

# NOVATEC/MAGUIRE Blender Selection Guide



VATEC

## The most popular blenders worldwide...

Three out of four gravimetric blenders purchased are manufactured by Maguire Products and NOVATEC is proud to be the world's largest distributor of the most popular blender in the world.

There are over 76 models of NOVATEC/MAGUIRE blenders available to blend up to twelve components at rates up to 8,000 lb./hr. (3,636 kg/hr.)

## Call NOVATEC for all of your blender needs...

- Our large network of sales agencies ensures good coverage of all plant locations
- Expert evaluation of your blender needs
- Excellent pricing and delivery
- Full service from qualified factory-trained technicians
- Easy access to parts and accessories at affordable prices
- 5-Year warranty



## More Blenders... More Sizes... More Choices

#### MaxiBatch™ Blender

- For hard-to-handle bulk powders like additives and wood flour
- Up to 8,000 lb./hr. ( 3,636 kg/hr.)
- High flow dispense valve rated at 10,000 grams/second
- For as many as 9 ingredients

#### **SERIES 1800**

- 21 models available
- Up to 5000 lb./hr. (2270 kg/hr.)
- Ideal for high output extruders and large central blending systems
- Two, four, or six compartment hoppers
- Up to 6 feeders

#### **SERIES 400**

- 12 models available
- Up to 1450 lb./hr (650 kg/hr.)
- For small to medium extruders, large injection machines and central blending systems
- Up to 8 components

### **SERIES 100**

- 5 models available
- Up to 450 lb./hr. (200 kg/hr.)
- For injection molders and small extruders
- Removable hoppers for quick color changes
- Up to 4 components



- SERIES 900
- 21 models available
- Up to 4000 lb./hr. (1800 kg/hr.)
- Designed for large extruders, blown film lines and central blending systems
- 2, 4, or 6 compartment hoppers
- Up to 6 feeders

### **SERIES 200**

- 12 models available
- Up to 900 lb./hr. (400 kg/hr.)
- For injection molders, small extruders, and central blending
- Removable hoppers for quick color changes
- Up to 8 components

### MICRO BLENDER

- 5 models available
- Up to 100 lb./hr. (45 kg/hr.)
- Ideal for small injection machines
- Easy flow regrind corner valve
- Removable hoppers for quick color changes
- Up to 4 components

Seven blender sizes with over 40 models plus feeders for pellets, powders and regrind as well as liquid color pumps.

## Blender Operation

## All Materials Metered by Weight

- Accuracy is constantly monitored.
- Automatic compensation for material variations.

## Very Simple Operation

- Load hoppers with material: Regrind, Natural, Color and Additive.
- Set thumbwheel switches for percentage desired.
- Turn controller on.
- The unit now operates automatically, adding components in the proper percentages. If material runs out, an alarm sounds.



## Removable Material Supply Hoppers

- Removable bins are available on many models.
- Quick disconnect of pneumatic lines allows fast removal, cleaning, and replacement when changing colors or materials.

## Direct Setting of Percentages -No Calculations



• Enter settings for percentage of color, additive or regrind on the thumbwheel switches, and the system does the rest.

#### **Options:**

- Bridge Breaker
- Drawer magnet
- Add-on pellet feeder
- Stand with casters
- Vacuum take-off box
- Vacuum loaders
- Add-on powder feeder

## Advanced Dispense Technology

- Batch to batch blend ratio is held to 0.1%.
- Advanced error-correction logic recognizes even miniscule errors and makes a correction for perfect blend ratio every time.
- Micro-Pulse<sup>™</sup> dispense capability is 3 to 4 pellets per dose.

### Immune to Vibration

- Load cell readings that have been compromisedby machine shock or vibration are detected and discarded.
- Many models may be mounted directly on the process machine.



### Easy Material Change

• Weigh bin is easily removed to facilitate cleanout for material change.

## Automatic Recalibration

 Material flow rate is constantly monitored, and each batch is followed by a correction routine to deliver perfect dispense weights.

