

CASE HISTORY

Latest case history Aeris executed by one of the world's leading **manufactures of fiber disc and flap disc sanders**



The air conditioning system installed, **has been dimensioned** considering the place of installation, dimensions of the department to be treated, teamwork present and especially production machinery.

The system guarantees the maintenance of absolute humidity conditions equal to 8.65 g/kg in the temperature range between 18°C and 27°C, with a tolerance of max + 0.5 g/kg.

An **air handling unit has been installed inside the production department**, which includes an air mixing section (minimum external air to guarantee the correct air change), an air filtration section, two heating coils and cooling, a humidification section and a series of fans, electronically driven, to send the air in the department.

The treated air is distributed through an Induction Humidification System, patented by AERIS, which guarantees a great homogenization of the thermo-hygrometric conditions into the room, in every point of it.

An accurate mathematical model defined the laser drilling made in the ducts in order to obtain the launch depth and the desired mixing effect.

The humidification system is also an integral part of the same patent, specifically designed to control humidity values with accurate ranges.

The system installed has the peculiarity to be an **adiabatic evaporation system with very low energy consumption**, unique in the sector to guarantee a level of health that complies with the strict guidelines of the Regulation **VDI 6022**.

The system is managed by an **accurate software** that uses Siemens industrial standard platform; the operation is at variable capacity, fans, humidification pump, thermal fluid valves are continuously controlled by the software which, connected to the company network, allows **remote controls** from each PC present in the company or, by remote control, external to it.

Aeris provides the **remote-control service** for each of its Digitron systems, always free of charge for **the complete life cycle of the system**.

***Discover all the advantages of AERIS integrated solutions** for the energy efficiency and ecological sustainability of your company!*