

Gefico

Land Based



01.	About us	3
02.	Services	4
03.	Technical water	5
04.	Drinking water	6
05.	Automatic process	8
06.	References	9

GEFICO

Gefico is a leading company in desing, development and supply solutions for the water treatment market.

The high quality of our products is the result of 35 years of experience acquired as specialist in seawater - potabilization. Our products and solutions are designed and intended to operate in extremely harsh conditions.

Through a worldwide network based on more than 50 offices , Gefico is able to supply spare parts and services of new and existing units delivered up to now.

In 2011, Gefico became part of industrial group Cetus . With a quality product certificate, the group focuses on sustainability and environmental solutions, holding several innovation awards and CSR (Corporative Social Responsibility)

Environmental impact is one of our main concerns. We therefore work to minimize negative impact on the environment by continuously developing new opportunities compatible with sustainable development.

We use life-cycle assessment (LCA) to measure and quantify the environmental impacts associated with all the stages of a product's life.



TECHNICAL WATER

Some industrial applications and processes require ultra pure water with extremely low levels of contaminants. Gefico evaporator plants are designed to cover this demand.

Our purpose is support efficiency at the industry by minimizing environmental impact through taking advantage of existing resources.

All our systems are developed in compliance with different international standards, material specifications according to customer's requirements.

DRINKING WATER

Membrane filtration has a number of benefits over the existing water purification techniques.

Based on the types of particles that are removed from the water with each type of membrane filter, we can summarize different techniques:

- 1) High Pressure Reverse Osmosis
Indicated for seawater treatment with salt concentration higher of 10.000 mg/l.
- 2) Low Pressure Reverse Osmosis
Indicated for the brackish water treatment with a salt concentration between 1.000 to 10.000 mg/l.
- 3) Ultra-filtration
Indicated for groundwater and surface water clarification.



Viscofan. Evaporator AQ-100/120A in CHP plant. Navarra - España.



Kenia. Courtesy of DWL WATER

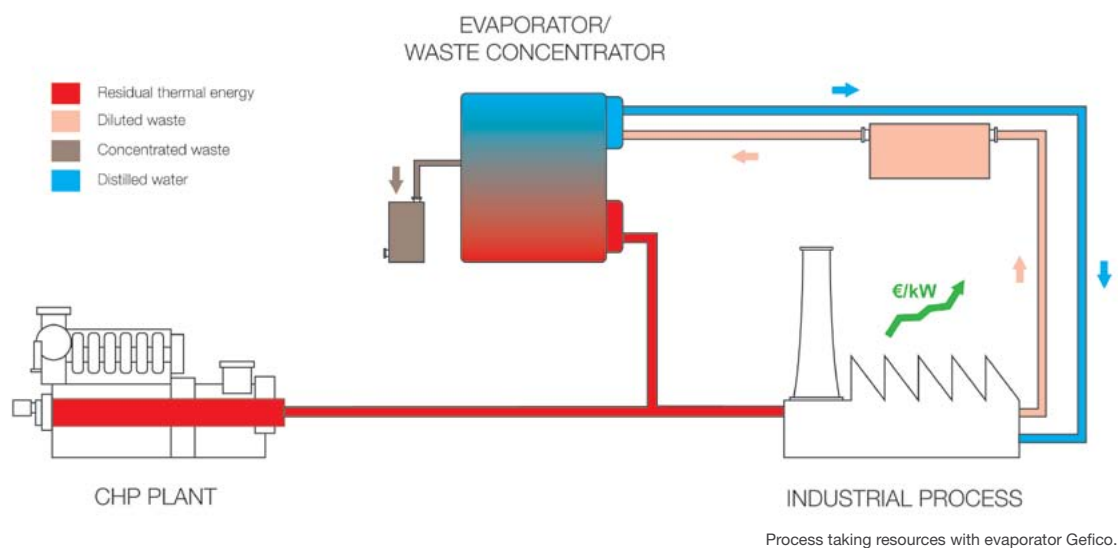
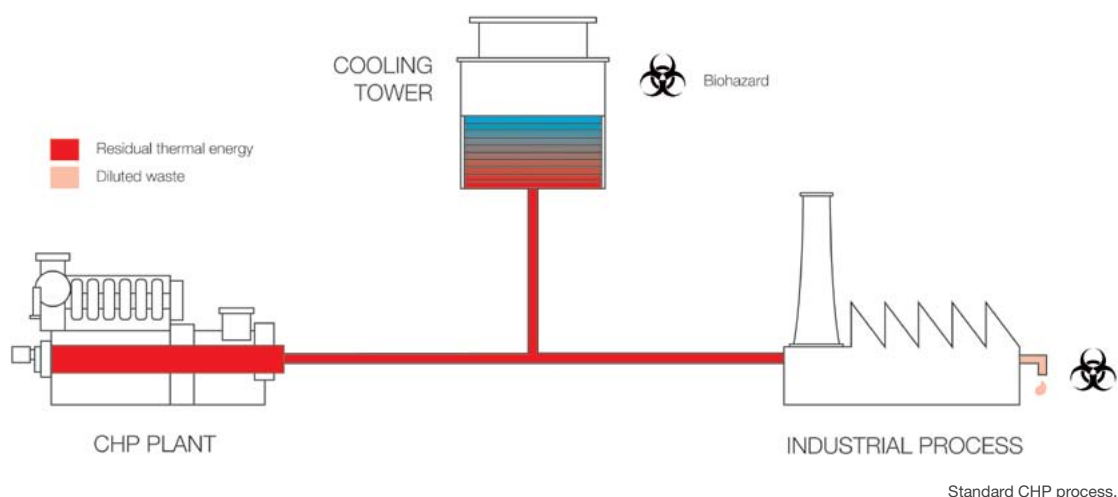
EVAPORATION

