

# PET结晶干燥机

"OCR" Orste PET Crystallizers



Central Conveying System  
中央供料系统

Drying & Dehumidifying  
除湿干燥

Feeding & Conveying  
供料输送

Dosing & Mixing  
混合拌料

Heating & Cooling  
冷热交换

Granulating & Recycling  
粉碎回收

## 命名原则 NAMING PRINCIPLE



## 产品特点 FEATURES

- 简化并提高原料干燥效率。
- 定速搅拌设计使未结晶之塑胶在晶相化的制程温度中不沾结成块。
- 可以在高温下进行原料干燥作业，极大提高工作效率。
- 标配旋风集尘器，应用于粉尘较多的场所，可有效减轻过滤布袋负荷，延长过滤布袋使用寿命。
- 减少过滤布袋清洗次数。
- 有双重过滤保护装置，可减少人为或机械故障所产生的意外。
- 配备旋转下料阀，密封性好，确保精确稳定输出结晶原料。
- 配备料位开关，料位检测精准，机器运行安全可靠。
- 配备负压检测器，即时检测过滤器通风情况，当负荷超过设定值时及时警报，提示清理，以避免过滤器堵塞。

- Simplify and improve drying efficiency.
- Fixed speed of agitator makes materials not lump together during the crystallization.
- Materials can be dried under high temperature to improve drying efficiency.
- Cyclone dust collector is standard equipped, which is applied to dust-rich place. Can effectively reduce the load on filter bag, and reduce the numbers of filter bag cleaning, thus extend the life span of the filter bag.
- With double overheat protector, it can reduce the possibility of either mechanical or man-made problems.
- Equipped with rotary valve with good sealing performance, which can output crystallized material accurately.
- Equipped with material level switch, which can detect material level accurately and make operation reliable.
- Equipped with negative pressure tester to immediately test the ventilation of the filter. Given an alarm when the negative pressure is higher than the setting value, clean the filter to avoid blockage.

## 选配件 OPTIONS

除湿机、真空料斗、吸料机、磁力底座、吸料盒、螺杆上料机。  
Dehumidifier, hopper receiver, auto-loader, magnetic base, suction box, screw feeder.

## 应用范围 APPLICATION

OCR系列密闭循环干燥结晶机用于持续结晶非晶化材料，将尚未晶化的PET原料或回收料结晶成可以直接除湿干燥的结晶原料。该系统包括加热装置，保温料桶及搅拌组件。当未晶相化的PET原料或粉碎料进入料斗后，对其进行结晶处理，同时进行搅拌，可防止原料结块并降低产品不良率。结晶后的塑胶可以从料斗底部输送到储料桶或直接输送至干燥料桶中干燥后使用。

OCR closed-loop crystallizers are used for constant crystallization of un-crystallized PET regrinds or pellets. Processed materials can then be dried and dehumidified directly. This system mainly consists of heating elements, insulated hopper and agitator screw mixing device. After un-crystallized PET materials fed into the hopper, the system starts crystallization and agitator starts blending to prevent formation in lumps. Crystallized materials can be conveyed to material storage bin or into drying hopper.

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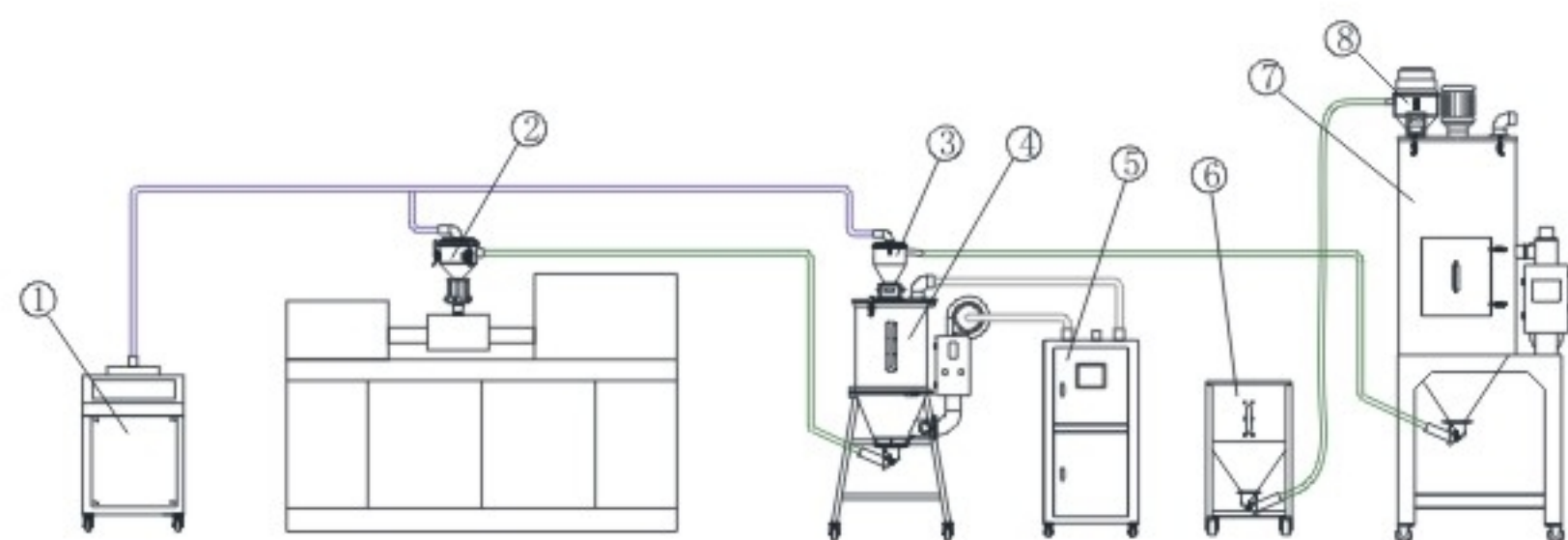
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1. 自动填料机 Auto-loader
2. 光电料斗 Photo-sensor Hopper
3. 微动料斗 Micro-switch Hopper
4. 料斗干燥机 Hopper Dryer
5. 除湿机 Dehumidifier
6. 储料桶 Material Tank
7. PET结晶干燥机 PET Crystallizer
8. 直接式真空吸料机 Auto Loader

