

*The trusted name in ventilation systems
for underground environments*



Zitrón

- *Founded in 1963*
- *Headquartered in Spain*
- *A passion for design, innovation, quality and service*
- *Chosen for many of the world's signature tunnel projects*





Mexico

Chile

Spain

Netherlands

S. Africa

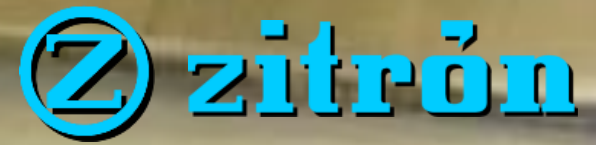
Turkey

Russia

India

Australia

*An expanding international presence
serving over 50 markets from 9 production hubs*

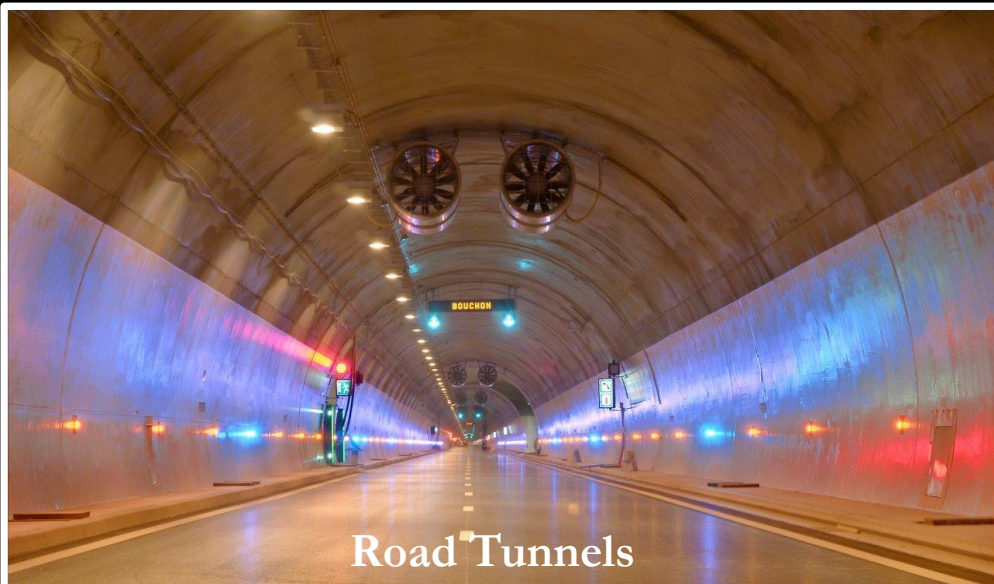




The name synonymous with
Design - Innovation - Quality - Reliability



Railway Tunnels



Road Tunnels



Mine Tunnels

zitrón *The ventilation systems supplier for the world's major metro projects*



Madrid - Barcelona - Valencia - Malaga



London



Sydney



Sao Paulo - Rio de Janeiro - Brasilia



Vienna



Lausanne



Marseille - Lyon - Toulouse - Rennes



Lisbon



Munich



Istanbul - Ankara - Izmir



Doha



Taipei



Montreal - Ottawa



Algiers



Cairo



Rome - Naples



Kiev



Moscow



Athens - Piraeus



Santiago



Singapore



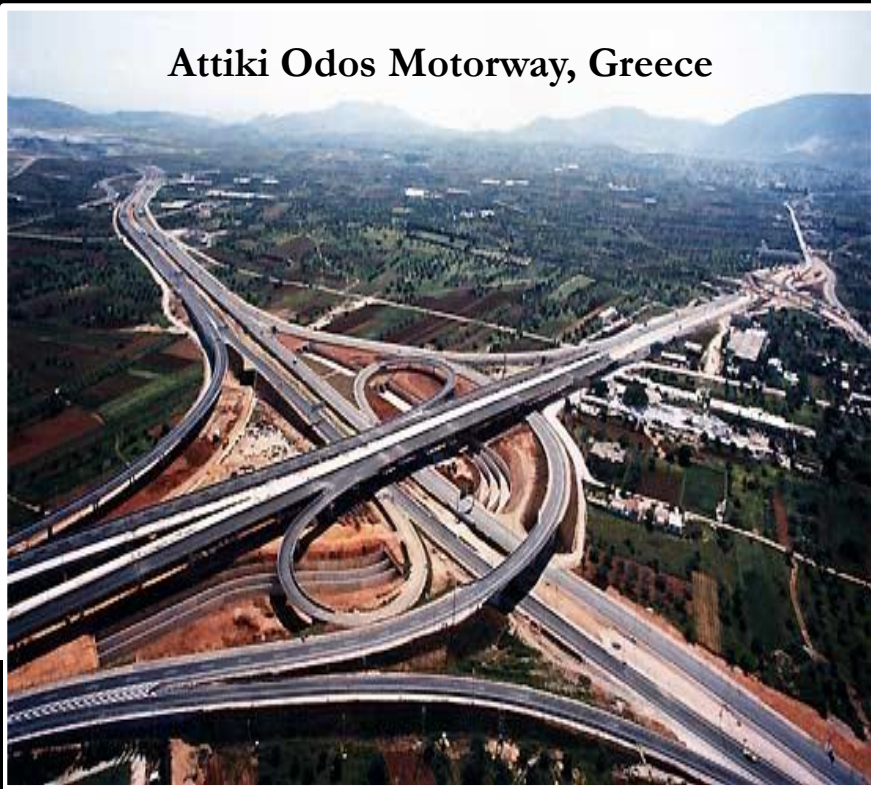
Santo Domingo



Buenos Aires



Helsinki



Attiki Odos Motorway, Greece

Zitrón *Chosen supplier for the world's major underground road projects*



Marina Coastal Expressway, Singapore



Dugald River Mine – Mineral Metals Group



