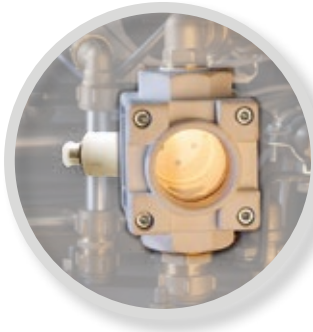
The aerodynamic rounded recovery section enables the Power Drying System to work better. Especially when cleaning with high-boiling solvents, drying of garments is of utmost importance. With this system we can achieve excellent drying results and unbeatably short cycle times that is a great advantage when using alternative solvents.



BÖWE dry cleaning machines

UNIQUE FEATURES

CAPACITIVE SENSORS



The capacitive sensors like the BÖWE Drystat for drying enable the ConfoTronic PL to determine the effective loads of garments present into the machine regulating consequently the optimal cooling water, steam or energy levels. In general the aim is to shorten the cycle times and to make the machine energy efficient at all times.

SPECIAL COATING



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. is prevented. The results are shorter cycle times as well as less energy and solvent consumption.

DISTILLATION SYSTEM



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

⊕ Thus, extra costs for maintenance and energy are saved and performance of distillation put-through is kept high.

⊕ Illumination of the distillation offers the opportunity to inspect the distillation bottom and follow the distillation process.

DISTILLATION VOLUME

P/M: 12-18KG/27-40lb | 120L/32gal

P/M: 21-30KG/46-66lb | 220L/58 gal

Extra comfort options

- ⊕ 2nd eco filter with special BÖWE filter discs
- ⊕ 2nd detergent or antifoaming stroke pump
- ⊕ Empty detergent drum alert
- ⊕ Spraymatic (waterproofing or spraying unit)
- ⊕ Loading door venting
- ⊕ Adsorption filter with carbon cartridge
- ⊕ Casing and tanks made in high-grade stainless steel (standard in Black Forest Edition)
- ⊕ Emission free distillation rake out system
- ⊕ Direct Connect machine management allowing off-site remote diagnosis & operations
- ⊕ Solvent cooling via refrigeration technique
- ⊕ Distillation overfill preventer
- ⊕ PMS 6000 ppm measuring device
- ⊕ Slimsorba adsorption unit
- ⊕ PERC to Multisolvent® conversion kit

SPECIAL TECHNICAL SOLUTIONS

- ⊕ Installation on SoftPad that reduces dynamic forces in full compliance with EN ISO 8230

The BÖWE SoftPad provides a clever solution full of advantages like:

- ⊕ Enormous reduction of the floor load
- ⊕ Reduces the dynamic force load by almost 90%
- ⊕ The machines doesn't need fixing to the floor
- ⊕ Low resonance frequency

SOFTPAD



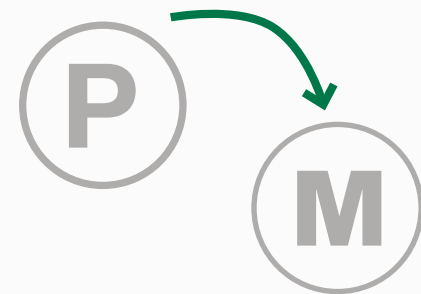
DIRECT CONNECT



SLIMSORBA



MULTISOLVENT® - EASY CONVERSION TO OTHER SOLVENTS



Maintenance

Only a well maintained machine is environmentally friendly: easy access openings on the back plate of the machine allows for proper inspection and maintenance. Further, the back plate of BÖWE machines is covered with a unique special coating, so that there will be hardly any lint clusters.

SELF-CLEANING SOLVENT TANKS

A new tank geometry offers especially sloped tank bottoms and the solvent exhaustion at the lowest point. Together with the modern processing technique for smooth surfaces, the 3 tanks practically do not allow any deposit anymore.

SELF-CLEANING WATER SEPARATOR

The water separator is designed to avoid manual cleaning. The unit is made of high quality stainless steel together with big sight glasses.

The new water separator is self-cleaning and offers utmost comfort with maintenance by fully automatic maintenance programs. Thus manual work is nearly not required. Distillation rake out is performed automatically and emission free, without the need to open the distillation.

SELF-CLEANING WATER SEPARATOR WITH RINSING PIPES



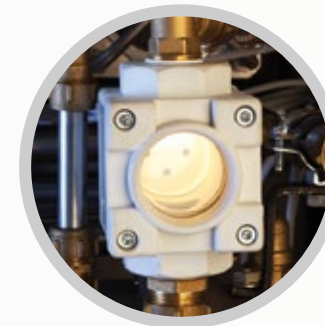
SLOPED TANK BOTTOM WITH LOW DIPPED DRAIN



BOTTOM TRAP AND LINT FILTER ACCESS BY ONLY ONE MAINTENANCE OPENING



SIGHT GLASS TO CONTROL THE SOLVENT





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