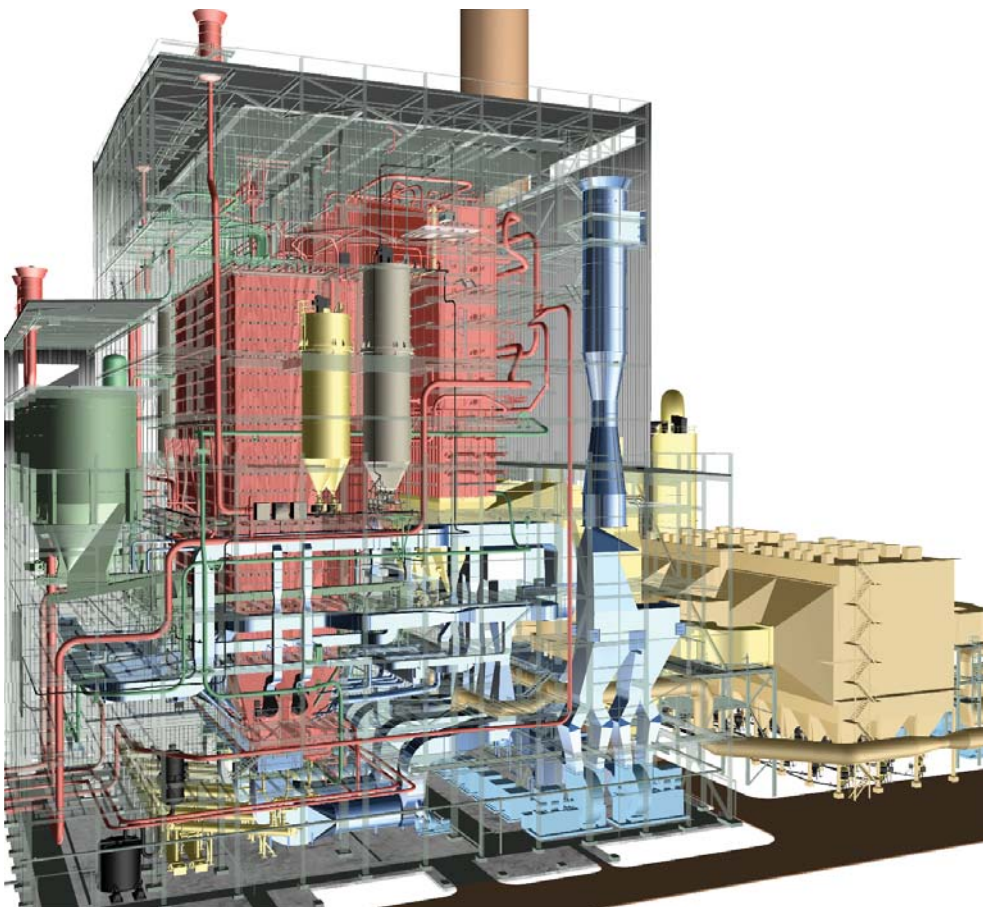


# Utility CFBs

## A New Generation of Technology



### CFB TECHNOLOGY ENTERS RUSSIA

The Sixth Wholesale Power Market Generating Company (WGC-6) has taken the bold step of being the first to order a Circulating Fluidized Bed (CFB) power plant in Russia. The plant will be built at WGC-6's Novochoerkasskaya GRES generating facility located in Novochoerkassk, within the Rostov region of Russia.

Not only is Novochoerkasskaya the first CFB plant ordered in Russia, but it is also the second CFB ordered in the world that utilizes advanced vertical-tube, once-through supercritical steam technology.

### STATE-OF-THE-ART POWER TECHNOLOGY

The Novochoerkasskaya plant along with the Lagisza CFB plant, currently starting up in Poland, utilize the world's most advanced CFB steam generator technology, representing a culmination of over 30 years of CFB technology development by Foster Wheeler.

