WHY CHOOSE CIEMME

OVER 40 YEARS OF HISTORY

The first company in Italy registered with the Chamber of Commerce (16 March 1982) for the production of solvent distillers.
"Rely on our experience. We will be able to provide you with the state-of-the-art technical solution that suits your needs."

MAXIMUM BUSINESS RELIABILITY

Certification of RATING 1 as the highest financial reliability of the company. This allows us to be referenced in the most important industrial groups in the world that we have supplied with mutual satisfaction.
"We will continue to provide you with maximum support over time. Day by day."

MORE SAFETY AND CONTROLS

We install up to 11 more controls and safety devices than required by regulations to ensure maximum process reliability and risk prevention.
"Safety is our priority. Our equipment can operate in complete autonomy even if they are not supervised."

5 YEAR WARRANTY

We are the only solvent distiller manufacturer that offers its customers a 5-year warranty with simple and clear conditions..
"The reliability of our systems is not just in words, but through a concrete and unique uarantee."

RCT AND RCO INSURANCE INCLUDED

With a cumulative insured of € 50.000.000, in the event of unforeseen events, we guarantee coverage with the best insurance companies on the market.
"Whatever happens at the distillation unit, we will be by your side to support you."

PRESS

FEATURES

Here is the best configuration to manage and treat solvents used in industrial printing:

- Integrated fire extinguishing system to treat solvents based ink contaminated by nitro cellulose.
- Vacuum generator that allows to reduce the distillation temperature, limiting the risk of generating an exothermic reaction due to **nitro cellulose**[1].
- High-performance vapour condenser air-cooled (designed by Ciemme) or water-cooled to ensure high efficiency and constant productivity in any environmental condition.
- Digital temperature controllers with PT100 reading probes and PID system to avoid thermal drift.
- Optimization of cycle time by vapor reading or timer.
- Proprietary foam and volatile particle control system
- Storage tanks for dirty and distilled solvents, also stackable, with the possibility of direct connection with printing machines and/or with washing systems for automatic solvent management.
- Containment tank for any accidental spills and for compliance with environmental and safety regulations.

Technical Notes

[1] ***Nitro cellulose*** *can react by self-combustion when the temperature exceeds 125°C.*
Thanks to the vacuum generator, it is possible to lower the boiling temperature to carry out the distillation cycle safely. In the event of excessive concentration of the residue or malfunction, there is a double safety system that verifies the temperature of the vapours on the boiling chamber by working on two temperature levels:

- *The first level, if reached, secures the machine and activates the diathermic oil cooling cycle;*
- *The second level, if reached, activates the opening of the safety valve to inlet water into the boiling chamber and stop the exothermic reaction.*

SOLVENT LIST

The most used and processed solvents in the **industrial printing** sector are:

- Heptane
- Isopropanol
- Isobutanol
- Ethyl acetate
- Ethyl alcohol
- Ethanol
- Acetane n propyl
- Methoxypropanol

PHOTOPOLYMER

FEATURES

The solvent used for the production of photopolymer plates requires distillation with:

- Vacuum generator to reduce the distillation temperature, especially for environmentally friendly solvents that have boiling points above 200°C.
- Air-cooled vapour condenser (designed by Ciemme) or water-cooled to ensure high efficiency and constant productivity in all conditions.
- In the case of chlorinated solvents, the machine is equipped with a stainless-steel condenser to prevent corrosion.
- Digital temperature controllers with PT100 reading probes and PID system to avoid thermal drift.
- Optimization of cycle time by means of timers.
- Proprietary system for the control of **foams**[1] and volatile particles.
- Solvent tanks, also stackable, can be connected directly to the machines for automatic solvent management.
- In addition to the storage tanks, a dedicated container can be implemented to pre-heat the distilled solvent before its reuse.
- Containment tank for accidental spills and for compliance with environmental and safety regulations.

Technical Notes

[1] *The solvents used in the development of photopolymer plates create* ***foams*** *and are particularly rich in volatile particles. The vapor outlet is connected to the special device that avoids contamination by entrainment or foaming of the distilled solvent.*

SOLVENT LIST

The most commonly used and processed solvents in the industry of the **development of photopolymer plates** are:

- Cyrel
- Flexosolv
- Nylosolv
- N-Butanol
- Perchloroethylene
- Polysolve

COATING & INDUSTRY

FEATURES

The solvents used in coating, painting and various industrial processes require distillation with:

- Vacuum generator to reduce the distillation temperature of high-boiling or thermolabile solvents.
- Air-cooled vapour condenser (designed by Ciemme) or water-cooled to ensure high efficiency and constant productivity in all conditions.
- Chlorinated or aggressive solvents require a high-performance stainless-steel condenser to prevent corrosion.
- For solvents with a high presence of water, there are technical solutions that allow their reduction in the distillate.
- Digital temperature controllers with PT100 reading probes and PID system to avoid thermal drift.
- Optimization of cycle time by means of timers.
- Proprietary system for the control of **foams**[1] and volatile particles.
- Solvent tanks, also stackable, can be connected directly to the machines for automatic solvent management.
- Containment tank for accidental spills and for compliance with environmental and safety regulations.
- Possibility to build the machine parts in contact with the solvent in stainless steel for high quality and purity distilled solvent.

