

ITALSCHELL s.r.l

DESIGN AND PRODUCTION OF VACUUM EVAPORATOR

PRESENTATION

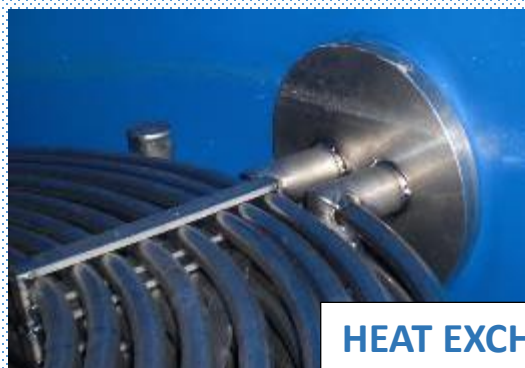
- DESIGN AND PRODUCTION OF VACUUM EVAPORATOR
- WASTEWATER TREATMENT THROUGH A PROCESS OF EVAPORATION IN VACUUM SEALED CHAMBER
- REDUCTION OF VOLUMES OF RAW SEWAGE



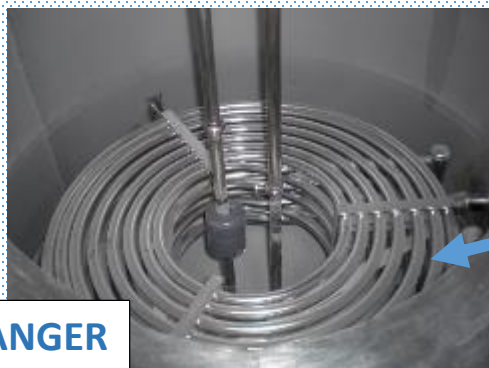
SYSTEM OVERVIEW:

- THE STRUCTURE: HERMETIC BOILING CHAMBER UNDER VACUUM
- THE THERMAL SOURCE: HEAT PUMP CIRCUIT
- HYDRAULIC CIRCUIT

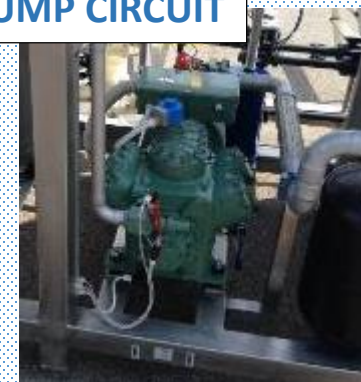
ONE CONCEPT, ENDLESS SOLUTIONS



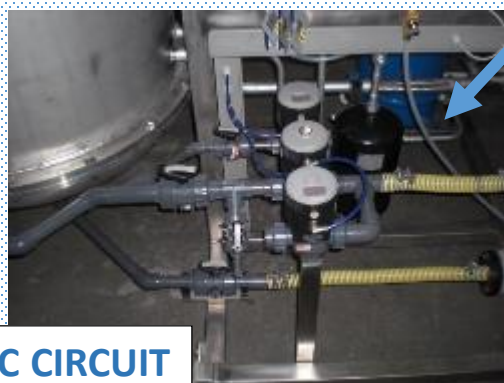
HEAT EXCHANGER



HEAT PUMP CIRCUIT



HYDRAULIC CIRCUIT



VACUUM SYSTEM



SERIES:

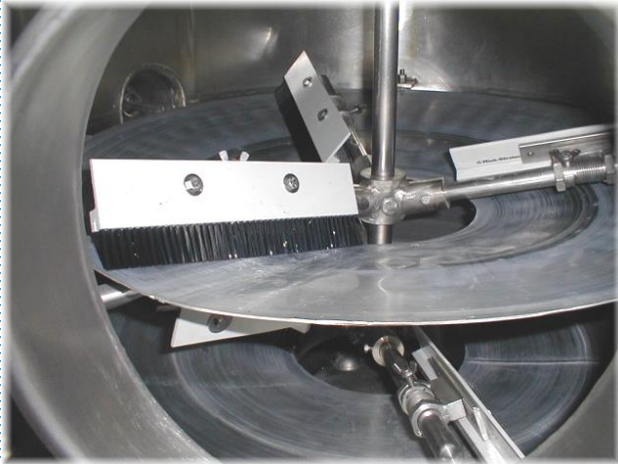
- **K**: immersed heat exchanger (serpentine) made in AISI 316L – EN.1.4404



- **CR**: machine made in special material (Superduplex, Titanium, coated with HALAR,...) suitable to treat aggressive product



- **TR**: machine designed to concentrate the product to a muddy consistency. They are equipped with a scraper to keep clean the heat exchanger



- **WS:** machine without the heat pump system. When the hot/cold thermal source are available on site the heat pump circuit may not be necessary.



- **MULTIPLE EFFECT**: machine where the latent heat released by the vapor is recovered in a second boiling chamber with a lower absolute pressure.



THE ADVANTAGES:

- REDUCE THE VOLUME OF RAW SEWAGE
- REDUCE DISPOSAL COST
- BENEFIT FOR THE ENVIRONMENT
- DELICATE DISTILLATION WITH A HIGH DEGREE OF CONCENTRATION
- LOW ENERGY CONSUMPTION
- VERSATILITY
- FULLY AUTONOMOUS AND CONTROLLED RUNNING
- MAINTENANCE SIMPLE AND MINIMIZED

APPLICATION SECTOR:

- METAL PROCESSING INDUSTRY
- GALVANISATION PROCESS
- PHOTOGRAPHIC, PRINTING AND TEXTILE INDUSTRY
- PAINTING PROCESS INDUSTRY
- LEATHER/HIDE PROCESSING INDUSTRY
- FOOD INDUSTRY
- WASTE DEPOSITS



Key suppliers: Schell GmbH & Co KG, ITALSCHELL srl

Contract value: € 700.000

Jobs created: –

<http://www.innovation-procurement.org/award>

Finalist Public Procurement of Innovation Award

Vacuum vaporizer based wastewater recycling system for the Austrian Mint

Federal Procurement Agency Austria

Federal Procurement Agency initiated the procurement of a 'Vacuum vaporizer based wastewater recycling system for the Austrian Mint'. In this procurement Federal Procurement Agency Austria asked the market for an environment friendly wastewater recycling system that is more resource efficient. Specifically, a system that reduces the need of freshwater. The Federal Procurement Agency Austria applied a negotiated procedure split into three phases. In the first phase suppliers were invited to provide information on their qualifications as a company. After that suppliers submitted their first offer which included a calculation for the Life Cycle Costs (LCC) and a full report with detailed information on wastewater consumption and the savings of the proposed system as well as concentration of waste filtered. Based in the results of the study suppliers were invited to submit their final offer.

www.innovation-procurement.org



And partners:



The Procurement of Innovation Platform and the PPI Award are initiatives developed by ICLEI, PIANO, REC and IWT supported by the European Commission

