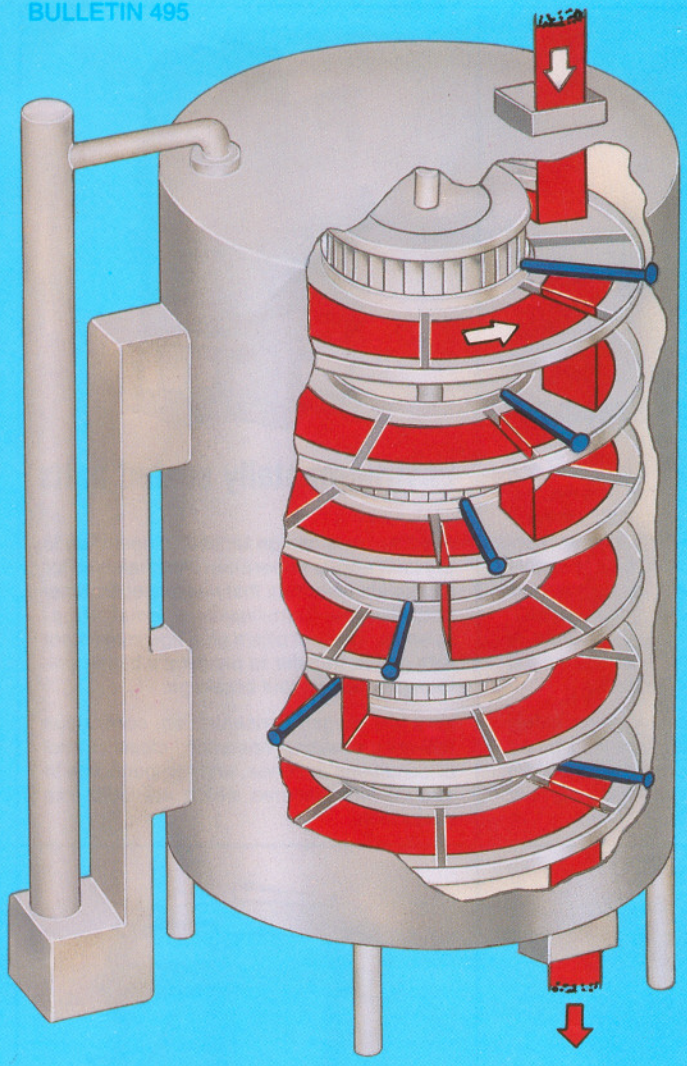
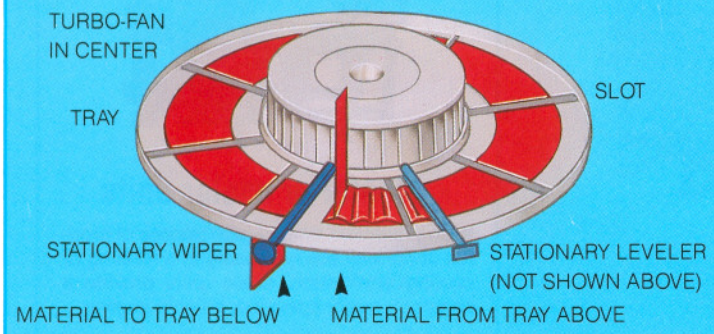
BULLETIN 495



DETAIL OF A SINGLE TRAY



HOW IT WORKS

The TURBO-Dryer® consist of a stack of slowly rotating circular trays. Material is fed onto the top tray. After one revolution the material is wiped onto the next lower tray where it is mixed, leveled, and then after one revolution is wiped to the next tray where the operation is repeated. The trays are contained in an enclosure in which heated air or gas is circulated by internal fans.

Why the Wyssmont TURBO-Dryer™ is best

EVEN, THOROUGH, AND RAPID DRYING

Delivers very uniformly dried product because material is intermittently redistributed with plug-flow operation. Uniform temperature or zoned temperature regions. The closest product temperature control of any dryer. Can give the lowest residual moisture of any dryer.

PRODUCT QUALITY

Gentle handling. Little dust, fines. Little product degradation, even with fragile flakes, crystals and pellets. Provides a free-flowing product when other dryers produce material that cakes or sets-up in containers, silos, or railcars.

UNIQUE FEATURES

Continuous automatic operation with little operator attention.
Precisely controlled temperature and residence time.
Easily adjusted and automatically maintained drying conditions.
Automatically adjusts for varying feed rates.
Can handle sticky products without backfeeding.
Can operate with inert atmosphere recirculation with solvent recovery.
Operates as a dryer, cooler, reactor, heat treater, calciner, humidifier, agglomerator, sublimer, roaster, in combination if required.
Environmentally sealed, and explosion-proof models.
The self-cleaning wiping action often eliminates the need for manual cleaning at product changeovers.
Easy startup and operation.
Low energy costs. Low labor costs.
Low maintenance costs because of its unparalleled reliability.
Can use any heating medium: steam, gas, electricity, oil, high temperature oil or waste gas from other operations.
Low temperature drying as low as 60°F without vacuum.
Drying or heat treating up to 1200°F.
Available in laboratory sizes, package units, and large field erected sizes.
Manufactured in a wide range of materials.
Vertical construction. Little space requirements. Outdoor or indoor installations.
Accurate scale-up from tests on a few pounds.

MATERIALS HANDLED

Powders, pastes, crystals, sludges, granules, slurries, beads, filter and centrifuge cakes, pellets, flakes.

