CIE
Solvent Recovery Technologies

Solvent reclaimer
&
Industrial washing unit

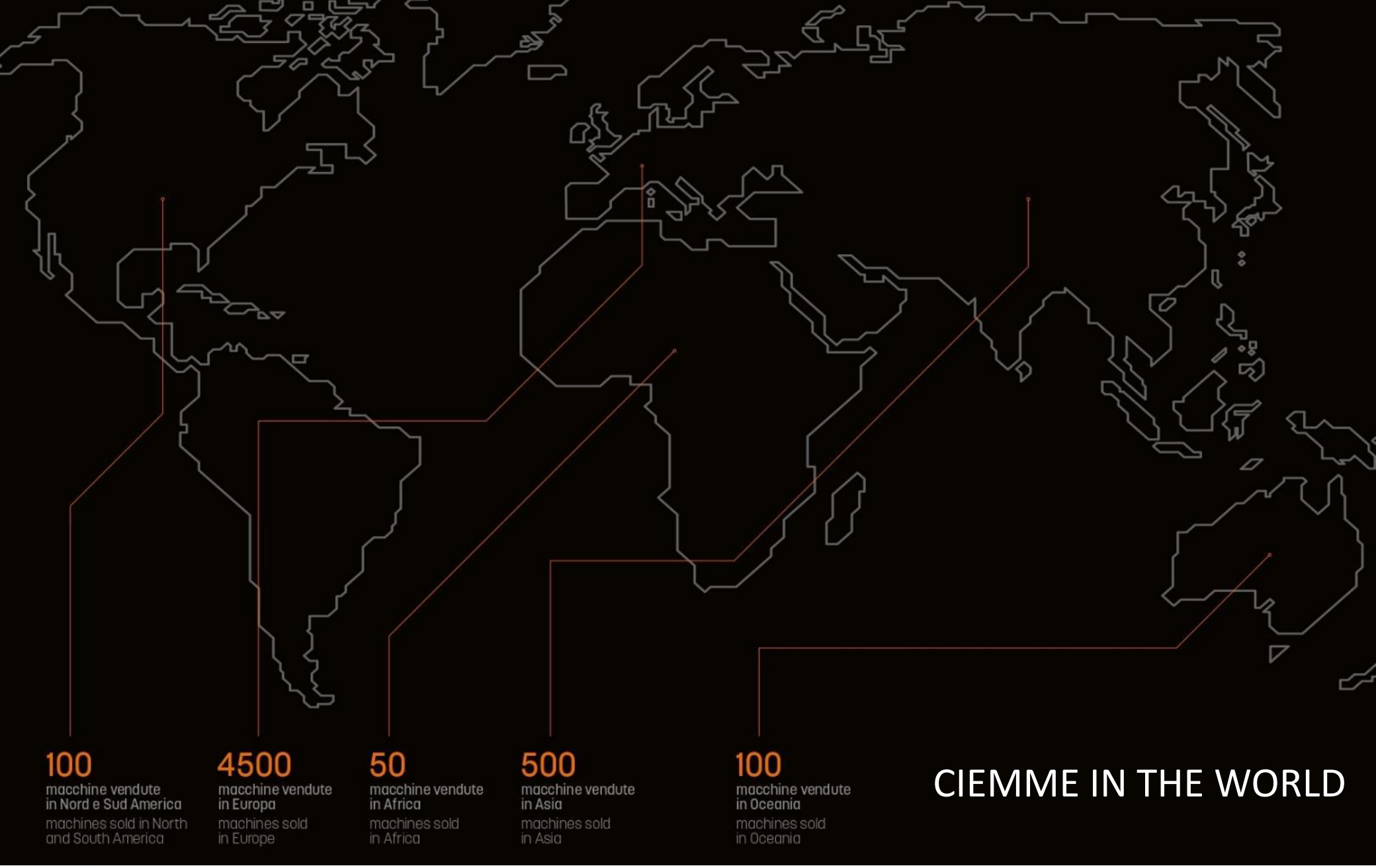
Why choose Ciemme

Over 40 years of history
The first company in Italy for the production of solvent purifiers

Maximum business reliability
RATING 1 Certification

Up to **3/5 YEARS WARRANTY** on the entire product range

Insurance with a cumulative sum insured of **€ 50.000.000**


100
macchine vendute
in Nord e Sud America
machines sold in North
and South America
4500
macchine vendute
in Europa
machines sold
in Europe
50
macchine vendute
in Africa
machines sold
in Africa
500
macchine vendute
in Asia
machines sold
in Asia
100
macchine vendute
in Oceania
machines sold
in Oceania
CIEMME IN THE WORLD

Why a SOLVENT DISTILLER

These are the advantages that make solvent distillers a strategic choice in many industries, especially those that use large quantities of solvents, such as in industrial printing, paint, coating and pharmaceutical industries.

