

GMX

Top Drive High Shear Granulation/Mixing Systems

The GMX High Shear Granulator and Mixer is designed for efficient and homogenous wet granulation of powders to form a medium to high density granule.

Its top-drive design allows for easy cleaning and maintenance, faster processing times, and superior users safety.

Every GMX mixer is backed by Vector's

comprehensive range of services, including product and process development, process scale-up and transfer, calibration and maintenance programs, and proactive Project Management.

Engineered with the end-user in mind, the GMX family is the ideal solution for your wet granulation and mixing needs.



GMX-LAB Micro

For Wet Granulation and Mixing Processes

Portable Self-Contained System

- Quick Change Design – No Tools Required for Cleaning or Changeover

Maximum Processing Flexibility

- 1L and 4L Interchangeable Bowls
- User-Defined Settings for Mixer and Chopper Blade Speeds
- Integrated Peristaltic Pump for Precision Solution Addition
- Optional Jacketed Bowl for Product Temperature Control



Packaging - Processing
Bid on Equipment
1-847-683-7720
www.bid-on-equipment.com

Portable Self-Contained System

- Quick Change Design – No Tools Required for Cleaning or Changeover

Maximum Processing Flexibility

- 1L and 4L Interchangeable Bowls
- User-Defined Settings for Mixer and Chopper Blade Speeds
- Integrated Peristaltic Pump for Precision Solution Addition
- Optional Jacketed Bowl for Product Temperature Control

Engineered Scalability

- Consistent with Production GMX Systems
 - Proportional Mixer Blade Tip-Speeds
 - Bowl and Blade Geometries

Color Touchscreen Control System

- Configured for Easy Operation
- Validatable Process Control
- Multiple End-Point Detection Parameters
 - Mixer Power – with Trending Screen
 - Granulation Time
 - Product Temperature – via IR Temperature Sensor
- Data Collection Port to PC or Printer (Opt.)

GMX-LAB Micro	Volume (L)	Working Capacity (L)
1L Bowl	1	0.3 - 0.7
4L Bowl	4	1.3 - 2.7

Laboratory Scale GMX's

For Wet Granulation and Mixing Processes

Maximum Processing Flexibility

- 4L and 8L Interchangeable Bowls
- User-Defined Settings for Mixer and Chopper Blade Speeds
- Integrated Peristaltic Pump for Precision Solution Addition
- Rated for Solvent-Based Solutions
- Optional Jacketed Bowl for Product Temperature Control



Portable Self-Contained System

- Quick Change Design - No Tools Required
- Mounted on Casters for Maneuverability
- Integrated Storage Area for Unused Components

GMX-LAB 10

Top Drive Advantages

- Easy Bowl and Blade Removal and Fixed Bowl Lid for Superior Cleaning, Maintenance, and Safety
- Vertical-Shaft Chopper for Improved Granulation

Engineered Scalability

- Consistent with Production GMX Systems
 - Proportional Mixer Blade Tip-Speeds
 - Bowl and Blade Geometries

Color Touchscreen Control System

- Multiple End-Point Detection Parameters
 - Mixer Power
 - Granulation Time
 - Solution Amount Delivered
- Data Collection Port to PC or Printer (Optional)

Lab Models	Volume (L)	Working Capacity (L)
GMX-LAB 10	4	1.3 - 2.7
	8	2.6 - 5.3
GMX-25	25	8.0 - 16.0

Pilot Scale GMX's

For Wet Granulation and Mixing Processes

Alternate Installation Configurations

- Portable Skid Mount or Space-Saving In-Wall Design

Top Drive Advantages

- Easy Bowl and Blade Removal and Fixed Bowl Lid for Superior Cleaning, Maintenance, and Safety
- Vertical-Shaft Chopper for Improved Granulation



Flexible Design for Specific Process Optimization

- Full Range of Charge and Discharge Systems
- Aqueous and Solvent-Based Processing
- Optional Vacuum Drying for One-Pot Processing
- Optional Jacketed Bowl for Product Temperature Control

Engineered Scalability

- Consistent with Production GMX Systems
 - Proportional Mixer Blade Tip-Speeds
 - Bowl and Blade Geometries

Validatable, Operator-Friendly Control System

- Pushbutton and Color Touchscreen Systems
- Automatic (Recipe Driven) and Manual Operational Modes
- Compu 4[®] Available for Additional Data Management and Integration with Fluid Bed Dryers
- Multiple End-Point Detection Parameters
 - Mixer Power
 - Granulation Time
 - Solution Amount Delivered

Pilot Scale Models	Volume (L)	Working Capacity (L)
GMX-75	75	25.0 - 50.0
GMX-150	150	50.0 - 100.0

Packaging - Processing

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Production Scale GMX's

For Wet Granulation and Mixing Processes

In-Wall GMP Design

- Reduced Processing Area Required
- No Hydraulic System or Motors in Processing Area
- Optional Stand-Alone Installation Available

Top Drive Advantages

- Easy Bowl and Blade Removal and Fixed Bowl Lid for Superior Cleaning, Maintenance, and Safety



Vertical-Shaft Chopper for Improved Granulation

Processing Flexibility

- User-Defined Mixer and Chopper Speeds
- Optional Vacuum Drying for One-Pot Processing
- Optional Jacketed Bowl for Product Temperature Control

Designed for Granulation Suites

- Full Range of Product Charge and Discharge Systems
- Integrated Controls (with Optional Compu 4[®] System)

Removable Bowl

- Improved Cleaning and Maintenance
- Optional Additional Bowl for Quick Process Changeover

Validatable, Operator-Friendly Control System

- Compu 4[®] Available for Additional Data Management and Integration with Fluid Bed Dryers
- Automatic (Recipe Driven) and Manual Operational Modes
- Multiple End-Point Detection Parameters
 - Mixer Power
 - Granulation Time
 - Solution Delivery

Production Models	Volume (L)	Working Capacity (L)
GMX-300	300	100 - 200
GMX-400	400	133 - 267
GMX-600	600	200 - 400
GMX-900	900	300 - 600
GMX-1200	1200	400 - 800