

PET IR LINEAR DRYER

INNOVATIVE TECHNOLOGY

1



The **PET IR Linear Dryer** is a 100% water based application system designed to eliminate the traditional “air drying” of water based products. The **PET IR Linear Dryer** was engineered to eliminate the long drying times associated with using a water based product which can lead to product contamination and excessive material handling. The product is fed directly into the **PET IR Linear Dryer**, finishing the product with a clean and dry surface ready for the next step in the production of the product being manufactured or stack-and-ready for shipment.

FEATURING

- Open Track Design for 4-sided exposure to the IR lamps for 4-sided drying.
- Tapered track rails specifically designed to only make contact on the board at two small points, along the bottom corner edges, per section of track.
- Adjustable track spacing from 2” centers to 4’ centers and above.
- Variable track speeds: up to 16 m/min.
- Adjustable IR lights adjusts the distance between the IR lights and the product ensuring and maintaining a constant temperature.
- Complete access panels on both sides of the dryer and on both top & bottom of track for daily inspection, cleaning and maintenance.
- UL Listed electrical components; available on the U.S. market.



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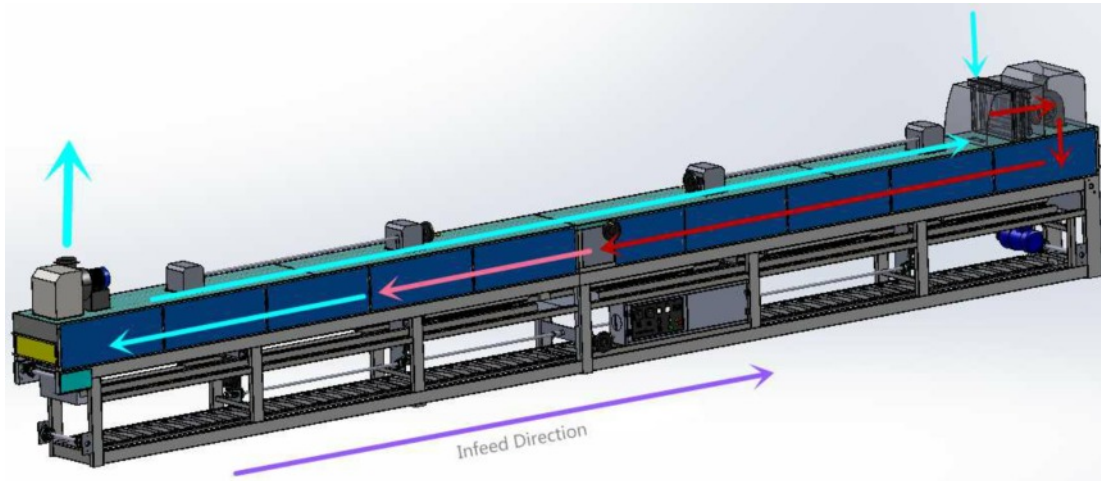
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2



The **PET IR Linear Dryer** brings to the industry a new technology in drying water based coatings using an automated system of inducing clean filtered, heated dry air into the outfeed end of the dryer, then forcing the air towards the infeed end while removing humidity from the air, and an adjustable distance between the IR lights and the product, all of which maintains a constant temperature required for drying the coating.



Forced Air Inlet
for filtering and heating the air.



Exhaust
for removal of humidified air.

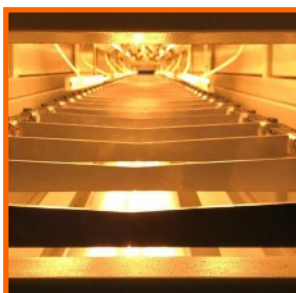


Upper IR Lamp
with full-access door open.

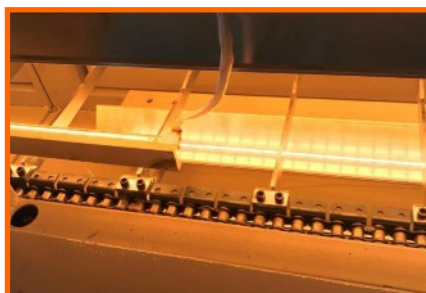
Upper IR Lamp
raising and lowering with
digital readout.