Gefico Evaporators use heat from an appropriate heat source (e.g waste heat/heat form a CHP unit). Increasing industrial energy efficiency, we use water more efficiently, reducing the environmental impact, operational interruptions and obtaining a better price per kilowatt.

Our evaporators are specially indicated for CHP facilities installed at Food Industry, among all industrial process requiring treatment for wastewater operation.

Cooling tower at the CHP installations can cause health and safety problems. By applying this solution, we can prevent cooling towers from becoming a public health risk or environmental issues

Gefico's thermal oil, water, single or double stage evaporators minimize waste and allow discharge according to international standards requirements.



REVERSE OSMOSIS

The Gefico RO Unit uses reverse osmosis method. Solute is retained on the pressurized side of the semipermeable membrane and the pure solvent is allowed to pass to the other side and consequently salt cannot pass through the membrane.

There are two types of Reverse Osmosis processes for generating freshwater, high and low pressure process.

In the high pressure process, the pressure is between 50-70 bar. In the low pressure process, the pressure is 12-20 bar.

Our RO Units can treat water to be used as potable water or intended for the industry or agriculture sector ensuring the minimum consumption.

Gefico's unit are modular made. All components are installed in a common frame so only the Booster Pump, Disc Filter and Dechlorination filter are independently supplied for the installation at the feed flow.

Gefico offers the possibility of developing different proposals for RO systems in compliance with different regulations, required specifications, customer's requirements.



Reverse osmosis desalination plant Gefico installed in container.

ULTRAFILTRATION

Gefico UF Systems remove high molecular-weight substances, colloidal materials, and organic and inorganic polymeric molecules with a size bigger than 0.05 μm , ensuring a better quality of treated water.

Our UF modules are compact and easy to use. With a broad range of products going from high capacities systems to portable units to obtain water in remote areas or emergency situations.

When energy supplied is impossible, Gefico dispose of solar powered systems up to 50 ton/day.

Benefits of UF technique are as follows:

- Constant water quality, independent to feed TSS (turbidity <0.1 NTU).
- Efficient removal of pathogens in water.
- Protozoan parasites such as *Giardia lamblia*, *Blastocystis hominis*, *Cyclospora cayetanensis*, *Cryptosporidium*, *Balantidium coli*, *Entamoeba histolytica*, etc.
- Fecal contamination due to: fecal coliform, *E coli*, fecal esterococos, *Clostridium perfringens* and somatic colicafagos.
- 99.999% removal of bacteria as *Leptospirona*, *Campylobacter jejuni*, *Yersinia enterocolitica*, etc..
- Reduction of organic material between 50 and 90%.
- Undissolved Heavy metals.



KLAR series for ultrafiltration.



Solar UV disinfection unit.



Solar ultrafiltration unit .

AUTOMATIC PROCESS

Our automation systems are delivered with integrated software ensuring that you achieve maximum efficiency in the broad scope of operations.

This automation ensures efficiently at operational face with the possibility of monitoring different parameters to adjust water production.

The system can be remote operated by a TCP/IP system or locally.

Trough our automation systems, you can reduce cost and improve the quality and safety of installation.



Control software for evaporator Gefico.

STAND OUT REFERENCES

We solve the waste problems, and water needs, both sweet and distilled, in any industry. Milk, oil, food processing, mechanical manufacturing, accommodation facilities, etc.

LOBITO - ANGOLA

Reverse osmosis desalination plant model AQE-60D in two 40 feet independent containers, with pre and post- treatment systems to obtain drinking water for the population of Porto do Lobito.



PONTEVEDRA - SPAIN

Reverse osmosis desalination plant model AQE-25BW for water brackish treatment (salt ratios between 1.000 - 10.000 mg/l) with low pressure reverse osmosis, 10-20 bar.



A CORUÑA - SPAIN

Reverse osmosis desalination plant model AQE-100 to obtain drinking water used for fish farming process.



GRANADA - SPAIN

Distillate plant by evaporation model AQ-50/60 to obtain distilled water used in different production processes. Boilers, refrigeración circuits, etc.



PONTEVEDRA - SPAIN

Potabilization plant model AQE-30D to obtain drinking water used in the processing and packaging of canned food.



MURCIA - SPAIN

Distillate plant by evaporation model AQ-60/70 to obtain distilled water used in manufacturing processes of soaps and detergents.



