

Drum-type infrared dryer contains casing, cone in the form of trapezoidal surface, shelves, end caps with windows, loading hopper, discharge pipe, support and drive rollers, and heat source. Flexible film resistive radiant-type electric heater is used as heat source; it is located on the inner trapezoidal surface of unit and the outer surface of unit's axis and additionally follows the geometry of shelves. Peltier elements are located on the end cover on the discharge pipe side, with the possibility of converting secondary thermal energy in the range from 30 to 65 °C into low-voltage power in the range from 3 to 6 V.