



**ADROIT**  
TECHNOLOGY

# BLENDO

CONTINUOUS GRAVIMETRIC LOSS-IN-WEIGHT BLENDER  
WITH INTEGRATED GRAVIMETRIC EXTRUSION CONTROL



**DOTECO**  
ART OF CONTROL

# BLENDO **ADROIT**

## CONTINUOUS GRAVIMETRIC LOSS-IN-WEIGHT BLENDER WITH INTEGRATED GRAVIMETRIC EXTRUSION CONTROL

Combining the experience gained in over 20 years of continuous gravimetric blenders and the latest innovative ADROIT technology, DOTEKO presents the new generation of BLENDO.

Designed to blend pellets in extrusion processes where dosing accuracy and a homogeneous dispersion of additives are strictly required. Unaffected by vibrations, BLENDO has been designed to be easily mounted directly on the extruder throat to replace the conventional feed hopper or for mezzanine mounting.

Available in 4 models, with throughputs up to 200, 400, 800 and 1300 Kg/h.

- Innovative industrial design
- D.I.Y. modularity up to 6 ingredients
- Brushless motors and direct transmission
- Improved accuracy and precision
- Reduced footprint
- Easy cleaning and maintenance
- Quick ingredients change

**Blendo Adroit** is perfect for applications where accuracy and precision at low percentages and very quick set-up timing are essential requirements.

## ULTIMATE DESIGN & TECHNOLOGY



## INGREDIENT CHANGEOVER AND CLEANING HAS NEVER BEEN SO EASY AND QUICK

- Downcomer hopper with reduced volume, to better follow the throughput variations and to ensure quick changeovers on the fly, with minimum residual material
- Discharge spouts to drain out quickly the residual material contained in the hopper
- Hopper with different size to ensure quick empty
- Cleaning windows



## MODULARITY

IT'S A FULL MODULAR BLENDER

The "basic machine" (for 2 ingredients) can be supplied already provided with wiring terminals and control box prearranged for upgrading up to 6 ingredients.

Upgrading kits include all parts, wires and fittings needed and easy-to-follow instructions.

Add more ingredients is a D.I.Y. operation, very easy and quick, with no technical commissioning needed.

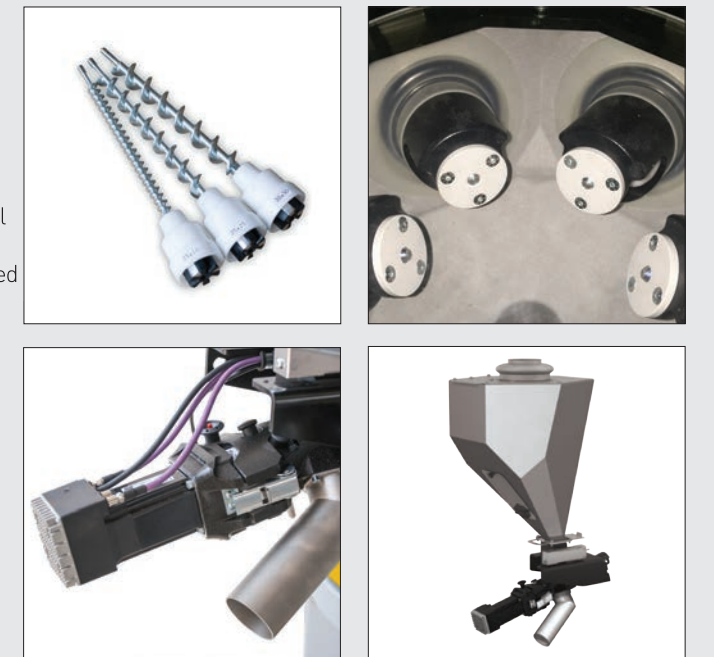


## FEATURES

- Quick and easy access to all parts for maintenance cleaning
  - No tools required
  - Drain spout for quick and complete ingredient feed hopper emptying
  - Clean out doors for fast removal of dust or ingredient residues and for visual inspection
  - Easy to use, simply set the dosing percentage
  - Full modular construction, from two to six ingredients
  - Self-supporting structure prearranged for vacuum receiver installation without additional supports
  - All parts that come into contact with the ingredients are made of food-grade materials or finishes
  - The on-board control box does not require any floor space
  - Standard type load cells, high resolution weighing system (24 bit A/D converter) to maximize analog accuracy
  - "7", "10", "15" or "21" HTML5 user friendly interface or possibility to integrate the communication with the line supervisor
  - No scheduled maintenance is required
  - Reduced installation costs.
- Complete wiring of the dosing unit is factory made

