

The manufacture of medicines

1. Application

The manufacture of medicines, food supplements and dietary foods is a highly sensitive process.

Adherence to the purity limit values in compliance with the “European Pharmacopoeia” is of paramount importance. This also applies to compressed air. It must safeguard the highest quality standards in accordance with ISO 8573 – 1 because it comes into contact with the individual products.

2. Role of compressed air technology

In everyday operations, compressed air plays a crucial role in creating a vacuum, driving membrane pumps, control valves and machine components, applying films and suspensions by means of spray cans in sugarcoating processes, and cleaning dust separators.

3. Compressed air technology

Compressed air is produced by means of oil-free, water-injected fixed or variable speed compressors.

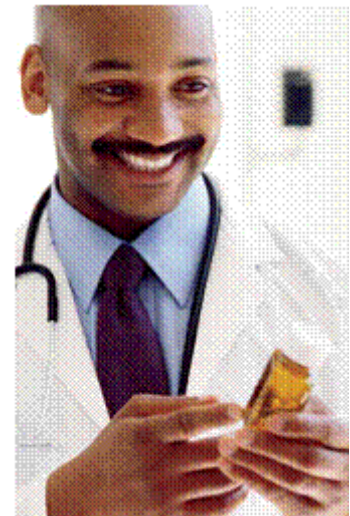
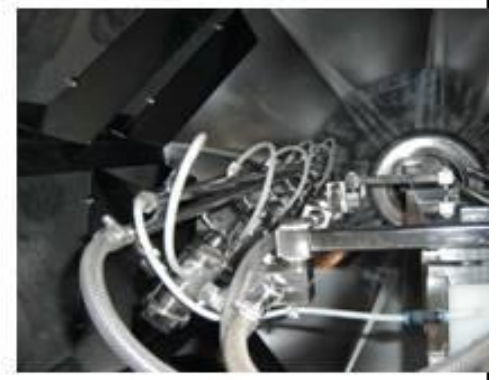
These are controlled by means of a consumption-related, higher order multiple control system.

The compressed air is treated by means of heat-regenerating adsorption dryers, pre-filters and fine filters. In the case of plants that come into contact with medical products, sterile filters are also used. State-of-the-art plant management telemonitors the whole compressed air station from an external control centre. The heat recovery system via an installed channel system has an energy-conserving effect.

4. Energy efficiency

A perfect and well-conceived production process ensures consistently high product quality while minimizing costs. The compressed air supply is continually optimized by using state-of-the-art oil-free compressors, loss-free treatment components and extremely modern control systems. This :

- Reduces the volume of compressed air required by over 15%,
- Avoids the expensive process of eliminating the residual oil content from the compressed air and condensate treatment,
- Incurs huge energy savings.



Example provided by VDMA member companies