



# **CaCl<sub>2</sub> CONCENTRATION AND PROCESSING PLANTS: FROM RAW MATERIAL TO FINISHED PRODUCT.**

Calcium chloride is used mainly as agent for gas drying, as additive to oil-drilling mud, as de-icing agent and as anti-frosting agent for concrete, as binding agent for de-dusting as well for the preparation of solutions as heating media or for the preparation of cooling brines. The product is typically available in form of **lye or in solid form or granules.**

Bertrams Chemical Plants Ltd. created the processing system that made this company the market leader in the field of alkali concentration, flaking and prilling plants. Since decades, the name of Bertrams Chemical Plants Ltd is synonymous of quality and reliability in the design and supply of processing equipments for alkali products. Today the ongoing development of the calcium chloride production process focuses on innovations for the future at effective costs for the customers.

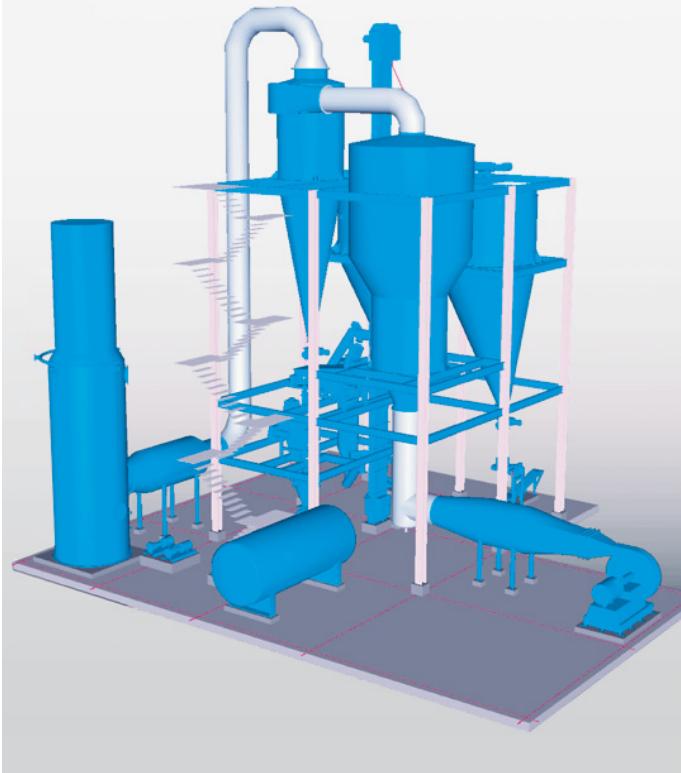
## **Raw substances for CaCl<sub>2</sub> production**

- Waste HCl from chlorination or other processes and limestone (CaCO<sub>3</sub>)
- CaCl<sub>2</sub> solution – all concentration

## **Products**

- CaCl<sub>2</sub> solution, typical at 35–40% wt
- CaCl<sub>2</sub> flakes at 78–80% wt or 94–96% wt CaCl<sub>2</sub> as over calcined material
- CaCl<sub>2</sub> granules/prills at 94–96% wt





### Proven technology inspires confidence

Our decades of experience in design and supply of more than 350 alkali-processing plants have resulted in our offering a state-of-the-art equipment showing high availability, safety operation and long service life, qualities which are highly regarded by our customers all over the world.

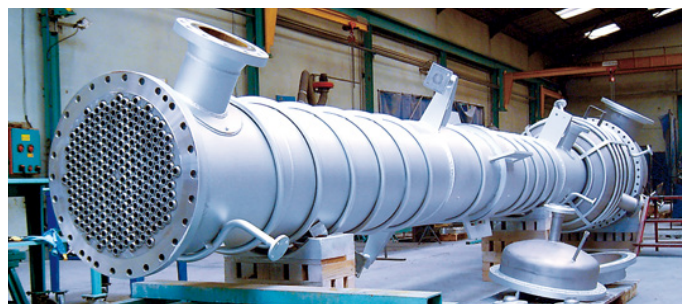
### BERTRAMS Chemical Plants Ltd means:

- An extensive experience in the production of prills and granules in the chlor-alkali industry, applied for the production of  $\text{CaCl}_2$  flakes or granules/prills
- A unique experience in designing handling systems for hygroscopic products
- Substantial experience in building plants for highly corrosive media at high temperatures
- One-hand responsibility from raw material conversion up to finished calcium chloride products in any form
- Extensive know-how in designing and handling of corrosive materials
- Reliable and easy-to-operate plants

### Plant sections

- Neutralization, settling and filtration
- Concentration in single or multiple stage in proven design evaporators
- Prilling/fluidization
- Flaking and drying/calcining
- Cooling
- Product conditioning

Lime stone and hydrochloric acid is reacted in specially designed chemical reactors to manufacture calcium chloride solution. The solution is then sent to a treatment and filtering station to obtain a crystal clear solution. The calcium chloride solution is concentrated in proven evaporators before being sent to the prilling/granulation process. The pre-concentrated liquor is sprayed in tower at countercurrent of hot gases which transforms the product into prill/granules of a definite size with a minimum concentration of 94–96% wt  $\text{CaCl}_2$ . The granular product is cooled and stored in silos ready for unit packaging.



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