Lower IR Lamp raising and
lowering adjustment.



Infeed of IR Dryer



Open Track Design with
Adjustable Track Rails



Outfeed of IR Dryer with jog
button for easy cleaning and
maintenance.

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3

SPECIFICATIONS:	PET IR LINEAR DRYER
LENGTH OF DRYER	10 m / 33 ft
VARIABLE FEED SPEED	0 - 16 m/min
TOTAL NUMBER OF IR LAMPS	38 lamps
LENGTH OF IR LAMP	1 m each
VOLTAGE	440 / 480, 3-ph / 60 Hz
TOTAL AMPERAGE	90 amps

SAMPLE OF A COMPLETE AUTOMATED FINISHING LINE WITH PET IR LINEAR DRYER

✿ 7-Head Brush Sander ✿ 2 Head Vacuum Coater ✿ IR Dryer ✿ Motorized Outfeed Conveyor ✿



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PRO EDGE TECHNOLOGY - PET IR LINEAR DRYER

Pro Edge Technology introduces the PET IR Linear Dryer Line, a 100% water based application system designed to eliminate the traditional "air drying" of water based products. The PET IR Linear Dryer System is an All-In-One sanding, coating and drying line engineered to eliminate the long drying times associated with using a water based product which can lead to product contamination and excessive material handling. Starting with a seven-head sander to ensure removal of previous tool markings and preparing the surface for the water based application. Next the two-head vacuum coater applies the water based coatings, including: primers, paints, stains and wood sealers, on all four sides of the product surface. Lastly, the product is fed directly into the PET IR Dryer finishing the product with a **clean and dry surface**.

The PET IR Dryer brings to the industry a new technology in drying water based coatings using an automated system of inducing clean filtered, heated dry air into the out-feed end of the dryer, then forcing the air towards the in-feed end while removing the humidity from the air, and an adjustable distance between the IR lights and the product, all of which maintains a constant temperature required for drying the product. This technology accomplishes the following goals:

1. Removing the humidity created during the drying process.
2. Forcing the direction of the air opposite of the production feed; the product is therefore traveling continuously through a much drier, less humidified air-source, speeding up the drying process. With this reverse airflow technology, the air travels through the entire length of the dryer, removing humidity and eliminating the fluctuations in air temperature as the product dries.
3. With the adjustable IR lights, you can determine the distance between the IR lights and the product ensuring and maintaining a constant temperature required for drying; from ½-inch to 12-inch widths.
4. This process results in the product exiting the dryer COMPLETELY dry and immediately ready for the next step in the production of the product being manufactured or stack-and-ready for shipment.

The PET IR Dryer's *open track* design is what sets this machine apart from the competition. The *open track* is adjustable from 2-inch to 4-foot centers or above. This *open track* design allows for total exposure of the bottom of the panel to the IR lamps. The track has been specifically designed to only make contact on the board at two small points along the bottom corner edges, per section of track, giving the product a quality finish on all 4-sides unlike other dryers that use rollers, chain mesh or a conveyor belt which prevents the bottom from having a quality bottom finish. And to top it off, the track is easy to clean, service and maintain!

The use of water based coatings vs solvent based coatings is what makes the PET IR Dryer environmentally GREEN. Water based coatings are nonflammable eliminating the fire rating, and low VOC (volatile organic compounds) and HAP (Hazardous Air Pollutant) ratings with the elimination of harsh chemicals such as formaldehyde which continuously emits pollutants into the air. No solvents are used prior to or during the cleaning process so there is no need for costly flammable storage cabinets. Please ensure you follow the guideline suggestions from the manufacturer of each water based product you purchase.

Notable Features:

- Adjustable temperature controller.
- Airflow is controlled through the temperature setting; volume and speed is used to remove and controlled the humidity.
- Track speed is variable and controlled through a VFD (Variable Frequency Drive).
- Solid state relays are used over conventional contactors to control the current load of the IR lamps. Solid state relays have no moving parts and will not fail over time due to the constant cycling of the switch.
- All electrical components are UL Listed.
- All components are available on the US market; no proprietary components are used.
- Complete access doors on both sides of the dryer eliminates hidden issues that would otherwise be unseen and allows for daily inspection, cleaning and maintenance.