

# Importance of Energy Efficient Dehumidifiers for Drugs and Pharma

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## Abstract

The presence of moisture, even in minute quantities in the production process atmosphere of drugs and pharma products can seriously damage product quality and also cause other problems, which are stated in the article. Therefore very efficient and effective dehumidification of plant production till the final packaging areas are required for which latest dehumidifiers will help.

The Indian pharmaceutical industry is emerging to be a significant player in the global pharmaceutical market. The country is the largest provider of generic medicines across the globe, accounting for 50% of generic supplies to Africa, followed by 40% to the US, and provides 25% of all medicines to the UK.

Rising to prominence as the 'pharmacy of the world,' the country seeks to expand its footprint in the international market. In this mission to provide universal health coverage, India is committed to improving healthcare infrastructure under the G20 presidency. For this, the pharmaceutical industry needs to continuously reinvent and innovate to upgrade manufacturing standards for meeting the highest standards, so that they can produce quality products that conform to the Food and Drug Administration (FDA) specifications.

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Choudhary has been instrumental in playing a pivotal role in steering growth and providing a strong foundation across many organizations of repute. His previous stint and experience with Freudenberg, Marpol, Polygel, L&T, ITW Signode, Shell and Cummins will definitely support Bry-Air scale the next-level growth.



To produce superior quality products, air quality is a determinant factor in the pharmaceutical industry. Even the slightest trace of moisture can account for quality deterioration, initiate organic corrosion and cause biochemical reactions. Moisture provides suitable conditions for the germination of unwanted microorganisms and even meddles with product accuracy. As a result, the supply of moisture-free air becomes a prerequisite throughout the pharmaceutical processes at each stage of processing, manufacturing, storage, research, testing, and packaging.

At the processing level, the materials coming in contact with the moisture become resilient and offer resistance to the various grinding and pulverizing operations. It defies pneumatic conveying from one source to another by clinging to the grinding machine. Also, in tablet compression, humidity causes



Tablet Compression

lumping and caking of powder, resulting in failure of tablet processing. There are also instances of rough, translucent coating of tablets due to moisture. All the factors can cumulatively lead to the revoking of the products from the market and even impact the reputation of the company.

As moisture can damage or create deterioration of pharma products, industry needs to adopt superior dehumidification solutions. The desiccant dehumidifiers come with advanced technology to



Tablet Production Line

achieve a constant RH as low as 1% or even lower throughout the production, processing, storage, and packaging of the products. It ensures that the quality is maintained throughout the shelf life of the products.

Additionally, as the market has become highly competitive over time along with the growing population seeking the best medical and healthcare facilities at an affordable price, it becomes imperative for the industry to ace up the manufacturing with advanced solutions to optimize the output significantly. India with a promising number of more than 3000 pharma companies enjoys a strong network of over 10,500 manufacturing facilities. Looking at the huge volume of production, energy-efficient and cost-effective solutions are being sought by the pharmaceutical industry.

Furthermore, the technology employing novel adsorbents ensures extreme cleanliness and hygiene standards required by the pharmaceutical industry. All the factors together contribute majorly to minimizing downtime of the manufacturing units. The advanced solutions ultimately translate into cost-effective pharmaceutical products that don't compromise on quality.

Employing the latest technology for quality air solutions can guide the roadmap ahead for expanding the offering to new countries while preserving the title of 'pharmacy of the world.'

**Editor's Note:**

*Bry-Air has introduced a new patented P95X Dehumidifier based on new guidelines desiccant technology. It regenerates the desiccant wheel at 95 deg C against the prevailing norm of 140 deg C. It provides significant savings in energy of more than thirty percent over other machines.*

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