

# PROTECTED WOOD

Optimum humidity in the wood industry

The NorDan Group is one of the leading manufacturers of wooden windows and doors. High-pressure air humidification ensures quality at all stages of production at the Group's Wolsztyn site.

The Polish site in Wolsztyn has been one of the NorDan Group's largest production facilities since 2006: over 200 members of staff produce 100.000 wooden windows there for Scandinavia and the United Kingdom each year.



NorDan in Wolsztyn, Poland



### Air humidification practice

## PROTECTED WOOD

### OPTIMUM HUMIDITY IN THE WOOD INDUSTRY

#### **Quality control**

High quality requirements apply at NorDan both for finished products and for the whole production process: top priority is given to energy efficiency, safety and environmental protection. "Stable processes and production conditions are enormously important for us. It is therefore essential to have constant, optimal humidity", explains the chief engineer, Maciej Sosiński. NorDan uses a high-pressure air humidification system in order to ensure relative air humidity between 50% and 60% throughout the year. This protects the frames of the wooden windows from drying out and prevents damage due to distortion and cracking.

#### **Repeatedly expanded**

The high-pressure system ML Princess used is particularly well-suited to applications in high halls and involving large quantities of humidity. Its low energy consumption and flexible expansion options were crucial for NorDan when it came to choosing the right system. Numerous expansions to the system now mean that the air is humidified in all production areas, from cutting and



NorDan produces 100.000 windows each year

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#### System schematic



Facts and figures	
Humidification:	22 humidifier type ML Princess 2
High-pressure system:	1 MLP 800
Area:	Whole production facility, Room volume total 10,000 m <sup>2</sup> Height 6 m
Humidity requirement:	50–60% relative humidity
Installation:	2006 (subsequently expanded numerous times)

painting, through to final assembly and the storage. "We are very happy with the air humidification and also decided to install a ML system for our new factory", says Maciej Sosiński, delighted.

#### **Optimal humidity protects wood against:**

- Distortion and warping
- Unevenness and surface cracks
- Frame corners springing open
- Rupturing veneer connections
- Adhesion problems when using water-soluble paints



The ML Princess system is energy-efficient and easy to expand



For Maciej Sosiński, optimal air humidity is essential

