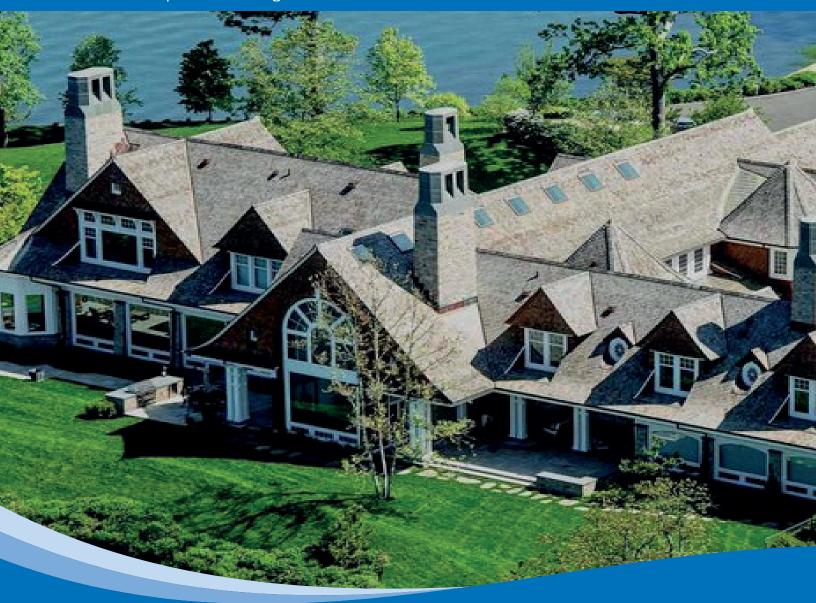
CASE STUDY | Manufacturing



Luxury window and door manufacturer uses Condair humidifiers to ensure they produce flawless products

DR Series Humidifiers

- Eliminate dimensional changes of wood
- Reduce waste and defects
- Improve product quality and consistency
- Diminish airborne dust and particle suspension









humidity control opens the door to numerous benefits for luxury manufacturer Fenêtres MQ

Project Overview





Customer: Fenêtres MQ

Location: Ste-Agathe-des-Monts, QC

Contractor: Mécanique du bâtiment MC2

Claude Ménard

Condair Agent: Qualite Air Totale Website: www.qualiteairtotale.com

Application: Manufacturing Product: DR Series Humidifier

Benefits of Humidifying:

- Eliminate dimensional changes of wood
- Reduce waste and defects
- Improve product quality and consistency
- Diminish airborne dust and particle suspension

Challenge

Founded in 1975, Fenêtres MQ has built a reputation for creating luxury custom engineered windows and doors for the most demanding criteria. Their manufacturing facility in Ste-Agathe, Quebec, sources exceptional materials that require a precise environment to maintain the final product quality expected by their customers.

Claude Ménard, the president of Mécanique du bâtiment MC2 was the mechanical contractor that initiated conversations with Fenêtres MQ to look at the manufacturing challenges they needed to overcome and what solutions would be best when it came to their indoor air quality.

"Fenêtres MQ was in need of maintaining their indoor relative humidity between 40-45% RH in order to prevent the wood used in their products from splitting", explained Mr. Ménard.

MC2 worked closely with Fenêtres MQ to find a reliable solution to maintain the required humidity levels and to solve some of the challenges their facility had. A section of the manufacturing facility of Fenêtres MQ in Ste-Agathe is newer but other areas of the original 50 year old structure includes



extremely low ceiling heights which can be a challenge when looking for the perfect humidification solution. Fenêtres MQ was also looking for a humidification solution that could offer an energy efficient cooling effect for areas of their facility that were causing discomfort due to elevated temperatures.

Solution

The facility already had a direct water injected humidification system which became insufficient with the installation of a new outdoor air compensation systems.

After careful consideration and consulting with HVAC distributor Qualite Air Total (QAT), a Condair ML Series, Direct Room Humidification system was selected and installed.

The ML Series system is comprised of a high pressure pumpstation and ML Princess ceiling mounted high pressure humidifiers. The ML Princess units are ideal for use in production areas, warehouses and fit well into spaces with low ceiling heights such as the Fenêtres MQ manufacturing space. The ML Princess humidifier has an integrated fan that distributes the humidification mist uniformly in a 360-degree fashion.

"The new humidification system by Condair effectively and accurately maintains the desired humidity level."

Oliver Rochon, Manager Fenêtres MO

Results

The system has only been running for a short time but already the results are being felt.

"So far, the new humidification system effectively and accurately maintains the desired humidity level", said Oliver Rochon, a Manager at Fenêtres MQ.

Mr. Ménard added, "I am glad to see how well the volume of water injected in the ambient air by the humidification system (capacity of 450 lbs/hr) is absorbed. The humidity level is excellent."



Why Humidification is Important

For manufacturing environments

- Minimizes equipment downtime.
- Reduces waste and product defects.
- Optimizes application and drying of paints, glues and lamination.
- Protect electronics from ESD.
- Increases product quality and consistency.
- Improves health and comfort of employees.
- Decreases employee absenteeism.

For the production and storage of wood products

- Maintains equilibrium moisture content (EMC)
- Minimizes dimensional changes and splitting of wood.
- Diminishes airborne dust and particle suspension.
- Reduces the risk of dust fires.
- Improves product quality and consistency.

About Condair condair.com

Condair is the industry leader in the manufacturing of humidification, dehumidification and evaporative cooling solutions for a wide variety of commercial and industrial applications. We draw upon our extensive experience to develop an ever growing range of products manufactured to our stringent ISO 9001:2019 certified quality standards that will provide our customers with maximum reliability, minimum maintenance and a choice of energy sources.

About QAT qualiteairtotale.com



Since its beginning in 1994, Qualité Air Totale (QAT) has focused on the HVAC sector. QAT is a company active in the supply of ventilation and air handling equipment to contractors, engineers for the commercial, institutional and industrial sectors. QAT has acquired a solid reputation in this sector thanks to the quality of its products and its know-how.

