



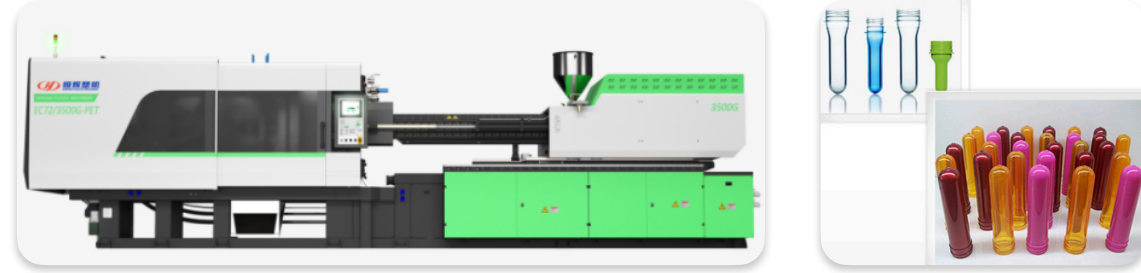
01 Infrared crystal dryer will Dry&crystallized rPET Pellets



02 Injection machine will be fed the dried&crystallized rPET Pellets and make the Preform



Solution: Drying rPET pellets --- Infrared Rotary Dryer



Solution: rPET Preforms --- Injection machine

### Always in motion

- ① No segregation of products with different bulk densities
- ② The permanent rotation of the drum keeps the material moving, and clumping can be avoided



### 01 Energy saving 25-75%

Adopt servo control oil circuit, AC servo motor to achieve smooth low-speed action control, hydraulic energy consumption to the minimum, avoid oil temperature rise, effectively reduce the consumption of oil temperature cooling water, Compared with the traditional injection molding machine could save 25~75%.

### Drying in minutes 15-20mins ≤50ppm

Infrared rays cause molecular thermal oscillations, which directly act on the core of the particles from the inside out, so that the moisture inside the particles is rapidly heated and evaporated into the circulating ambient air, and the moisture is removed at the same time.



### 02 Special screw design for PET Preform

Equipped with special screw for PET bottle billet with aspect ratio of 24:1 to shorten plasticizing time. It will avoid the decomposition of elastomer components and small bubbles. Special design on screw groove, compression ratio and three-stage ratio which **effectively reduces the production of black spots**

### Instant start and quicker shut down

- ① An immediate start of the production run is possible immediately upon startup. A warm-up phase of the machine is not required.
- ② Processing can be started, stopped and restarted easily

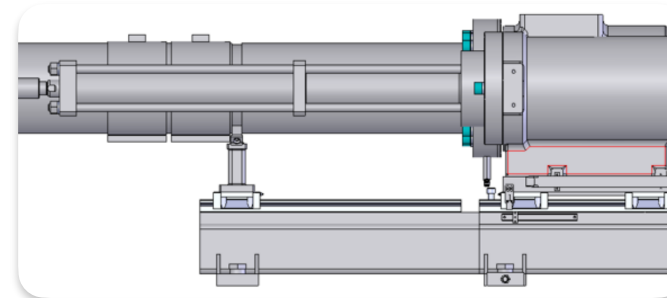


### 03 Double acting piston rod

Double acting piston rod is matched with independent pumping cylinder, reasonable distribution of power. When injecting, the injection oil cylinder area is small, the oil return amount is small, and the oil return back is low, so the system does less useless work, high efficiency and energy saving.

### Lower energy cost

Today LIANDA IRD users are reporting energy cost as 0.06kwh/kg, without sacrificing product quality



Double acting piston rod with independent pumping cylinder

### Easy cleaned and change materials

The drum with the simple mixing elements has no hidden spots and can be cleaned easily by a vacuum cleaner or compressed air



### 04 Effectively stop the sagging of the melt barrel

The barrel support adopts linear guide rail, and forms an integral part with the front plate of the injection, which will not be unreliable due to the adjustment of the injection table, and effectively control the sagging of the melt barrel;

### PLC Control

Recipes and process parameters can be stored in the controlling system to ensure optimal and reproducible results

