
# CASE STUDY

## HILTON DOUBLETREE

### Location

Trieste, Italy

### Product & Application

GGW 200 Natural Gas Gen-Set for Stanby Power

### End user/Contractor

Pederzani s.r.l

## SUMMARY

**Pramac Natural gas generator GGW200 was the ideal solution for a roof-top installation for a backup power supply in a remodeled luxury hotel in Trieste, IT.**

The upgrade and conversion of an historical building in the city of Trieste into a luxury hotel with 125 rooms and 25 suites, required a reliable back-up power supply to ensure the delivery of client services and keep power running for hotel guests. A 200kVA back-up power generator was chosen and due to limited ground space, the rooftop location presented an ideal alternative. However, due to the complexities of installing a back-up generator on a rooftop, it meant that consideration had to be taken in terms of ongoing maintenance and what fuel could be used. Powerful, clean and reliable PRAMAC gas generator was chosen and seen as the perfect fit solution to overcome the installation challenges.

## TECHNOLOGY

**PRAMAC range of gas-fueled generator sets feature powerful GENERAC rich-burn engines, which are optimized for Stand-by Applications, even with low gas pressure supply.**

Natural Gas as fuel for back-up power generators presents several advantages compared to traditional Diesel. With «virtually unlimited» run time, GENERAC Gas Engines are optimized to meet the stringent requirements of NFPA110-10, featuring <10s start and high block-load impact.

*Hilton Doubletree – Trieste building. Pramac GGW200 generator set running on Natural-Gas is installed on the historic building's roof-top*

# HILTON DOUBLETREE

## CHALLENGE

**Background:**
**- Rooftop installation on historical building**
**- Diesel fuel not permitted on the building**
**- Natural gas available on-site only with low pressure guaranteed**

Designing the back-up power system for a luxury hotel in one of Europe's most historical locations, presented several challenges for the install team. This included limited facilities for a plant room and limited land space for a back-up generator to be installed at ground level. A solution was the hotel roof as this provided adequate space. However with such a complex install consideration had to be given around how to transport fuel to the generator. Due to the roof top location, this meant that traditional diesel fuel could not be stored or transferred and even though natural gas in Trieste city was available, the pressure was very low.

## SOLUTIONS

**Pramac model GGW200G, 160kW / 200kVA Standby Power (ESP), Generac 14.2L Natural Gas engine, 17-27 mbar Gas pressure range was chosen.**

To ensure reliable and clean back-up power, the local installer, Pederzani Impianti s.r.l. specified and installed a Pramac 200kVA Natural Gas solution that could be optimized and activated in case of utility failure in less than 10 seconds. Pramac Generator GGW200 features a proven and trusted US-built gas engine from Generac® which is used for emergency stand-by applications. To ensure full operation with low gas pressure, a low-pressure fuel system was incorporated into the set. This enabled the engine to deliver the full stand-by power with only 17 mbar of gas pressure at the inlet on the gen-set. This was enough to allow full-load operation without the need of gas recompression on-site, therefore helping to save time on the installation.

## RESULTS

**Pramac / Generac innovative technology provided the solution in a complex and challenging installation.**

Remote installations with the possibility of running on low gas pressure where drivers for the design of Pramac's line-up of gas fuelled generator sets.The remodelling of Hilton Doubletree hotel in an historical building in Trieste's downtown required all the features that were specific of Pramac's design. Furthermore, Pramac generators are powered by Generac's rich burn engines which can meet the requirements for use as utility backup with quick start and high load impact Pramac gas generators can also deliver the full standby power with low pressure gas supply.

Pramac GGW 200 Natural Gas generator set is now installed on the building's roof top providing clean and reliable backup power while running on low gas pressure from the gas grid.