1) Cost reduction: recovering and reusing solvents instead of disposing of them as waste can reduce the costs associated with the disposal and purchase of clean solvents by up to 90%.

2) Lower environmental impact: Solvent recycling reduces the volume of hazardous waste produced, contributing to greater sustainability and reducing environmental impact.

3) Improved workplace safety: By reducing the quantity of hazardous solvents that need to be handled and disposed of, the risk of exposure to chemicals that are harmful to workers is also reduced.

4) Process optimization: Solvent distillation can be integrated into production processes, ensuring a steady flow of clean, ready-to-use solvents, improving operational efficiency.

5) Versatility: Solvent distillers are designed to manage a variety of solvents, making them suitable for different types of industrial applications.

6) Reduced storage space: Since solvents can be recycled and reused, the need for large storage spaces for new solvents and waste is reduced.

7) Increased operational autonomy: Having an on-site solvent treatment system allows companies to be less reliant on external suppliers for solvent supply and disposal.

8) Enhancement of the corporate image: The adoption of recycling and sustainability practices can improve the company's image, showing a commitment to environmental responsibility.

Solvent Distillers SMART Series

SMART	K 10	K 16	K 30	K 60
Daily Productivity (lt/24h) (gal/24h)	30 (8)	55 (14)	110 (29)	200 (52)
Average – peak productivity (lt/h) (gal/h)	2 – 3 (0,5 – 0,8)	2 – 3 (0,5 – 0,8)	4,5 – 6 (1 – 1,5)	8 – 11 (2 – 3)
Load Capacity (lt) (gal)	10 (2,6)	18 (4,7)	37 (9,7)	67 (17,7)
Lid gasket	EPDM - PTFE			
Heating power(Kw)	1,2	1,6	2,5	3,2
Power supply voltage	220 Volt / 1ph / 50 Hz			
Weight (Kg)	45	95	111	133
Working Temperature	50-200°C (122-392°F)			
Certification	CE	II 2G Ex h IIB T3 – ATEX Zone 1		

Functioning SMART Series

1. Place the distillation bag inside the boiling tank and manually load the solvent to be treated
2. Close the lid and place the jerry can to collect the distilled solvent
3. Set the parameters and start the cycle
4. At the end of the cycle, you can reuse the distilled solvent and dispose of the residue

Installation photos SMART series

Solvent Distillers TECHNO Series

TECHNO	K 100	K 200	K 400
Daily Productivity (lt/24h) (gal/24h)	500 (132)	1.000 (264)	2.000 (528)
Average – peak productivity (lt/h) (gal/h)	20 – 30 (5 – 8)	40 – 55 (10 – 15)	85 – 100 (22 – 26)
Load capacity (lt) (gal)	100 (26)	200 (52)	400 (105)
Lid gasket	PTFE		
Heating power (Kw)	9,6	15	30
Pneumatic Loading Pump	3/4” membrane PTFE		1” membrane PTFE
Pneumatic pump for distilled solvent	3/4” membrane PTFE		
Residual Drain Valve Diameter	2,5”		
Residue collecting container	Drum 200 lt (52 gal) - IBC (opt)		
Power supply voltage	400 Volt / 3ph + N / 50Hz		
PLC Control System	Siemens S7 1200 Series		
Certification	II 2G Ex h IIB T3 - II 1/2 G Ex h IIB T3 Ga / Gb – ATEX zone 1		

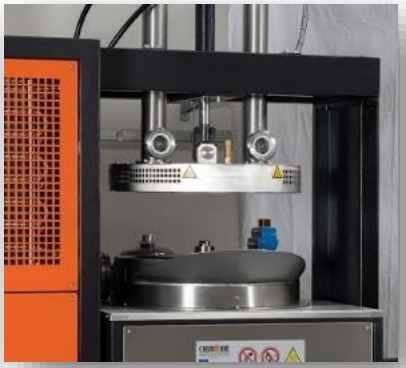
Functioning TECHNO Series

1. Place the drum with the solvent to be treated near the distillation unit and connect the suction pipe
2. Position the drum to collect the distilled solvent directly at the condenser outlet or at the vacuum generator pump if equipped
3. Place the drum to collect sludge under the discharging drain valve if equipped
4. Set the distillation parameters via the PLC panel and start the cycle
5. The load pump will be automatically started to fill the boiling tank and as soon full filled, the pump will be automatically stopped to start heating
6. The distilled solvent will be automatically discharged into the drum
7. At the end of the cycle, the residue can be drained manually or it will be drained automatically if the automatic drain function is installed