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Wyssmont™

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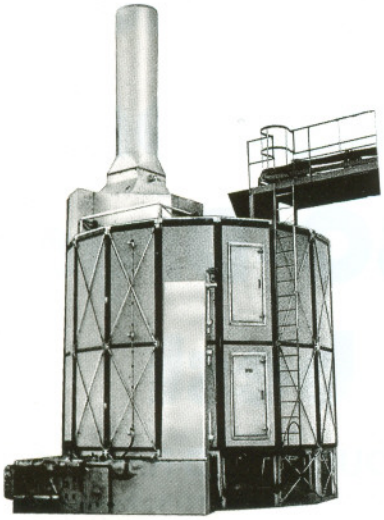
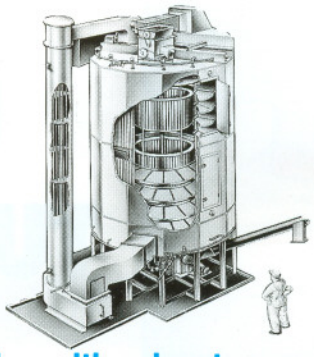


Field-erected units

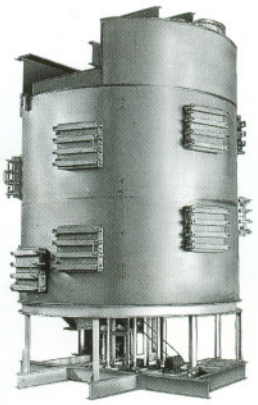
A large 20 ft. diameter field-erected TURBO-Dryer for drying and cooling a flaked material. Dryer sizes range up to 35 ft. diam. x 60 ft. high with evaporative capacity of 25,000 lbs. water/hr. Unique construction avoids massive foundations.



Drying with solvent recovery

Wyssmont is predominant in the field of drying with solvent recovery. Compared with the batch solvent recovery dryers, which they often replace, these systems are safe, economical and continuous, and require almost no operator attention. Their design is built around the special features of the TURBO-Dryer, which is uniquely able to operate at atmospheric pressure with inert gas as the drying medium in a closed system.

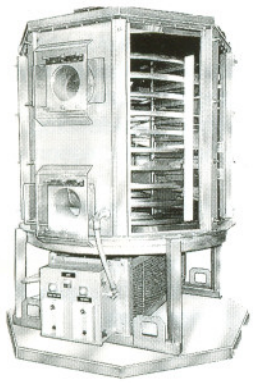
These systems have a reputation for safety and reliability. Many customers with broad experience in drying equipment will consider only Wyssmont systems when drying with solvent recovery.



Environmentally sealed units

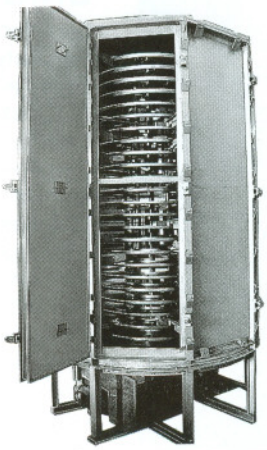
A welded tank design for sealed operation to dry toxic and/or solvent-wet material. Also for gas-solids reactions that need specific time-temperature histories or special atmospheres. The unit offers plug flow movement with gentle transfer to produce a highly uniform product without breakage.

Very low oxygen concentration, continuous self-compensating operation, close control of conditions in zones, and temperatures to 1200°F are features which are built into these units.



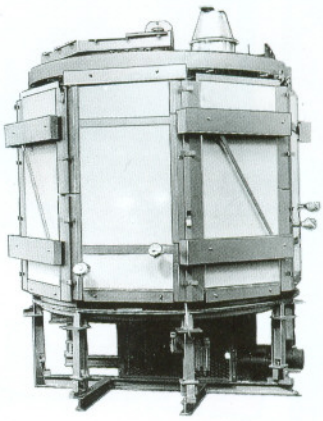
Small units

Suitable for small-scale drying the Model "K" TURBO-Dryer shown with side panels removed, can handle from 25 to 200 lbs./hr. continuously. Measuring 4′ in diameter and 5′ in height, this all stainless steel unit has the same features as the larger units. It can be used for specialty product applications for which batch unit operations including those requiring vacuums are often used; and for in-plant testing in order to confirm product quality and scale-up for larger commerical scale units.



Package units

A "package" TURBO-Dryer shipped completely assembled 24 shelves. Diameter: 6 ft. This unit, operating at 300°F, will dry approximately 150 lbs/hr lbs. of free-drying product from 30% moisture content to 1/2%. Package unit sizes start at approx. 4 ft. diam. x 5 ft. high to 12 ft. diam x 16 ft. high.



Heater or cooler units

If long retention time or high degree of product uniformity are necessary in a heating or cooling application, these units provide a compact, easily operated, reliable answer.

They are especially applicable to heating and cooling very fine powders, with minimum particle size segregation. They are available in designs up to 1200°F.

Where specific time-temperature histories, gentle handling or treatment in special atmospheres are desired, they provide solutions that are specially applicable to the problem.

TEST YOUR MATERIAL

Find out accurately what the TURBO-Dryer® can do for your product.

Our test unit will duplicate the drying conditions of a full scale TURBO-Dryer®.

We can utilize a small sample, 1 to 3 pounds of material, and give you accurate scale-up.

Complete brochures, specialized product sheets, case histories, magazine feature story reprints, and other information is available.

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