

#### **GDN** Water Treatment

#### HERE WE ARE



GDN Water Treatment in Soresina is a company formed by professionals that have more than 40 years of experience in the manufacture of equipments for water production, from sea water to pre-treatment plants, from Reverse Osmosis to Distillation equipments, water storage, mixing and distribution.

This technology comes from long years of activity developed in major manufacturing companies specialized in water treatment and we mainly aim at 2 goals:

-the research and the development of the technological innovation of the machineries according to the continuous changes in the international rules of the sector

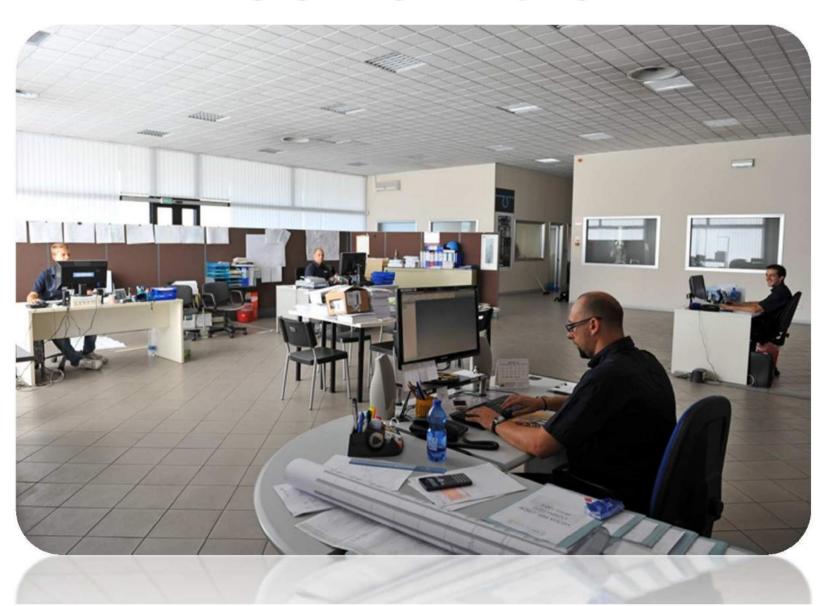
-giving support, through our own work and experience, to the customer production requirements and philosophy, trying to relieve him as much as possible from the tasks and activities concerning the equipment and the materials research, which can often distract him from his main activity.