Pajingo Mine – Evolution Mining

Zitron *The ventilation systems supplier for the world's underground mine projects*



Kibali Mine - Randgold



Rudnik 4 Mine - Berezniki



Prominent Hill – OZ Minerals

Committed to Delivering Cost Savings



*Supplying
Ventilation On Demand*

A 3D CAD model of the cooling tower shown in the top-left image. The model is rendered in a wireframe style with various colored lines (red, yellow, green, blue) representing airflow patterns or sensor locations. The tower is mounted on a green base.

OVERVIEW SLD FAN SERVICES CONFIG LOG IN FAULT RESET

OVERVIEW

Temperature	22.0 °C
22.7 °C	22.0 °C
22.8 °C	22.8 °C
22.8 °C	22.8 °C

Pressure

0.0 mbar	0.0 mbar
0.0 mbar	0.0 mbar

Flow

0.00 m³/s	0.00 m³/s
0.00 m³/s	0.00 m³/s

READY RUN STOP

Remote Manual

Fan

- Control
- Start
- Stop
- Lock
- Unlock
- Emergency Stop

Automatic Start

- On
- Off
- Lock
- Unlock
- Emergency Stop

STATUS: OFFLINE

OVERVIEW SLD FAN SERVICES CONFIG LOG IN FAULT RESET

FAN

Flow & Temp. 01	Flow & Temp. 02	Flow & Temp. 03	Fan Speed
22.0 °C	22.0 °C	22.0 °C	2 RPM
22.7 °C	22.7 °C	22.7 °C	2 RPM
22.8 °C	22.8 °C	22.8 °C	2 RPM
0.0 m³/s	0.0 m³/s	0.0 m³/s	0.0 RPM

STATUS

Fan Ready	Manual	Fan Start
Fan Running	Manual Stop	Fan Stop
Fan Alarmed	Manual Start	Fan Alarm On
Automatic Start On	Manual Speed	Stop Fan
Automatic Start Off	Manual Stop	Starting Error

