

|      |          |    |                       |      |                         |     |                           |
|------|----------|----|-----------------------|------|-------------------------|-----|---------------------------|
| F-21 | Keywords | Y3 | equipment or facility | Z3/4 | natural gas/electricity | S4  | FEMS                      |
|      |          |    |                       |      |                         | E25 | general-purpose machinery |

Kawasaki Heavy Industries, Ltd.

## Gas Turbine Cogeneration System

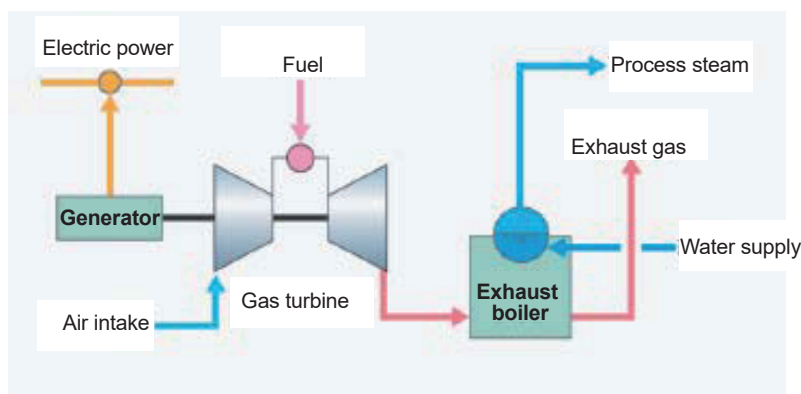
### Features

- ◆ The driving source is a 100 % Japanese-made gas turbine.
- ◆ Reduction in NOx emission with the use of a low emission DLE (dry low emission) combustor
- ◆ Contribution to energy saving with the high overall efficiency
- ◆ A wide variety of product lineups with a wide variety of system variations and output from 1,500 kW to 30,000 kW

|                              |         |         |         |         |         |         |          |          |
|------------------------------|---------|---------|---------|---------|---------|---------|----------|----------|
| Model                        | PUC15D  | PUC17D  | PUC30D  | PUC50D  | PUC70D  | PUC80D  | PUC180D  | PUC300D  |
| Gas turbine model            | M1A-13D | M1A-17D | M1T-13D | M5A-01D | M7A-02D | M7A-03D | L20A-01D | L30A-01D |
| Power generation output (kW) | 1470    | 1770    | 2910    | 4440    | 6550    | 7610    | 17530    | 32160    |

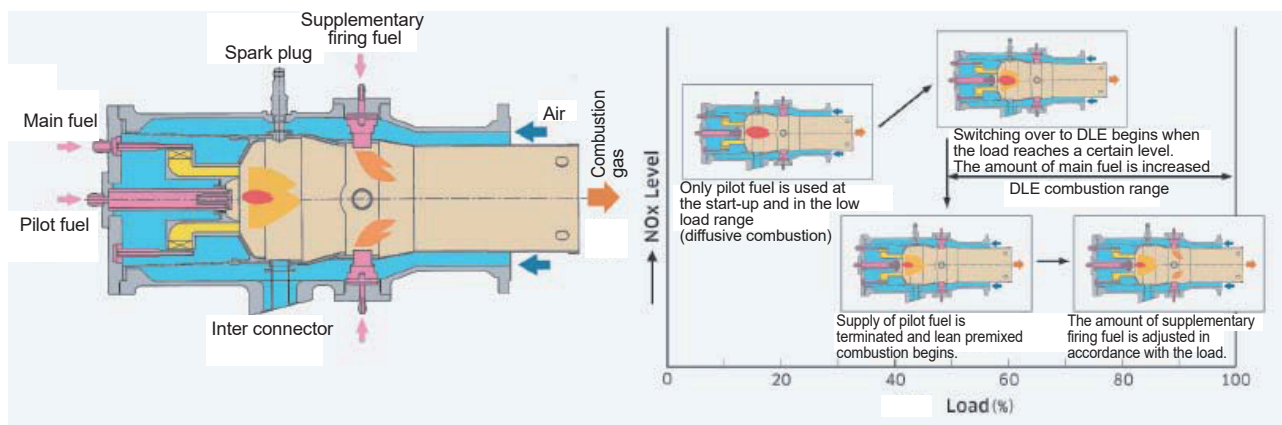
### Basic Concept or Summary

A cogeneration system is a system supplying multiple types of secondary energy (electricity, steam, etc.) continuously by driving a gas turbine with primary energy (fuel).