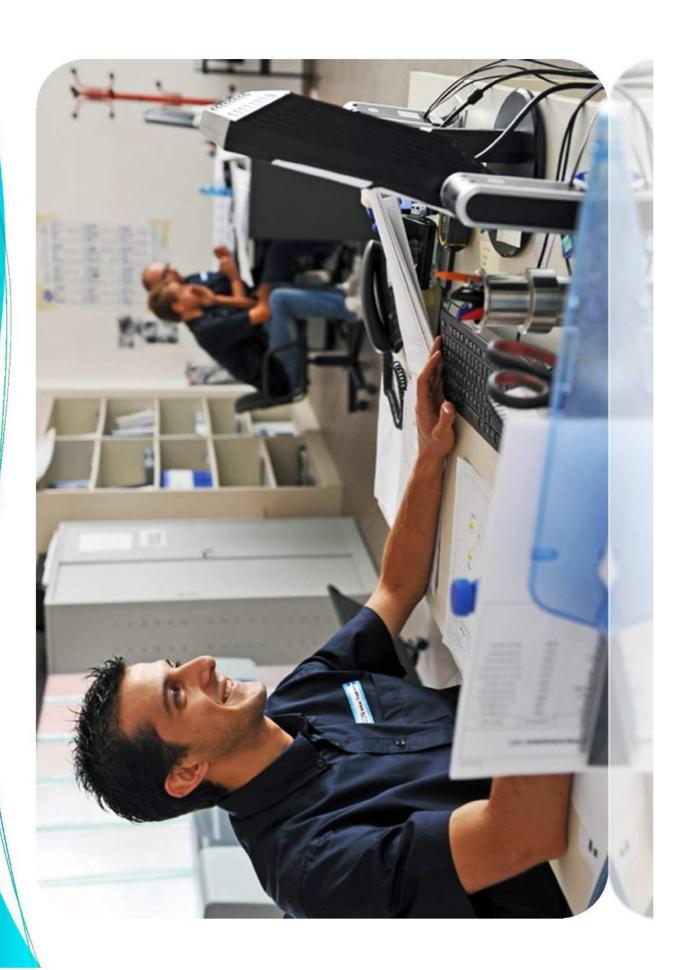
#### **GDN SRL**

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# **OUR OFFICES**







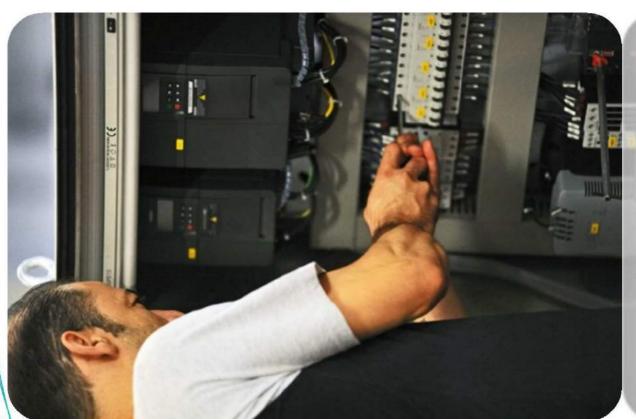
# **OUR WORKSHOP**















# EQUIPMENT

PRIMARY WATER TREATMENTS
MULTIMEDIA FILTERS
SAND FILTERS
ACTIVE CARBON FILTERS

**SOFTENERS** 

CARTRIDGE MICROFILTRATION

DOSING STATIONS FOR CHEMICAL SOLUTIONS
WATER TREATMENT BY DEMINERALIZATORS AND REVERSE OSMOSIS PLANTS
(TO PRODUCE SOFT WATER, POTABLE WATER AND SEA WATER)

C.D.I.

MULTIPLE EFFECT DISTILLERS
THERMOCOMPRESSION DISTILLERS

**PURE STEAM GENERATORS** 

MICROFILTRATION (ceramic and polymer)

