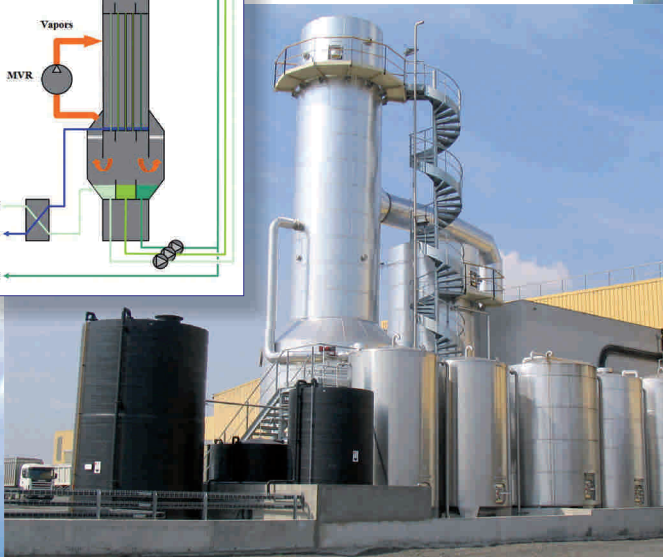
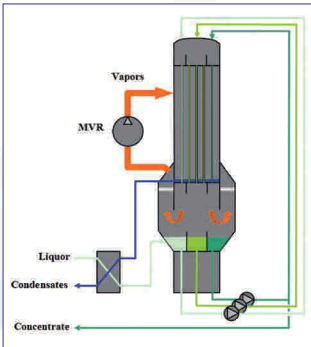


France evaporation

POLLUTION REMOVAL . THERMAL ENGINEERING . INDUSTRIAL PROCESS

EVAPORATION

- Single / multiple effect evaporation
- Mechanical Vapor Recompression
- Cogeneration - thermal recovery



CRYSTALLIZATION

- K_2SO_4
- Na_2SO_4
- Boric acid
- Vinasse with potash removal
- Any salt solution



microscope
view

DISTILLATION / STRIPPING

- Treatment of the dissolved ammonia
- Concentration of the ammonia into ammonium sulphate for spreading
- Recovery of solvent
- Hexane
- Alcohol concentration (ethanol)



Packing



France evaporation

New industrial process for sulphate treatment

OUR SOLUTION:

Crystallization of recoverable co-products such as **Na₂SO₄** (detergent market) or **K₂SO₄** (soil fertilization), without production of ultimate waste (CaSO₄)



Na₂SO₄



K₂SO₄

ADVANTAGES:

- No production of **gypsum** (restrictive towards regulations)
- **Better running** of the biologic wastewater treatment **without sulphates**
- **Valorization** of the **co-products**
- Process already **well-known** and **useful** in chemical industry

