Case study 718

Ventilation rental keeps transport project on schedule

During the summer of 2016, Andrews Ventilation was asked to provide some temporary equipment to assist with a large tunnel digging project in Amsterdam, Netherlands. The tunnel was required to accommodate a new underground train line connecting the northern and southern areas of the city. Due to be completed in 2018, the project was progressing well until some concerns were raised about the quality of air present in the tunnel itself.

The safety of staff was of course a priority for our client and as such, they closed the site temporarily until an appropriate solution was found. At this stage, an Andrews specialist was sent to conduct an assessment of the working area and propose a suitable ventilation hire system off the back of his findings. Given the depth and length of the tunnel, as well as the constant presence of heavy machinery and tools being used inside, the potential for toxic gases and exhaust fumes to linger was extremely serious.

Our local expert proposed the delivery of two FV1800 extraction fans to operate alongside ten smaller FV300 units. The FV300s were deployed throughout the tunnel, with each unit driving the polluted air towards the FV1800s. The high capacity FV1800s then pushed the polluted air through the remaining part of the tunnel where it was filtered and any contaminants removed before being discharged to the open air.

The client was extremely satisfied with our rapid response to the problem which ensured a potentially dangerous environment remained safe for technicians located within the tunnel.

Air flow (max) 38,000 m3/h
Power supply 415 V 3 ph 50 Hz Run 28 A
Plug type BS4343 3 ph 5 pin 15 V 63 A
Generator size 30 kVA
Duct size Inlet 600 mm Outlet 600 mm
Noise level 80 dBA @ 1 metre
Weight 1,110 kg
Dimensions (L x W x H) 2,208 x 2,090 x 2,005 mm
Control Manual
Average power consumption 11.6 kW/h