

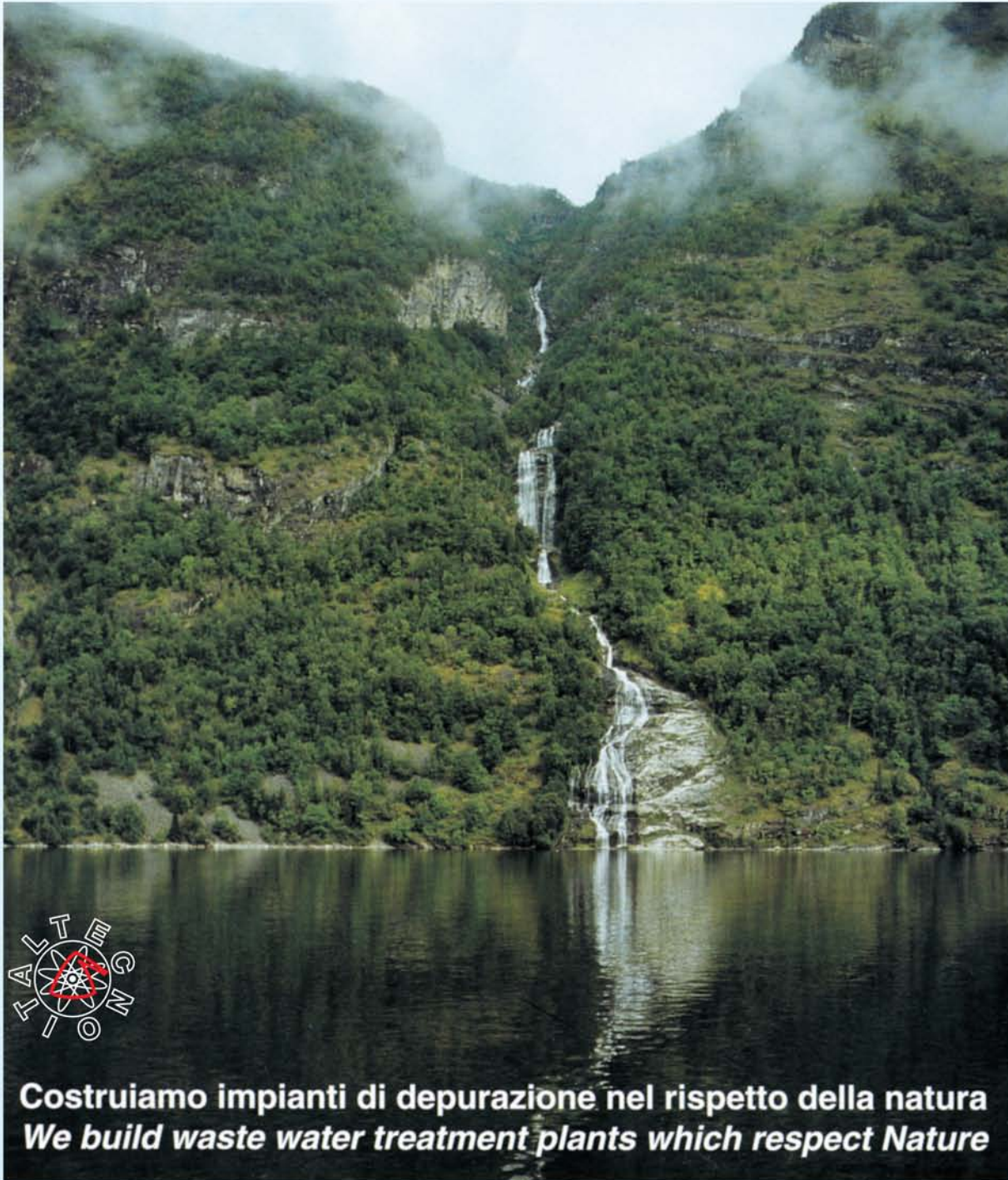


# ITALTECNO

Equipment

*The most updated Waste Waters Treatment solutions available as a turn-key project*

## WASTE WATERS TREATMENT PLANTS



**Costruiamo impianti di depurazione nel rispetto della natura**  
***We build waste water treatment plants which respect Nature***

Water is getting more and more precious: an environmental friendly approach is definitely essential for any technological process.

This is why Italtecno particularly emphasizes environmental aspects in all its activities,

combining research results from chemical and equipment divisions.

In this context, it is particularly important the experience gained in providing tailored solutions to meet the Customers' needs in any aspect of waste waters treatment.



