CONFECTIONERY



More efficient drying times
Consistent, high product quality
Same production climate all year round

Controlled climate

DST supplies flexible dehumidifiers which can be customized to guarantee exactly the right climate for the production of chocolate and other confectionery. Dry air provides for uniform products all year round, with no risk of stoppages or spoilage.

Chocolate

Fat blooming and sugar blooming are two common problems when manufacturing and storing chocolate. Both kinds of blooming can occur a few hours after production, and during storage if the ambient air is too humid. The relative humidity (RH) should not exceed 60% during production and storage. Using dry air when cooling chocolate products in cooling tunnels prevents condensation from forming on products and the tunnel. This enhances hygiene levels and products do not become sticky or stick to the conveyor belt.

Sugar coating

It is necessary to maintain control over the ambient humidity when sugar coating products. Quality is impaired if the ambient humidity is too high, and products readily stick to one another. During the damp season, the humidity also means that the drying time – and hence also the coating time – is extended. Dehumidification ensures that the same drying time and quality are applicable all year round.

Package

Boxes and stacking trays become stuck on the conveyor belt in the packaging machines if they are damp. The packaging process can be improved by using dry air as this ensures that products do not become stuck on machinery or wrappings.



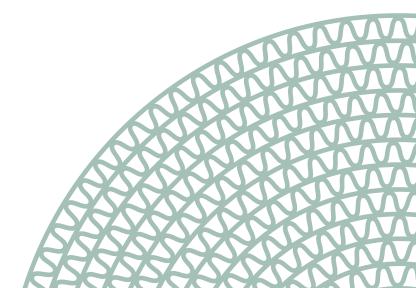


Sugar

Sugar becomes sticky or even dissolves if the ambient humidity is too high. When storing sugar loose or in sacks it is therefore a good idea to control the ambient humidity on the storage premises. Sugar silos should be fed with dry air to protect the head space from condensation.

References

Arla, Brittish Sugar, Cadbury, Cloetta Fazer Suklaa OY, Cykoria S.A. Unilever GmbH, Danisco Sugar, Knorr AG, Kraft Foods, Kraft General Foods, Malaco Leaf Milko, Monkhill, Mars, Mars AG, Nestlé, Norrmejerier, Pontefract, Thayngen.



Example of an installed DST unit **Jämtgott**

DST dehumidifiers at Jämtgott AB enable consistent drying of candy in order to guarantee confectionery of the best quality, and concurrently ensure energy efficient production.

Just outside Östersund in Sweden, you find Jämtgott, a candy factory that started manufacturing confections in 1968. The production is still done in the same way as it was when the factory started, however everything has been streamlined to be able to produce more whilst being energy efficient especially during drying of the candy. After the candy is mixed, it is poured into moulds, where it is dried. The molds are then placed in a warm drying room in order to evaporate moisture from the candy. This requires a controlled climate in order to achieve the best quality.

In the past, the confectionery was dried by placing it in a warm room with ventilation that exuded the moisture. It worked very well but it was quite difficult to dry the candy evenly. When Jämtgott increased their sales, they also needed to be able to increase control over the drying process of the candy. Their consultant came to DST's representative Polair Luftteknik AB for help. The solution offered was a DST dehumidifier that would supply dry air, through ducts installed at floor-level of the drying room. In this way, the dry air would spread upwards through the moulds, and then out via ventilation ducts in the ceilings. This vented air would then be re-circulated to the dehumidifier unit. With this new system, the candy is dried more evenly than before.

The DST dehumidifier installed at Jämtgott has a PLC which makes it easy to communicate with the unit without being physically present. It also allows the unit to be programmed according to different drying cycles depending on the product being produced. As such, Jämtgott AB have total control over the drying conditions for their candy, which enables them sell products of the highest quality.



Confectionery on drying at Jämtgott AB

