



CF SERIES CHEMICAL-PHYSICAL TREATMENT PLANTS

S.A.I.T.A.
water treatment solutions

saitaimpanti.com

CF SERIES

CHEMICAL-PHYSICAL TREATMENT PLANTS

SAITA produces modular and standard chemical-physical plants, continuous process, **CF series**, or batch process, **BR series**, for the industrial wastewater treatment.

The chemical-physical treatment is used for the decontamination of industrial wastewater from organic or non-organic pollutants (for example: metals, surfactants, ect...), in order to achieve the discharge limits defined by the current legislation.

These plants exploit chemical-physical technologies, in a succession of various phases, to remove pollutants, in form of sludge, and to obtain dischargeable treated water.

APPLICATIONS

The **CF** and **BR series** are recommended for the treatment of wastewater with a high concentration of suspended and/or dissolved substances, coming from industrial processes, such as:

- Galvanic Electro deposition
- Powder Coating
- Anodic Oxidation
- Pickling and Degreasing
- Chemical and Pharmaceutical industries
- Electronics and Printed Circuits

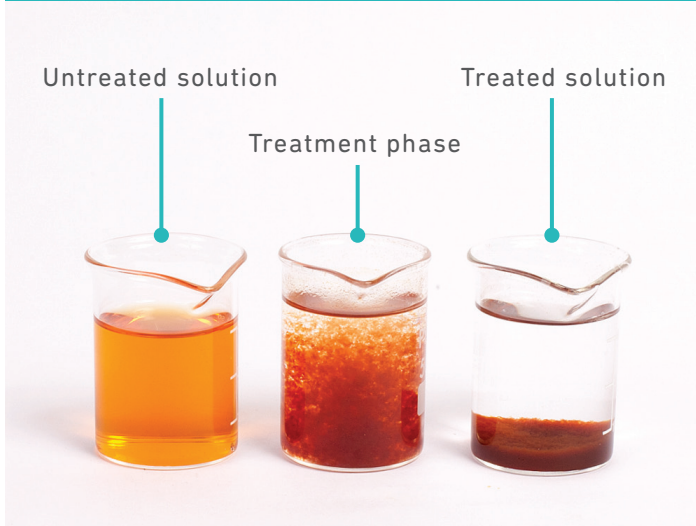
CONTINUOUS PROCESS

CF series chemical-physical modular plants are designed according to: type of pollutants contained in the wastewater, flow-rate, discharge limits and available area for the plant location. The **CF series** models have a capacity range from **1.000 lt/h** to **60.000 lt/h**.

BATCH PROCESS

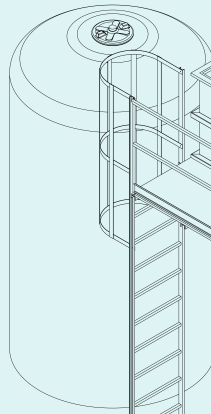
The batch **BR series** plants are used to treat discontinuous flow and highly polluted wastewater. The **BR series** models have a capacity range from **1.000 lt/day** to **30.000 lt/day**. Both the **CF** and **BR series** can be used in the same treatment process.

SAITA's chemical-physical plants are controlled by a single switchboard, composed of a touch panel for the supervision and management (remote control as well) of the whole process and of the individual users.



CF SERIES PLANTS TREATMENT PHASES

1. Equalization



2. Reaction area

- Acidification
- Coagulation
- De-chromation
- De-cyanidation
- Fenton reaction
- Oxidation
- Alkalinization
- Flocculation

3. Sedimentation and sludge thickening

- Lamellar decanters
- Thickeners

4. Sludge de-hydration

- Filter press
- Big-bags
- Under-vacuum rotary filters

5. Final filtration of the treated water and final pH control

- Quartz and active carbon filters
- Selective resins filters for heavy metals

SPECIAL APPLICATIONS

SAITA through its research and development activity, has designed specific treatment systems to solve different treatment issues where the traditional chemical-physical solutions have failed. Particularly, these processes aim is to reach the discharge limits of wastewater, polluted with: sulphates, Br, complexed metals, fluorides, surfactants, COD and dyes.

PROCESS

DESULFATE PROCESS

The Desulfate process has been studied to solve issues concerning the elevated concentration in wastewater of: sulphates, Br, fluorides and metals. The treatment process involves the use of the DS50 powder, which promotes the precipitation of the pollutants under the discharge limits in compliance with the regulation in force. The continuous or batch treatment cycle can have one or multiple phases, according to the characteristics of the wastewater. In some cases the treated water can be reused in the original production process.

APPLICATIONS

- Acid lead batteries production
- Electrode wire galvanizing process
- Rinsing water from pickling process
 - Wastewater from aluminum anodic oxidation
- Rinsing water from nickel plating

POWDERMIX PROCESS

It is a treatment, in continuous or batch, that causes the precipitation and consequent abatement of: COD, complexed metals, surfactants, suspended solids, oils, colloids and dyes. It employs specific mixtures of demulsifier and coagulant powders for the absorption and precipitation of the pollutants in form of sludge. Through this process it is possible, under certain conditions, to recycle the treated water, in a closed circuit, in the original production process.

APPLICATIONS

- Wet vibro-finishing of metal and plastic details
 - Water jet cutting
- Waste waters from wood coating
- Rinsing waters containing noble metals
 - Glass manufacturing



COMPANY PROFILE

Over 30 years SAITA srl has been designing, producing, installing and providing assistance to industrial wastewater treatment plants. Our goal is to provide solutions and innovative plants for the recycle of wastewater, in order to complete the production process with our closed circuits treatment systems.

ASSISTENZA

SAITA srl provides post-sale assistance which includes: maintenance contracts, supply of spare parts and consumables, remote assistance; moreover it offers technical advices and chemical analysis.



Via Pierobon, 2
35010 Limena (PD)

Tel. +39 049 8840172
Fax +39 049 767144

info@saitaimpianti.it
www.saitaimpianti.com