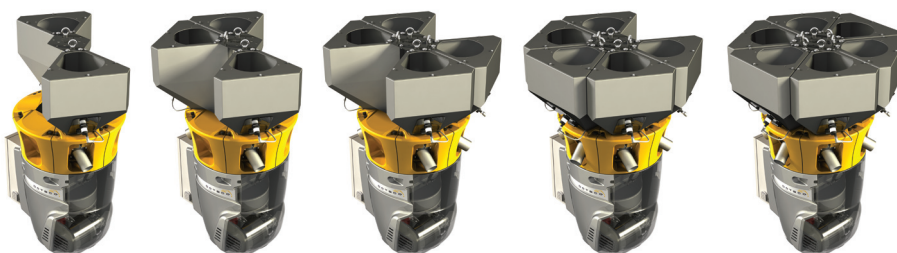


**ADROIT**  
TECHNOLOGY

# GRADO

GRAVIMETRIC GAIN-IN-WEIGHT BLENDER  
WITH INTEGRATED GRAVIMETRIC EXTRUSION CONTROL



**DOTECCO**  
ART OF CONTROL



# GRADO ADROIT

## GRAVIMETRIC GAIN-IN-WEIGHT BLENDER WITH INTEGRATED GRAVIMETRIC EXTRUSION CONTROL

A new concept of batch blending system, with a quite innovative and original mix of design and technology. GRADO ADROIT is the highest expression of know-how, creative thinking and passion of a leading manufacturer of batch blenders for the plastic extrusion industry, with two decades of experience and roundabout 10.000 blenders made. Nothing comparable in terms of blending accuracy, higher throughput, easy maintenance and cleaning, modularity, reliability.

GRADO ADROIT is the third generation of GRADO, the batch blender which became a best seller and a master-piece for the plastic extrusion industry.

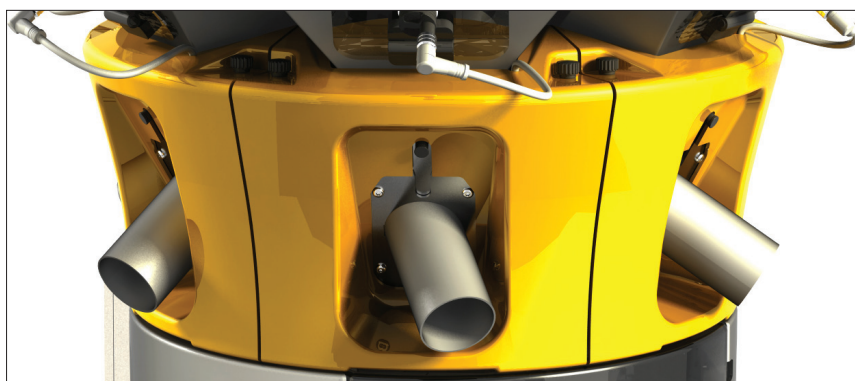
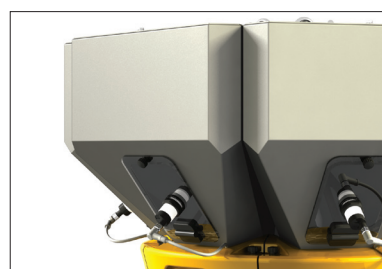
With the ADROIT version, we gave GRADO some further characteristics which make it even more unique:

- innovative industrial design
- D.I.Y. modularity to add more ingredients
- improved reliability
- reduced maintenance
- higher & constant throughputs
- improved gravimetric efficiency
- easier cleaning and maintenance

Suitable to be installed in-line, directly on the extruder throat or either on a mezzanine, and also off-line, on a take-off stand to feed one or more extruders.

