

## TRUEBLEND™ TB500-4 AND TB500-6



Model TB500-6

# ACCURATE GRAVIMETRIC BLENDING FOR MEDIUM TO HIGH THROUGHPUTS

Get accurate blends, better mixing, faster material changes and increased profits with Conair's TrueBlend Series Blenders.

Steep-sided component hoppers allow material to flow evenly and freely through respective vertical dispense valves into the weigh chamber. Efficient mixing assures full integration of all recipe ingredients. The fully enclosed cabinet design assures no pellet spillage and clean operation. Standard convenient features such as wide access doors on each material compartment, a hinged access door and removable components in the mixing chamber reduce downtime during cleanout.

## BROAD RANGE OF STORAGE CAPACITIES AVAILABLE

The TrueBlend TB500 series blenders offer processors with medium-sized extruders or medium-to-large injection molding machines a superior way to blend color and additives centrally or at the throat of the processing machine.

The blender dispenses up to six materials (depending on model) from material compartments into a common weigh chamber. The control determines the correct weight of each ingredient based on setpoints entered on the touch screen display. Up to 1000 recipes and 250 resin names can be entered and stored in the control.

Unique fast-acting "no stick" vertical valves control the amount of material dispensed. All dispense valves use two-way air cylinders assuring positive operation.

Choose between four component or six component blender models. Options include an integrated blender/loader control feature, a flow control valve for central blending applications and material compartment drain ports.

### ■ Blend accuracy to 1/2 of 1%

Colorant and/or additive weights are held to within 0.5% of setting. A selectable Precision Additive™ feature is also available for additives. The microprocessor control automatically calibrates after every cycle and compensates for variations in dispense method, resin bulk density or particle geometry.

### ■ Easy-to-use control

Intuitive 5.7 inch LCD touch screen control with full color graphics allows quick and easy setup of blender setpoints. All setpoints are displayed simultaneously. Enter the percentages of the blend on the touch screen display and the blender does the rest. The system automatically weighs the recipe ingredients in the proper sequence and maintains the correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.



### ■ Convenient, no-tools clean out

Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning. The blender features a built-in material shutoff valve below the mixing chamber, this can be replaced with the automatic flow control valve for remote and central blending applications.

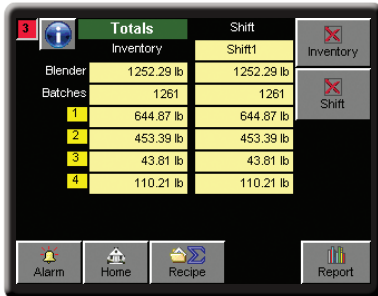


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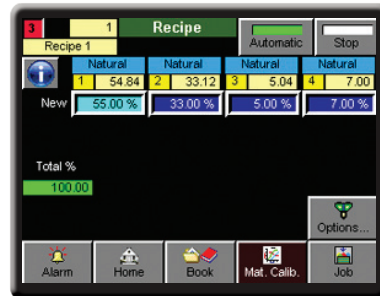
FEATURES

**Intuitive, SB-2 touch screen control offers the industry’s best multi-component accuracy**

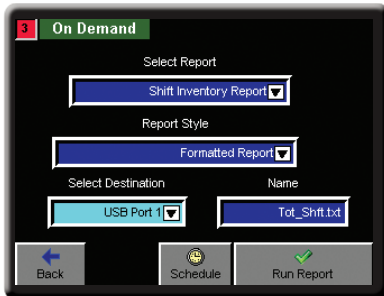
This easy-to-use touch screen control allows for fast setup of blender setpoints and automatically weighs recipe ingredients in the proper sequence to maintain correct blend relationship. Any position can be identified as one of the four material type selections adding flexibility to your application setup.



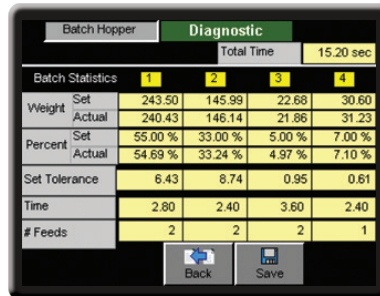
**Instantly see your materials usage**  
Material usage / totals screen tracks the number of batches, weights dispensed by bin and weight dispensed in total since the last reset.



**View and make changes to the active recipe**  
Save and recall up to 1000 recipes and 250 resin names in the Recipe Book.



**Built-in reporting**  
Every SB-2 blender control is equipped with the capability to help users track their settings, alarms, material consumption, shift and inventory needs.



**On-call diagnostics**  
Diagnostic screen displays target set point percentage and actual percentage dispensed. Also displays start and finish weights for each material per batch. Verifies true and accurate blend performance.

WHICH PACKAGE IS RIGHT FOR YOU?