RUN STATUS

Run	Stop	Start	Stop	Reset	Emergency Stop
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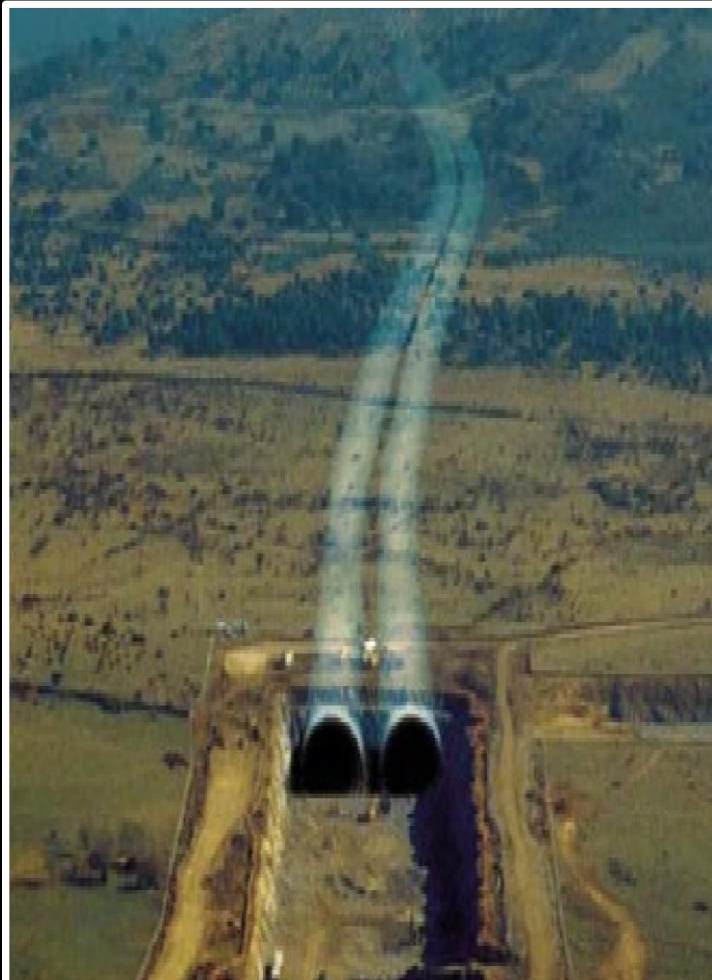
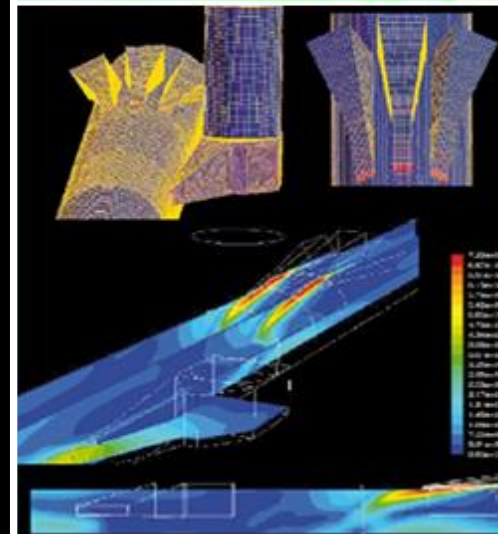
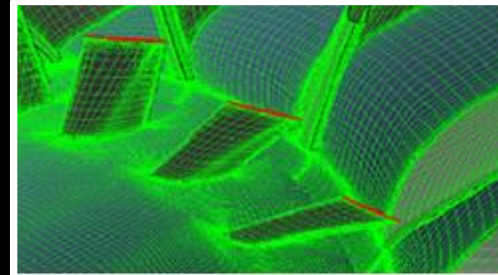
STATUS: OFFLINE

