

# 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

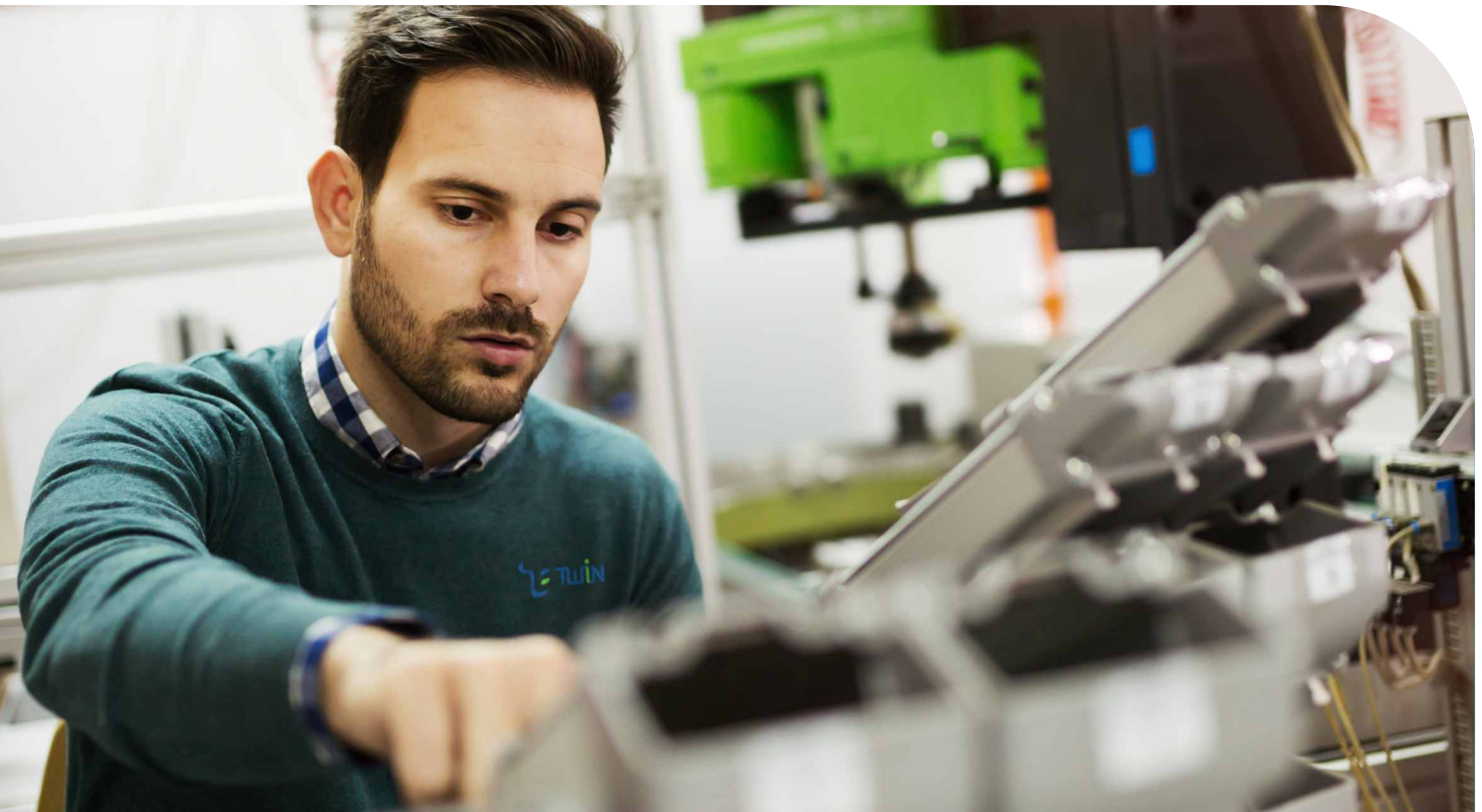


Automotives

and many more...

## 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

**CONVERGENCE**  
R&D Center @ Twin Engineers

### 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

# 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

### intelloband

Intelligent Glue Mixing and Dispensing Machine for  
joining Composite parts



## 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.

## Industries

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

## Manufacturing Processes

- RIM
- RTM
- Filament Winding
- Pultrusion

## Technology Features



### Precision Gear Metering Pumps

Achieve metering and mixing accuracy of  $\pm 1\%$ , 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.



# optimix

## 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.

### PROCESSES

RIM | RTM  
Impregnation bath in filament winding

### TECHNICAL SPECIFICATIONS

Flow rate	1 to 20 LPM
Mixing Ratio	100:10 to 100:100
Viscosity Range	10 Cps to 5000 Cps
Tank Capacity	10, 45, 60, 100



Cylinders, Tanks/Vessels



Pipes



optimix integrated with an IBC

### FEATURES

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

### 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

# intellomix

## 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.



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**

### TECHNICAL SPECIFICATIONS

Flow rate	12.5 to 35 LPM
Mixing Ratio	100:20 to 100:70
Tank capacity	100/ Integration with Drum/IBC
Power Supply	4.5 Kw
Material Type	Filled, unfilled

### FEATURES

- Integrated Flow meters
- Material re-circulation
- Auto-caliberated 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



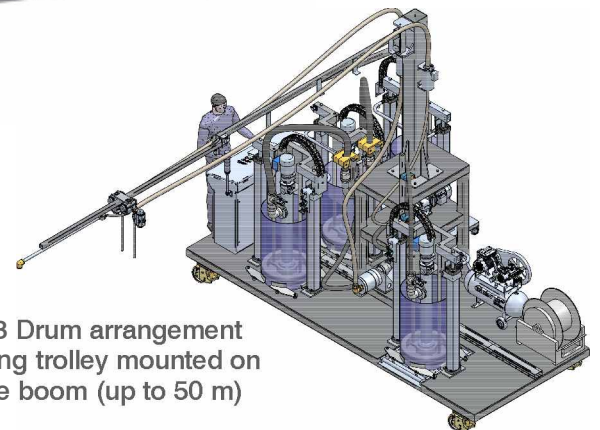
# intelloband

## 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.



Wind Rotor Blades



A typical 3 Drum arrangement with moving trolley mounted on retractable boom (up to 50 m)

### 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

Flow rate	8 to 20 kg/min
Mixing Ratio	100:20 to 100:100
Drums	200 L
Power Supply	26 Kw

500+  
Clients

2500+ Installation

25+  
Years of  
experience

Exports to  
11 Countries



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