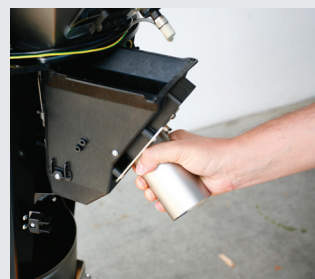
Available in 4 different sizes:  
**S** (200 kg/h) / **J** (400 kg/h) / **Q** (800 kg/h) / **K** (1.300 kg/h)  
 Each size is available in **5 models**:  
 from 2 ingredients up to 6 ingredients.

## ULTIMATE DESIGN & TECHNOLOGY



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

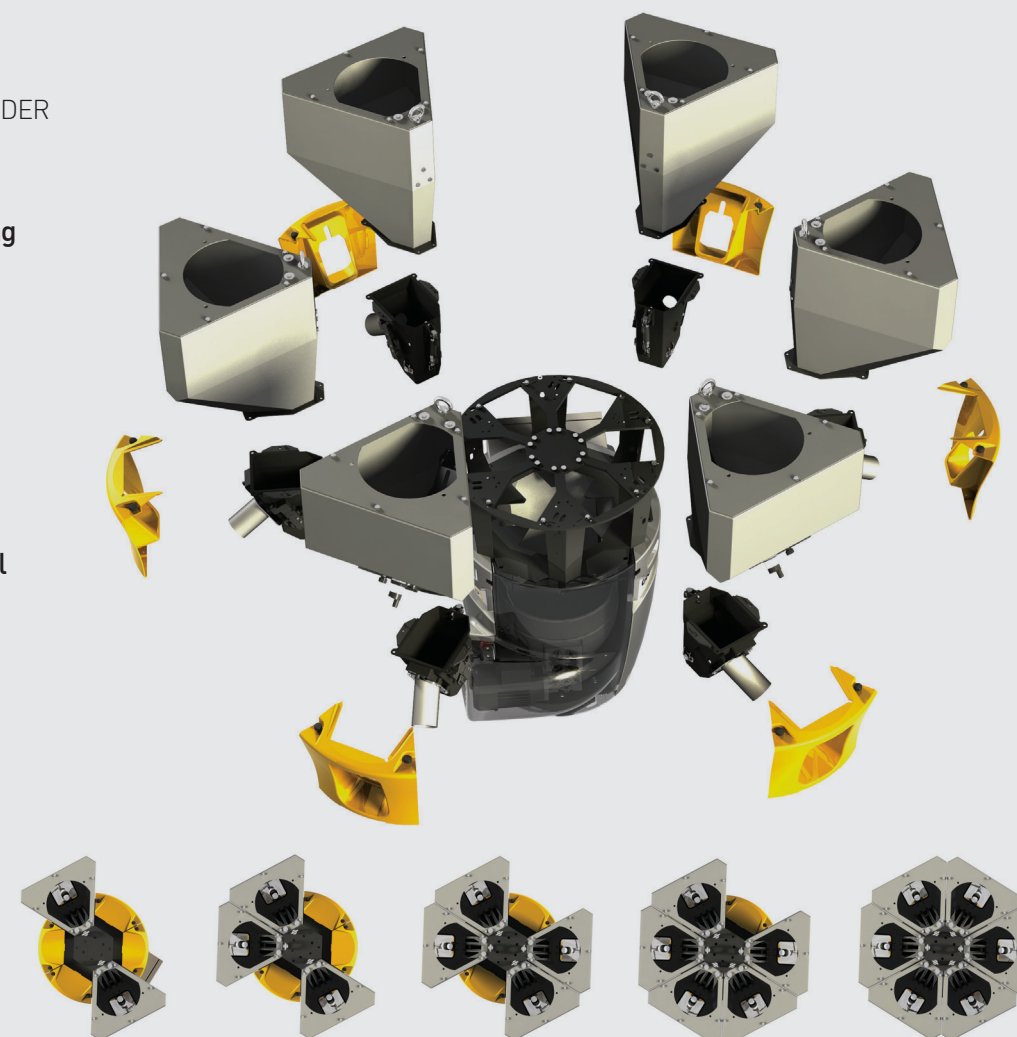
- spherical mixing chamber with conical bottom part, to guarantee the most efficient mixing action and no residuals to stuck into
- discharge spouts with slide gates
- inclined slide-gate, linked to the drain spout, to guarantee a complete draining of the ingredient, with no residuals to stuck into
- quickly removable slide-gate block for deep cleaning



## MODULARITY

IT'S A FULL MODULAR BLENDER

The "basic machine" (for 2 ingredients) comes 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.