Improved System Reliability

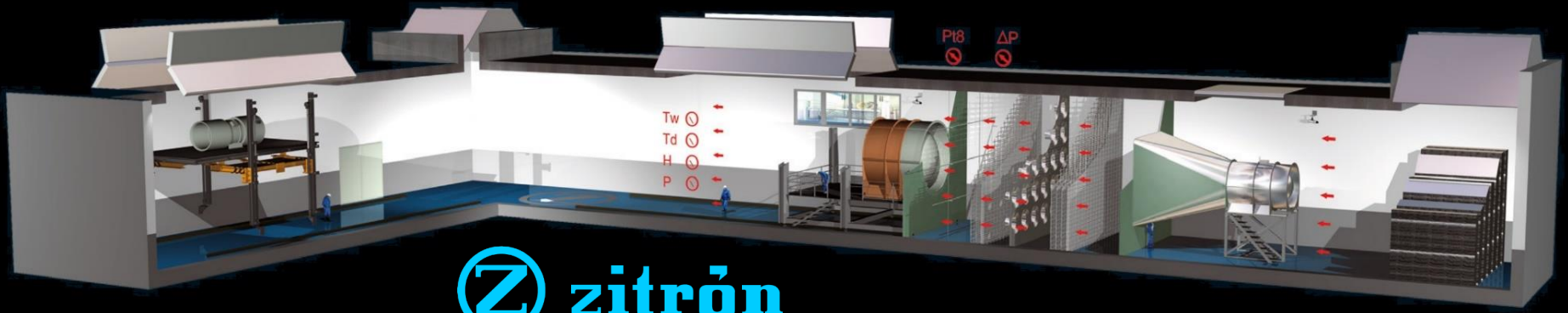


The Guadarrama Tunnels, Spain (5th-largest tunnels in the world)

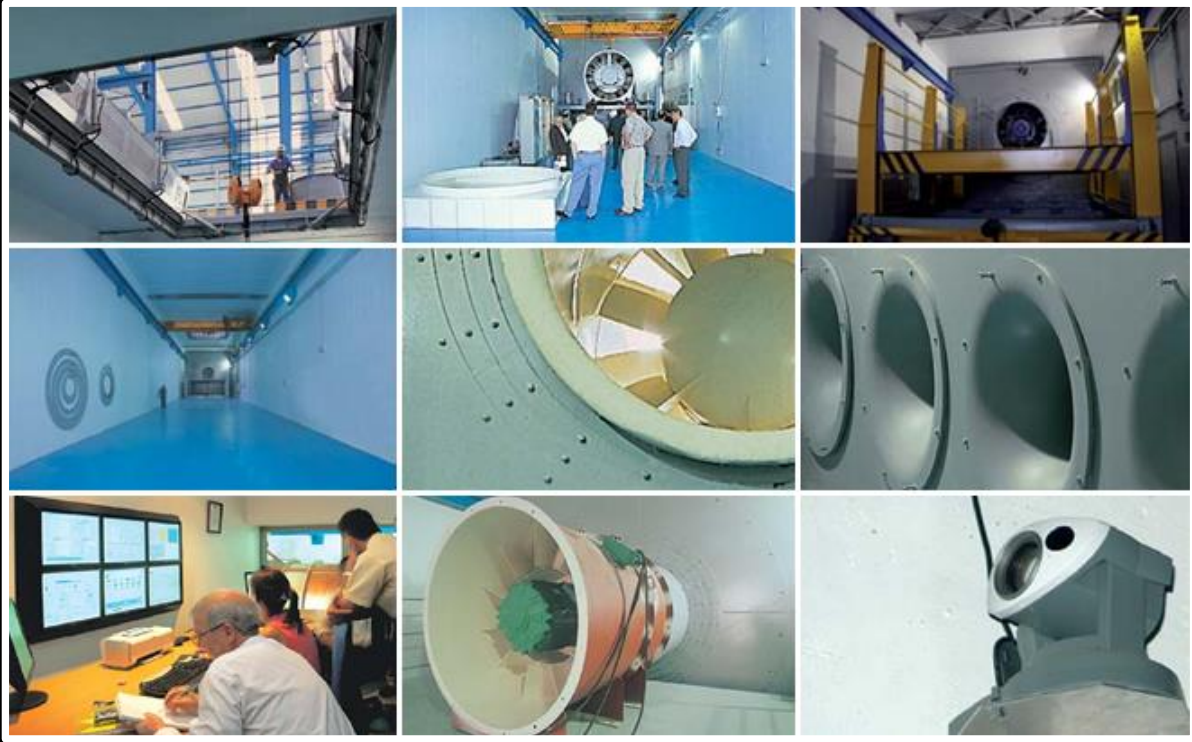
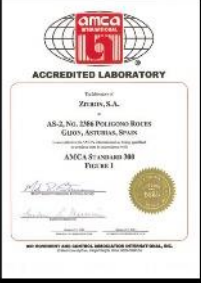
- 2 Twin tunnels of 28 kms each
- No intermediate shafts
- Saccardo nozzle system
- Cross passages at 250 m