### THE BEST AVAILABLE WATERS TREATMENT TECHNOLOGY

Since 1974, thanks to its full range expertise in aluminium surface treatment, going from chemicals till fully equipped process lines, Italtecno has always been in a position to design and offer to Customers, the best available technology for waste waters treatment to the aluminium anodizing, surface treatment and painting industries.

### A COMPLETE RANGE OF PRODUCTION

The range of production covers all the different options available in waters treatment technology:

#### Waste waters Treatment:

- Chemical-physical open-cycle installations
- Zero discharge closed-loop installations with evaporators
- Partial recycling installations
- Sludge treatment
- Final waters treatment

#### Process waters Treatment:

- Deionizer resin units
- Acid recovery equipment
- Phosphoric acid recovery

#### Primary Waters Treatment:

- Demineralizer units
- Quartz filtration
- Osmosis equipment

### THE WORLDWIDE EXPERIENCE

The worldwide experience acquired in these years, allows Italtecno to give response to the different needs of Customers in all the five Continents.

A particular attention has always been paid into complying with the applicable Regulations and Environmental standards, which may vary from country to country. Italtecno can count on not less than 750 waters treatment installations worldwide.



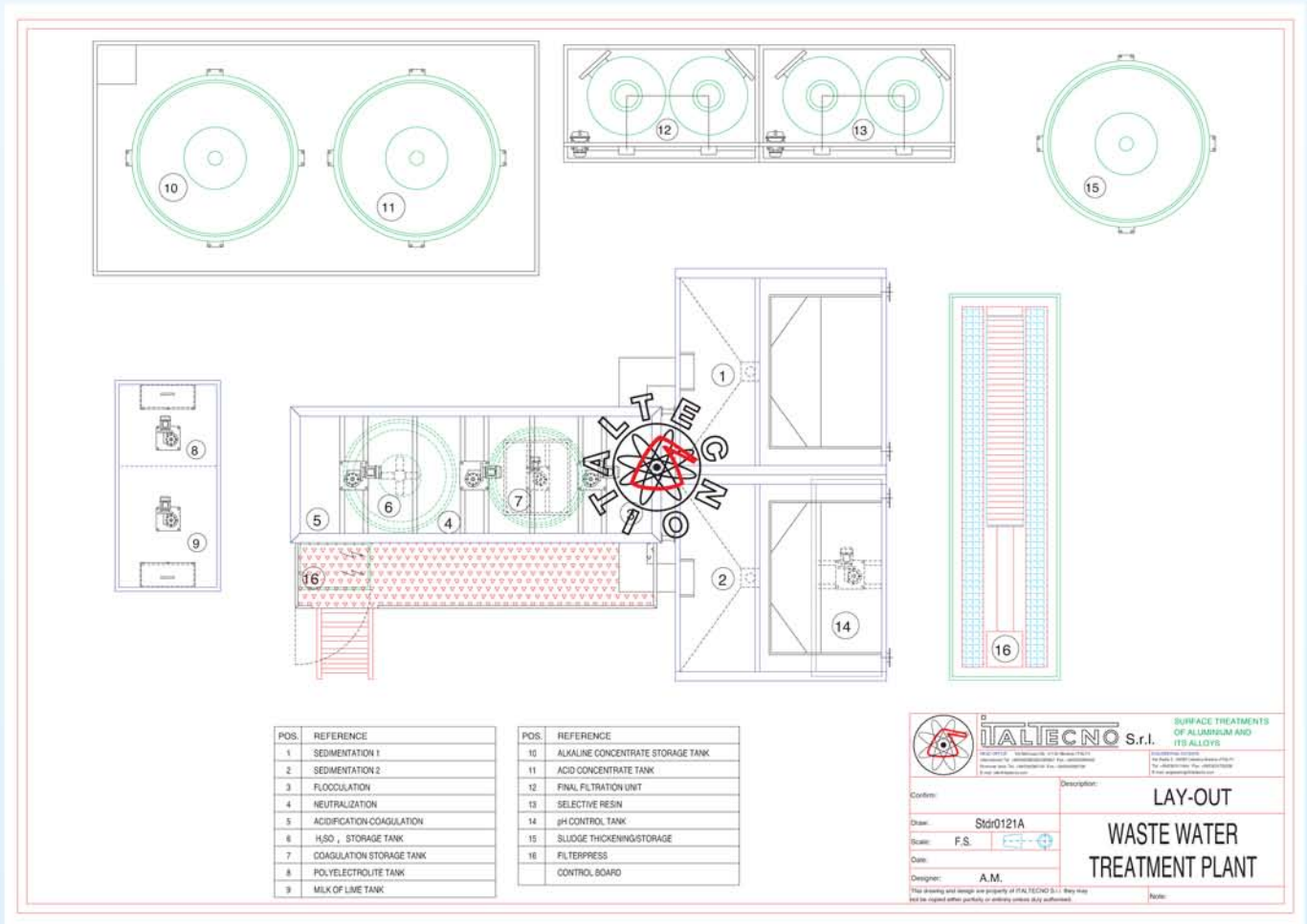
Chemical-physical installation

### FULL FLEXIBILITY

In order to provide Customers with optimized solutions, Italtecno make available all possible supply configurations, from the full turn-key delivery, till partial deliveries, where Italtecno will supply only the core equipment of the plant and will assist the Customer in acquiring all less critical components (such as storage tanks) in the local market.