Plant Electrical Output (Gross/Net)	<b>330/312 MWe</b>		Furnace	
Net Plant Efficiency (LHV/HHV)	<b>41.5/39.9%</b>		Width	<b>33.1 m 108 ft.</b>
Net Plant Heat Rate (LHV/HHV)	<b>8681 kJ/kWh</b>	<b>8553 Btu/kWh</b>	Depth	<b>8.5 m 28 ft.</b>
Steam Flow (SH/RH)	<b>278/227 kg/s</b>	<b>2202/1798 kpph</b>	Height	<b>45.0 m 148 ft.</b>
Steam Pressure (SH/RH)	<b>247/37 bar g 3582/536 psig</b>			
Steam Temperature (SH/RH)	<b>565/565 °C</b>	<b>1049/1049 °F</b>	Fuel	<b>Anthracite Coal</b>
Feedwater Temperature	<b>280 °C</b>	<b>536 °F</b>		<b>Bituminous Coal</b>

### NOVOCHERKASSKAYA PROJECT SUMMARY

Plant Location: Novochoerkassk, Russia  
 Customer: PJSC Energo Mashinostroitelny Alliance (EM Alliance)  
 FW Full Release: January 2008  
 Plant Start-Up: Winter 2012



**We offer a full range of steam generator equipment, aftermarket products, and services to the power, industrial, and waste-to-energy sectors.** Our global manufacturing and engineering network can deliver cutting-edge products and expertise, quickly and cost competitively with best-in-class quality. Established in 1891, our experience comes from over a century of designing, servicing, and continually improving steam generating equipment.

#### Steam Generators

- Circulating Fluid Bed
- Pulverized Coal
- Oil & Gas
- Supercritical Steam
- Solar Power
- Package
- Grate & MSW
- Metallurgical Waste Heat
- Heat Recovery Steam Generators

#### Auxiliary Equipment

- Feedwater Heaters
- Condensers
- Biomass Gasifiers

#### Steam Generator Services

- SCR and SNCR Systems
- Low NOx Combustion Systems
- Replacement/Upgraded Parts
- Construction Services
- Modernizations

## CONTACT US

### GLOBALLY

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

#### CHINA

Units 12 to 26, 6<sup>th</sup> Floor - Tower A  
Beijing COFCO Plaza  
No. 8 Jianguomennei Street  
Beijing, 100005 China  
T +86 (0) 10 6526 3480/81

8<sup>th</sup> & 5<sup>th</sup> Floor, UC Tower  
500 Fushan Road  
Pudong New Area  
Shanghai 200122 China  
T +86 (0) 21 5058 2266

#### FINLAND

Metsänneidonkuja 8  
FI-02130 Espoo, Finland  
T +358 (0) 10 393 11

Relanderinkatu 2  
FI-78201 Varkaus, Finland  
T +358 (0) 10 393 11

#### GERMANY

Burggrafenstrasse 5A  
40545 Düsseldorf, Germany  
T +49 (0) 211 5502 4700

#### POLAND

Aleja Jana Pawla II 15  
00-828 Warsaw, Poland  
T +48 (0) 22 697 6870

ul. Staszica 31  
41-200 Sosnowiec, Poland  
T +48 (0) 32 368 1300

#### SPAIN

Calle Gabriel Garcia Márquez, 2  
28230 Las Rozas  
Madrid, Spain  
T +34 (0) 91 336 2400

#### SWEDEN

Lindövägen 75  
602 28 Norrköping, Sweden  
T +46 (0) 11 285 330

#### THAILAND

9<sup>th</sup> Floor, Maneeya Building  
518/5 Ploenchit Road  
Lumpini, Pathumwan  
Bangkok 10330, Thailand  
T +66 (0) 2 652 0760

#### USA

Perryville Corporate Park  
Clinton, New Jersey 08809 USA  
T +1 (1) 908 730 4000

9780 Mt. Pyramid Court, Suite 260  
Englewood, Colorado 80112-7060 USA  
T +1 (1) 303 784 4880