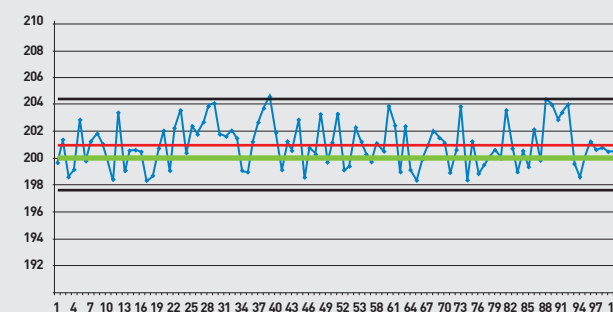
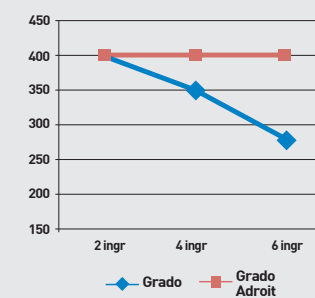
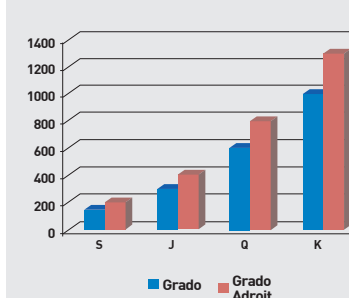
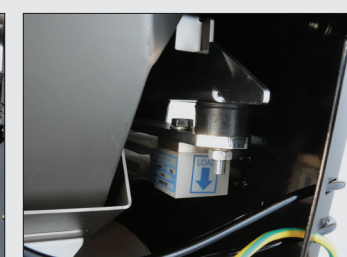
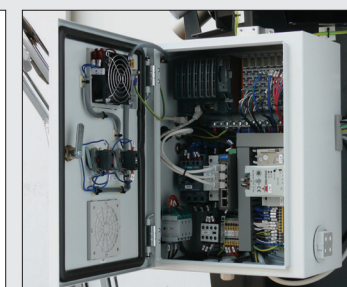


## INCOMPARABLE ACCURACY AND PRECISION HIGHEST THROUGHPUT IN A SMALL SIZE

- radically improved kinetic of the slide-gate
- innovative techno-polymer flaps
- double lip polymer seals
- vibration dumpers on the weight bin
- last generation electronic B&R-X20

give GRADO ADROIT

- the most precise and accurate dosing performances
- the highest gravimetric efficiency
- an incomparable performance of blending accuracy and precision, most probably the best ever seen in a batch blender
- the highest throughput related to the machine size
- higher reliability, i.e. less maintenance and longer life time

