

GRUPAGUA PROJECT BROCHURE

SOLUCIONES INDUSTRIALES



PROJECT BROCHURE

INDUSTRIAL SOLUTIONS



www.polletwatergroup.com



OUR ADDED VALUE

- Wide range of total solutions
- Custom-tailored applications
- Standard range
- Mobile water treatment
- 'Plug & Play'-modules
- Integrated solutions
- Chemical products
- Service support
- Technical monitoring
- On-site assistance
- Different financing possibilities
- Energy saving design
- Sustainability

Industrial solutions

- Softeners
- Filtration
- Ultra-filtration
- Reversed Osmosis
- Demineralisation
- Water Storage Tank
- Chemical Dosing
- Disinfection
- Booster Units
- Blowdown Systems
- ...



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Well water treatment for production of potable water for slaughterhouse

Removal of iron, ammonia and odor by oxidation, disinfection and filtration

Equipment

- Aeration unit diam. 1500
- Duplex multimedia filter epoxy-coated tanks diam. 1800 with nozzle plate
- UV 80/5
- PLC

Chemicals

- HYDROS 359 Chlorine dosing

<http://www.polletwatergroup.com/news/hydris-engineering-project-movie-of-noordvlees-van-gool>



Grey water treatment for water recuperation in deep frozen vegetable industry

Removal of suspended solids by ultra filtration

Equipment

- Ultrafiltration unit 130m³/u

Chemicals

- Coagulation
- Chemical cleaning NaOH
- Chemical cleaning HCl
- Disinfection NaOCl



▶ Treatment and conditioning of well water to be used as make-up water for steaming boiler

Revamping of existing installation (sand filter, softener, active carbon and reversed osmosis) and adding an ultra filtration to remove organic compounds

Equipment

- Aeration tank diam. 90 cm with 500l of aeration rings
- Triplex filtration aquamandix
- Ultra filtration 13,5m³/u
- Activated carbon filtration C30.78
- Softener – revamping multi-valve system
- Reversed osmosis KR

Chemicals

- Oxidizing KMnO₄
- Chemical cleaning UF NaOH
- Chemical cleaning UF HCl
- Anti-scalant Hydraclean 59
- Boiler water conditioning Sustain 95



▶ Treatment of well water for steam production in biogas plant

Sand filters in quadruplex, magnetic filter, duplex softener, reversed osmosis, EDI module and mixed bed to achieve 1m³/h ultra pure water

Equipment

- 4 x sand filtration Fleck 7700
- Magnetic filter
- Duplex softener 2 x 250 Clack
- Reversed osmosis Aqualine RO 640
- EDI ionpure
- Mixed bed 2 x 100l

Chemicals

- NaOH



Waste water recuperation for re-use in car-wash

Triplex AFM filter and active carbon with pneumatical valves and PLC with visualization

Equipment

- 3 x AFM filter C21.60
- 1 x activated carbon filter C30.72
- PLC

Chemicals

- No chemical dosing



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▶ Paper industry – Algeria

Triplex softener 180m³/h
PVC plumbing



▶ Brewery – Ethiopia

Duplex softener 45m³/h
Composite tank C36”
PLC control
PVC plumbing



▶ Food industry - Belgium

4 duplex softeners
Max. flowrate 240 m³/h
Epoxy vessels
PVC plumbing



▶ Automotive industry – Czech Republic

Triplex softener 120m³/h
Chemical conditioning



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Industry - Netherlands

Duplex softener 30m³/h
Composite vessels 36"
PP plumbing
Controller



Beverage - Belgium

1. Mineral water 45m³/h
Simplex oxidation tower
Triplex sand filter
Triplex activated carbon filter

2. Borehole water 45m³/h
Triplex activated carbon filter

Lemonade water
Reversed osmosis 30m³/h
Reversed osmosis on concentrate 10m³/h



➤ Frozen Vegetables - Belgium

2 duplex softeners 40m³/h
1 double-pass reversed osmosis 15m³/h



➤ IT, GOOGLE - Netherlands

Triplex 3 x 1200L resin – 60m³/h



➤ Metal industry – Belgium

Extension on ultrafiltration - 140m³/h
Pretreatment of RO feed water
Stainless steel plumbing and connections according to DIN standard
SGS approval



▶ 3 x Clack 2" softener 250L with System Controller for progressive flow functioning

3 x Clack 2" softener 250L with System Controller for progressive flow functioning. The equipment is destined for cooling water products in a power station (Sweden).