**ULTRAFILTRATION** (ceramic and polymer)

**NANOFILTRATION** 

**DIAFILTRATION** 

PROCESS TECHNOLOGIES FOR THE RECOVERY OF PROTEINS IN DAIRY PRODUCTS

**STORAGE TANKS** 

**MIXING TANKS** 

**DISTRIBUTION LOOPS** 

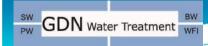
**CIP/SIP SYSTEMS** 

**EXCHANGERS** 

**OZONE GENERATORS AND OZONE METERS** 

**TURBO EMULSIFIERS** 

**DUST LOAD SYSTEMS** 









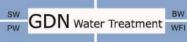


















#### LAB DISTILLER



**VERY SIMPLE DESIGN** 

**FED BY ANY KIND OF WATER** 

LOW CONSUMPTION
LOW MANTAINANCE COSTS
NO COOLING WATER

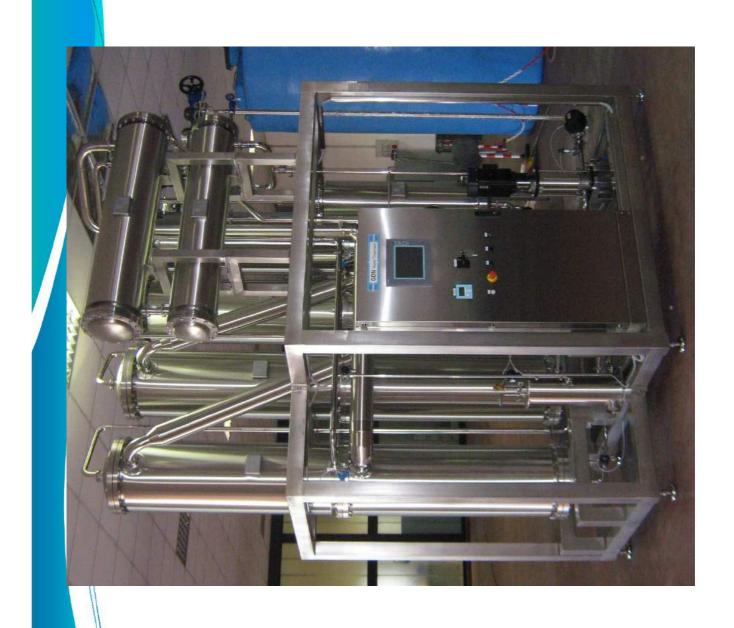
WFI FLOW 50 lt/hr

COLD DISTILLED WATER PRODUCTION

GREAT QUALITY/PRICE RELATIONSHIP

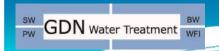
**LONG LIFE** 











# **GDN Industrial Line**











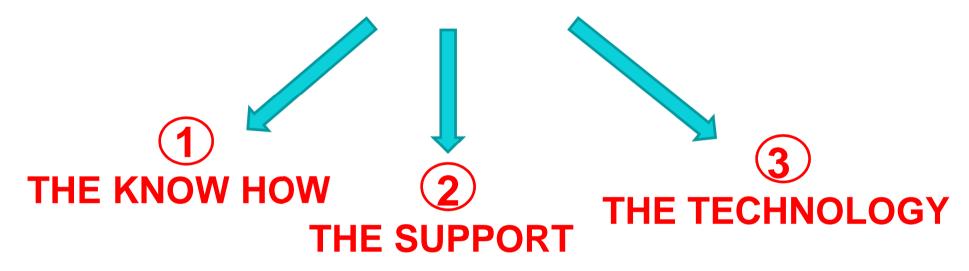
#### Our main goal:

# ANSWER TO ALL OUR CUSTOMERS NEEDS IN TERMS OF

# TECHNOLOGY-QUALITY-MAXIMUM FLEXIBILITY AND, ABOVE ALL, COST EFFECTIVE SOLUTIONS



# GDN unique selling advantages



- 1) 40 years of experience from PONZINI to GDN
- 2) Complete CUSTOMERIZATION
- 3) HIGH TECH solutions and equipments

# 1) Know How

- 1972 Giovanni Solzi, the owner of GDN, at the age of 22, is part of the Ponzini staff and starts his long career in the design, manufacture of thermocompression distillers
- 1989 Giovanni Solzi becomes the Technical Manager of Ponzini
- 2007 Giovanni Solzi becomes the Technical Manager of the multinational company Veolia Water
- 2009 Veolia Water in Soresina closes due to the severe global financial crisis and Giovanni Solzi, at the age of 59, decides to start his own company taking over from Veolia the tools, the materials and all the employees.

# In 44 years of experience Giovanni Solzi can pride himself on having witnessed the birth and the operation of at least 3000 distillers.



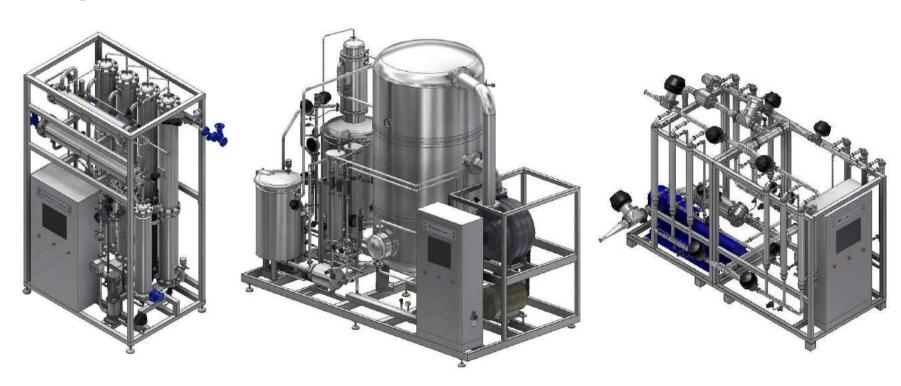
# OUR BEST EQUIPMENT Thermocompression distiller The result of 42 years of research and development of an incomparable high technology

# 2) Complete Customerization



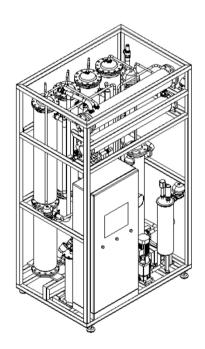
## We can do it all:

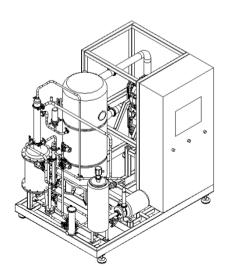
- Temperature and flows
- Dimensions
- Special treatments