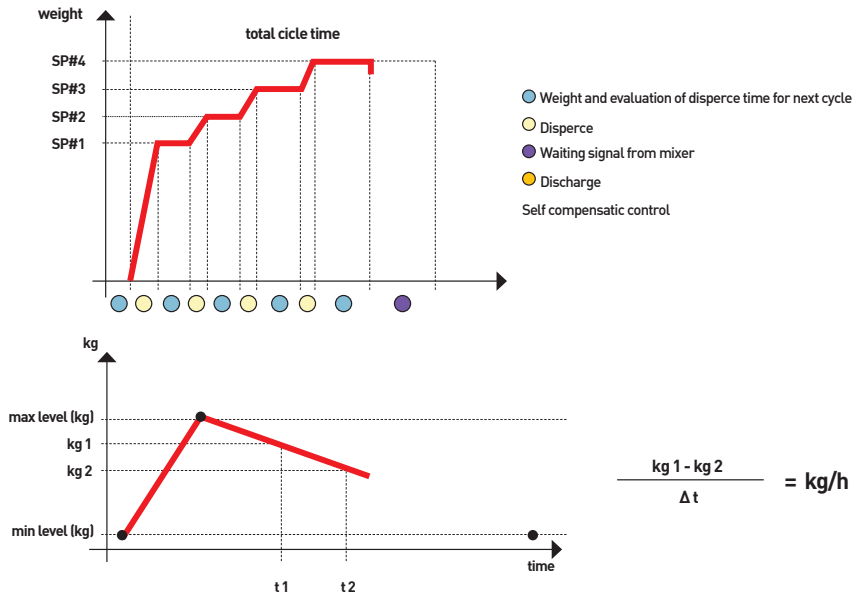
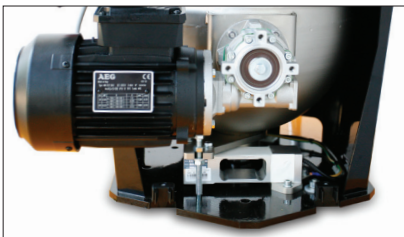
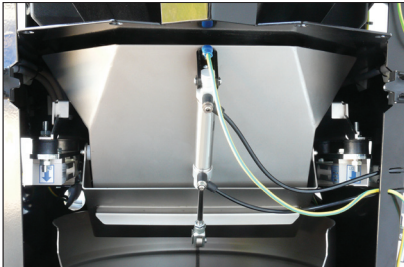


# DOUBLE ACTION BLENDER

- Gravimetric gain-in-weight blending
- Gravimetric loss-in-weight extrusion control (extruders control and take-off control)

Batch gain-in-weight blending: ingredients are dosed, in sequence, by a slide-gate valve, and then fed into a gravimetric bin, mounted on load-cells.

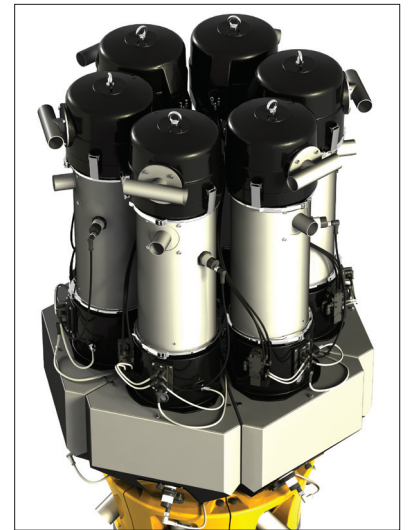
GRADO-ADROIT has an internal loss-in-weight mixing chamber, with an hemispheric bottom, installed on load-cells, which continuously weights the material flow into the extruder. The system can measure and control the extrusion throughput or use this value to control the line speed or, as an alternative, perform both functions simultaneously. With multi-layer lines, each extruder throughput is measured and controlled to maintain a constant layer-to-layer ratio.



## 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.



**DOTEKO SPA**  
Via E. Mattei, 30  
41037 San Martino Spino  
Modena - ITALY  
Phone +39.0535.31653  
Fax +39.0535.31727  
Web [www.doteco.com](http://www.doteco.com)  
E-mail [doteco@doteco.com](mailto:doteco@doteco.com)

North America Branch  
**DOTEKO Inc.**  
2450 Abutment Road, Suite 7  
Dalton, GA 30721  
Phone +1.706.529.8787  
Fax +1.706.529.1898  
E-mail [doteco@doteco.com](mailto:doteco@doteco.com)

South America Branch  
**DOTEKO Ltda**  
Rua Isonzo, 643  
Ipiranga 04249-000  
São Paulo SP BRAZIL  
Phone +55.11.2948.1454  
Fax +55.11.2351.5520  
E-mail [doteco@doteco.com.br](mailto:doteco@doteco.com.br)