
Indoor Emissions Retrofit – MTU 20V4000G34F Generator

Engine Size

2488 kW – 95.4L MTU
20V4000G34F

Sector

Healthcare / Hospital Infrastructure

Project Overview

This project featured the integration of a large MTU generator into a hospital environment, with strict acoustic and emissions requirements. The confined indoor location created challenges for routing, system access, and airflow — while demanding Tier 4 Final-level emissions and noise compliance.

Solution Provided

E.I. Williams/IMS engineered indoor SCR solutions benefit the clients with low pressure, thermally managed exhaust systems. In this example, a roof-mounted, airless SCR solution designed to operate in tight, indoor conditions can be seen. The system was customized with comprehensive real-time monitoring and performance tracking tools. Catalyst and silencer modules were integrated for compactness, while maintaining full acoustic and thermal compliance.

Visual / Instalation Photos



System Specification

Engine	MTU 20V4000G34F
Power Output	2488 kW
NOx Reduction Requirement	Tier 4 Final equivalent
Noise Target	≤ 65 dB(A) @ 1m
Installation Constraints	Inside-building space, rooftop configuration
Runtime	30+ hours continuous at full load using single DEF tank
Monitoring	Real-time operational feedback and error logging
Special Functions	Parameter logging system, dynamic adjustment

Results & Impact

NOx & PM Compliance	Met and exceeded EPA requirements
Runtime	Over 30 hours at full load on one tank
Noise Performance	≤ 65 dB(A) @ 1m
Data Insight	Continuous system logging and fault tracking
Optimization	Delivered fully within the spatial and acoustic limits of the site

If you have any questions, please reach out to us at info@eiwilliams.com or (905) 428-0950