## NOVATEC self-contained loaders

- Ideal for automatic loading of virgin and regrind materials.
- Each loader includes mini-PLC controller with no-load alarm.

## New 12-12 Control



The new 12-12 controller is standard on all blenders sold by NOVATEC. Clear messages in English and other languages replace coded readouts and a USB port is included.

#### New advantages -

**Use-friendly interface** – New 2-line, 40-character vacuum fluorescent display provides detailed messaging in English or other languages.

**USB port** – Software updates can now be installed via flash memory stick and the range of printers that can be connected to the controller is greatly broadened for

documentation of blend accuracy, blend content and/or material usage.

**Ethernet capability now standard** – Internal communications speeds of 2.4 megabits per second speeds of 10 megabits with outside systems.

**Single card for fieldbus communication** – The new Communications Gateway Card facilitates communication between the blender and other devices via Profibus, DeviceNet and other widely used networking languages.

#### Other standard features -

- Settings entered directly; no programming required
- Settings may be locked-in to limit operator access
- Upper limits may be placed on settings
- Two-level password allows access to change machine parameters
- Hundreds of pre-programmed custom applications are included
- Plus many additional features

## New Touch Screen Control



## Advanced Touch Screen Control Option

All the features of the new 12 -12 control... plus wireless capability!

Our new optional touch screen control is the first gravimetric blender control with an intuitive, userfriendly, touch screen and wireless communication, eliminating the cost of installing cable throughout the production area.

Internal and external communications occur at speeds of up to 100 megabits per second and readily links to other wireless-equipped machines, regardless of the manufacturer.

## Gravimetric Gateway

### Control your productivity through advanced materials management:

#### Gravimetric Gateway<sup>™</sup> Networking Software

In any plastic processing facility gravimetric blenders play a unique role. They control and measure the exact weight of each material component as it enters the process. Gravimetric Gateway, available as an option, is a networking software package that allows plastic processors to utilize this information to its fullest potential.

#### Take a test drive:

Gravimetric Gateway can be tested in demo mode free of charge at HYPERLINK "http://www.maguire.com/page.php/downloads.htm" http://www.maguire.com/page.php/downloads.htm

### Key Gravimetric Gateway<sup>™</sup>(G2) features:

**Material Usage Reports:** Usage reports can be generated based on many combinations of criteria such as time, date, blender ID number, part number, work order number, operator number, recipe number, material type, etc. Alarm Functions: G2 detects any alarm in the network and reports location and description of the alarm.

**Ability To Download/Update Recipes:** G2 users can download recipes to be certain that the correct recipes are running on the proper machines. Recipe settings may be updated from a remote location according to part number, work order number, operator number, recipe number, etc.

**Security:** Extensive security functions are provided to selectively limit access to recipes and blender operation. There are 3 classes of user password security with predefined templates: Administrator, Supervisor, and Operator. Each user's privileges may be further refined by adjust-

ing over 30 different security fields.

Advanced Inventory Management Programs: Inventory levels can be monitored, and reorder points can be flagged to notify purchasing when low levels are reached. In addition a material accounting record allows entry of material cost to track inventory value on a real-time basis.

**Instant Access To Maintenance Updates and Upgrades:** Software updates and upgrades are immediately available over the Internet.

Go to http://www.maguire.com/page.php/downloads.htm where new programs or maintenance updates may be downloaded directly to the user's system.

**Multilingual Versions:** G2 is available in English, German, Spanish, Italian, French, and Dutch.

**Multi-plant Networking:** G2 technology expands the potential for multi-plant and even multi-national networking.

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#### SETUP

Setup is simple and flexible. Material Usage Reports



#### CONSTANT SCAN

Blenders on the network are constantly monitored for any changes such as alarm status, throughput, settings, work order number, etc.

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#### RECIPE LIST

Recipes are maintained in a database file for quick access during downloading.

