Brezhnev 12MW GPP **Russia**

Total Output	12MW
Customer	NG ENERGO
Operating Mode	Base load
Gensets	9H35/40G x 3sets
Fuel	Natural Gas
Scope	Genset supply
Delivered	2016

Extreme cold condition power plant

This is for IPP project to supply electric power in Kamaz factory.

To catch customer's short delivery time, HYUNDAI recommended to use enclosure type power plant and provided full technical support for engineering.

Under HYUNDAI's full technical supports, it was successfully constructed within 12 months after the contract.





Case 4: DFPP

Termonorte 93MW DFPP **Colombia**

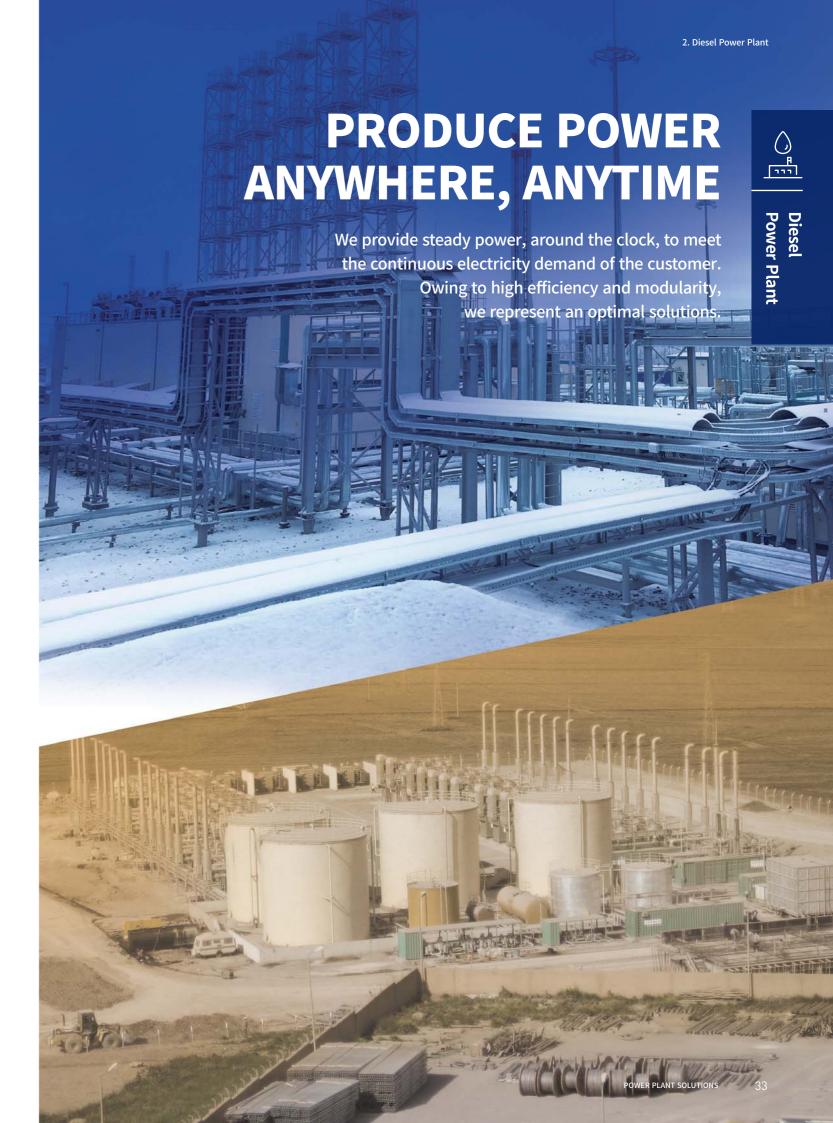
Total Output	93MW
Customer	TERMONORTE
Operating Mode	Base load
Gensets	20H35DFV x 10sets
Fuel	Natural Gas, Diesel Oil, Heavy Fuel Oil
Scope	EPC
Delivered	2018.11

The biggest dual fuel engine power plant in Colombia

In February 2017, HYUNDAI received an order from TERMONORTE S.A.S E.S.P., for engineering, procurement and construction. The contract consists of 10 sets of HiMSEN dual fuel engine generator to supply continuous power to national grid in Colombia, South America. The power plant was handed over in November 2018 to the customer and is currently under commercial operation.







02 Engine Power Plant Solutions 2. Diesel Power Plant

Who Is It For?

- For those who are looking for efficient, economical power plant.
- For those who are willing to run power plant on various fuel oil.
- For those who want low CAPEX.

Why Are They Good?

1. FUEL FLEXIBILITY

HYUNDAI's diesel engine power plant provides a variety of selection of fuels, ranging from HFO, LFO, Crude oil to Emulsified oil.

2. QUICK START TIME

Diesel engines have a shorter start time compared to turbines. It takes up to 15 to 40 minutes for turbines to start, whereas diesel engine only takes 2 minutes.

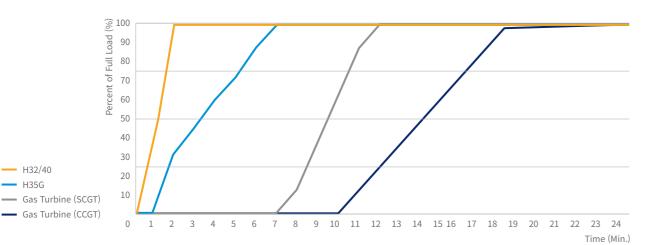
3. HIGH RELIABILITY

We provide robust, reliable engine generator set and auxiliary equipment, which are proven in the most challenging nations and environmental conditions.

Scope of **Supply**

- **1** Diesel Generator set
- 2 Mech. Aux. equipment
- 3 Elec. Aux. equipment
- 4 I&C Aux. equipment
- **5** Basic & Detail Engineering
- **6** Construction
- **3** Supervision of Installation & commissioning

Start-up time comparision(HiMSEN engine vs Turbine)



Case 1

BERA 70MW DPP Bangladesh

70MW
BPDP
Base load
18H32/40V x 9sets
Heavy Fuel Oil
EPC
2012

Peak shaving power plant for Bangladesh power grid

HYUNDAI was an EPC and turnkey contractor for Bangladesh Power Development Board. Under a turnkey contract, HYUNDAI had to deliver a complete power generation plant to the client with 2 years warranty and 4 years long term service.

HYUNDAI delivered excellent results by working in close collaboration with the BPDB and the suppliers, competent engineering team and cost effective solutions.





Case ②

JARAMIJO 150MW DPP Ecuador

Total Output	150MW
Customer	EQUITATIS
Operating Mode	HFO operation
Gensets	18H32/40V x 18sets
Fuel	Heavy Fuel Oil
Scope	Genset + Equipment supply Engineering
Delivered	2012

Short delivery for 18 gensets within 5 Months

HYUNDAI made the contract for supplying 18 sets of 18H32/40V rating 8,294kWe per set and its auxiliary equipment on 25th April, 2011. Under very tight schedule, HYUNDAI successfully delivered gensets in 5 months through partial shipment after contract commencement. From 5th May 2012, the power plant started commercial operation after commissioning and testing for reliability and performance.





HIMSEN

- H32/40

— H35G