

## REACTORS / MELTING KETTLE / DILUTERS

### DESCRIPTION OF THE EQUIPMENT

REACTORS are highly versatile machines capable of carrying out the processes of dispersing, mixing and diluting products of varying viscosities in one single unit. To optimize processes and manufacturing time, they can incorporate a vacuum system and double heating and / or cooling jacket

### MODELS

Depending on the product to be processed, different reactors / diluters models can be manufactured:

- The standard model is equipped with a single shaft with a high dispersion power turbine.
- For products with higher viscosity and in order to avoid dead mixing zones, a second diluting shaft (DUPLICATE) can be fitted with a central slow-running blade and a cowles disk or lateral three-blade helix. A third dissolver shaft (TRIPLEX) can be incorporated to enhance the mixing process and product recirculation.

In all models, the manufacturing capacity ranges from 5 to 20,000 liters, and the construction materials can vary from stainless steels (AISI-304, AI-SI-316L, etc.) up to special technical coatings (PTFE, Du-Pont®, vitrified, etc.)



Internal view of diluter designed for vacuum operation



Mobile diluter equipped with double jacket and designed for internal pressure operation

Currently we have installed diluters that work in the manufacture of pre-dispersion materials, homogenization of product batches, manufacture of base, etc. achieving highly satisfactory results.

In all cases, automatic component addition systems can be included, installing loading cells and electronic weighing terminals with formula memorization, as well as automatic CIP cleaning systems (Clean In Place). These systems can all be controlled and operated by SCADA programmes (Supervisory Control And Data Acquisition) ensuring a better control, analysis and optimization of the processes.



50 Litres reactor with magnetic agitation mounted in the lowest part



Mobile reactor with slow agitation prepared to work under vacuum and pressure, with electrical control panel attached to the equipment. Outside finishing mirror polished.



Bottom-loaded pressure Reactor

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