

SST-110/KKK Steam turbine overhaul and repair

Remotely located little paper mill was seeking a new partner for their SST-110 steam turbine of 4 MW. Suffering from low response and support they were looking for a stable high performing service partner. They found that in Energetic. The partnership started with the much appreciated "No stop check" from the Energetic portfolio and later continued with a major inspection, performing also reverse engineering of all capital parts of the turbine like turbine wheels, nozzles, stop valves, control valves, bearings etc. The aim was to become independent from original manufacturer and secure their strategic asset for a long time ahead. Thanks to the high technical level of Energetic the reverse engineering could be conducted in a time & cost effective way during the annual outage over 3 weeks. Enabling the customer to access parts at a lower cost and at faster delivery times. Also making it possible to choose what parts to keep on stock and not. Thanks to the shorter lead times. Unfortunately the mill suffered from a terrible noise coming from the gearbox of the turbine. A sound that can be described as a heavy hydraulic noise. First the turbine was opened and checked to make sure no damages had occurred and then focus was turned to the gearbox.

Energetic engineers could conclude that a weakness was found in the material hardness of the bull gear, luckily the bull gear could be repaired, but unfortunately the pinion had to be completely replaced. Energetic re engineered and provided the customer with all knowledge and resources in order to get a new pinion as fast as possible. The project was later summarized as a big success. Getting the turbine back in smooth and stable operation again. The customer was so satisfied with Energetic services they requested to sign a exclusive service contract. Energetic has executed already a lot of activities on SST 110 AFA CFR turbines all over Europe in various industries, potential customers can check our reference list available on our site.