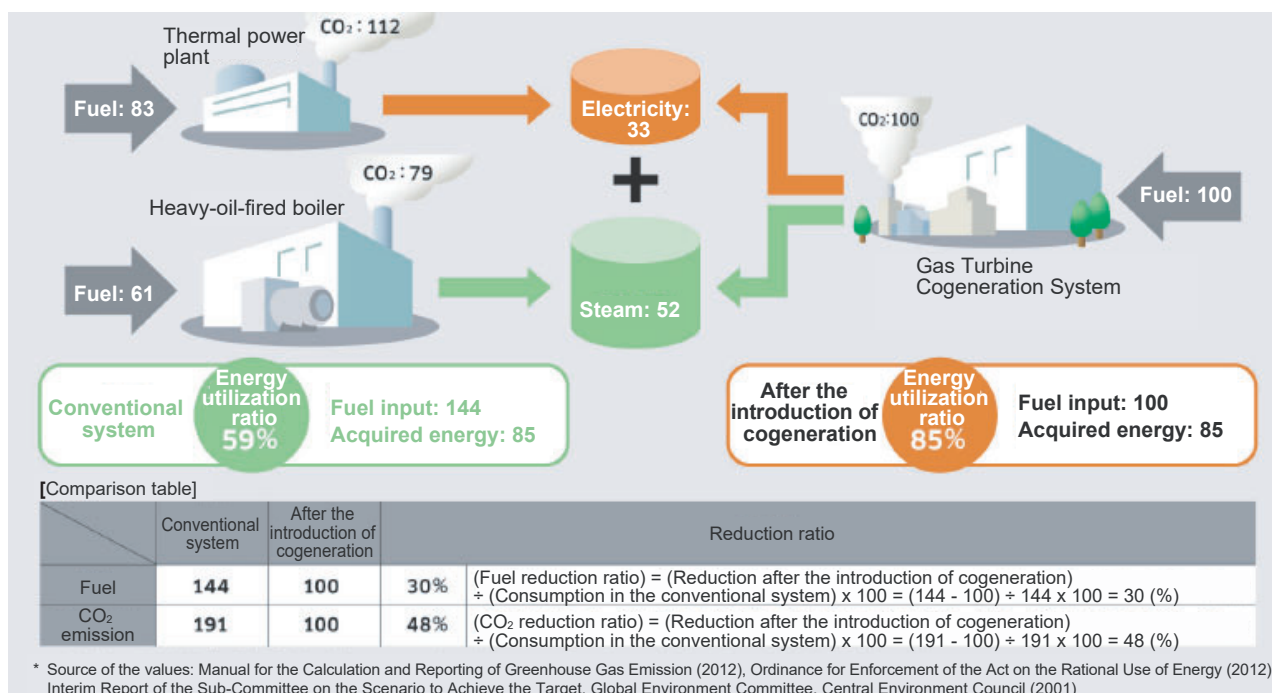


It is possible to reduce the emission of NOx with the use of DLE combustors.

### Outline of DLE combustor



An example of the effects of energy saving and reduction in CO<sub>2</sub> emission with an 8 MW-class gas turbine cogeneration system (PUC80D)



Installation in Practice or Schedule

**Domestic** Orders for the cogeneration systems received from Japanese clients: number of deliveries: 427 units (as of the end of March 2020)

**Overseas** Orders for the cogeneration systems received from Japanese clients: number of deliveries: 404 units (as of the end of March 2020)

**Contact:** **Kawasaki Heavy Industries, Ltd.**, Energy System & Plant Engineering Company  
 Sales Division, Domestic Power Generation Sales Department  
 Tel: +81-3-3435-2232 Fax: +81-3-3435-2592  
 URL: <http://global.kawasaki.com/>