## Specifications

MODEL	BATCH SIZE	COMPONENTS	SLIDE GATES	FEEDERS	CAPACITY	OVERALL DIMENSIONS L X W X H (approx.)	BLENDER WEIGHT (approx.)
<b>WSB-MB</b> Micro	0.9 lb. 400 g	4	4	0	up to 140 lb./hr. or 60 kg/hr.	16.5 x 16.5 x 23.3 in. 42 x 42 x 59 cm	50 lb./23 kg
WSB-140MP Micro-pulse	2.2 lb. 1000 g	4	4	0	up to 350 lb./hr. or 160 kg/hr.	30.1 x 27.9 x 32.3 in. 76 x 71 x 82 cm	150 lb./68 kg
<b>WSB-100</b> WSB-140 WSB-140R WSB-160	2.2 lb. 1000 g	4 4 6	4 4 6	0 0 0	up to 450 lb./hr. or 200 kg/hr.	31.4 x 31.2 x 41 in. 80 x 80 x 104 cm	150 lb. /68 kg
WSB-200 WSB-220 WSB-221 WSB-222	4.4 lb. 2000 g	2 3 4	2 2 2	0 1 2	up to 000 lb /br	32.5 x 26.5 x 42 in. 83 x 67 x 107 cm	220 lb. /100 kg 260 lb. /118 kg 300 lb. /136 kg
WSB-240 WSB-241 WSB-242 WSB-240R WSB-260		4 5 6 4 6	4 4 4 6	0 1 2 0 0	up to 900 lb./hr. or 400 kg/hr.	34.9 x 28.4 x 45.75 in. 89 x 72 x 116 cm	230 lb. /105 kg 270 lb. /123 kg 310 lb. /141 kg 255 lb. /116 kg 260 lb. /120 kg
WSB-400 WSB-420 WSB-421 WSB-422	8.8 lb. 4000 g	2 3 4	2 2 2	0 1 2		32.5 x 26.5 x 48 in. 83 x 67 x122 cm	275 lb. /125 kg 315 lb. /143 kg 355 lb. /161 kg
WSB-440 WSB-441 WSB-442 WSB-444 WSB-440R WSB-460		4 5 6 8 4 6	4 4 4 4 4 6	0 1 2 4 0 0	up to 1450 lb./hr. or 650 kg/hr.	34.9 x 28.4 x 51.75 in. 89 x 72 x 131 cm	310 lb. /141 kg 350 lb. /159 kg 390 lb. /177 kg 470 lb. /214 kg 345 lb. /157 kg 355 lb. /161 kg
WSB-900 NWSB-940 NWSB-941 NWSB-942 NWSB-944 NWSB-960	19.8 lb. 9000 g	4 5 6 8 6	4 4 4 6	0 1 2 4 0	up to 4000 lb./hr. or 1800 kg/hr.	46.5 x 28.5 x 60 in. 118 x 72 x 152 cm	420 lb. /191 kg 460 lb. /209 kg 500 lb. /227 kg 580 lb. /264 kg 430 lb. /195 kg
NWSB-1800 WSB-1840 WSB-1841 WSB-1842 WSB-1860 WSB -1866	39.7 lb. 18000 g	4 5 6 6 12	4 4 4 6 6	0 1 2 0 6	up to 5000 lb./hr. or 2150 kg/hr.	46.5 x 40.5 x 87 in. 118 x 103 x 221 cm	615 lb./280 kg 655 lb./298 kg 695 lb./316 kg 625 lb./284 kg 865 lb./393 kg
WSB-3000 Multiple Models	66 lb. 30000 g	up to 9	up to 4	up to 5	up to 10000 lb./hr. or 4500 kg/hr.	Contact NOVATEC	Contact NOVATEC

#### NOTES:

- Most popular models shown
- Generally, slide gates are correct for components over 3% (may go lower with valve restrictors)
- MicroPulse valves are correct for dispenses less than 10g
- Compressed air 50 psi recommended for NWSB-MB, 80 psi recommended for all others (25 psi minimum)
- $\bullet$  Compressed air consumption 10 ft³/ hr.
- Voltage: 120V 60Hz, 230V 5/60Hz
- Contact NOVATEC to determine actual throughput for your application based on resin type and bulk density



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All information in this bulletin is subject to change without notice.