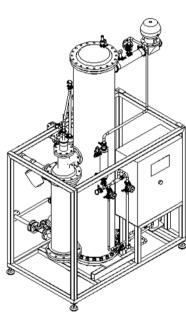


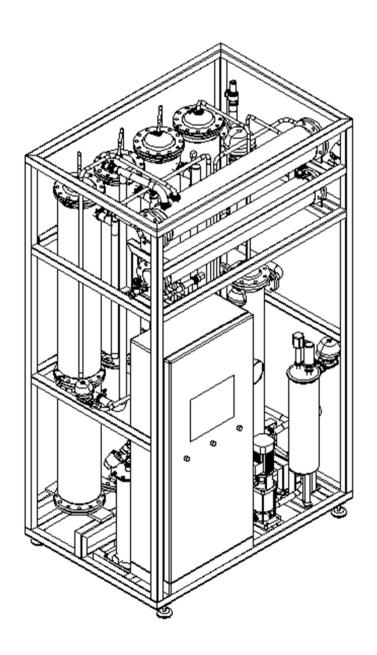


# 3) High Tech solutions and equipment





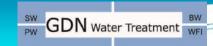


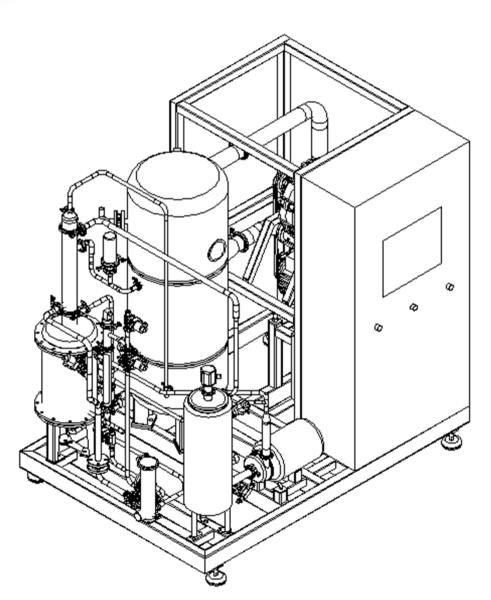


# PSME HIGH TECH

1. Falling film High tech level

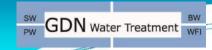
2. No dead legs Sanitary equipments

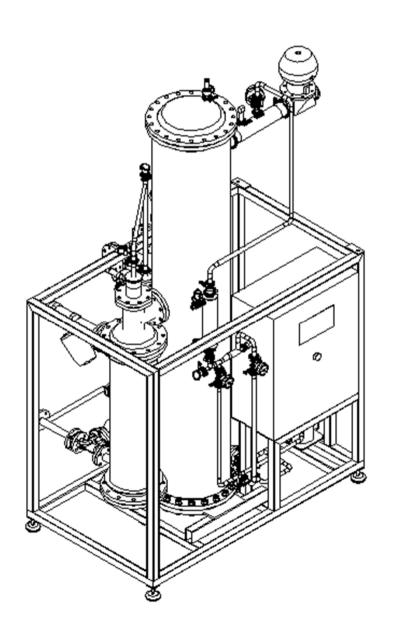




# PSMC HIGH TECH

- 1. Blower vs volumetric compressor
- 2. Three different degassing systems
- 3. Always changing and adapting





# PPSG HIGH TECH

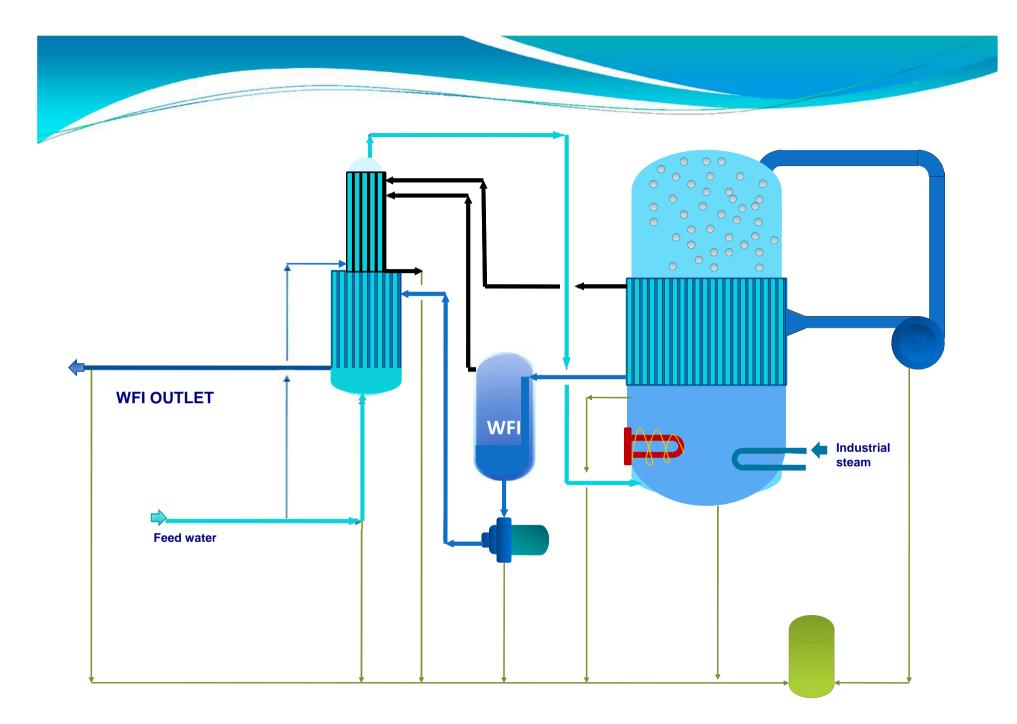
Special degassing systems:

