

# Fläkt Woods solution chosen for the new Metro Line in Milan, Italy



Fläkt Woods has long been associated with supplying packaged ventilation systems for the Milan metro. Ventilation rooms for stations on Line 2 & 3 and the Milan railway link have all been supplied with Fläkt Woods axial flow fans. Now the order has been obtained to supply fans for yet another line.

## FACTS

**Customer:**  
Milan Metro, Italy

**Need:**  
Efficient solution for ventilation and emergency smoke extraction.

**Solution:**  
47 reversible axial flow fans, diffusers, silencers, dampers and inertia base frames.



# The volume flows range from 40,000 to 230,000 m<sup>3</sup>/hour

Fläkt Woods has long been associated with supplying packaged ventilation systems for the Milan metro. Ventilation rooms for stations on Line 2, and Line 3 (Line 4 still to be built) and the Milan railway link have all been supplied with Fläkt Woods axial flow fans and now the order has been obtained to supply fans for the new Line 5.

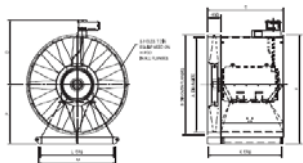
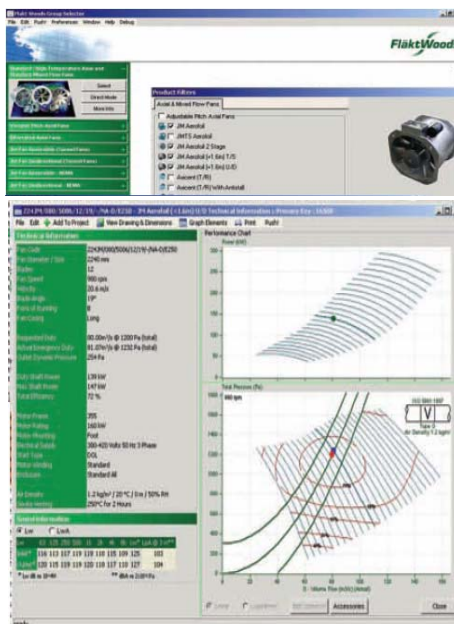


This new line which will connect Garibaldi railway station to Bignami will consist of 9 stations and is scheduled to open between 2011 (Bignami-Zara) and 2012 (Zara-Porta Garibaldi).

The new order comprises 47 truly reversible axial flow fans with diameters between 1000 mm and 2000 mm. In each station and tunnel shaft 2 fans will be installed in parallel. Fläkt Woods S.p.A. will supply in addition to the fans, diffusers, silencers, dampers and inertia base frames.

The fans all have 4 pole motors suitable for inverter control with motor powers between 15 kW and 142 kW and are suitable for operation in emergency for smoke extract at a temperature of 250°C/2h. Volume flows range from 230,000 m<sup>3</sup>/h in the tunnel ventilation shafts and between 40,000 m<sup>3</sup>/h and 200,000 m<sup>3</sup>/h in the stations with static pressures between 400 and 1100 Pa.

The metro will use a driverless system, with automated controlled trains capable of carrying up to 440 passengers. A train is envisaged every 3 minutes for an estimated 8700 passengers an hour. All trains are equipped with rubber wheels, a feature contributing to higher speeds, lower braking distances and less vibration than on steel railway lines



## Axial Fans

Fläkt Woods offers a wide range of axial flow fans for general air movement and special applications such as emergency high temperature smoke extract and pressurization. We also have ATEX fans for explosive atmospheres and multistage options for increased pressure development.

## Fläkt Woods Group

Fläkt Woods is a global company providing solutions for ventilation and air treatment for buildings as well as fan solutions for Industry and Infrastructure applications.

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