

AIRWATERGREEN AT 3C- PRODUCTION

Reference case Industry

BACKGROUND

Every day, approximately 2,000 window isolation patches are delivered from 3C-Production. The window isolation is a Swedish innovation using Bitumen, which makes it more environmentally friendly than ordinary foam. As a step in the production, the isolation patches are dried. Previously, the drying room was heated to drive evaporation, which consumed large amounts of energy. Since our goal is to have a completely sustainable factory in terms of energy consumption, 3C is constantly looking for alternative solutions. Self-sufficiency in electricity and no carbon dioxide emissions is the goal!



3C factory

WHAT PROBLEMS DID THE AIRWATERGREEN DEHUMIDIFIER SOLVE?

A NEXT240 was installed in the drying room where it captures the moisture emitted from the isolation material. Production is made in batches where drying takes place for about 5 days. As the largest amount of moisture is released at the beginning of the drying process, the NEXT turbo effect has come to a great advantage. The machine can then for a period reduce even more moisture from the air than with nominal capacity.

To drive the evaporation, the NEXT dehumidifier is set to work against a really low RH level, below 40%. Energy consumption has been able to be significantly reduced in two ways. On the one hand, NEXT240 is very energy efficient, and the heating of the room has been minimized.



QUICK FACTS

Product: 1 NEXT240 unit

Installation year: March 2022

Purpose: To reduce the energy consumption during the drying process in the production of window gears.

HAVE YOU TESTED OTHER SIMILAR PRODUCTS / SOLUTIONS?

Previously, two major cold condensing dehumidifiers and heating were used. The drying worked but consumed large amounts of energy.

« The goal was to become completely self-sufficient in energy and to have no carbon dioxide emissions. Today we have achieved this goal and we are extremely proud of it! Seeing the solar panels outside the factory every day makes me so happy! The idea is also to pave the way for other factories to take the step too. Everyone can do something! My contribution is to encourage others, so I see it! »

Johan Strömberg, CEO and founder of 3C

BENEFITS OF USING AWG'S PRODUCTS VS DO NOTHING?

Drying of the isolation patches must take place during the production process so the question was which technology was the most energy efficient and with the right capacity. After a short time of tuning our NEXT240, we have been able to reduce the heating while maintaining capacity and cycle time during the drying.