STANDARD PACKAGES - 4 Component	TS	TE	LS <sup>‡</sup>	LE <sup>‡</sup>
<b>FEATURES</b>				
Material bin sight glasses and bin clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge <sup>†</sup>	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge <sup>†</sup>	●	●	●	●

STANDARD PACKAGES - 6 Component	TS	TE	LS <sup>‡</sup>	LE <sup>‡</sup>
<b>FEATURES</b>				
Material bin sight glasses and clean out doors	●	●	●	●
Touch screen control	●	●	●	●
Loading control option			●	●
Loader, pump and compressed air interconnection kit			●	●
Material bin finger guards	●		●	
Quick clean/enhanced flow option*		●		●
Machine mount with manual slide gate discharge <sup>†</sup>	●	●	●	●
Remote/bin mount with pneumatic slide gate discharge <sup>†</sup>	●	●	●	●



FEATURE NOTES:

- \* Material bin door safety interlocks and drain ports.
- † Choose between either machine or remote mounted blender packages.
- ‡ Includes an optional integrated loader control feature.

Specifications may change without notice. consult with a Conair representative for the most current information.



**TRUEBLEND™ TB500-4 AND TB500-6**

**FEATURES**

**Simple and quick cleanout**



Easy access to all material contact points for fast and safe cleaning during color or resin changes. Material compartment access doors, removable weigh bin, mix agitator and mix chamber liner allow quick efficient cleaning.

**Optional floor stand design**



Blender installs easily to this floor stand, which is equipped with a material reservoir.

Each blender stand features:

- Sturdy design
- Easy cleanout
- Fork-lift provisions
- Drawer magnet provision
- One standard material takeaway tube (up to two additional material tubes are available as options)
- Available with two or five cubic foot reservoir capacities

**OPTIONS**



**TB reports**  
Used to track and document material usage, alarms, batch and shift reports and recipes. *See TrueBlend Reporting Software and ControlWorks specification sheets.*



**Air blow-off for mix chamber level sensor**  
This feature is integrated into the blender mix chamber to blow excessive dust and fines away from the sensing device and ensure accurate level sensor reading.



**Material level alarm control**  
Eliminate costly material shortage problems and machine downtime with this early warning system. The control monitors up to six material levels at one blender. Individual switches can be adjusted to monitor high or low material levels. *See Level Alarm Control specification sheet.*



**Remote mixer demand sensor**  
This sensor provides a fill-to level option in a surge bin or other material receptacle that sits below a remote mounted blender.



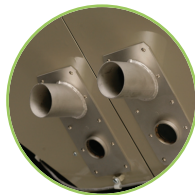
**Drain chute**  
The material drain chute readily installs to the chassis opening of the blender for fast and simple cleanout.



**TrueBlend high-heat models**  
Used to process high temperature plastics such as ABS, nylon, polycarbonate and PET resins. Available in medium temperature (160° - 250°F {71° - 121°C}) TBA models and high temperature (250° - 375°F {121° - 191°C}) TBH models. *See TBA and TBH specification sheet.*



**Major component flow restrictor**  
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions one and/or two. (Generally used when feeding more than two minor ingredients.)



**Dry air blanket**  
This option blankets the material compartments and mixing chamber with hot dry air to prevent moisture regain during processing. Available on both the TBA and TBH models. *See TBA and TBH specification sheet.*



**Minor component flow restrictor**  
Available with TB/TBA/TBH models 100, 250, 500 and 900 on bin positions three and/or four. (Generally used when feeding 1% or less of an ingredient).