## 工作原理 FUNCTIONAL SCHEME

开始吸料后，电热风机启动，原料开始加热。当原料堆积至高于料位开关位置时，主控箱停止输出信号给吸料机。原料加热一段时间，当料桶的感温探针达到设定结晶温度值时，原料由送料装置送出；此时，随着料斗内料位逐渐降低，吸料装置开始补充未结晶原料，实现连续结晶作业。

当感温探针达到设定停止排料温度值时，送料装置停止工作，当温度再上升至设定结晶温度值时，出料装置重新工作，如此连续循环从而达到连续结晶作业。

Once material filling starts, heat blower starts up and material heating begins. Control cabinet would stop sending signals to auto loader when material filling amount is higher than material level switch. Then material heating lasts for a while. When temperature sensing needle detects the value of reaching the set crystallized temperature, material would be conveyed out via feeding device; meanwhile, as material level in hopper lowers gradually, filling device starts to supply the uncrystallized material accordingly to realize the continuous crystallization process.

When temperature sensing needle detects the temperature value of stopping material conveying, feeding device halts. If temperature rises again to reach the set crystallized temperature, feeding device will be activated to work so that the continuous crystallization process can be realized through this kind of circle.

## 技术参数 PARAMETERS

机型 Model		OCR-160	OCR-450	OCR-900	OCR-1600	OCR-2500
电热功率 Heater Power (kw)		12	24	48	96	128
风机功率 Blower Power (kw)		0.55	2.2	3	7.5	15
搅拌电机功率 Blending Motor Power (kw)		0.25	0.55	1.55	1.5	4
最大处理量 Max. Throughput (kg/hr)		50	150	300	500	7500
料桶容量 Hopper Capacity (L)		160	450	900	1600	2500
外形尺寸 Dimension	L (mm)	1140	1440	1930	2190	2350
	W (mm)	1040	2370	2890	3570	4050
	H (mm)	2380	3850	4450	5350	5670
重量 Weight (kg)		235	500	865	2290	2790

产品参数如有变更，恕不另行通知。 We reserve the right to change parameters without prior notice.

注 Notes:

- (1) 以上量大处理量是以堆积密度为0.85kg/L，直径为3~5mm的PET未结晶原料颗粒计算得出。  
Above Max.processing capacity is based on pellet material of 0.85kg/L in bulk density and 3~5mm in diameter.
- (2) 机器电压规格：3φ, 400VAC, 50Hz。  
Power: 3φ, 230/400/460/575VAC, 50/60Hz.

## PET特性 PET CHARACTERISTICS

PET树脂原料最广泛应用于纺织用纤维、食品、医药包装用原料、磁带薄膜、工业用丝、耐高温餐具等高聚合产品。其含水率比较高，在高温挤出熔融时，会发生气泡、龟裂、色泽发黄等不良缺陷。由于需要特殊的干燥处理和包装领域的高速发展，奥诗德机械为广大PET注塑设备和产品生产厂家提供可靠的除湿干燥技术保障，广泛应用于PET之原料的结晶、干燥、成套除湿干燥结晶工艺设备。奥诗德机械在PET成型系统辅助设备领域的先进技术适用于各种应用领域的需要：制瓶、制胚，热成型薄膜、片材生产，打包带、工业用丝生产，管材生产，废料回收生产及其他类似领域。

PET material is widely-used in textile fiber, food and chemical packaging, tape stripes, industry thread, heat-resistant dishware. Air bubble and chapping will take place due to its high moisture content. With this drying demand and the development on plastic industry, Orste provides a series of secured and reliable drying and dehumidifying technologies for PET molding and other PET product manufacturers. Orste's PET system has advanced technology to meet various application needs: Bottle and blank making, Thermal forming film and sheet making, Strapping tape and industrial yarns making, Tubing making, Waste recovery making and other similar fields.