

# ICONIC MAASTUNNEL EQUIPPED WITH INNOVATIVE NOVENCO JET FANS



## RE-BUILD THE MONUMENT

The Maastunnel is a monumental tunnel in the heart of Rotterdam. Construction started in 1937 and having opened in 1942. It is the oldest tunnel in the Netherlands and passes under the Nieuwe Maas river and is located west of the centre of Rotterdam as a part of the Rotterdam Tunnel Traverse.

The closed section of the tunnel is 1,070 metres long and it has two tubes, each with two lanes. There is also a separate tube for cyclists and one for pedestrians.

The recent overhaul and upgrade of the tunnel involved both structural and technical aspects, amongst which a major alteration of the tunnel ventilation.

The importance and complexity of the job to preserve the monument was further

stressed by new regulations. This entailed implementation of a longitudinal ventilation system to create safe conditions for the evacuation of people in the event of a tunnel fire and to provide fire brigades with smoke-free attack routes.

## RELIABILITY FOR LIFE SAFETY

NOVENCO Building & Industry supplied and installed tunnel fans firstly as a temporary measure during the construction phase and subsequently also for permanent use. The installation consists of NOVENCO's round tunnel fans type AUR 1250 and rectangular fans type ARC 710, which are specially designed, space-saving jet fans for tunnel profiles with minimal available installation height. In conditions where installation space for tunnel jet fans is

limited, the NOVENCO rectangular fans play an essential role when designing ventilation and smoke control solutions. And last but not least, the rectangular range of tunnel jet fans provide a lower sound level, which ensures better conditions and driving comfort in the tunnels.

Both installed tunnel jet fan types are well-known for an uncompromising quality and more importantly, reliable in case of fire. The re-opening of the Maastunnel after two years of reconstruction and renovation aroused a lot of interest around. As it was stated in the Dutch newspaper AD: 'The Maastunnel passed its final exams. In case of fire, there will occur a storm.' And in this case the storm is guaranteed by NOVENCO's reliable jet fans.

# ICONIC MAASTUNNEL EQUIPPED WITH INNOVATIVE NOVENCO JET FANS

### EQUIPMENT DELIVERY

The system supplied and installed by NOVENCO Building & Industry is a mechanical ventilation system which executed as a longitudinal ventilation and ventilates in traffic direction. The ventilation system is dimensioned for pollution ventilation, and guarantees effective ventilation and smoke control in case of a fire. The ventilation system consists of: 9 pcs round NOVENCO AUR 1250 and 5 pcs rectangular NOVENCO AUC 710 tunnel jet fans.

### FACTS

- MAASTUNNEL, LOCATION ROTTERDAM S103, CONTINUES UNDER NIEUWE MAAS
- LENGTH OF CLOSED SECTION, 1070 M WIDTH, 24,77 M TRAFFIC LANES, 2 × 2
- CONSTRUCTION PERIOD, 1937 - 1942
- WORLD'S FIRST IMMERSED TUNNEL



One of the Maastunnel entrances



View through enormous NOVENCO tunnel jet fan



Installation works