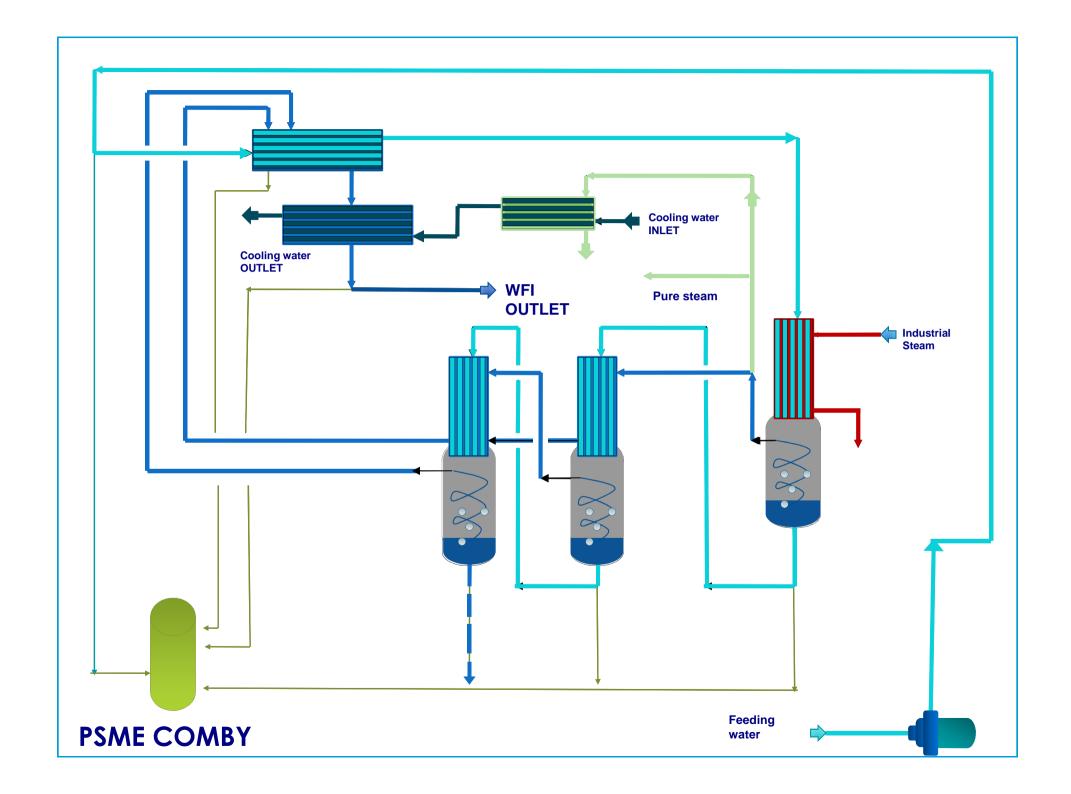
- Preheater
- Thermosyphon

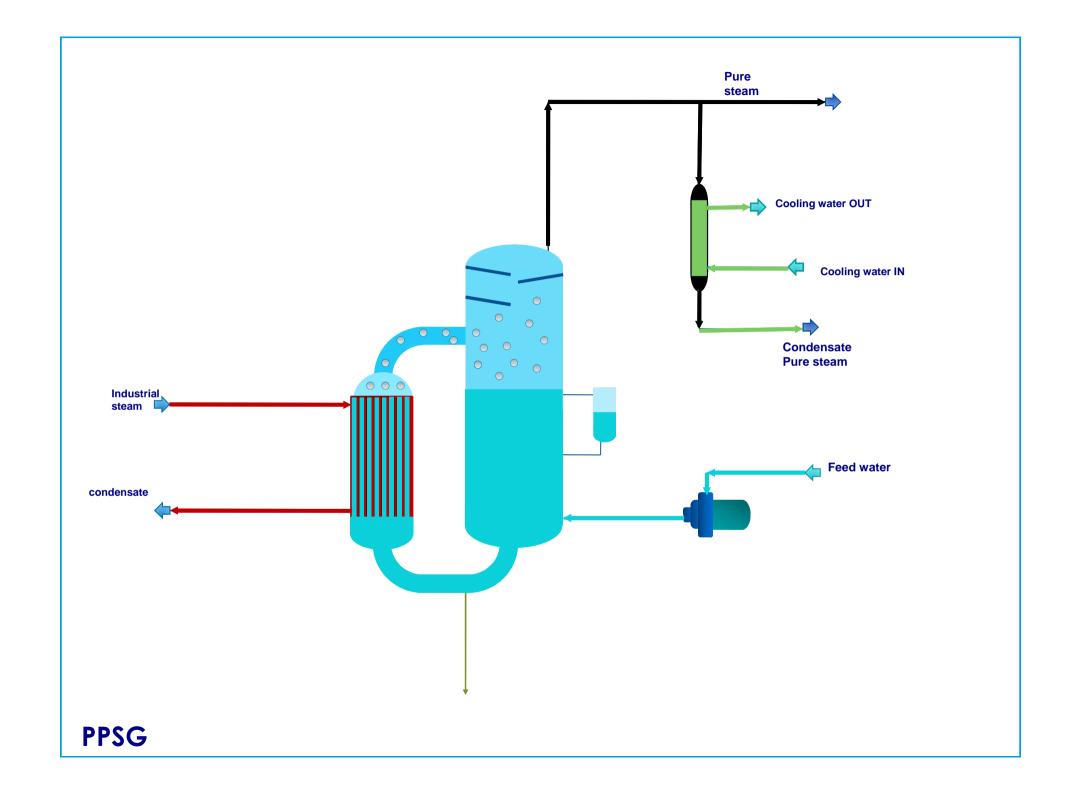
**Anti-pollution system** 

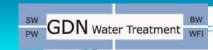
**EN 285 conformity** 

## **WORKING PHILOSOPHY:**









# Several models: From limited productions (100 l/h)...



## ...to bigger productions (15.000 l/h and more)







## Our main goal:

# GIVE AN ANSWER TO ALL OF OUR CUSTOMER'S NEEDS IN TERMS OF

