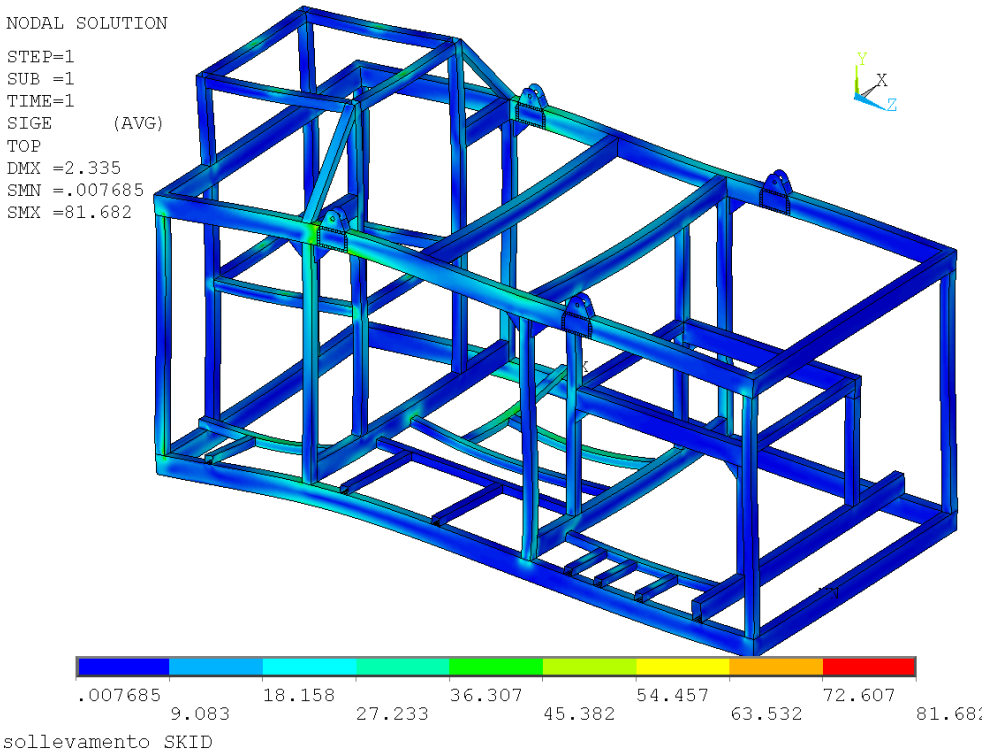
VACUUM EVAPORATORS V-NT SERIES

APPLICATION SECTORS:

- Galvanic
- Photographic
- Mechanic
- Cosmetic
- Chemical
- Petrolchemical
- Pharmaceutical
- Oenological
- Dairy
- Olive oil



ACCESSORIES AND SERVICES OFFERED:

- Conductivity meter
- Installation on site
- Start-up
- Maintenance
- Fan-speed control
- Distance control
- Measurement of production

C&G Depurazione Industriale – Via I°Maggio, Rosano, Rignano sull'Arno (FI) – Italia –
Tel. +39 055.83.03.450 – Fax +39 055. 83.03.368 - E-mail: info@cgdepur.it

"Your WasteWater, Our Solution"

C&G Depurazione Industriale Srl has been operating since 1971 in the industrial wastewater treatment sector. The Know-how acquired from the design and construction of over 3000 plants, sold both in Italy and abroad, encourages our constant growth, research and innovation, and allows us to propose a complete and personalised service to our customers.

Countries where the C&G logo is already well known and appreciated are: Italy, France, Belgium, Spain, Holland, Slovakia, Slovenia, Poland, Turkey, Greece, Russia, Lebanon, UAE, USA, Mexico, Taiwan, China, India, Indonesia, Malaysia, Japan, Brazil and others.

C&G supplies equipment and support technologies to a wide range of production sectors, all however with a common objective: to improve the conditions of a particular liquid.

C&G offers a wide range of products, all conforming to existing guidelines of the EEC:

- VACUUM EVAPORATORS
- REVERSE OSMOSIS
- ULTRAFILTRATION
- ION EXCHANGE
- CHEMICAL–PHYSICAL TREATMENT
- WATER-SOFTENERS
- DEMINERALIZRS
- FILTERPRESS
- SPECIAL EQUIPMENT FOR GALVANIC INDUSTRY

The services offered by C&G include:

- Custom made, one-off solutions
- Analysis in our laboratory of your polluted waters
- Design, manufacture and installation
- Maintenance contracts
- On-line and on-site assistance

C&G Depurazione Industriale – Via I°Maggio, Rosano, Rignano sull'Arno (FI) – Italia –
Tel. +39 055.83.03.450 – Fax +39 055. 83.03.368 - E-mail: info@cgdepur.it

General Working Description

The V-NT series of vacuum evaporators have vertical development with the boiling chamber in the lower part and the condensation chamber in the upper part.
The vacuum system guarantees minimum energy expenditure.
The distance between the free surface of the effluent being treated and the collection plate guarantees the absence of drag out, and therefore a higher purity in the distillate.

Refrigerant circuit

The V-NT evaporator series are plants which use a heat-pump. There is a refrigerant circuit where high pressure is used to yield heat to the wastewater and bring it to boil, and low pressure is used to re-condense the distillate produced by removing the heat.

