

CONTINUOUS POWER GENERATION FOR YOUR BUSINESS

With Mantrac, you can choose medium speed genset units from the industry's largest range, for reliable, non-stop power generation at lower costs than high-speed alternatives.

NON-STOP POWER FOR NON-STOP OPERATIONS

An ideal medium-speed genset solution should meet all your requirements for predictable and reliable operation.



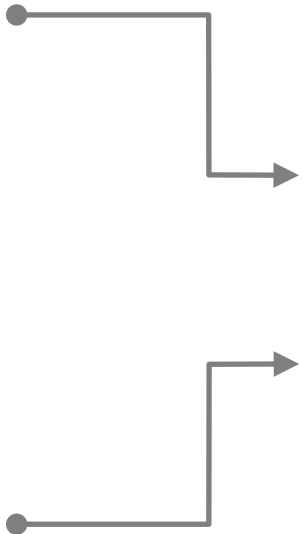
Lowest possible ownership costs

Efficient running and fuel flexibility to minimise expenditure during day-to-day operations

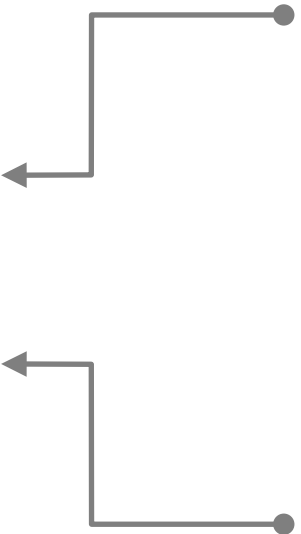


Guaranteed, reliable long haul operation

Technology to ensure maximum possible uptime and predictable power output, with proven success across applications

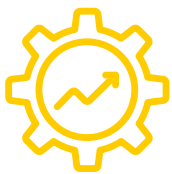


Predictable and reliable operation



Customisability

Configurability for your requirements, whether you require quieter operation or higher efficiency



Parts and service availability

A readily available product range for quick access during service and repairs

PROVEN PERFORMANCE ACROSS CONFIGURATIONS

The medium-speed category is the most powerful in the Cat® genset range. These systems are more cost-effective, providing higher fuel efficiency and output compared to other speeds.



Unmatched operations



Fuel flexibility

- Diesel
- Heavy fuel oils
- Dual fuel
- Natural gas
- Biogas
- Coal gas
- Coke oven gas



Successful across applications

- Power plants
- Utilities
- Oil & gas
- Cement plants
- Water treatment
- Airports
- Large industries



Wide range

- Manufactured to specifications, with a dedicated medium-speed genset facility
- Low capital expenditure or high fuel efficiency



Longevity

- Long life before genset overhaul
- Average lifespan of a Cat medium-speed genset is over 20 years

CUSTOMISED SOLUTIONS TO KEEP THE POWER ON

Whatever output requirements you are looking for, there is a Cat medium-speed genset optimised for it. With the industry's largest range, we can configure tailor-made solutions.



Tailor-made solutions



Speed and frequency

- 500, 600, 750 and 1,000 rpm
- 50 Hz or 60 Hz



Power

- Energy Storage Systems for peak load shifting
- Range from 1 MW to 14 MW per unit



Dedicated systems for

- Lubricating oil
- Engine coolant
- Air filters and exhaust gas systems
- Starting and mounting systems



Standby power systems

Secondary high speed gensets to supplement power in case of maintenance or breakdown

POWERFUL PARTNERSHIP, POWERFUL OPERATIONS

We maximise equipment lifespan for optimal uptime and operational ease. You can rely on us as a partner throughout the lifetime of your medium-speed genset.



Support & service

Installation:

- Modular Power Plant (MPP)
- Technical supervision
- Full plant balancing including transformers and switch gears

Quick maintenance/repair:

- Easily accessible service and delivery with local Cat-certified service teams
- Periodic maintenance contracts



Consulting

Site grading:

- Accounting for all site conditions (altitude, temperature, humidity)

Custom sizing:

- Looking at your space to provide the optimal genset and containment solution
- Using multiple gensets in a series as a cheaper alternative to a single genset with high output



Financing

Minimise upfront costs:

- Take advantage of credit and financing



Warranty support

Warranty support:

- 12–18 months warranty on gensets
- Performance warranties may be applicable, depending on the project

EXCELLING IN EFFICIENCY, RELIABILITY, AND COST SAVINGS

The advantage of a Cat medium-speed genset over a high-speed genset is clear.

