Drying: Presentation of the New KREYENBORG PET-BOOSTER.

For the first time, KERYENBORG will present their new PET-BOOSTER. This continuously operating system dries PET within 7-10 minutes.

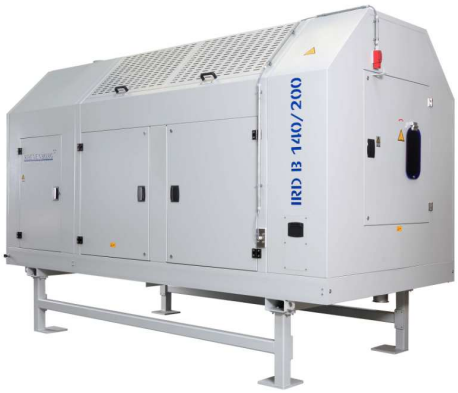

Fig. 1: IRD Infrared Rotary Dryer

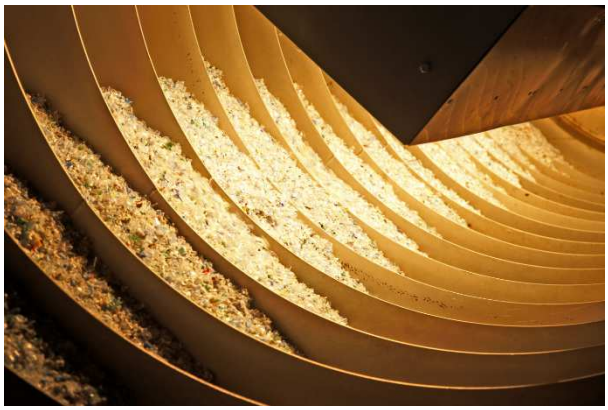

Fig. 2: IRD (interior)

Drying PET. Continuously. In Minutes Instead of Hours.

Focus here is specifically on applications in extrusion of plastic films and fibers with degassing extruders (twin-screw, planetary- and multi-screw-extruders). Varying levels of input moisture that results in process fluctuations in the extrusion process (as well as fluctuations in end-product quality) can be eliminated with the KREYENBORG PET-BOOSTER. By feeding pre-heated material with a consistent, low input moisture level, a smaller extruder and vacuum degassing system can be used. With existing plants, a quick 30% increase in throughput can be realized with the installation of the PET-BOOSTER. A further positive side-benefit: the toxic liquid precipitate from the vacuum system is reduced by up to 50%. The investment is thereby amortized in a very short period of time.

Through the continuous circulation of the PET Flakes or Pellets and the direct heating up with infrared light, the IRD PET Booster is able to crystallize and dry in one step.

IRD technology, which uses very efficient Infrared radiation instead of hot air as a heat source.

For several years now, Infrared-Drum Dryers have proven themselves as superior technology in many PET applications. The success story has been justified through clear advantages in comparison to other drying methods and processes. These proven advantages include energy efficiency, short residence time, and flexibility through its ability to handle various material forms and properties.

The IRD PET Booster is able to dry the PET to a moisture of about 200-300 ppm. In combination with a final drying hopper the PET dry without any additional energy up to final moisture of about 100-150 ppm.

The IRD PET Booster is the only one continuously workable system of the world how can dry PET in such a short time.

Meanwhile the IRDs are often used in PET applications with single screw and especially as pre-heater by degassing extruder for the cast film, thermoforming sheet, strapping, and recycling production.

Q1: The press release says it can dry PET in about 10 minutes. … What quantity of PET would that be? How much can you actually process at once?

We offer different IRD sizes with throughputs form 20 – 3500 Kg/h.

The IRD PET Booster is the only continuously working dryer in the world, which is able to dry PET in such a short time.

Q2: Related to that, the press release says that the dryer works with small extruders. … What size extruders?

By feeding pre-heated material with a consistent, low input moisture level, a smaller extruder and vacuum degassing system can be used.

The IRD PET Booster is drying the PET in front of the extruder.

Customers, who are going to buy a new extrusion line, can choose a smaller and cheaper extruder, due to the fact, that the PET is pre-heated.

Customers, who do have an existing line in place, can increase the throughput of the line, due to the fact, that the PET is pre-heated.

The extruder is not scope of the delivery of KREYENBORG.

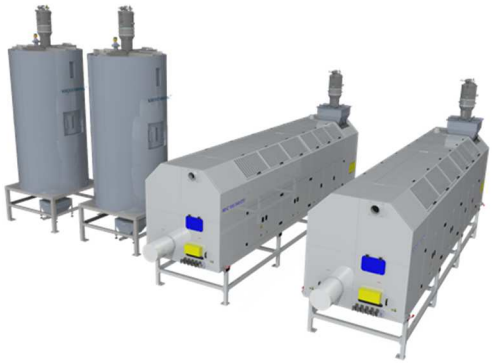

Fig. 3: PET-Booster

KREYENBORG product range plastic:

Turn-key solutions




Silos


Storage Silo


Fiber Silo


Film-Flake Silo


Block-type Silo

Mixer


SFM


USM


MBM

Dryer


IRD continuous


IR Batch


IRD PET Booster

Crystallizer


IRD continuous


IR Batch

Feeding systems

Conveyor screws

Conveyor belts

Pneumatic conveying systems

Dosing equipment

Extruder feeding system, Densifier. Type KSW

Extruder feeding system, Special feed hopper

Volumetric metering systems

Big-Bag stations

Big-Bag filling station

Big-Bag emptying station

Container

Discharge container

Discharge container with agitator

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