



CASE STUDY
QATAR WORLD
CUP STADIUMS



PROJECT

Qatar World Cup Stadiums (Lusail Stadium, Education City Stadium, Al Janoub Stadium), Qatar

CLIENT

Supreme Committee for Delivery and Legacy

PRODUCT

SQUIF, SQFA (Twin Fan), NALTM, Smoke Axial, Axial, and IFC Jet Fans

APPLICATION

Smoke, Carpark, Kitchen and Toilet Ventilation Applications

Nuaire provides smoke extraction and ventilation solutions for the 2022 FIFA World Cup in Qatar

In 2022, Qatar hosted the 22nd FIFA World Cup, the first to take place in the Middle East. In anticipation of the arrival of the 32 national teams and estimated 1.5 million fans who would participate in the tournament, Qatar commissioned seven new stadiums in which to hold the games.

When developing these new stadiums, environmental impact was a key consideration. Organisers also required that the stadiums be built with long-term sustainability in mind, to provide a lasting legacy for sport and entertainment in Qatar far beyond the final whistle.



Nuaire was appointed to supply the smoke extraction and ventilation services for car parks, emergency fire situations and day-to-day spaces within three of the host nation's new stadiums: Education City Stadium, Al Janoub Stadium, and Lusail Iconic Stadium - the host stadium for the 2022 World Cup final. We were chosen thanks to our extensive product range, which covered all project requirements, as well as our commitment to sustainable practices.

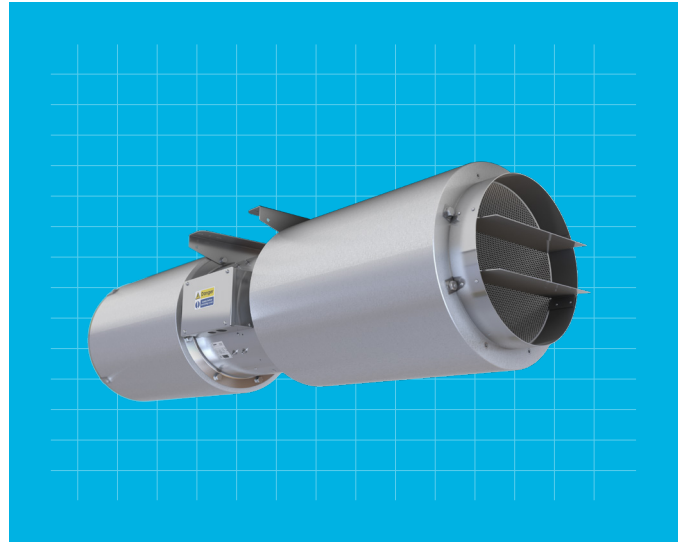
For the car parks, we installed IFC jet fans. These fans channel toxic gases upwards, along, and out of enclosed spaces. They also ensure fast smoke extraction during emergency situations. And, because of their power and efficiency - with a record-breaking throw distance of 100 metres - less units are required overall, which results in reduced project installation and maintenance costs.

For emergency fire situations, we installed Axial and Smoke Axial fans. With air performance tested to ISO 5801:2017, and emergency extraction capabilities of up to 400°C, these fans are not only able to withstand extreme conditions, but they also provide optimum design flexibility. Our bespoke Axial Configurator software allows us to customise our fans on a project-by-project basis, with millions of design combinations possible.



For ventilation requirements in toilets and kitchen spaces, we selected SQFA twin fans, SQUIF fans and NALTM tube fans due to their efficiency and low noise output. With the SQFA twin fans, Nuaire was able to provide the value-added benefit of the EcoSmart change-over control.

Nuaire puts sustainability at the heart of its project approach. Materials were carefully sourced to align with our environmental commitments, considering both their manufacturing methods and future performance.



The built-in 'trickle and boost' function is ideal for 24/7 operations, as it reduces overall power consumption - and therefore long-term operational costs. And the SQUIF fan was selected specifically for the kitchens, as its motor is not impacted by the airstream. This means that it cannot be damaged by pollutants in the air, such as grease.

Nuaire puts sustainability at the heart of its project approach. Materials were carefully sourced to align with our environmental commitments, considering both their manufacturing methods and future performance. In addition, construction processes were also stringently monitored to minimise pollution and contamination. Ultimately, our innovative product range helped Lusail Iconic Stadium to achieve a five-star rating under the Global Sustainability Assessment System (GSAS) for Design & Build, and a Class A* rating for GSAS Construction Management.

Nuaire was proud to contribute to the success of the 2022 World Cup, and be part of the ongoing legacy of sport and entertainment in Qatar.

