Jain Laboratory Instruments

Product Code . JL-TWL-9189



Rotary Dryer

Description

Rotary Dryer

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A rotary dryer is a unit in which drying is done by forced draft action created by hot air.

Air from a blower passes through a heating chamber serves the purpose of drying agent.

An arrangement for rotating the dryer shell at low RPM is provided by means of an electrical motor and a reduction gearbox.

The set-up consists of a long revolving cylindrical shell slightly inclined towards the outlet.

The shell is fitted with two brackets for support.

As the shell rotates internal flights lift the solids and shower them down through the interior of the shell.

This action increases the contact of wet solid against hot air making the dryer very effective.

The flow of hot air is counter-current to solids.

Flow control and by-pass valve are fitted to regulate the airflow.

Wet feed enters from one end of the cylinder and dry material discharges from the other end.

Experimentation:-

To study the drying characteristics of a solid material under batch drying condition in a rotary dryer.

To study the operation of a Rotary Dryer.

Utilities Required:-

Floor space of 1.5m x 2m.

Electricity Supply: 1 Phase, 220 V AC, 4 kW.

Wet Solid.