

Item	Unit	Location	
		North Sea	Gulf
<b>Technical parameters</b>			
Rated capacity, gross	MW	600	
Steam parameters *)	bar /bar /°C	160 / 42 / 535	
Cooling water temperature	°C	15	35
Electrical efficiency, gross **)	-	44.23%	41.75%
Heat rate	MJ / kWh	8.14	8.62
<b>Energy balance</b>			
Equivalent operating hours	h / a	7,500	
Annual electricity generation	GWh <sub>e</sub> /a	4,500	
Annual fuel consumption	GWh <sub>t</sub> /a	10,175	10,778
<b>Fuel costs</b>			
Fuel price	US\$ / t <sub>ce</sub>	120	
Fuel heat price	8.14 MWh/tce US\$ / MWh <sub>t</sub>	14.74	
<b>Annual fuel costs</b>	<b>mIn US\$ / a</b>	<b>150</b>	<b>159</b>

\*) Live steam pressure / reheat pressure / live steam temperature

\*\*) Approximation formula  $\eta = 0.442 \times (-0.0028 \times tcw + 1.0426)$

Values in yellow cells can be altered

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Item	Unit	Values	
<b>Technical parameters</b>			
Gas turbine type		STG6-5000F	
Fuel	-	natural gas	
Rated power output, ISO	MW	208	
Electrical efficiency, ISO	-	38.10%	
<b>Location (Saudi Arabia)</b>			
		<b>Jazan Red Sea</b>	<b>Riyadh Central</b>
Elevation	m	7	608
Design temperature	°C	38	44
<b>Correction factors:</b>			
Elevation factor for power	-	0.999	0.933
Temperature factor for power	-	0.976	0.972
Temperature factor for efficiency	-	0.949	0.936
<b>Actual power output</b>	<b>MW</b>	<b>203</b>	<b>189</b>
<b>Actual electrical efficiency</b>	-	<b>36.2%</b>	<b>35.7%</b>