The Zitrón Test Tunnel : An investment in design excellence and ongoing innovation



Ensuring tailored and proven solutions that benefit clients





ZITRÓN

Design - Innovation - Quality - Reliability

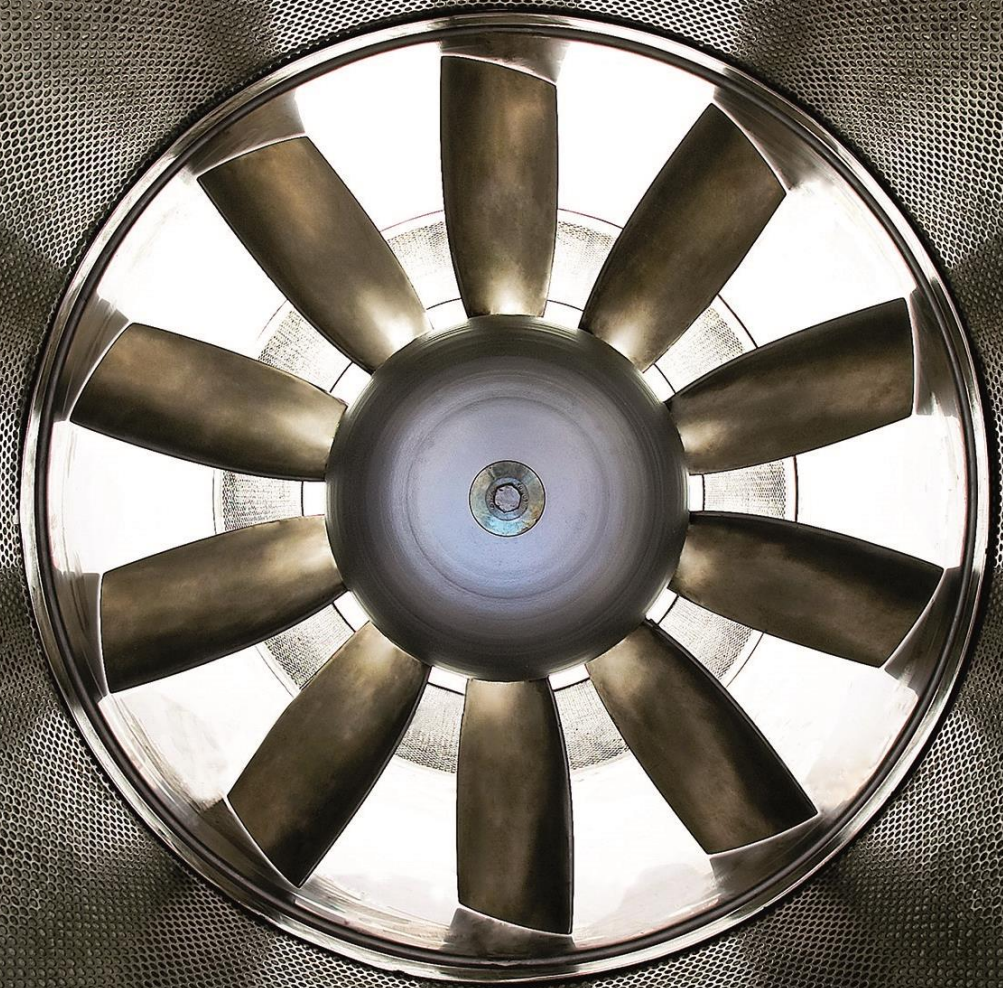


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