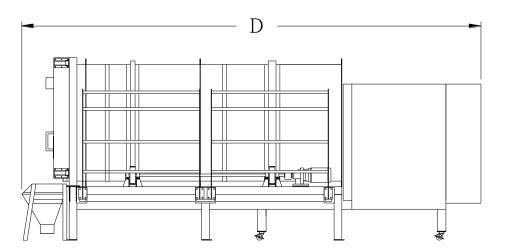
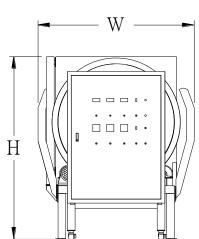
INFRARED ROTARY DRYER

FEATURES:

- 1. PET material will be crystallized & dried simultaneously within 8~15minutes along with the advantages of faster start-up and quick changeover results in efficient production.
- 2. Materials are more efficient drying both inside and outside particles. It can save 20~50% energy than conventional dehumidifier system.
- 3. The drum is divided into three heating zones which equipped with infrared PID temperature sensors can be set drying or crystallized temperature independently.
- 4. By setting the rotating speed of drum, suitable crystallized & drying time.
- 5. By setting the material feeding speed of the screw to control the material output capacity.



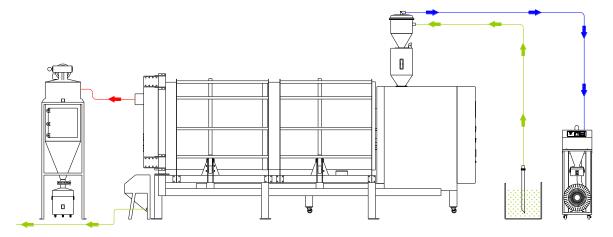




IRD COMPARISON

Item	IRD Dryer	Traditional Dryer		
Transfer medium	None	Hot air		
Heat transfer		From outside to inside particle gradually.		
Energy	Save at least 20~50% energy compared to traditional dryer.	Consume much energy.		
Process time	 Crystallization & drying: They are processed simultaneously within about 8~15 minutes. Drying again: About 1~1.5 hours. 	 Crystallization: About 30~60 minutes. Drying: About 4~6 hours. 		
Moisture content	 Under 100~500 PPM after IRD processed. Under 50 PPM after about 1~1.5 hours dehumidifier processed again. 	 Spend 30~60 minutes to change amorphous PET to crystallized PET first. Under 200PPM after about 4 hours dehumidifier processed Under 50 PPM after about more than 6 hours dehumidifier processed. 		
Lead time	Less than 15 minutes or no more than 1.5 hours.	More than 6 hours.		
Material changeover	 Easy & faster. There are only 1~1.5 times capacity of material hourly consumption in the buffer hopper. 	 Difficult & slowly. There are 5~7 times capacity of material hourly consumption in the crystallizer & hopper. 		
Operation	Simple	It is difficult such as it must put a little crystallized PET in the crystallizer when beginning operation.		
Maintenance	 Simple. Lower maintenance cost. 	Difficult. Higher maintenance cost.		

Flow Chart:



TO. Extruder



SPECIFICATIONS

Model		KIRD-100	KIRD-120	KIRD-150	KIRD-150L	KIRD-150XL		
PET Throughput	PELLET	KG/HR	300 ~ 450	500 ~ 700	700 ~ 1,000	850 ~ 1,200	1,400 ~ 2,000	
	FLAKE	KG/HR	150 ~ 225	250 ~ 350	350 ~ 500	425 ~ 600	700 ~ 1,000	
Drum dimension		CM	φ 100*240	ψ 120*300	ψ 150*300	ψ 150*360	φ 150*450	
IR lamp		TYPE	1 KW	2 KW				
		PCS	54	42	63	72	99	
		KW	54	84	126	144	198	
Average life of IR lamp (Voltage output)	90%		20,000					
	95%	HR	10,000					
	100%		5,000					
Cooling fan		KW	0.20	0.25	0.60			
Material feeding motor		KW	0.37					
Drum motor		KW	0.37	0.75	1.50		3.75	
Approx. power consumption		A-PET	0.08 KW / KG · HR (Crystallization only)					
		C-PET	0.12 KW / KG \ HR (Drying only)					
		FLAKE	0.20 KW / KG \ HR (Crystallization & drying)					
Final moisture content		A-PET	1,000 ~ 2,500 PPM (Crystallization only)					
		C-PET	100 ~ 500 PPM (Drying only)					
		FLAKE	100 ~ 500 PPM (Crystallization & drying)					
Total load		KW	55	85	128.5	146.5	200.5	
Dimension (W*D*H)		CM	155*410*185	170*493*210	200*480*250	200*540*250	200*640*250	
Approx. weight		KG	1350	2000	2520	3040	3800	
Options			1.Buffer tank 4.Auto-cleaning vortex cyclone 7.Dust collector of bag type 2.Auto loader 5.Dehumidifying dryer 6.Vortex cyclone 8.Insulated & dust-free hopper dryer					
Remarks			 1.Please keep maintenance space of drum. 2.IR lamps are not warranty parts. 3.If PET material is dried again about 1.0~1.5 with smaller dehumidifier after KIRD processed, to further reduce the moisture content desired, it can increase the IV value of PET material too. 4.We reserve the right to change specifications without prior notice. 					