Vacuum circuit

A vacuum is created within the boiling chamber through the use of a liquid ring vacuum pump and an ejector.

This extraction system guarantees a residual pressure of 33 mbar inside the evaporator.

Distillate circuit

The discharge of the distillate is independent. There is an accumulation tank placed on the skid which is continuously discharged using an apposite centrifuge pump.

Concentrate discharge

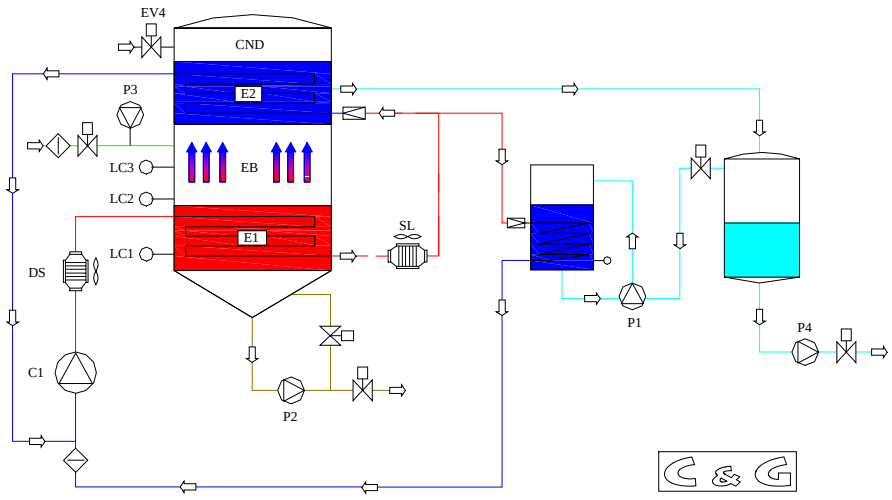
The concentrate produced is discharged using an apposite pump that not only allows the discharge to occur, but also permits a continuous recycling of the concentrate, guaranteeing better uniformity and an increase in the thermal exchange coefficient.

Automation, alarms and control

C&G evaporators can work unattended and continuously 24/24 hours thanks to control through PLC.

The use of simple, logical software allows easy control and immediate set up of the working parameters.

The use of a synoptic (standard from model V-NT 1000 up) guarantees a rapid and intuitive global control of the working of the machine



C&G V-NT Series

C1 - Compressor
DS – De-superheater
SL - Subcooler
EB – Boiling chamber
E1 – Boiling heat exchanger
E2 – Condensation heat exchanger
L1- L2 – L3 – Boiler levels
P1 – Vacuum pump
P2 – Recycle/discharge pump
P3 – Antifoam pump
P4 – Distillate discharge pump

C&G Depurazione Industriale – Via I°Maggio, Rosano, Rignano sull'Arno (FI) – Italia –
Tel. +39 055.83.03.450 – Fax +39 055. 83.03.368 - E-mail: info@cgdepur.it

V-NT Models

MODEL V-NT*	l/h	DIMENSIONS LxDxH (mm)	CONSUMPTION (W/l)
150	6,25	1200x1000x2100	180-200
250	10,4	1400x1000x 2100	180-200
350	14,6	1400x1000x 2100	180-200
500	20,8	2000X1300X2100	180-200
750	31,2	2000X1300X2100	180-200
1000	41,6	2300X1300X2300	180-200
1500	62,5	2300X1300X2600	180-200
2000	83,3	2700X1500X2600	180-200
3500	145,8	3000x1800x2600	180-200
5000	208,3	3000X1800X2600	180-200
7000	291,7	3600X2200X3900	180-200
10000	416,7	4800X2100X3700	180-200
12000	500	5600X2100X4000	180-200
18000	750	6300X2200X4000	180-200
20000	833.33	6300X2200X4300	180-200
All units by C & G conforms "Machinery directives "2006/42/CE			

* Possibility of other dimensions to measure on request

Component	**Material**
Boiling/condensation chamber	Stainless steel AISI 316L (EN 1.4435)
Boiling chamber heat exchanger[1]	Stainless steel AISI 316L (EN 1.4435)
Boiling chamber base[1]	Stainless steel AISI 316L (EN 1.4435)
Condensation chamber heat exchanger	Stainless steel AISI 316L (EN 1.4435)
Vacuum pump liquid ring tank	Stainless steel AISI 316L (EN 1.4435)
Distillate tank	Stainless steel AISI 316L (EN 1.4435)
De-superheater heat exchanger	Pipes in Cu / Casing in Al
Subcooler heat exchanger	Pipes in Cu / Casing in Al
Vacuum pump	Ghisa UNI 5007-69
Concentrate discharge pump	Stainless steel AISI 316L (EN 1.4435)
Antifoam dosing pump	PP
Distillate discharge pump	Stainless steel AISI 304 (EN 1.4301)
Skid	Stainless steel AISI 304 (EN 1.4301)
Piping	Copper / PVC[2]

1 - Possible to use special stainless steels

2 – Possible to use pipes in stainless steel or alternative plastic materials

C&G Depurazione Industriale – Via I°Maggio, Rosano, Rignano sull'Arno (FI) – Italia –
Tel. +39 055.83.03.450 – Fax +39 055. 83.03.368 - E-mail: info@cgdepur.it