

### DD AND AIR FLUSH MODULE

Innovative and patented technologies for the EREMA Preconditioning Unit



## DD - Double Disc

Predrying and predensifying materials with up to 12% residual moisture.

Washed post consumer waste and BOPET production waste have one thing in common – moisture. Whereas in the case of washed fractions there may be up to 12 % moisture, BOPET has minimal core and surface moisture values. Nevertheless this does lead to negative feeding and processing effects in the extruder, such as fluctuating outputs, irregular melt patterns, damage to the material and, as a result, reduced product quality. **EREMA's patented technologies such as Double Disc and Air Flush Module eliminate negative influences on the extruder, thus ensuring high material quality and a wide processing range.** 



### How it works

The addition of a second disc in the EREMA Preconditioning Unit divides it into **chamber 1 and chamber 2**. The **material preparation** (cutting, mixing, warming, drying and predensifying) takes place in chamber **1**. The **feeding of the extruder** (buffering of the pretreated material) comes from chamber **2**.

### Unique quality with BOPET

- Using DD technology means that no degassing zone is necessary on the extruder when processing BOPET
- Better colour values and gel reduction increases return-to-production rate considerably
- Reduced investment and maintenance costs thanks to higher throughput

Temperature pattern in the Preconditioning Unit with DD technology



# Air Flush Module

Removal of moisture from the Preconditioning Unit when processing materials with high residual moisture.



How it works

**Feeding 1** takes place with material that has high residual moisture. In the **Preconditioning Unit 2** the material is cut, mixed, heated, dried, densified and buffered. The challenge in this process is the **removal of the large volume of water vapour that is produced**. A continuous stream of air from the **Air Flush Module 3** passes through the material

### Advantages of DD and Air Flush Module

- **High-quality end product** when processing material with high residual moisture of up to 12 % (e.g. washed post consumer film waste)
- Optimum processing of BOPET using DD technology
- **Increased throughput** through uniform feeding with homogeneous material

in the Preconditioning Unit. The vaporising water is removed from the Preconditioning Unit quickly and effectively with the help of the air stream via an **extractor (4)**. The **tangentially connected extruder (5)** is filled continuously with the material that has been predried extremely efficiently.

- Low energy requirements thanks to efficient predrying
- Longer machine lifetime and lower maintenance costs
- Suitable for retrofitting on virtually all EREMA systems

### **Headquarters & Production Facilities**

EREMA Engineering Recycling Maschinen und Anlagen Ges.m.b.H. Unterfeldstrasse 3 / 4052 Ansfelden / Austria Phone: +43 (0)732/31 90-0 erema@erema.at / www.erema.com

#### For worldwide subsidiaries and representatives please visit www.erema.com

Subject to technical modifications. © EREMA Engineering Recycling Maschinen und Anlagen Ges.m.b.H.



09/22

https://www.erema.com/en/ download\_center/