PONTEVEDRA - SPAIN

Reverse osmosis plants to supply water consumption in areas where the availability of fresh water is minimal, as in the islands.



EVAPORATORS. 1992 - 2011

Model	Production (m³/day)	Customer	Location	Year
AQ-100/120	100	VISCOFAN	NAVARRA	2011
AQ-50/60A	50	GRELVA - PULEVA	GRANADA	2010
AQ-50/60A	50	GRELVA - PULEVA	GRANADA	2010
AQ-50/60A	50	GRELVA - PULEVA	GRANADA	2010
AQ-100/120A	110	JEALSA - BOINERSA	BOIRO	2010
AQ-100/120A	110	JEALSA - BOINERSA	BOIRO	2010
AQ-100/120A	110	JEALSA - BOINERSA	BOIRO	2010
AQ-40/50A	40	PAQUITO	BOIRO	2010
AQ-25/30B	25	IMM - BÉLGICA	DJIBOUTI	2009
AQ-60/70A	60	LINASA	MURCIA	2007
AQ-60/70A	60	LINASA	MURCIA	2007
AQ-60/70A	60	LINASA	MURCIA	2007
AQ-60/70A	60	LINASA	MURCIA	2007
AQ-50/60A	50	GRELVA	GRANADA	2007
AQ-50/60A	50	GRELVA	GRANADA	2007
AQ-50/60A	50	GRELVA	GRANADA	2007
AQ-25/30B	25	IMM - BÉLGICA	DJIBOUTI	2004
AQ-60/70A	60	LINASA	MURCIA	2000
AQ-60/70A	60	LINASA	MURCIA	2000

EVAPORATORS. 1992 - 2011

Model	Production (m³/day)	Customer	Location	Year
AQ-60/70A	60	LINASA	MURCIA	2000
AQ-60/70A	60	LINASA	MURCIA	2000
AQ-50/60A	50	GESA	MAHON	1999
AQ-50/60A	50	GESA	MAHON	1999
AQ-50/60A	50	GESA	MAHON	1999
AQ-50/60A	50	GESA	MAHON	1999
AQ-12/16	12	GESA	IBIZA	1999
AQ-12000	12	GESA	PALMA	1998
AQ-12000	12	GESA	PALMA	1998
AQ-12000	12	GESA	PALMA	1998
AQ-12000	12	GESA	PALMA	1998
AQ-12000	12	GESA	PALMA	1998
AQ-50/60A	50	OLCELSA	CUENCA	1998
AQ-50/60A	50	OLCELSA	CUENCA	1998
AQ-60/70A	60	COOSUR	JAEN	1998
AQ-100/120A	110	JEALSA	BOIRO	1998
AQ-100/120A	110	JEALSA	BOIRO	1998
AQ-100/120A	110	JEALSA	BOIRO	1998
AQ-40/50A	40	CONS. PAQUITO	BOIRO	1998

EVAPORATORS. 1992 - 2011

Model	Production (m³/day)	Customer	Location	Year
AQ-12/16	12	GESA	IBIZA	1998
AQ-60/70	60	COOSUR	VILCHES	1998
AQ-50/60	50	OLCELSA	TARANCÓN	1998
AQ-50/60	50	OLCELSA	TARANCÓN	1998
AQ-50/60A	50	WARTSILA NSD	BERMEO	1997
AQ-12/16	12	GESA	IBIZA	1997
AQ-12/16	12	GESA	IBIZA	1997
AQ-12/16	12	ENDESA	MELILLA	1997
AQ-12/16	12	ENDESA	CEUTA	1997
AQ-50/60	50	SALICA	BERMEO	1997
AQ-12/16	12	GESA	MAHON	1992
AQ-12/16	12	GESA	MAHON	1992
AQ-12/16	12	GESA	MAHON	1992

REVERSE OSMOSIS. 2000 - 2009

Model	Production (m³/day)	Customer	Location	Year
AQE-18D	15	ISLAS CIES	PONTEVEDRA	2009
AQE-15D	12	ISLAS CIES	PONTEVEDRA	2008
AQE-15D	12	ISLAS CIES	PONTEVEDRA	2008
AQE-60D	50	PORTO LOBITO	LOBITO - ANGOLA	2007
AQE-60D	50	PORTO LOBITO	LOBITO - ANGOLA	2007
AQE-30D	40	PESCANOVA	PONTEVEDRA	2007
AQE-100	80	PRODEMAR	CORUÑA	2003
AQE-15D	12	FÁBRICA HIELO	CANARIAS	2003
AQE-25BW	25	FANDICOSTA	PONTEVEDRA	2002
AQE-6D	4,8	HOTEL	CUBA	2000

CUSTOMERS



CERTIFICATIONS



COLLABORATORS



AWARDS



Polígono O Acevedo, Parcela A
15185 Cerceda - A Coruña, Spain
Tel +34 981 250 111 - Fax +34 981 258 439
Email: gefico@gefico.com
www.gefico.com

Gefico

Excellence in water



Gefico cannot accept responsibility for possible errors in catalogs, brochures and other printed material. Gefico reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specifications already agreed. © 2012 Gefico. All rights reserved.