### Rotocav



## Technology

Innovative Technological Solution For The Cosmetic Industry



# Preparation of Lotions, Creams and Ointments



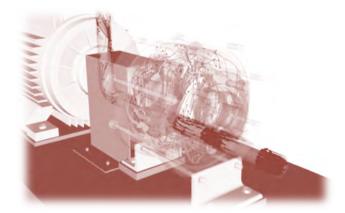
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### **Innovative Processes With ROTOCAV Technology**

ROTOCAV can be used as an intensification technique in the industrial cosmetic processes: more into details, it can be installed in all the process steps, which include:

- o mixing of two or more fluids;
- functionalization of a product: homogenizing colorants/pigments/fragrances/active ingredients in a liquid medium;
- solubilization, dispersion or hydration of thickeners and stabilizers:
- o preparation of stable emulsions.



It is possible to optimize traditional processes through the use of this technology. The processed liquid is subjected to turbulence, shear stresses and cavitation phenomena when it passes through the cavitation chamber. This means:

- mass transfer and diffusivity are optimized;
- in the presence of solids, controlled cavitation promotes homogeneous dispersions of powders into the liquid phase, deagglomeration and disintegration;
- in the presence of two immiscible phases controlled cavitation promotes the disaggregation of the droplets of the disperse phase increasing the stability and the uniformity of the resultant emulsion.



ROTOCAV equipment can be installed in new plants or it can be integrated as a booster in existing plants, requiring few modifications.

### Comparison (Traditional Systems vs ROTOCAV)

TRADITIONAL SYSTEMS	ROTOCAV
Energy consumptions are not negligible	Low energy consumption
Lumps or agglomerates, inhomogeneity of	High quality of the final product, no
the final product	agglomerates
Long treatment time	Short treatment time
Pre-mixing required	Easy, compact, safe system, in line process