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 Novocherkasskaya GRES generating facility located in Novocherkassk, within the Rostov region of Russia.

State-of-the-art power technology

The Novocherkasskaya plant utilizes the world’s most advanced CFB steam generator technology, representing a culmination of over 30 years of CFB technology development by Sumitomo SHI FW.

Novocherkasskaya Power

Supercritical utility CFBs—A new generation of efficient technology

Project summary

Location: Novocherkassk, Russia
Customer: PJSC Energo Mashinostroitelny Alliance (EM Alliance)
Duration: 2008-2016
Scope: Design and supply of CFB boiler

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Values</th>
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<tbody>
<tr>
<td>Plant Electrical Output (Gross/Net)</td>
<td>330/312 MWe</td>
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<tr>
<td>Net Plant Efficiency (LHV/HHV)</td>
<td>41.5/39.9%</td>
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<tr>
<td>Net Plant Heat Rate (LHV/HHV)</td>
<td>8681 kJ/kWh 8553 Btu/kWh</td>
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<tr>
<td>Steam Flow (SH/RH)</td>
<td>1001/817 tph 2202/1798 kpph</td>
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<tr>
<td>Steam Pressure (SH/RH)</td>
<td>247/37 barg 3582/536 psig</td>
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<tr>
<td>Steam Temperature (SH/RH)</td>
<td>565/565 °C 1049/1049 °F</td>
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<tr>
<td>Feedwater Temperature</td>
<td>280 °C 536 °F</td>
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<tr>
<td>Fuel</td>
<td>Anthracite coal, bituminous coal</td>
</tr>
</tbody>
</table>
Our vision is to provide sustainable energy solutions through decarbonization, decentralization and digitalization of the energy industry. Our capabilities cover customer needs in the fields of power generation utilizing circulating fluidized bed (CFB) technologies, long term energy storage, and related network services. We continuously broaden our portfolio of products and services by advancing our in-house technologies and developing further alliances with new partners.