

# VACUUM HOMOGENIZER MIXER (PILOT)



**Laboratory and pilot-scale vacuum homogenizer mixers** are designed for small-batch production and R&D. They reduce financial risks by allowing efficient testing of product formulations before scale-up. Typical uses include pharmaceutical emulsions, food sauces, and cosmetic lotions. These mixers can be manufactured in a range of capacities, from small-scale laboratory volumes up to 30 liters.



## Other specifications:

- Particle size reduction down to 2 microns
- No bubble formation, ensuring improved product quality
- No separate pump required for discharge and cleaning
- Integrated CIP nozzle for cleaning without external equipment
- Easy replacement of rotor, stator and spare parts
- Double- and triple-jacket vessel with heating/cooling & temperature control system
- Option for localized heating system
- Fixed anchor-type scraper and baffle
- Homogenizer pump with circulation, discharge and CIP flow path
- Vacuum system with vacuum pump and pressure control
- Mixer lid with clam-shell opening mechanism
- Sight glass with internal lighting for product inspection



## Options:

- Butterfly valves with pneumatic actuators
- Side tanks for water, oil and powder phases, equipped with mixer or bottom entry homogenizer
- Raw material feeding via load cell, flowmeter or dosing pump
- Variable speed control of homogenizer pump, scraper and second agitator through inverter installation
- Mirror-polished internal and external surfaces
- Customizable configurations based on customer requirements
- HMI automation with PLC controller



## In Industries:

**Food Industry:** Cold and hot sauces, ketchup, mayonnaise, cream fillings, chocolate

**Cosmetics & Personal Care:** Cosmetic foundations, lipsticks, mascaras, masks, hair dyes, nail polishes, lotions, toothpaste, shampoos

**Pharmaceutical Industry:** Medical creams, gels and ointments, ophthalmic products, dermatological formulations

**Chemical Industry:** Adhesives, inks, greases, coatings



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