



PELLETIZING SYSTEMS >

> UNDERWATER PELLETIZING

CYCLO®

Efficient centrifugal dryer
for any application

CYCLO® is energy-efficient pellet drying with minimal space required. The dryers are suitable for use with both PEARLO® underwater pelletizing and M-USG and P-USG underwater strand pelletizing systems. Well thought-out and highly accessible components, such as the core rotor device, serve to provide excellent operating characteristics and efficient servicing.

 **GALA**

 **AUTOMATIK**

Your benefits

- Minimal residual moisture easily achieved
- Compact design providing optimized access for cleaning and maintenance
- Integrated pre-dewatering chute provided as standard equipment
- Easy exchange of all parts subject to wear, e.g. rotor blades
- Special design for micropellets
- Low noise emissions
- Low energy consumption
- Keyless mechanical interlock
- Adjustable rotor speed – optional
- Self-cleaning system – optional
- Hinged outlet filter for cleaning access – optional
- Full scale demonstration available

Basic principle of pellet drying

The drying operation as part of the pelletizing process consists of three individual steps:

1. Pre-dewatering: Up to 95 % of the process water is removed by gravitational force.

2. Primary drying: Bigger water drops adhering to the pellets are largely removed through airflow or mechanical movement.

3. Final drying: The residual heat of the pellets is used to evaporate the remaining surface moisture.

CYCLO® featuring:

- Field proven dryer designs
- Solid rotor combined with segmented bottom section
- Field proven EM (Easy Mounting) screens
- Tangential in- and outlet
- Low noise insulation
- Integrated dewatering
- Stand still monitoring - optional
- Keyless mechanical interlocking system
- Two large dryer doors
- Filter integrated into insulated resin outlet
- Motor on top arrangement (direct drive)
- Interlocked hinged resin outlet filter for cleaning access
- Internal air ductwork



Range of applications

The CYCLO® centrifugal dryers are well-suited for the drying of raw materials as well as for the manufacture of compounds, blends, master-batches, and recyclates based on:

- Polyolefins, e.g. LDPE, HDPE, PP
- Styrene polymers, e.g. PS, SAN, ABS
- Acrylic resins, e.g. PMMA, PAN
- Polyacetals, e.g. POM
- Polycarbonates, e.g. PC
- Polyesters, e.g. PET, PBT, PEN
- Polyamides, e.g. PA 6, PA 6.6, PA 11, PA 12
- Thermoplastic elastomers, e.g. TPE-S, TPE-E
- Polyurethanes, e.g. TPU
- Hot-melt adhesives
- Rubber
- Natural and synthetic resins
- Biopolymers, e.g. PLA, PHA, Bio-PA, Bio-PET, Bio-PP
- Other materials available upon request

The CYCLO® dryer features double walls filled with insulating material. Sound pressure level of < 80 dB(A) is possible. Large, wide doors and larger distances between rotor screens and dryer walls provide easy access to the interior.



Integration of the intake and air filter into the resin outlet optimizes countercurrent air flow so less air volume is needed for the drying process.

System	Rotor Selection	Drying Capacity lbs/hr [kg/h]	Water Rate GPM [m³/hr]	Air Flow CFM [Nm³/hr]	Motor Size HP [kW]
CYCLO 420	Hybrid Solid	25,000 (11,300)	600 (136)	1,000 (1,605)	7.5 (5.5)
	Segmented	20,000 (9,000)			
CYCLO 430	Hybrid Solid	40,000 (18,100)	600 (136)	1,448 (2,324)	15 (11)
	Segmented	32,000 (14,500)			

All information subject to change based on application. All rates obtained via laboratory tests conducted with 1/8 inch diameter, High Density Polyethylene. (HDPE) Pellets.

