BGK Brand - IR Pulse Dryer

Infrared Drying System for Thermoset Coatings & Ceramic Frits

The "Pulse Dryer" incorporates high intensity infrared technology with hot air impingement inside of a convection oven. Infrared heater modules are staged throughout the oven, above the glass pass line. Convection air modules with air nozzles, positioned between the infrared module direct heated air at the glass surface and create the pulse drying effect.

The infrared stages drive heat energy through the coating into the glass, while the hot air nozzles wipe the solvent rich air off the surface of the glass. The solvents are dissipated and mixed with the recirculating air. An exhaust blower removes a percentage of the air to maintain an acceptable low emissions level "LEL". The pulse drying effect provides for fast and energy efficient dryers and compact designs.

Standard Sizes & Specifications

Model Number	Oven Opening	Oven Length	Glass Thickness	Glass Width	Heated Width	Conveyor Speed	Drying Time	Part Exit Temp	Connected Lamp Load	Convection Air	Exhaust Capacity	Roller Spacing
	in	ft	mm	in	in	ft/min	sec	°F	kW	°F	CFM	in
PD-6610	66	10	2 - 6	60	65	15 - 20	30 - 40	250	125	400	800	7
PD-6614	66	14	2 - 6	60	65	20 - 28	30 - 40	250	195	400	800	7
PD-6621	66	21	2 - 6	60	65	28 - 40	30 - 40	250	280	400	1000	7
PD-8410	84	10	2 - 6	76	82.5	15 - 20	30 - 40	250	175	400	1000	7
PD-8414	84	14	2 - 6	76	82.5	20 - 28	30 - 40	250	262	400	1200	7
PD-8421	84	21	2 - 6	76	82.5	28 - 40	30 - 40	250	350	400	1200	7

Features & Benefits

Powered Rollers	Swaged end rollers are supported by pillow block bearings with drive sprockets outside the heating zone
Roller Material	Chromium plated carbon steel rollers with the option for stainless steel
Zone Control	IR emitters are grouped into zones across the width of the glass - the outer edges can be turned off for narrow parts
Heat Profiling	IR emitter zones can be adjusted to provide an even temperature profile across the width of the glass
Idle Mode	The dryer maintains an "oven ready" condition with a consistent air temperature - if there are extended gaps between parts
Part Sensor	The part sensor triggers an instantaneous response from the IR emitters to preset operational power
Part Recipe Control	The dryer control package includes a part recipe function to include IR zone output, oven temperature setpoint and line speed
Close-Loop Control	An optical pyrometer can be supplied to read part exit temperature and modulate input voltage to maintain consistent part temperature
4-Point Lift System	The lift system evenly from the four corners of the dryer to provide total access to the inside of the dryer from either side

Typical Applications:	Coating Types:
Silk-screening	Oil Based - Lead Free Ceramic Inks
Spandrel Roll Coating	Water Based - Lead Free Ceramic Inks
Silvering	Electrochromics
Ink-Jet Printing	Mirror Backing

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