

TWIN SCREW CONTINUOUS MIXER / EXTRUDER

Slurry mixing for Batteries

OVERVIEW

Twin Screw Continuous Mixer / Extruder, designed and developed by CMTI, is used for the continuous mixing of powder & liquid ingredients for achieving a high level of homogeneity with a viscosity of up to One lakh poise. This mixing technology is best suitable for **Slurry Mixing for Batteries**, wherein electrode material with binders and additives can be mixed homogeneously and continuously.

KEY FEATURES

- **Continuous Mixing:** Since the mixer operates continuously without interruptions, there will be a significant reduction in change over time and increased productivity.
- **High Mixing Efficiency:** The design ensures uniform mixing of ingredients, with precise throughput and reduced cycle time over batch production.
- **Ingredients Feeding:** The ingredients are fed into mixer / extruder using controlled and accurate feeding systems for powders and liquids.
- **Easy Maintenance:** Designed for easy cleaning & maintenance to minimize downtime.
- **Robust Construction:** Built with durable materials for long-lasting performance.
- **Customizable Configuration:** Adjustable parameters like feed rates, screw speeds, etc., & interchangeable screw elements/paddles inside the barrel offers customization to meet specific application requirements.

SPECIAL SAFETY FEATURES OF MIXER

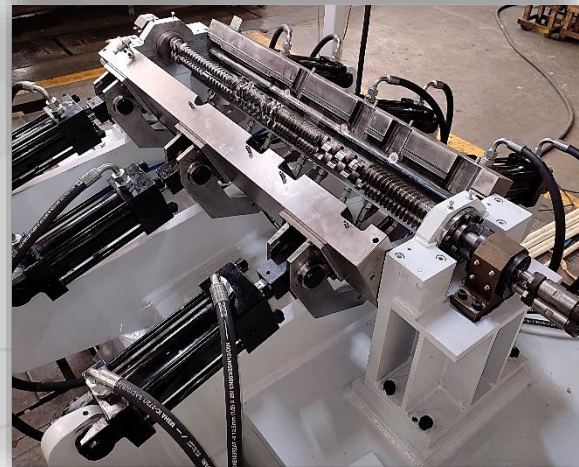
- All parts coming in contact with the mix are manufactured from SS316L material.
- Overload protection for motors.
- Over temperature and over pressure safety limits for safe operation of mixer.
- Emergency off push button in local and remote panels.

ADVANTAGES

- **Improved Mix Quality:** Consistent & uniform mixing leads to superior mix quality.
- **Reduced Operational Costs:** Continuous operation lowers overall production costs.
- **Versatility:** Suitable for a wide range of materials and applications.
- **Ease of Maintenance:** Designed for easy access & quick maintenance, reducing downtime & maintenance costs.

SPECIFICATIONS

Nominal Barrel Bore Dia.	Upto 3 inch
L/D Ratio	Upto 25
Screw Speed	Upto 300 rpm
Throughput	Upto 100 kg/hr
Slurry Viscosity	Upto One Lakh Poise
Vacuum Level	Upto 100 torr
Drive motor power	Upto 11 kW
Overall dim. of Basic machine (L x B x H)	2220 mm x 660 mm x 1275 mm
Machine Net Weight	4000 kg (approx.)
Atex Design	On request



CUSTOMER SUPPORT

- CMTI team provides complete **installation & commissioning** support to ensure seamless integration.
- **Maintenance services** will be provided to ensure smooth running of the equipment.

Batteries

Defence

Space

Food Processing

Pharma

Polymers