# TECHNOLOGY- QUALITY – MAXIMUM FLEXIBILITY AND ABOVE ALL SAVING MONEY



# **AND ALSO:**

Industrial PC and SCADA as standard SS AISI 304 control board as standard

SS AISI 304 skid as standard
Only sanitary membrane valves are used
Only TC ASME BPE connections are used

First choice components: GEMU, SIEMENS, ENDRESS + HAUSER, WIKA, GRUNDFOS

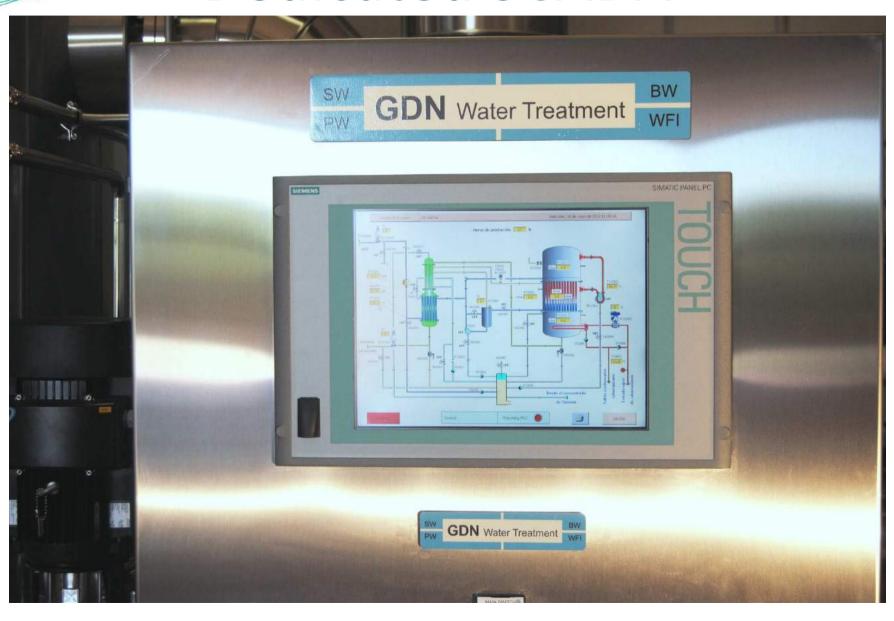
# Our standard control board in INOX and with standard SCADA



