

CONFIGURATOR FUNCTIONS

The OneAir configurator is a tool designed to support the design of new systems with high induction ducts or for the verification of the dimensions already performed.

In a clear and simple way, the configurator will suggest the optimal data for the system and / or return a verification of the existing ones, giving autonomy to the user and allowing him to proceed with the subsequent phases of the design with the peace of mind of a correct sizing.

DESIGN SUPPORT

By entering only the flow, pressure and shape data, the configurator will automatically return the suggested values for the section under consideration. This function can be useful for sizing a new plant.

Example:

Let's assume an environment of 50x20x7m (volume: 7,000m³) where 2 volumes/hour are required, then a total air flow 14,000m³ / h. By entering 6m as the installation height, the configurator returns a launch of 12m per side and a pressure at the entrance of the duct of 190Pa. The diffuser is therefore able to treat a 24m wide area (in addition to this value more in-depth studies will be needed to ensure proper operation) so it is possible to cover the 20m wide of the environment with a single line of 14,000m³ / h. Finally, by inserting the flow rate of the diffuser into the configurator I obtain the suggested diameter of Ø850mm, corresponding to an internal speed of 6.85m/s. The diffusion system will therefore be composed of: n°1 diffuser Ø850mm long 45m positioned at 6m altitude and powered with 14,000m³/h at 190Pa.

DATA VERIFICATION

The configurator can also be used to verify a sizing already performed.

Once the various fields have been filled in, the configurator performs an automatic check and returns a report that allows you to understand if the sizing is correct, if it requires more in-depth checks or if the data are not compatible with the correct functioning of the system.

- All fields are marked with a green check: the data entered are correct, the sizing is correct
- One or more fields have yellow check and the others green: the data marked by the yellow check have critical issues, the sizing could be correct but requires additional verification by OneAir
- One or more fields have a red check: the data marked with the red check have values that are not compatible with the correct functioning of the system, the sizing is incorrect.