NextGen 2/3K Meter Mix Machines for Composite Industry

Extensive range of machines, for dispensing Epoxy Resins and Glues

Wind Rotor Blade  Cylinders, Tanks/Vessels  Composite Pipes  Automotives

and many more...

www.twinengineers.com
Partners in Productivity for 1000+ Mixing & Dispensing Processes!

Twin Engineers is a partner in automating mixing and dispensing processes for some of world's leading companies, across industries.

Twin Engineers Pvt. Ltd. offers specialist technology in three areas - Fluid Filling, Meter Mix Dosing and Robotic Dispensing. Twin is the only company globally, that offers solutions across all these three areas and has been a market leader in its chosen niche since the last two decades.

A global network of representatives ensures real-time availability of critical spares, consumables and services. Customers from diverse industries which include automotive, electrical, electronics, filters, PU components rely on Twin’s versatile technology for their applications.

ABOUT TWIN
- Founded in 1998
- Based in Pune, India
- Award winning partner of Ford, Toyota
- Team of 80+ Engineers
- Products range includes Fluid Filling, Meter Mix Dispensing and Sealant/Adhesive Dispensing
- Customers include Proprietary to Fortune 500 companies
- In-house Design, Engineering and System Integration capabilities
- Full range of Solutions from standard Machines to production line automation

RELY ON OUR DEDICATED R&D CENTER FOR
- Quick solution with modular process design
- Success guarantee with extensive trials & testing
- End-to-end support for commissioning and training at your premises

R&D Center @ Twin Engineers
Proven, Reliable Machines for the Composite Industry
Leveraging 25+ Years of Expertise in Mixing and Dispensing Processes to your advantage

Our Speciality
Application specific Machine Concepts

Our Promise
Optimized process, and cost-efficient operations for your composite processes

Product Range

**optimix**
Optimized Mixing and Dispensing Machines with flow rate of 2 to 20 LPM for impregnation bath

**intellomix**
Intelligent Resin Infusion Machine with outflow of up to 35 LPM

**intellobond**
Intelligent Glue Mixing and Dispensing Machine for joining Composite parts

Industries
- Aerospace
- Automotive
- Boats and Ship Building
- Chemical
- Defence
- Construction
- Electronics
- Sports & leisure
- Wind energy

Manufacturing Processes
- RIM
- RTM
- Filament Winding
- Pultrusion

Designed in Germany
Twin’s machines come with totally new, highly advanced German Design and Engineering. Featuring imported components, and assembled at Twin’s state-of-the-art facility in India, these machines offer the best of design, quality and performance, cost-effectively.
Technology Features

Precision Gear Metering Pumps
Achieve metering and mixing accuracy of ± 1%, for a variety of materials used in your processes

Variable Ratio
A wide range of ratios, that can be easily set to match your process parameters

Touch Screen HMI
Easy, intuitive operation with up to 25 pre-programmed recipes to match your process needs

Mixing Units for every application
Choose from options of disposable or reusable Static Mixer, Dynamic mixing head or static-dynamic mixer

IntelloSeries Comes with NextGen Features

Maintenance Pop-ups
Plan your preventive maintenance well in advance with automated alerts for faults and routine maintenance activities.

Smart Data Logging & Reports
Smart Production dashboards with report library to analyse Mixing Ratio, Utilization, Consumption and other process parameters for each batch.

Built-in E-Manual & Videos
Quick reference E-manuals, assembly and maintenance videos accessible through HMI enables immediate and easy troubleshooting.

Instant Service App
Just scan a QR Code on your machine from Twin's Instant Service App to register and track your service call.
Optimized Mixing and Dispensing Machines with flow rate of 1 to 20 LPM

The OptiMix range of machines are highly advanced gear pump driven metering and mixing systems. Ideal for mixing and dispensing of low to medium viscosity materials including epoxy, polyurethanes, these systems are recognized for smart features that ensure an optimized process for your composite parts.

**ADD-ON OPTIONS**
- Extended Dispensing arm and hoist
- Additional hose lengths
- Stand-by material preparation Tank and integrated transfer pump
- Stirrers, Electric Heating
- Automated Material Refill for Tanks from - IBC, Drums

**FEATURES**
- Variable ratio, precision gear metering pumps
- Level control alarms
- Mixing Type - Static or Static-Dynamic
- Flushing system for static mixer

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow rate</td>
<td>1 to 20 LPM</td>
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<tr>
<td>Mixing Ratio</td>
<td>100:10 to 100:100</td>
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<tr>
<td>Viscosity Range</td>
<td>10 Cps to 5000 Cps</td>
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<tr>
<td>Tank Capacity</td>
<td>10, 45, 60, 100</td>
</tr>
</tbody>
</table>

**PROCESSES**
- RIM | RTM
- Impregnation bath in filament winding

**Cylinders, Tanks/Vessels**

**Pipes**

**optimix integrated with an IBC**
Optimized Mixing and Dispensing Machines with flow rate of 12 to 35 LPM

Designed to deliver high flow rates of up to 35 LPM, the intelloMix series of machines come with some of the industry's most advanced features. With easy integration, convenient remote based operations and precision gear pump mixing, these machines are the backbone of consistent, reliable production.

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Flow rate</td>
<td>12.5 to 35 LPM</td>
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<tr>
<td>Mixing Ratio</td>
<td>100:20 to 100:70</td>
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<td>Tank capacity</td>
<td>100/ Integration with Drum/IBC</td>
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<tr>
<td>Power Supply</td>
<td>4.5 Kw</td>
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<tr>
<td>Material Type</td>
<td>Filled, unfilled</td>
</tr>
</tbody>
</table>

FEATURES

- Integrated Flow meters
- Material re-circulation
- Auto-calibrated level sensor
- Extended dispensing Arm and hoist
- Automated Material Refill for Tanks from - IBC, Drums
- Remote monitoring, Data Logging and Reports
- Smart SMS/email alerts
- NEW! Epoxy Degassing for 500 Kg tank

The wireless remote allows the Operator to easily switch-on/off or increase/decrease the material flow, even when he/she has moved away from the Machine to inspect the mould.

PROCESS: Resin Infusion
Glue pasting machine/Adhesive mixing machine with 2/3 Drums

Twin's meter mix dispensing systems for 2K epoxy resin ensure accurate mixing ratio for high volume Glue dispensing in stipulated time for bonding of shells or large composite structures. The high-performance systems are well proven for paste-like adhesives with a viscosity of up to 1 million cps. The portable system can be moved in parallel to the composite parts for online application of adhesives.

FEATURES
- Suitable for highly viscous, paste-like adhesives
- Extended Arm with hoist
- Wireless Remote for Operators
- Ideal for high volume dispensing Advanced PLC control panel
- Touch based HMI Controller

ADD-ON OPTIONS
- Standby feeding & metering system available for auto changeover of material
- Portable system

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Flow rate</td>
<td>8 to 20 kg/min</td>
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<tr>
<td>Mixing Ratio</td>
<td>100:20 to 100:100</td>
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<td>Drums</td>
<td>200 L</td>
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<td>Power Supply</td>
<td>26 Kw</td>
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