## INCOMPARABLE ACCURACY AND PRECISION

- Screws designed to ensure minimum vibrations and high precision control
- Screws are driven by brushless motors, to ensure accurate control of the revolutions, from 1 to 600 rpm
- The entire dosing unit (hopper and auger screw) is gravimetric metered with high resolution (24 bits) loading cells
- All the ingredients (even the main component) are metered with the same continuous loss-in-weight technology
- The gravimetric downcomer hopper maintains continuous accurate stability of extruder throughput
- All the data are processed by the latest B&R X20 electronic hardware and the software developed by DOTEKO in over 20 years of field experience with the major leaders of extrusion



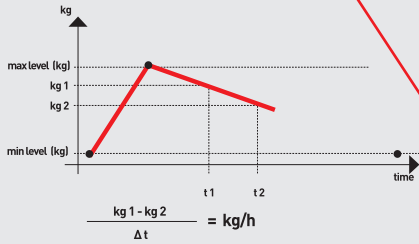


### INTEGRATED REFILL VALVE

Opens when the gravimetric hopper asks for material

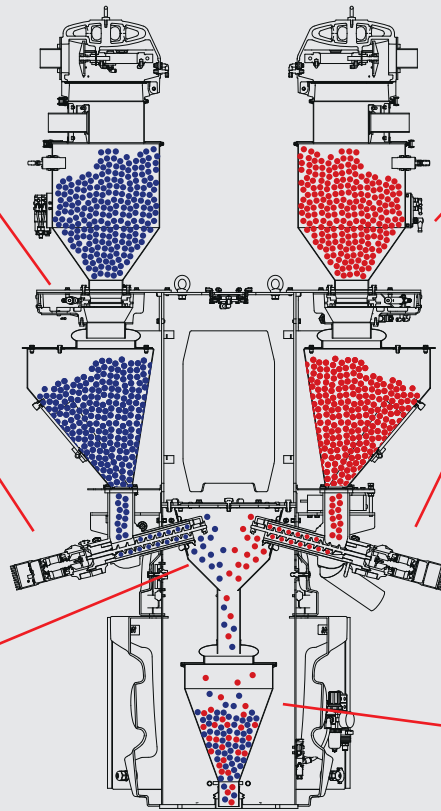
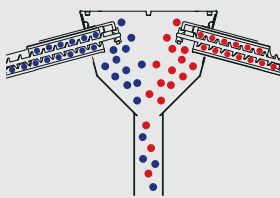
### GRAVIMETRIC BLENDING

Auger screw on load cells - continuous Loss - in - weight for each individual component



### CASCADE MIXER

The most efficient mixing system



### SMARTCONVEY

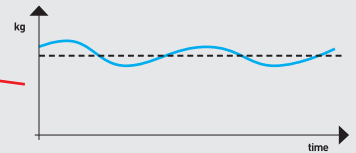
Integrated Conveying System with automatic filter cleaning

### GRAVIMETRIC EXTRUSION CONTROL

Integrated algorithm with summation of all dosing stations feeding with continuous loss - in - weight technology

### GRAVIMETRIC DOWNCOMER HOPPER

Maintaining continuous accurate stability of extruder throughput vs blending of each component



## INTEGRATED VACUUM LOADING SYSTEM SMARTCONVEY

Fully automatic vacuum loading system, controlled by the same PLC which controls the blending system and operated by the same HMI. One or more vacuum pumps to serve one or more receivers, whose association can be set through personalized configuration.

All receivers linked to one pump are served in turn, according to a priority sequence which is automatically assigned by the control PLC. Changeover Active Control software available, to minimize the ingredients residual quantity at the end of any job order.



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