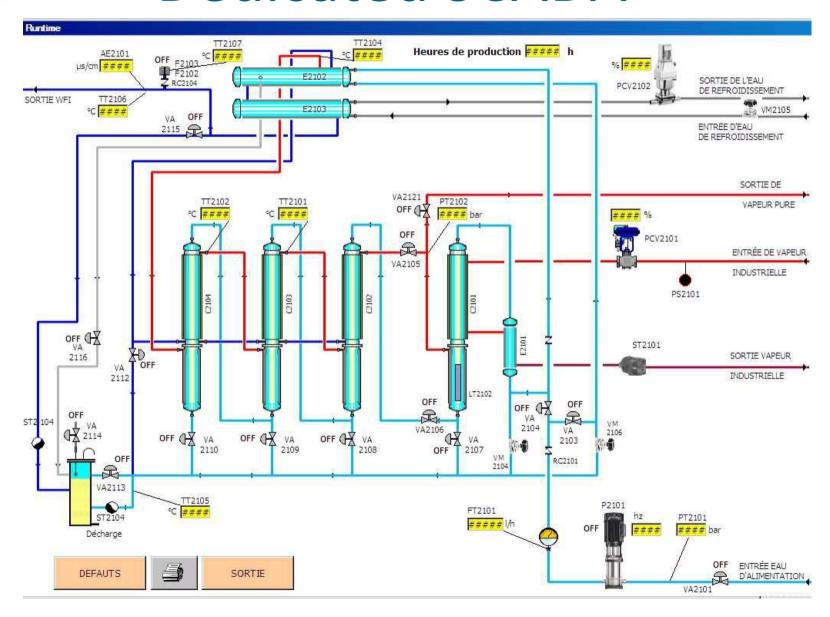




# Dedicated SCADA



## Dedicated SCADA



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# HIGH TECH COMPONENTS

- All the components are made in Italy/Europe
- All the components are last generation, high tech and high quality items
- Our suppliers are only first choice suppliers
- Our service and spare parts are always available













ROHRSYSTEME AUS EDELSTAHL

ARDIAN

spirax

burkert FLUID CONTROL SYSTEMS

2 angella

METTLER TOLEDO

Paffex

NGI

SUFFIF OF

# **D-CKWEILER**



# Endress+Hauser



























Water Technology

F.LLI TASSALINI s.p.a.















FBINOX FONDI BOMBATI

ELFOR























# **VALIDATION**

All the welders, the welding operators, the welding activities and the WPS (welding procedure specification) are qualified and certified according to these rules:

- **•ASME BPE 2002**
- •UNI EN 15614-1
- •UNI EN 729-2
- •UNI EN 287-1
- •UNI EN ISO 6947 :1998
- •UNI EN 719 :1996
- •UNI EN ISO 14554-1 :2001
- •UNI EN 1418 :1999

- •92/31 CEE
- •93/68 CEE and what foreseen by the harmonized International norms for low tension
- •73/22 CEE
- •D.P.R. 459 24/07/1996
- •Legislative Decree 476 04/12/1992



# **DOCUMENTATION**

- cGMP
- F.D.A. rules
- ISPE baseline
- USP 37/ NF 32
- European Pharmacopeia 7th edition
- ASME BPE
- PED
- CFR21
- GAMP 5
- EN 285 conformity
- CE conformity declaration
- DQ/IQ/QQ/PQ
- Operating and maintenance manuals
- Customized documentation
- Customized drawings



START UP **COMMISSIONING TRAINING** IQ/OQ EXECUTION INSTRUMENTS RECALIBRATION 24/7 AFTERSALES SERVICE





# ON-SITE AND OFF-SITE PLANNED MAINTENANCE ACTVITIES









