

MAY, 2010.

METRO AND TUNNEL SAFETY CERTIFICATION- 400°C @ 2 HOURS

In the past, “Ventilation Systems” installed in tunnels / metros only renovated internal air. With the increase in the number of accidents occurred in the last few years in highway, metro, and railway tunnels, with an elevated number of injured and dead; a Ventilation System aiming user safety needed to be redesigned.

The major concern became the occurrence of incidents and accidents inside such structure, and in this case the power of the fire is the main factor to dimension “Ventilation Systems”.

With High Temperature Operation Test Certificates issued by international entities, ATRIC, representative of

Fläkt Woods in Brazil, ensures their products / equipment in compliance with a minimum temperature of 250°C of two (2) hours, and today with the concern of international entities to ensure more user safety, up to 400°C for 2 hours are required.

With that in mind, Fläkt Woods has been developing fan tests at 400°C for 2 hours, being the only certified axial fan manufacturer company in the world able to resist to such temperature.

With this purpose, Fläkt has recently obtained the highest certification degree at 400°C for 2 hours according to

standards EN 12101-3 and ISO 21927-3.

The fans tested at 400°C for 2 hours were:

D = 2,240 mm

P = 1 MW (ABB motor)

D = 2,240 mm

P = 355 kW (WEG motor)

Rotation = 1,500 rpm

Fans tested and certified are of the unidirectional, totally reversible (100%), horizontal, and vertical types, including models with the anti-stall device (which eliminates the risk of pumping).



Undergrounds Garages



Highway
Tunnels



High Temperature
Test

Train / Metro
Station



Certification