Technical Notes

[1] *Solvents used in coating, painting and various industrial processes can create* ***foams*** *during distillation and have volatile particles inside them.*
The vapor outlet is connected to the special device that avoids contamination by entrainment or foaming of the distilled solvent.

SOLVENT LIST

The most commonly used and treated solvents in the **coating sector, in painting and in various industrial processes** are:

- Butanone
- Butylglycol
- Cyclohexane
- Ethanol/Isopropyl Alcohol
- Hydrocarbons
- Isobutanol
- Isopropylacetate
- MEK/ MIBK
- Methyl Acetate/Propyl Acetate
- N-butanol/N-butanone
- NMP
- Solvesso 100-150-200
- Toluene
- White spirit
- Acetone
- Nitro thinner/Anti-fog
- Turpentine
- Dichloromethane/ Dichloroethane/ Perchloroethylene
- Acrylic/Polyurethane/Epoxy thinner

CHEMISTRY & EXTRACTION

FEATURES

Solvents used in production processes for the chemical and extraction sectors require distillation with:

- Vacuum generator to reduce the distillation temperature of high-boiling or thermolabile solvents.
- Air-cooled vapour condenser (designed by Ciemme) or water-cooled to ensure high efficiency and constant productivity in all conditions.
- Chlorinated or aggressive solvents require a high-performance stainless steel condenser to prevent corrosion.
- For solvents with a high presence of water, there are technical solutions that allow their reduction in the distillate.
- Digital temperature controllers with PT100 reading probes and PID system to avoid thermal drift.
- Optimization of cycle time by means of timers.
- Proprietary system for the control of **foams**[1] and volatile particles.
- Solvent tanks, also stackable, can be connected directly to the machines for automatic solvent management.
- Containment tank for accidental spills and for compliance with environmental and safety regulations.
- Possibility to build the machine in stainless steel for high quality and purity distilled solvent.

Technical Notes

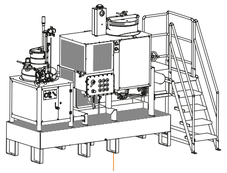
[1] *Solvents used in the chemical and mining industries can* ***foam*** *during distillation and have volatile particles inside them. The vapor outlet is connected to the special device that avoids contamination by entrainment or foaming of the distilled solvent.*

SOLVENT LIST

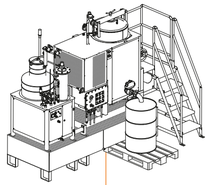
The most commonly used solvents in manufacturing processes for the **chemical and extraction** sectors, they are:

- Ethyl alcohol
- Methyl alcohol
- N-propyl alcohol
- Isobutyl alcohol
- Isopropyl
- Acetone
- Butyl alcohol
- Ethanol

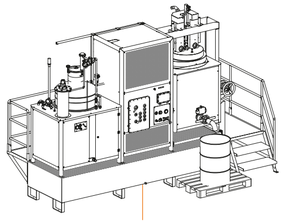
TECHNO



K100



K200



K400

MODEL	K100	K200	K400
Loading volume (lt)	100	200	400
Total boiling chamber volume (lt)	170	330	570
Supply voltage	400V/3 - 50Hz	400V/3 - 50Hz	400V/3 - 50Hz
Heating power (kw)	9,6	15-22,5	30
Oil quantity (lt)	54	100	175
Average daily productivity (lt)	100-450	200-1.000	400-1.800
Certification	ATEX II 2G	ATEX II 2G	ATEX II 2G

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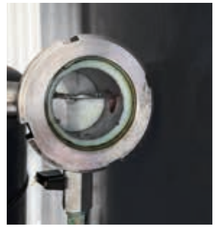
EN

TECHNO

SOLVENT DISTILLATION UNIT



FEATURES

- UP TO 1.800 LITERS/DAY
- AUTOMATIC OPERATION
- VACUUM DISTILLATION
- ATEX CERTIFICATION
- DIGITAL PROGRAMMING
- SELF-CLEANING SYSTEM
- CONTAINMENT TANK
- DISCHARGE THROUGH VALVE

Solvent Recovery Technologies