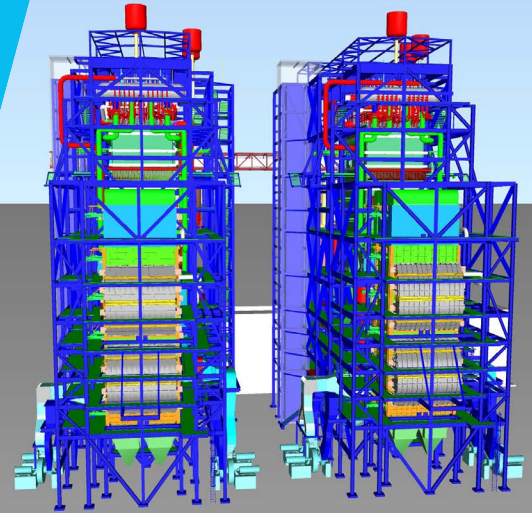


PROJECT PROFILE: CFB, Indonesia

# Palu 3

## Circulating fluidised bed combustion



In 2019, Doosan Lentjes was awarded a contract to deliver circulating fluidised bed (CFB) technology for a new thermal power plant located in Palu, Sulawesi, Indonesia. The project is expected to be completed in 2022.

### DELIVERABLES

- Engineering and procurement of the boiler island including the major boiler equipment
- Advisory services for erection and commissioning

### CHALLENGES

- Very competitive market driven by low cost projects.
- Strict contract requirements for the procurement strategy
- First Doosan Lentjes CFB boiler in Indonesia

### BENEFITS

- Excellent environmental performance
- Highly efficient and flexible steam generation
- Full EP solution delivered from Doosan Lentjes and its parent company Doosan Heavy Industries & Construction

# Tailored CFB boiler solution for Indonesia

In 2019, Doosan Lentjes was awarded a contract to deliver circulating fluidised bed (CFB) technology for a new 2 x 50 MW<sub>e</sub> coal-fired power plant located in Palu, Sulawesi, Indonesia. Doosan Lentjes' parent company, Doosan Heavy Industries & Construction will act as the main contractor for the supply of the CFB boiler.

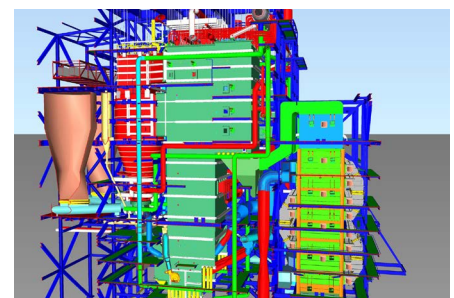
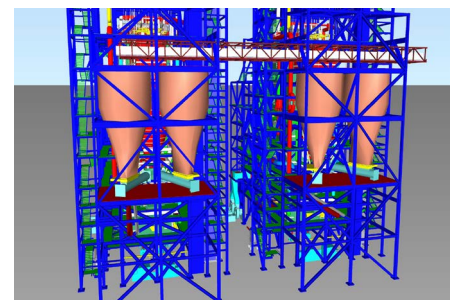
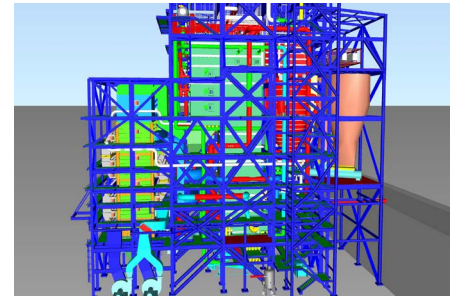
Once complete, the new plant will be owned and operated by the Indonesian electricity provider, Perusahaan Listrik Negara (PLN).

Doosan Lentjes' scope of work will cover both engineering and procurement of the boiler island including the major boiler equipment. Moreover, advisory services for both erection and commissioning will also be part of the delivery.

Trusting in the proven CFB boiler technology will enable the plant owner to generate electricity efficiently from the local coal. Moreover, the limit values achieved for SO<sub>2</sub>, NO<sub>x</sub> and dust emissions will fully comply with the applicable legal requirements.

## Key Project Data

<b>Customer</b>	Doosan Heavy Industries & Construction
<b>Final customer</b>	Perusahaan Listrik Negara (PLN)
<b>Location of power plant</b>	Palu, Sulawesi, Indonesia
<b>Main fuels</b>	Indonesian coal
<b>Award date</b>	2019
<b>Number of lines</b>	2
<b>Plant output</b>	2 x 50 MW <sub>e</sub>
<b>Thermal capacity</b>	2 x 168 MW <sub>th</sub>
<b>Live steam</b>	2 x 218 (t/h)
<b>Live steam pressure</b>	130 bar
<b>Live steam temperature</b>	540 °C
<b>Design fuel</b>	
LHV	16 MJ/ kg
Ash	4.5 %
Moisture	35 %
Sulphur	0.5 %
<b>Emissions (acc. to 6% O<sub>2</sub>, dry, monthly av.)</b>	
SO <sub>2</sub>	200 (mg/m <sup>3</sup> STP)
NO <sub>x</sub>	200 mg/m <sup>3</sup> STP)
Dust	50 (mg/m <sup>3</sup> STP)
<b>Thermal efficiency</b>	> 85 % (ASME)



## Doosan Lentjes GmbH

Daniel- Goldbach-Str. 19  
40880 Ratingen, Germany

Tel: +49 (0) 2102 166-0  
Fax: +49 (0) 2102 166 2500

[www.doosanlentjes.com](http://www.doosanlentjes.com)

Doosan Lentjes is a global provider of processes and technologies for energy production from both sustainable and conventional fuels. Our specific areas of expertise include circulating fluidised bed boilers, key technology for the generation of energy from waste and sewage sludge, as well as, flue gas cleaning systems. We have been pioneering energy solutions for 90 years and convert millions of tonnes of waste into valuable energy each year.

Doosan Lentjes is part of a powerful combination of companies united under the Doosan Group to deliver complementary technologies, skills and value to customers the world over.

Doosan Babcock

Doosan Lentjes

Doosan Škoda Power

NUCLEAR | BOILERS | TURBINES | WASTE TO ENERGY | AIR QUALITY CONTROL | SERVICE