# Treatment of waste waters from anodizing plants CHEMICAL PHYSICAL PLANT



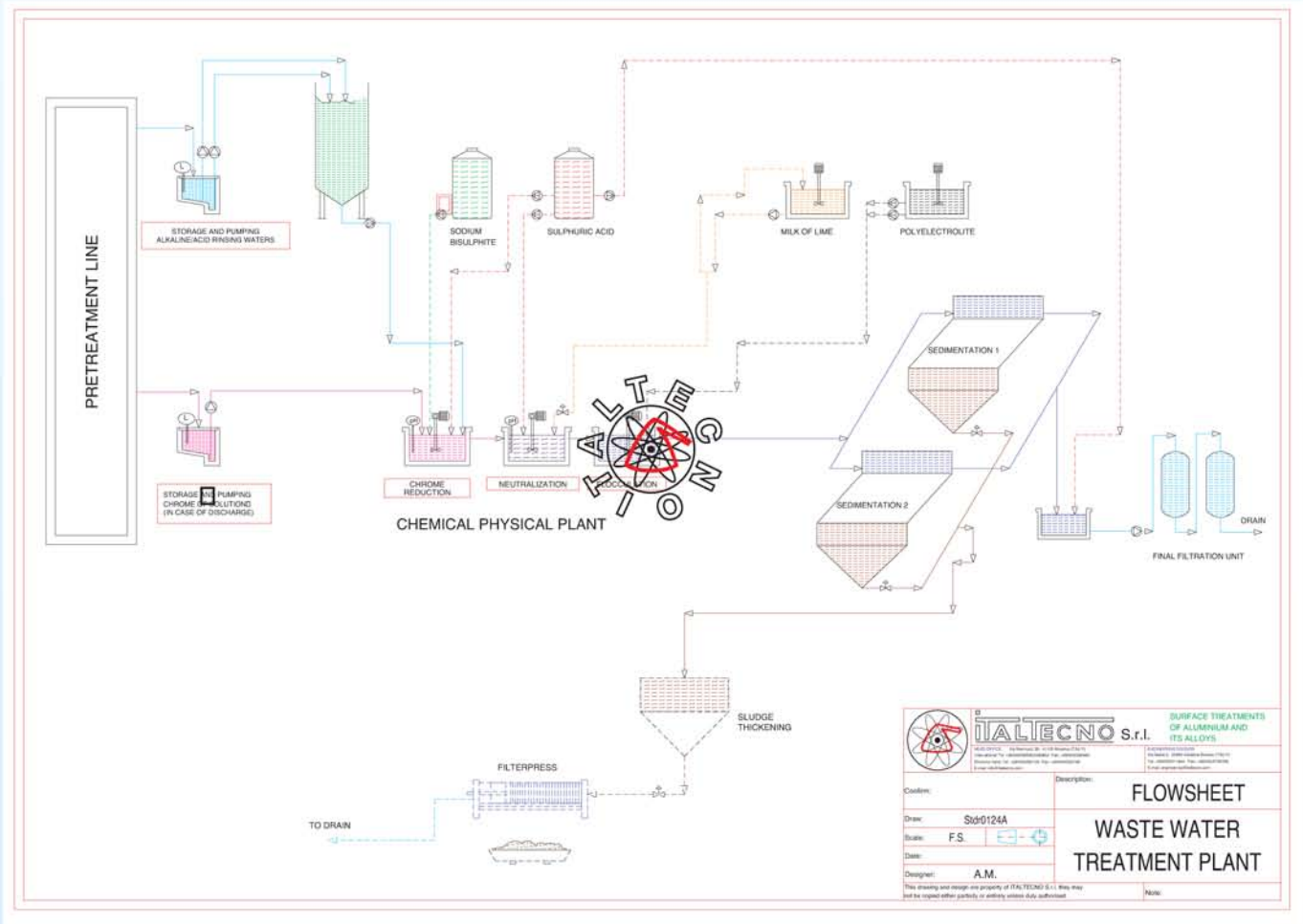
The Chemical-Physical installations for anodizing waters treatment typically include the following parts:

