

# DO YOU LOVE CANDY?

*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.



*World leaders in dehumidification.*

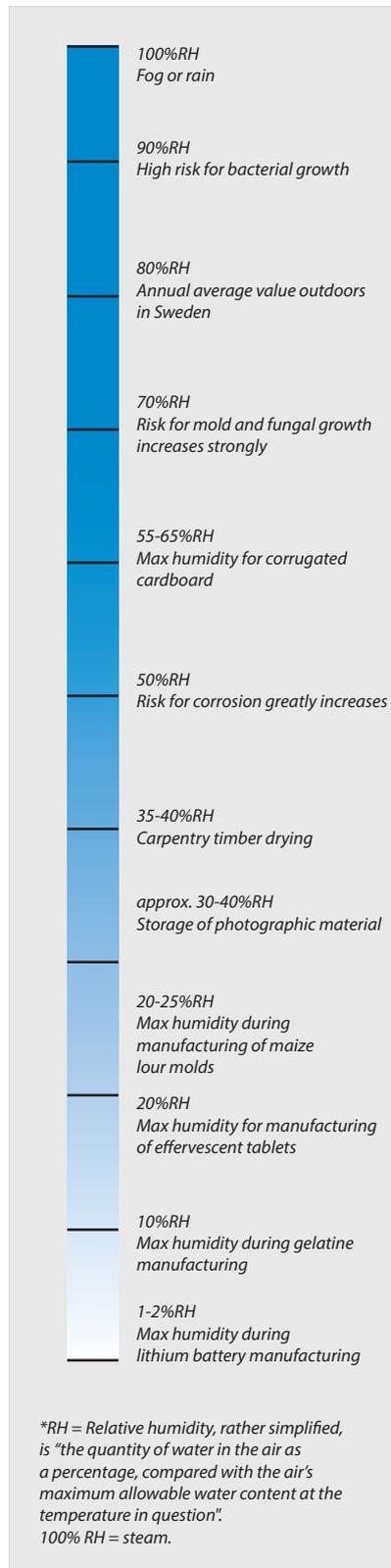
When Jämtgott increased their sales, they also needed to be able to increase control over the drying process of the candy. Their consultant came to DST's representative Polair Lufttechnik AB for help. The solution offered was a DST dehumidifier that would supply dry air, through ducts installed at floor-level 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.



**Candy being dried at Jämtgott AB**

# Facts about humidity



## Relative humidity

The relative humidity is a measure of how much water the air contains. 50% relative humidity means that the air is moisture saturated to half. The relative humidity is affected by the temperature. With an air temperature of +20°C and a humidity of 60%RH, air humidity rises to 100%RH if the air is cooled to 12°C.

## Dew point

The relative humidity in the air increases as the temperature drops. When the relative humidity amounts to 100%, it begins to condense moisture, forming dew. The dew point indicates the temperature at which humidity has risen to 100%.

If the temperature is 20°C and the relative humidity is 40%, the dew point is 6°C. At a temperature of 20°C and an air humidity of 60% the dew point becomes 12°C. The dew point in the outdoor air is lowest during the winter and then rises when it gets warmer.

*Seibu Giken DST produces and sells high-quality sorption dehumidifiers. With more than 30 years of experience are the dehumidifiers sold by over 45 representatives around the world as well as through the subsidiaries DST America, DST China and DST Poland.*

*What distinguishes the DST dehumidifiers is the rotor, in every DST dehumidifier there is a D-MAX rotor from Seibu Giken Co. Japan. Who was the first in the world to manufacture silica gel rotors and since 1984 has been the world leader in this technology. In a dehumidifier, the quality of the rotor is very important as it determines the dehumidifier capacity and technical life. After 10 years, the D-MAX rotors have more than 90% of their original capacity remaining.*