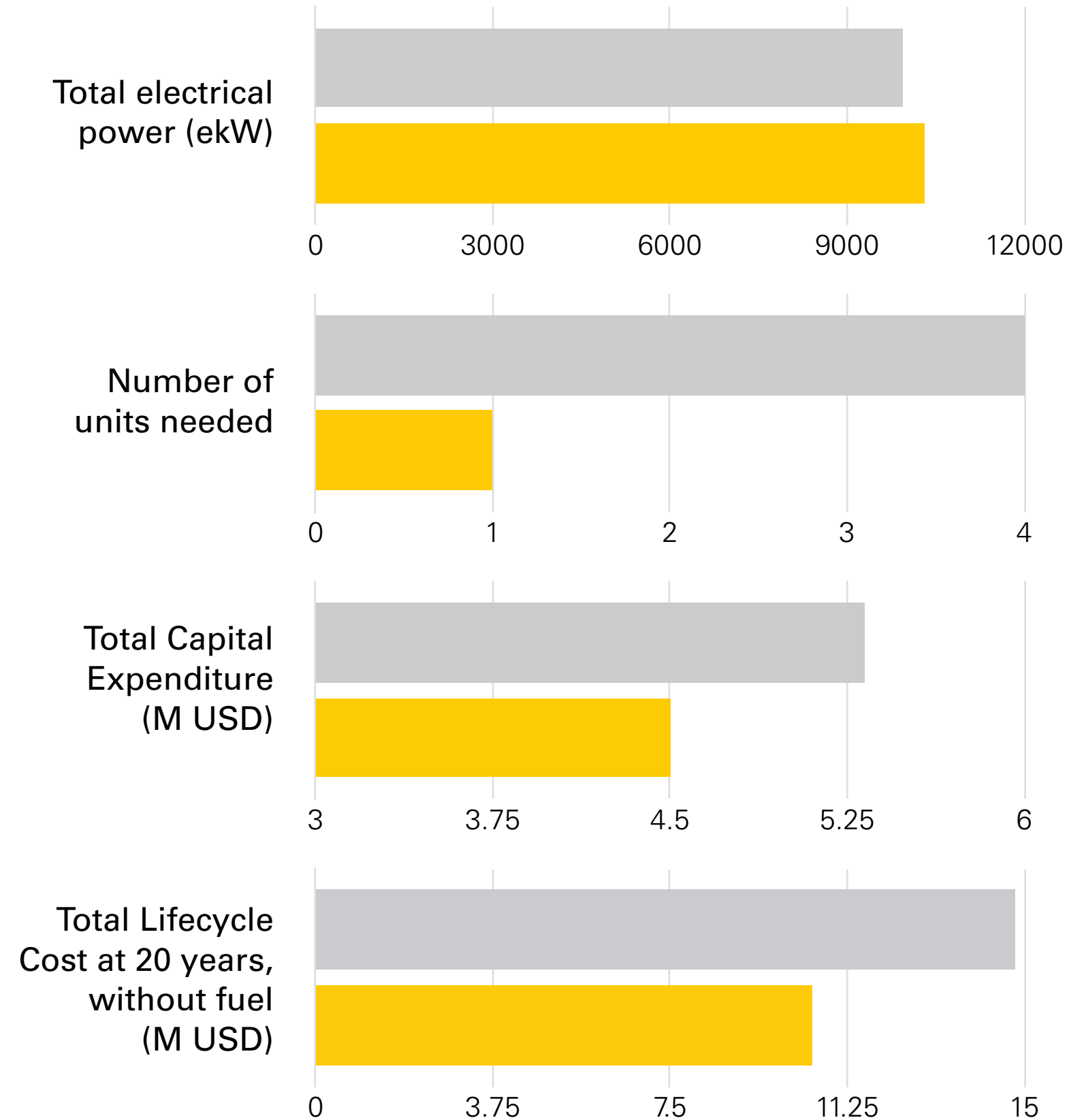
This data from a Mantrac project in Egypt shows medium-speed gensets offer better overall return, with a lower lifecycle cost and space utilisation, compared to a high-speed genset for a 10 MW plant.

