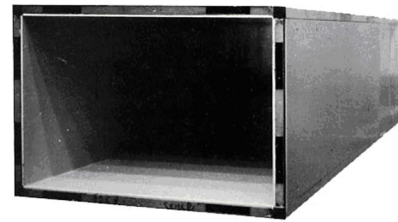
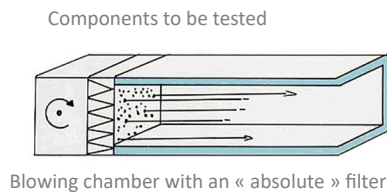


Particle emission checking

Aim : To check that the products used are not a source of contamination in a controlled dust room.

Principle

Measurement of particles emitted by DAGARD partitions and connections under the influence of a laminar flow.



Tunnel made of Dagard panels before test
(length 6 m 19.68')

Results

Beginning of measurements after only 12 hours of operation.

Only 23 particles over $0,5 \mu\text{m}$ 0.019 mil were observed per m^3 of air (i.e. fewer than 0,6 particles per cubic foot).
No particle over $1,4 \mu\text{m}$ 0.055 mil was detected.

Example

Transposed to an actual 25m^2 269 ft^2 dust-controlled room, 3 meters $9.84'$ high, with an air renewal rate of 300 (flow rate of $6.253/\text{s}$), the concentration in the room would reach 23 particles per m^3 . At this particle level the cleanliness class is ISO 3 according to ISO 14644-1.

Conclusion

Despite very severe experimental conditions :

- the results were validated after only 12 hours of operation
- air speed 4 times higher than for normal working conditions.

=> The number of particles produced is 170 times smaller than tolerated by the best official cleanliness categories.

Dagard products are completely compatible with the most demanding controlled atmosphere rooms.

Test conducted by CETIAT (Centre Technique des Industries Aérauliques et Thermiques) CR N° 869092.