Capacity : up to 30m³/h



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➤ Duplex sand filter



➤ Triplex filtration 50 m³/h



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▶ Container solutions

Sandfilter - Softening - Reversed Osmosis - Ultrafiltration - EDI



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PROJECTS IN THE MIDDLE EAST

► Doha – QATAR

105 m³/h UF and 89 m³/h RO



► Kirkuk – IRAQ

72 m³/h RO



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PROJECTS IN THE MIDDLE EAST

▶ Kuşadası – TURKEY

56,25 m³/h SWRO



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PROJECTS IN THE MIDDLE EAST

▶ SYRIA

100 m³/h RO



▶ Bursa – TURKEY

150 m³/h RO



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PROJECTS IN THE MIDDLE EAST

▶ Doha – QATAR

210 m³/h UF and 156 m³/h RO



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PROJECTS IN THE MIDDLE EAST

▶ Kocaeli – TURKEY

180 m³/h SWUF



▶ Kocaeli – TURKEY

93 m³/h UF and 42 m³/h SWRO



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PROJECTS IN THE MIDDLE EAST

► Denizli – TURKEY

60 m³/h RO and 50 m³/h CEDI



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PROJECTS IN THE MIDDLE EAST

► İzmir – TURKEY

128 m³/h RO



► Eskişehir – TURKEY

16 m³/h CEDI



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HERCO UNITS

▶ Compact units

UO and UO-D series with optional cover (up to 500 l/h)



▶ Combi units

Simplex or duplex (up to 500 l/h)



▶ Vertical frame units

UO-D (FU) CD series (500-2000 l/h)

UO-D/ FU series (500-2000 l/h)



▶ Counter pressure units

Up to 7 bar (50 - 1.200 l/h)



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HERCO UNITS

Standard units

UO ND and UO-D ND (from 2.500 up to 12.000 l/h)



Anti-Scalant units

UO-D AS (FU) series (from 1.650 up to 30.000 l/h)



Ultra pure units

UP series (150 - 20.000 l/h)



EP series (150 - 2.200 l/h)



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HERCO UNITS

High efficiency units

KR - series (3.000 - 10.000 L/h) - Recovery up to 90%



UO 8500 KR(FU)

Permeate staged units

ND/P series (220 – 2.000 l/h)



UO 1000 ND/P

Brackish water units

BW < 5,000 ppm TDS - up to 27.500 l/h



UO 4500 BW

Sea water units

SW units up to 20.000 l/h -
For a total salt content up to 45,000 mg/l at 25°C



PROJECTS USING UVO₃

➤ Mobile UV unit

This is a mobile UV unit and filter. The concept is that it can be taken to various locations on the farm to treat river / reservoir water.

The main customers are baby leaf growers, salad crops and potatoes.

The popularity of this unit is increasing due to pressure from the supermarkets for 'cleaner' produce.



➤ 'Air Handling' UV unit

This is an 'Air Handling' UV unit treating the air that is being blown into a Jam factory. The customer had mould issues with their product despite using HEPA filtration.

This system was used in conjunction with a range of locally installed UV batten units to successfully increase the shelf life and reduce the number of customer product rejects.

Installed in 2016



➤ UV unit to treat the water in the largest fountain in England.

The unit is installed in a National heritage site. They couldn't use chemicals to treat the water as this destroyed the grass and the flowers in the surrounding areas so they turned to UV.



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PROJECTS USING UVO₃

▶ Water treatment unit for a soft fruit grower in the East of England

Crops were being damaged by some waterborne diseases and as they are an organic grower they couldn't use chemicals so they ask UVO3 to offer a solution to their problem.

Unit installed 2014



▶ Water treatment units for a grower of Watercress in Spain

The following two pictures are of two units that have been sold to a grower of Watercress in Spain. The water they use to grow their crop occasionally picked up some bacteria that affected the growth of the Watercress. As their system is based on a recirculation system it caused them many problems. UVO3 installed these units to eliminate the problem.

Units installed in 2014 and 2015