Cat G20CM34

Cat 3520 HR

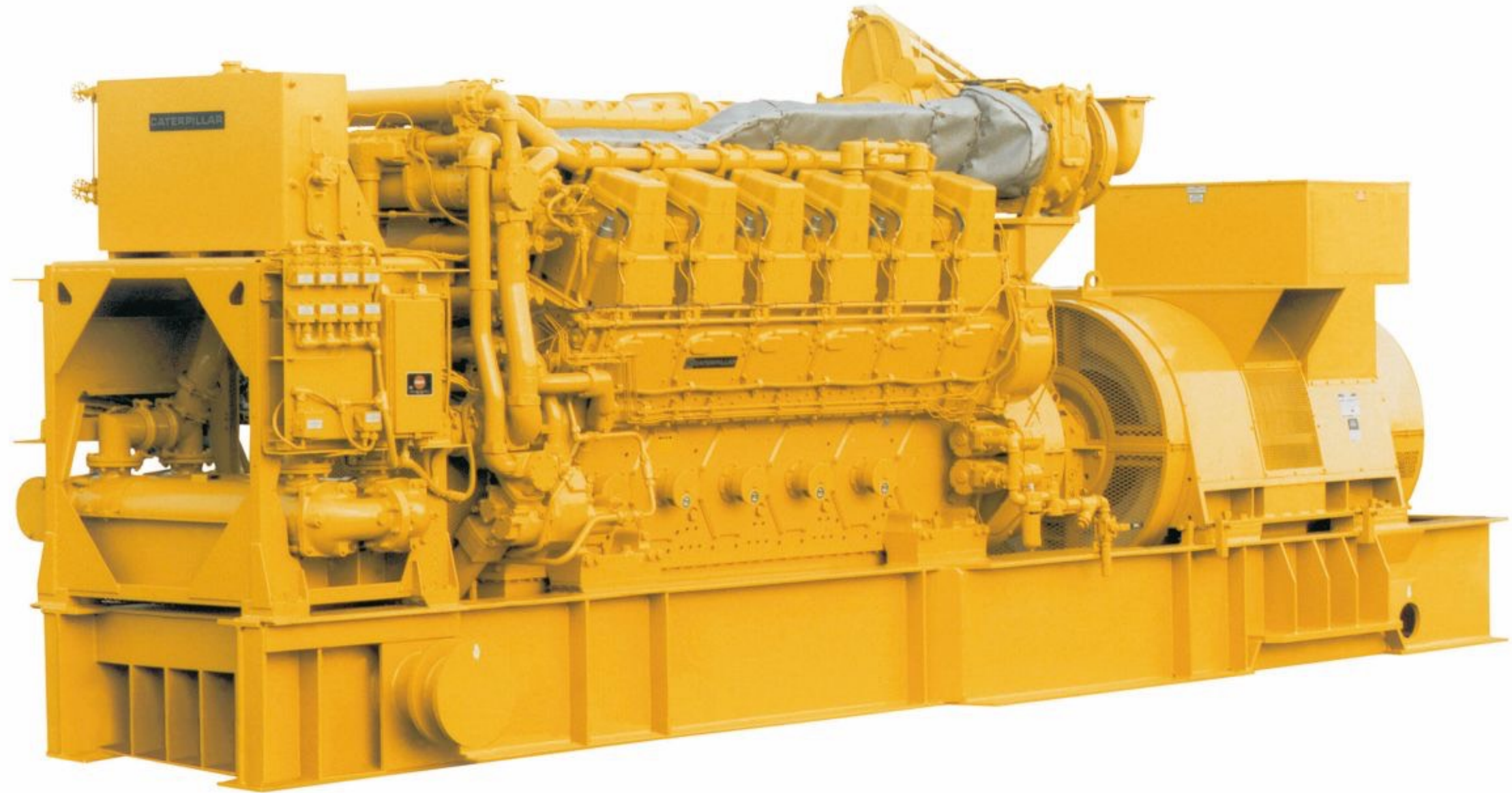
Medium speed (750rpm)

High speed (1500rpm)



A MANTRAC CASE STUDY

BUILDING A STRONG FOUNDATION FOR CEMENT PRODUCTION



HEIDELBERGCEMENT
GROUP



BUILDING A STRONG FOUNDATION FOR CEMENT PRODUCTION

BUA Group entrusted Mantrac with starting from scratch on a new facility in Nigeria, owned by Heidelberg Cement. Here's how we approached the project and found the best solution.

Challenges



Build an 18 MW custom power plant



Civil and electro-mechanical work



Remote location in north-west of Nigeria

BUILDING A STRONG FOUNDATION FOR CEMENT PRODUCTION

Solution

- Provide four 3616 HFO capable medium-speed gensets
- Install, supervise and provide maintenance with professional Mantrac personnel
- Make room for upgradability for growing power needs in the future
- Bring in all required talent and resources from other locations



Impact

\$3 billion USD

Amount of annual turnover facilitated by the new power solution

Reduction in units

Higher power rating units were removed

Growth enablement

Three additional 3616 medium-speed gensets for added power

Fuel savings

HFO capability facilitated the reduction in fuel consumption

RELATED ASSETS

EXPLORE OUR RANGE OF MEDIUM SPEED POWER SOLUTIONS

COMMERCIAL MATERIAL

Get an overview of the entire medium speed range by viewing our brochures and videos.

PROJECT REFERENCES

See how Mantrac has successfully delivered power solutions for customers across applications.

TECHNICAL DOCUMENTS

Understand the types of medium speed solutions that are ideal for your specific operational needs.

PRODUCT SPECIFICATIONS

Get all the details on prospective medium speed power solutions for your operations.