Installation photos TECHNO series

Solvent Distillers EVOLUTION Series

EVOLUTION	EV 125	EV 225	EV 400	EV 800
Daily productivity (lt/24h) (gal/24h)	700 (185)	1.300 (343)	2.500 (660)	5.000 (1320)
Average – peak productivity (lt/h) (gal/h)	30 – 35 (8 – 9)	55 – 65 (14,5 – 17)	105 – 125 (27,5 – 33)	200 – 250 (52 – 66)
Load capacity (lt) (gal)	120 (31,7)	210 (55,4)	400 (105)	800 (211)
Lid gasket	PTFE			
Heating power (Kw)	9,6	15	30	55
Pneumatic Loading Pump	3/4” membrane PTFE		1” membrane PTFE	
Pneumatic pump for distilled solvent	3/4” membrane PTFE			1” membrane PTFE
Residu Drain Valve Diameter	2,5”	3’’		
Residue drain container	Drum 200 lt (52 gal) - IBC (opt)			
PLC Control System	Siemens S7 1200 Series			
Certification	II 2G Ex h IIB T3 - II 1/2 G Ex h IIB T3 Ga / Gb – ATEX Zone 1			



Functioning EVOLUTION Series

1. Place the drum with the solvent to be treated near the distiller and connect the suction hose
2. Place the drum to collect the distilled solvent directly at the outlet of the vacuum generator pump
3. Place the drum to collect sludge under the discharging drain valve
4. Set the distillation parameters via the PLC panel and start the cycle
5. The load pump will be automatically started to fill the boiling tank and as soon full filled, the pump will be automatically stopped to start heating
6. The distilled solvent will be automatically discharged into the drum
7. At the end of the cycle, a cooling cycle will be carried out to automatically discharge the residue at a preset temperature

Installation photos EVOLUTION series

Why an AUTOMATIC WASHING UNIT

The adoption of an automatic washing system is a practical and intelligent choice that allows companies operating in sectors that require frequent and intensive washing to optimize their production process.

1) Optimization of 60% of operator time: An automatic washing system frees staff from repetitive tasks, allowing them to focus on more productive and strategic activities.

2) 40% reduction in chemical consumption: Thanks to the precise control and efficiency of the system, less chemicals are used, reducing costs and environmental impact.

3) Standardization and improvement of the washing process: Automation guarantees consistency in the quality and effectiveness of washing, eliminating variables related to manual intervention.

4) Doubling the life of materials due to constant washing: Regular and well-controlled washing prevents premature deterioration, extending the life of the treated materials.

5) Elimination of the operator's exposure to chemicals: An automatic washing system eliminates the operator's direct contact with potentially harmful substances, improving safety at work.

6) Economic and environmental sustainability of the process: The efficient use of resources and the reduction of chemical waste contribute to a more sustainable process, with both economic and environmental benefits.

SOLVENT based washing unit

SL	SL 1500	SL 2000	SL 2500
Useful washing area (L x W x H mm)	1.500 x 650 x 500 59'' x 25'' x 19''	2.000 x 650 x 500 78'' x 25'' x 19''	2.500 x 650 x 500 98'' x 25'' x 19''
Solvent tank volume	200 lt (52 gal)		
Washing pneumatic pump	1 " membrane PTFE		
Discharging pneumatic pump	1/2 " membrane PTFE		
Inspection hatch diameter	300 mm (12'')		
Filtration	Pneumatic pump suction filter Solvent return pre-filter in tank		
Certification	II 2G h T3 Gb – TF : TÜV IT 19 ATEX 063 AR – ATEX Zone 1		

Functioning SL Serie

1. Place the parts on the grid installed in the washing chamber
2. Set washing and rinsing time on the control panel
3. The pump will recirculate the solvent from the main tank to perform the washing cycle
4. After the washing the pump will such by an external tank the clean solvent for the rinsing, a dedicated pump will discharge the solvent from the main tank to maintain the level
5. Before discharge the washed parts, the exhaust of the solvent vapour generated in the washing chamber is performed
6. Open the lid and take out the washed and rinsed parts.

