

# MDS Balance Drydose

Precision meets moisture control



After installing the MDS Balance Drydose, our previous streaking problems when adding additives are simply gone!

Bernd Wilming, Plant Manager

agathon  
molding

 **Labotek**

# MDS Balance Drydose®

Drying and additive dosing in one compact unit. Maintain optimal moisture and consistent quality by drying directly at the machine inlet. The unit prevents costly defects, such as splay, streaking, and structural weaknesses, by stopping hydrolysis at its source.

## Efficient drying

Dry and condition materials close to the machine inlet, minimizing heat loss and moisture reabsorption. Effectively dry material within hours (e.g. ABS in 2 hours).

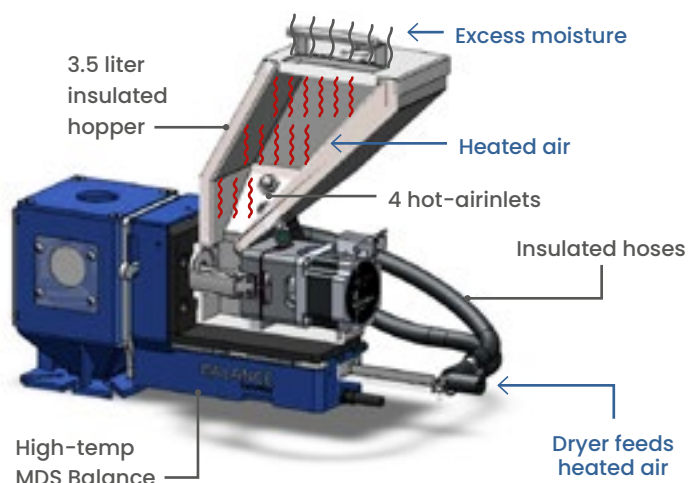
## Consistent product quality

Maintain optimal moisture levels throughout processing to prevent defects like hydrolysis, degradation, and surface flaws - ensuring superior mechanical and physical properties in end products.

## Working principle

- The compressed air dryer supplies heated air through insulated hoses directly to the MDS Balance hopper.
- Material near the dosing cylinder/auger is also dried, minimizing the risk of moisture reabsorption.
- The hopper is equipped with four hot-air inlets and full insulation to ensure consistent drying and maintain optimal moisture levels.
- Excess moisture is safely released via the hopper lid.

<b>Dryer</b>	<b>Weight dryer</b>
LCD 5 or LCD 15 compressed air dryer	11 kg
<b>Dosing unit</b>	<b>Compressed air bar</b>
MDS Balance high-temperature	Min. 7 bar
<b>Weight dosing unit</b>	<b>Maximum dew point</b>
2 kg (feeder), 0,7 kg (controller)	-50°C
<b>Max material temperature</b>	<b>Hopper capacity</b>
120°C	3.5 liter



Raw material		Recommended drying time	Recommended drying temperature	Drying capacity (kg/h) using single 3.5 liter insulated MDS Balance Drydose®	
				BD: 0.6 kg/l	BD: 0.8 kg/l
ABS	Acrylonitrilebutadienestyrene	2-3 hours	80 °C	0.5-0.7	0.7-0.9
PA	Polyamide 6	4 hours	80 °C	0.4	0.5
PC	Polycarbonate	2-3 hours	120 °C	0.5-0.7	0.7-0.9
PE	Polyethylene	1-2 hours	80-90 °C	0.7-1	0.9-1.3
PE	Polyethylene, black	3-4 hours	90 °C	0.4-0.5	0.5-0.7
PETG	Polyethylene terephthalate glycol	4 hours	66 °C	0.4	0.5
PMMA	Methylmethacrylate polymer	2-3 hours	80 °C	0.5-0.7	0.7-0.9
POM	Polyacetal	2-3 hours	100 °C	0.5-0.7	0.7-0.9
PP	Polypropylene	1-2 hours	80-90 °C	0.7-1	0.9-1.3
PS	Polystyrene	1-2 hours	80 °C	0.7-1	0.9-1.3
SAN	Styrene acrylonitrile	2-3 hours	80 °C	0.5-0.7	0.7-0.9

\* The MDS Balance Drydose® is specifically engineered for dosing and conditioning pre-dried materials, as well as for drying small quantities of moist materials. In case of moist materials, Labotek recommends maintaining additionally one hour material level between two manual fill cycles. This interval ensures that the measuring algorithm has sufficient time to achieve the correct dosing percentage and to properly dry any newly added material.