- Water storage tank
- Concentrate storage tank
- Decolouring tank
- Reaction tank
- Reactive preparation and storage tank
- Polyelectrolyte and preparation storage tank
- Lamellar decanter
- Recycling pumps, metering pumps, stirrers pH control devices •
- Final filtering column
- Electric control board
- Filter press



Treatment of waste waters from coating plants

# CHEMICAL PHYSICAL PLANT



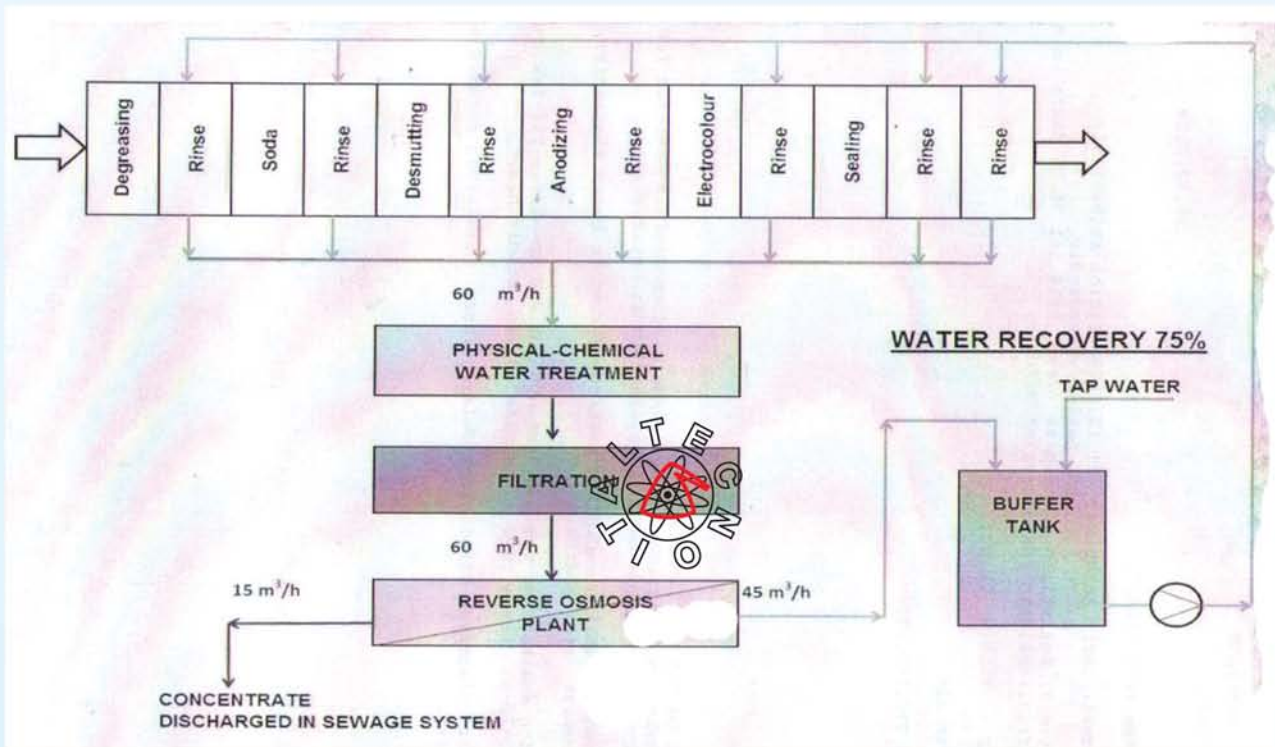
The Chemical-Physical installations for pre-treatment coating waters treatment typically include the following parts:

- Water storage tank
- Concentrate storage tank
- Reagents tank (acid and alkaline)
- Neutralization tank
- Flocculation tank
- Lamellar decanter
- Recycling pumps, metering pumps, stirrers, pH control devices
- Final filtering column
- Electric control board
- Filter press



Treatment of waste waters from anodizing or coating plants

# PARTIAL RECYCLING



Partial recycling of waters is the answer whenever conventional chemical-physical are not good enough due to:

- Advanced environmental policy
- Limitations on the volume of waters to be discharged
- Protection of well waters
- Consent limits non achievable with conventional methods
- Other instances

The options available for partial recycling are many, and involve a comprehensive design of both the waste waters plant as well as of the treatment line.

This approach can vary from ease to ease, and normally consider the addition of equipment like:

- Reverse osmosis
- Resin lines
- Buffer tanks
- New water lines for re-use streams
- and many others

