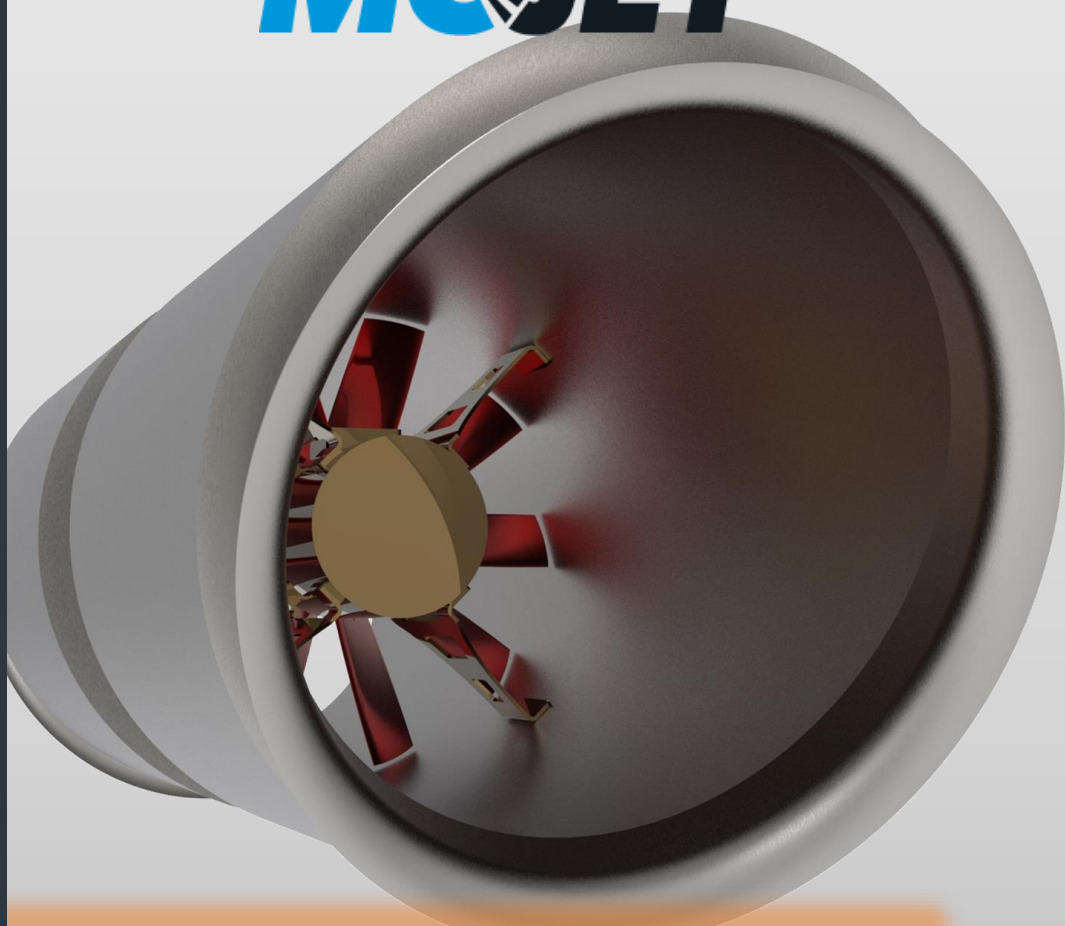




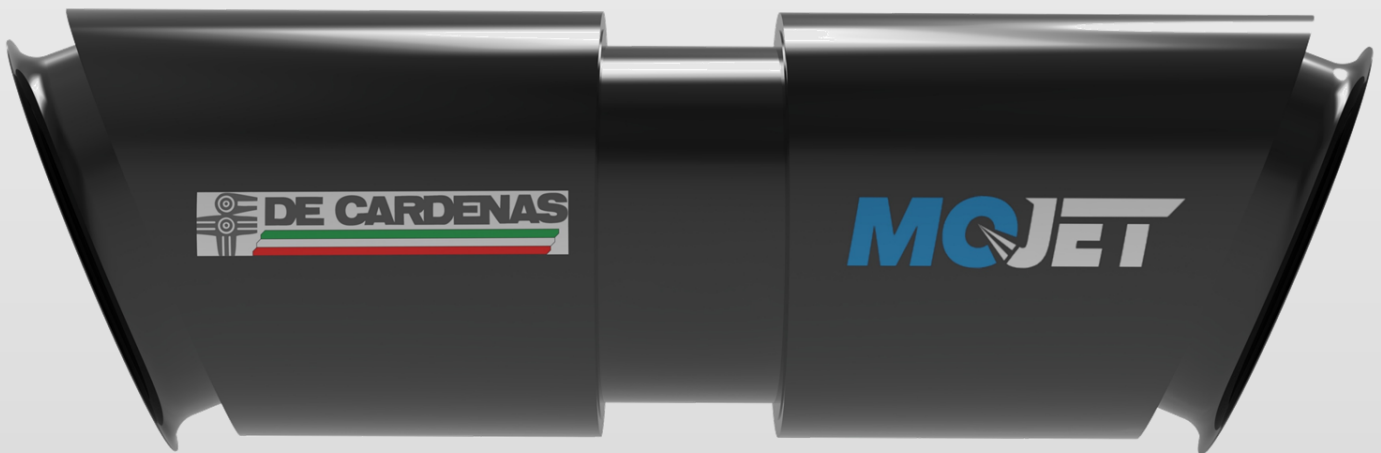
DE CARDENAS
MCJET



JET FANS DMJ

A company of Boldrocchi Group

GENERAL INFORMATION



<https://mojet.global/de-cardenas-fans-service-srl/>

HOW THE MOJET® WORKS?

Reducing the Coanda effect

The discharged jet is turned away from the tunnel surfaces, which significantly reduces the proportion of thrust lost due to aerodynamic friction. The MoJet® achieves this by using an inclined trailing edge, and a bellmouth design which improves the flow conditions at the inlet side, while acting as a deflector on the outlet side.

Static pressure recovery

downstream of the fan (due to an increase in silencer cross-sectional area). This means that more thrust is generated using the static pressure at the outlet (which is a reversible, efficient process) rather than the discharge velocity (an irreversible, inefficient process).

Increased mass flowrate

through the fan (due to reduced inlet and outlet pressure drops). The pressure drops at the inlet and outlet are reduced due to the larger cross-sectional areas compared to conventional jet fans.

Confining effects of the tunnel soffit on the silencer inlet are reduced because the silencer inlet area is directed away from the tunnel soffit.

Reduced discharge velocity

leading to lower shear stress at the tunnel soffit immediately downstream of the MoJet®.

key benefits of the De Cardenas MoJet® are



Reduced number of jet fans

The innovative design results in markedly improved energy efficiency and fewer or smaller jet fans being required to provide the same degree of ventilation, as verified by independent measurements in full-scale tunnels. The reduction in the number of fans leads to lower procurement, installation and maintenance costs.

Reduction of up to 50% in power consumption

This leads to lower costs for energy and installed power, as well as a lower carbon footprint.



Reduced cabling costs

since MoJets® can be installed much closer together in a longitudinal direction than conventional jet fans.



DE CARDENAS

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