Buy universal rapid dryers and more from our comprehensive selection of fluid bed dryers from VJ Ins

Also view our other products like Pharma R&D Tablet Coater and Water Maze.

A fluidized bed dryer or a universal **rapid dryer** is a type of pharmaceutical equipment used in the drying processes of a variety of different products. The **rapid dryer** is often used for drying drugs, powders, granules, tablets, and other items in the pharmaceutical industry. It is designed to be energy efficient as well as maintain the quality of the product throughout the drying process.
A **fbd fluid bed dryer** is commonly used in the pharmaceutical industry because of its ability to dry a wide variety of products quickly and evenly. Additionally, the equipment is easy to use, reliable, and efficient. The clean and sterile environment provided by a fluid bed dryer ensures that the products are safe to use. Fluid bed dryers and universal rapid dryers help manufacturers ensure that their products meet several standards of the industry, while also reducing the time and resources needed to complete the drying process. Rapid dryers have been used for decades in order to ensure the maximum quality and efficiency of the drying process.
VJ Instruments universal **rapid dryer** is used in quality control, sample preparation, and R&D departments. It permits the gentle drying of pharmaceutical bulk materials without localized overheating. Suitable materials can be coarse, fine, crystalline, fibrous, or leafy. The universal **rapid dryer** ensures that the end product is dried, loosened up, and thoroughly mixed in short drying times. With the interval operation, the product in the fluidized bed is mixed even better. Temperature, drying time, and air volume can be set through PLC & HMI and adjusted continuously.

Here are a couple other product lines that we wish to showcase. The equipments and mazes made for animal studies and R&D Equipment of tablet coating machines.

Water Maze for animal studies.
A **water maze** is a behavioral test used to measure spatial learning and memory in rodents, especially rats. It is often used as a tool in research on learning and memory, typically as part

of an animal cognition study. It is also known as the Morris **Water Maze**, named after an American psychologist, Richard F. Morris, who first developed it in 1981.

The **water maze** consists of a large circular tank of water. Within the walls of the maze (water tank) is an escape platform that the rat can climb onto to escape the water. The escape platform is positioned at some distance from the edges of the **water maze** and out of the rat's view. The water is darkened and sometimes contains objects that the rat can use to orient itself and eventually find the platform.

The rat is placed in the tank of water at a starting point that is near the escape platform. It then begins to swim around, looking for the escape platform. Researchers record the time it takes for the rat to find the platform, the paths it takes while exploring the maze, and the performance of the rat in the subsequent trials. The VJ Instruments **water maze** includes software that automatically executes calculations and analyzes all the necessary parameters. The necessary parameters include time spent in each quadrant, trajectory, latency to climb on the platform, and more.

The **water maze** is a useful tool for investigating rat learning and memory. It can help us to understand rat learning strategies and the way the animals orient themselves in the environment.

R&D equpiment: Tablet Coater

A **tablet coater** is a key component of the modern pharmaceutical industry. A **tablet coater** enables the efficient processing and packaging of tablets and other products. Tablet coating extends the shelf life of the tablet and protects it from environmental contamination. The coating improves the barrier properties of the tablet, making it more stable, and less susceptible to humidity-related decomposition. The coating also helps reduce dusting and stickiness and makes the tablets easier to handle during production.

Tablet coaters use different coatings ranging from enteric coatings to film coatings. A **tablet coater** can sometimes help increase the bioavailability of active ingredients in a tablet. This allows a more accurate dose to be dispensed to the patient.

Tablet coaters help save money by increasing production speeds and process efficiency and improving safety and quality control. They also reduce material costs and waste.

In the past, pharmaceutical companies had to manufacture unnecessarily large quantities of test drugs due to the then-existing standards of coating facilities. This was a huge waste of effort and money.

A new machine like the R&D **tablet coater** machine is equipped to handle smaller trial batches of tablets and granules. The R&D **tablet coater** machine is designed to fulfill specific needs with the help of a unique array of smaller coating pan sizes of 4" and 6". This ensures that the quantity of the test batch never exceeds the requirement. The Pharma R&D **tablet coater** machine has an elegant exterior fabricated of SS 304 box with a coating pan supported in a tangential position of 35° to 45°.

Vj Instruments are the best vendors for R&D equipment, behavior instruments and mazes for animal studies, transdermal machines, and Pre Clinical instruments. VJ Instruments is a Company engaged in the production of Scientific Instruments with a focus on the field of Pharmacy and Pre Clinical research. We supply a range of world-class products that comply with quality standards and focus on “ease of use”. Our company is operated by a team of professionals who have a vast experience in the Pharma industry and understand its specific requirements. VJ Instruments continuously carries out the actual manufacturing process, software development, and R&D which helps us understand prevailing market trends, technological advancements, and customer requirements. Visit our website *vjinstruments.com* for more information.