

In collaboration with our sister company Goodwin Steel Castings, Goodwin International supplied five 1000MW turbine shells for Shenhua Guohua Jiujiang power station in China.

Harbine Turbine Company Limited has a production capacity of 30,000MW which accounts for approximately 1/3 of the total annual output of turbines in power generation for China. Siemens is supplying four 1000MW ultra-supercritical steam turbines to Shenhua Guohua Jiujiang.

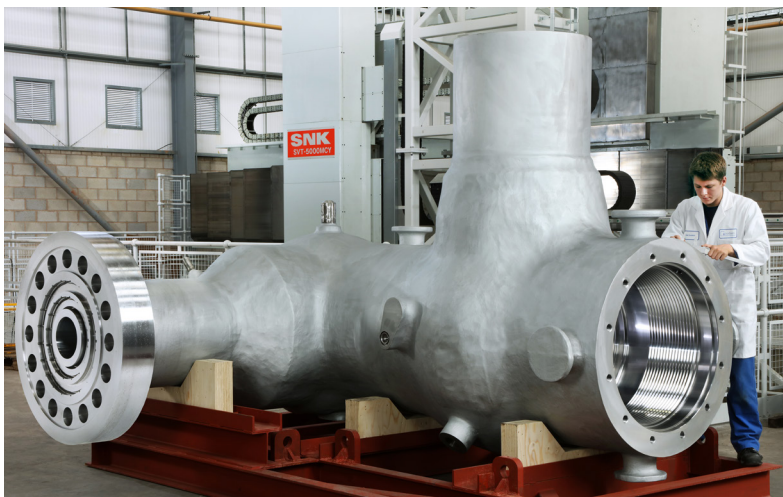
These use a tandem compound, four-cylinder arrangement. Steam enters the high-pressure turbine through two main steam valves, with exhaust steam being reheated and fed to a double-flow intermediate-pressure turbine. From there, it goes to two low-pressure turbines.

Goodwin International had the task of material procurement of the forgings for the flanges, which also involved management of a submerged arc welding company. However, fabrication was also performed at Goodwin International's very own fabrication shop.

Once the component was fabricated, the material is then finish machined at Goodwin International's machine shop. This involved working to tight tolerances which were met by the highly skilled machine operators who have an extensive experience and knowledge which was integrated into the project. Operations such as butterous threads were performed, providing the customer with the highly geometrically accurate component requested.



*5 off Left Hand & 5 off Right Hand 1000MW casings for the Shenhua Guohua Jiujiang power station, China. These consisted of CrMoV castings issued by Goodwin Steel Castings which were then fabricated to the F91 forgings*



*Goodwin International's QC personnel inspecting the butterous thread performed by our 5 axis milling machinery, ensuring our customers highly geometrical toleranced component requirements are met first time, every time*

Once the machining of the component is completed by a selection of our team of 20 ASME Level II technicians performed Non Destructive Testing (NDT) to ensure that the component has being manufactured to specification.

Following extensive work within our design team, a transport frame was specially designed to transport the 1000MW component to China.