WATER based washing unit

LA	LA 1500	LA 2000	LA 2500
Useful washing area (L x W x H mm)	1.500 x 650 x 500 59'' x 25'' x 19''	2.000 x 650 x 500 78'' x 25'' x 19''	2.500 x 650 x 500 98'' x 25'' x 19''
Washing tank volume	200 lt (52 gal)		
Electric Washing Pump	4 bar – 200 lt/min (52 gal/min)		
Power of Heating (Kw)	6		
Discharging pneumatic pump	1/2 "		
Inspection hatch diameter	300 mm (12'')		
Filtration	Pneumatic pump suction filter Solvent return pre-filter in tank		
Certification	CE		

Functioning LA Serie

1. Place the parts on the grid installed in the washing chamber
2. Set washing and rinsing time on the control panel
3. The pump will recirculate the water from the main tank to perform the washing cycle
4. After the washing the pump will such by an external tank the clean water for the rinsing, a dedicated pump will discharge the water from the main tank to maintain the level
5. Open the lid and take out the washed and rinsed parts.

Washing tank for PHOTOPOLYMER PLATES

FLEXOMATIC	45	65	95	120	140
Usefull washing width (mm)	450 (17'')	650 (25'')	950 (37'')	1.200 (47'')	1.400 (55'')
Number of brushes	2	2	3	3	3
Volume of detergent tank (lt) (gal)	40 (10,5)	40 (10,5)	80 (21)	100 (24,4)	100 (26,4)
Heating (W)	1.000				
Volume of rinse tank (lt) (gal)	40 (10,5)				
Filtration	Double filtration				
Operator Interface	Touch screen control panel				
Certification	CE				

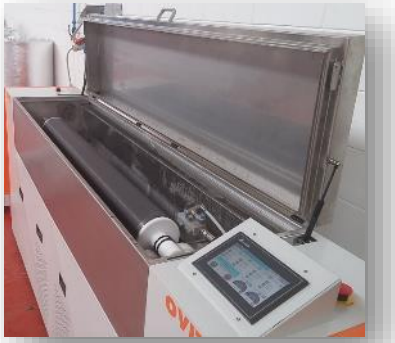
Functioning FLEXOMATIC Series

1. Set the speed and temperature parameters via the operator panel. In Smart machines it is very simple, just act on the potentiometers. In HD machines version equipped with a touch screen panel, you can view all the parameters, change them easily and quickly choose one of the 2 previously stored programs.
2. Place the plate to be washed on the manual input table to be read by the input sensor. The machine will start automatically. If the machine is equipped with a conveyor, it is possible to place several plates at a time on the conveyor belt so that they enter one after the other automatically.
3. Washed and dry plates come out of the back of the unit. They are collected in a basket or slid on a comfortable inclined table equipped with wheels (optional).

Installation photos FLEXOMATIC series

Washing tank for ANILOX

ANILOXMATIC	1800	2200	2800
Useful washing area (L x D mm)	1.800 x 250 70''x 10''	2.200 x 250 86'' x 10''	2.800 x 250 110'' x 10''
Maximum Load Capacity (kg) (lbs)	250 (330)		
Electric Washing Pump	140 bar – 9 lt/min (2,3 gal/min)		
Drying	Compressed air		
Volume of detergent tank (lt) (gal)	80 (21)		
Heating (W)	1.000		
Volume of rinse tank (lt) (gal)	80 (21)		
Filtration	Double filtration		
Operator Interface	Touch screen control panel		
Certification	CE		



Functioning ANILOXMATIC Serie

1. Place the anilox on the anilox holders located on the front of the machine.
2. Fit the caps that allow rotation inside the machine and prevent the washing solution from entering the inside of the sleeve and damaging it.
3. Place the anilox on the appropriate rotation gear in the washing chamber.
4. Close the lid and choose one of the 5 previously stored programs and press the Start button.
5. A green light is on when the wash cycle is complete.
6. Open the lid and take out the washed and dryed anilox.

Installation photos ANILOXMATIC series

CIEMME
Solvent Recovery Technologies

ciemme.it

Ciemme srl a socio unico - Via S. Allende 102 - 41122 Modena - Italy – tel: +39 059315101 – ciemme@ciemmemo.it