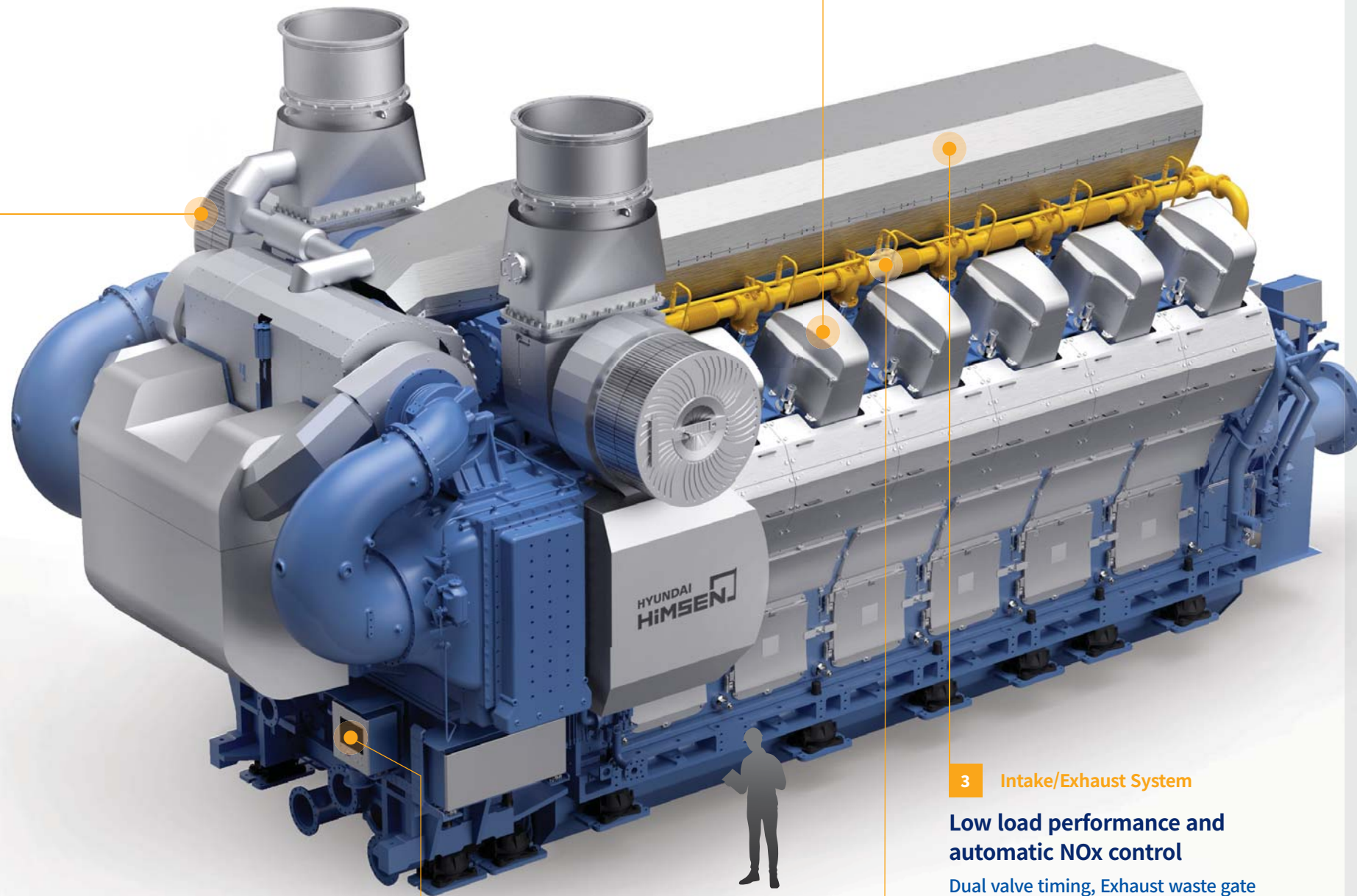


# MAKING YOUR POWER PLANT WITH THE LATEST TECHNOLOGY

## HYUNDAI DF Engine, H54DFV



### Two-Stage T/C System 1

**High efficiency and no derating even for sites with high ambient temperature and altitude**

Extreme miller cycle, Two-stage T/C

- Advanced IVC
- Effective compression ratio
- Higher Engine efficiency
- Decreased NOx emission

### General Info

EFFICIENCY\_TSTC

**51.2%**

EFFICIENCY\_SSTC

**50.2%**

OUTPUT RANGE

**17.6~26.5 MW<sub>m</sub>**

\* TSTC : Two Stage Turbo Charger  
SSTC : Single Stage Turbo Charger

### Control System 5

**Safe and optimal engine operation**

HI-MECS, Cylinder balancing, Knock control

### 2 Combustion System

**High power and efficiency**

MP/Main injector, Piston bowl, Gas/Diesel combined simulation

- Output / Cylinder : 1470kWm
- Engine Cycle : 4-stroke
- Bore : 540/600mm
- Engine Speed : 600rpm

### 3 Intake/Exhaust System

**Low load performance and automatic NOx control**

Dual valve timing, Exhaust waste gate

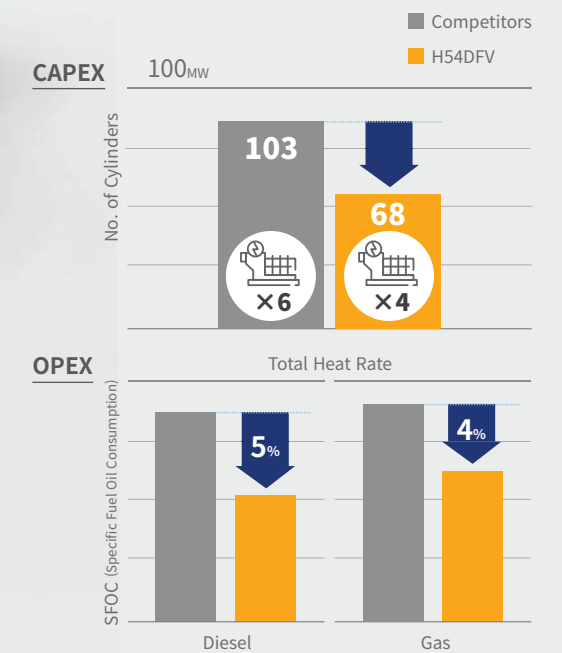
### 4 Gas Supply System

**Even mixture distribution & Low knocking**

Gas mixer optimization, Port flow CFD

## BENEFITS FOR YOU

- Steady Performance**  
 One of the major important factors of an engine is its consistency in performance. HiMSEN engine's professional engineering can assure stable power output even after the years.
- Easy Maintenance**  
 HYUNDAI engines are thoughtfully modularized for easy maintenance. Many O&M managers working on HYUNDAI's power plant comment that the intuitive and stable engine design makes the site easier to be operated. Also, the pipeless design can prevent deformations.
- Eco-friendly**  
 HiMSEN engines have been designed with the environmental issues in mind. HYUNDAI always looks for various ways to protect the environment. Low NOx emissions / Smokeless at whole operation range / Low vibration & noise.
- High Efficiency**



\* Specifications are subject to change without prior notice.