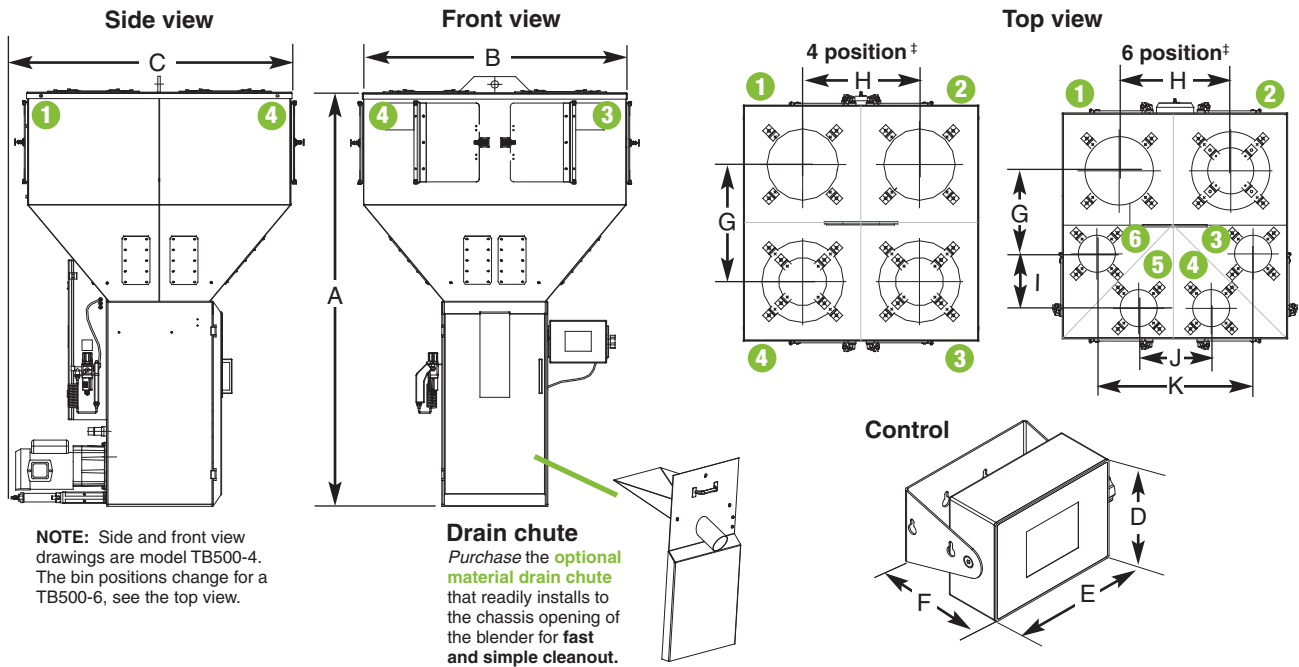


**Remote HMI operator cable**  
This option is for the 6 meter cable in lieu of the standard 2 meter cable.



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SPECIFICATIONS



MODELS	TB500-4	TB500-6
<b>Performance characteristics</b>		
Batch size lb {g}	11 {5000}	11 {5000}
Maximum throughput rate lb/hr {kg/hr}*	1500 {680}	1150 {522}
Bin capacity - main ingredient ft <sup>3</sup> {liter}	2.7 {76.4}	2.7 {76.4}
Bin capacity - minor ingredient ft <sup>3</sup> {liter}	2.7 {76.4}	1.35 {38.2}
Maximum number of materials	4	6
Number of vertical discharge valves	4	6
Number/(size) of major bin valves	2 - (100/60 mm)	2 - (100/60 mm)
Number/(size) of minor bin valves	2 - (30 mm)	4 - (30 mm)
<b>Dimensions inches {mm}</b>		
A - Height above mounting plate†	63.00 {1600}	63.00 {1600}
B - Width	40.13 {1026}	40.13 {1026}
C - Depth	43.00 {1092}	43.00 {1092}
D - Control height	6.50 {165.1}	6.50 {165.1}
E - Control width	8.75 {222.3}	8.75 {222.3}
F - Control depth	6.75 {171.5}	6.75 {171.5}
G - Loader center distance	22.00 {558.8}	14.88 {377.8}
H - Loader center distance	22.00 {558.8}	20.00 {508.0}
I - Loader center distance	NA	9.75 {247.7}
J - Loader center distance	NA	13.00 {330.2}
K - Loader center distance	NA	28.00 {711.2}
<b>Weight lbs {kg}</b>		
Installed	400 {182}	400 {182}
Shipping	520 {236}	520 {236}
<b>Voltage total amps</b>		
115V/1 phase/60 hz	6.3	6.3
230V/1 phase/50 hz	3.2	3.2
<b>Compressed air requirements</b>		
Discharge valves	90 psi @ 0.2 ft <sup>3</sup> /min {6 bars @ 0.09 liters/sec}; 1/4 in. NPT fitting	
<b>Maximum loader sizes</b>		
15 inch loaders - number of loaders -	4	2
8 inch loaders - number of loaders -	NA	4

**MOUNTING INTERFACE**

Dimensions shown in inches and (mm).

Mixing chamber access door - this side of the interface.

Mounting bolt hole size (8 holes) 9/16 inch {14.0 mm}.  
Predrilled 8 x 8 and 12 X 12 mounting pattern as standard.

**SPECIFICATION NOTES**

\* Maximum throughput rates are based on 35 lb/ft<sup>3</sup> pelletized material, using all standard valve sizes. Use of reducer inserts will lower the rate shown.

Throughput rates are based on:

- **A 4-position blender** recipe of 20% regrind, 80% natural, 3% color and 2% additive material.
- **A 6-position blender** recipe of 20% regrind, 80% natural, 3% color at position 3, 2% additive at position 4, 3% additive at position 5 and 2% additive at position 6.

† The optional flow control valve will mount inside the chassis in the space of the manual slide valve. Conair recommends using the optional flow control valve when mounting the blender on a stand, surge bin or hopper.

‡ TB500-4 hopper positions three and four are supplied with 12-8 adapters with 8 inch cover plates as standard. TB500-6 hopper position two is supplied with a 12-8 adapter and an 8 inch cover plate as standard.

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