Back in January 2007, SGS Industrial Services was awarded a contract to provide Technical Consulting for the construction of the new 858 MW unit in the Belchatow Power Plant in Poland. For the length of the entire project, with completion scheduled for November 2011, SGS’s team of experts has performed a wide range of third-party inspection, testing and verification services, including review of initial design and documentation, Quality Assurance, Quality Control and Construction Supervision.

**IMPORTANT PROJECTS REQUIRE DEDICATED QUALITY ASSURANCE AND QUALITY CONTROL**

Belchatow Power Plant is a large 4,440 MW lignite-fired power station, situated near Belchatow, an industrial city in Poland. With a total production of 28,8 TWh of electricity per year, generating almost 20% of the total power output in Poland, it is the largest thermal power station in Europe and one of the largest fossil power stations in the world.

In order to increase the total capacity of the power station to 5,258 MW while contributing to a reduction in both fuel consumption and emissions, as compared to the existing unit, PGE Elektrownia Belchatow S.A., a subsidiary of the Polish Energy Group, decided to modernise the plant while also beginning construction of the new 858 MW unit.

To attain the goal of proceeding with such an extensive project in compliance with all relevant regulations and requirements, while keeping the project within the planned time schedule, the project owner looked for a Technical Adviser – a reliable inspection, verification, testing and certification company.

In January 2007, due to its extensive experience and competence, SGS Poland was awarded a contract to provide extensive Technical Consulting services for the entire project. On May 23, 2007, a foundation stone ceremony for the construction of the biggest and most modern power unit in Poland, scheduled to be operational in April 2011, successfully took place near the city of Belchatow. The new unit will be fired with brown coal delivered from the strip mine in Belchatow and will be able to provide power for a city the size of Warsaw.
CASE STUDY

SGS TECHNICAL CONSULTING FOR BELCHATOW POWER PLANT

Since January 2007, SGS Industrial Services has been providing complex Technical Consulting services for the construction of the new 858 MW unit in the Belchatow Power Station, including review of initial design and documentation, Quality Assurance, Quality Control and Construction Supervision.

With Design Verification, SGS ensured at an early stage in cooperation with the client that the design of the new unit was in accordance with proven industry standards and met given international and local requirements for operational, safety and environmental performance. Based on its substantial experience in projects of this kind, SGS provided verification for the design drawings with regards to power generation and evacuation, structural and geotechnical design, as well as review of installation specifications and verification of material certificates. Furthermore, SGS’s team of experts reviewed various concepts, including flue gas desulphurisation, flue gas heat recovery, CO2 emissions, co-firing coal as well as process automation and monitoring.

In order to ensure that the construction of the 858 MW unit is in compliance with all contractual specifications, codes, standards and government regulations, the team of SGS’s experts in relation with the investor provides both Quality Assurance and Quality Control inspections for the duration of the construction works. With Quality Assurance and Quality Control, SGS verifies materials and machinery equipment through checks, audits, inspection and witnessing. The whole inspection process is carried out in accordance with quality assurance procedures and a checklist relating to specific types of equipment, operational factors and the vendor’s quality control system.

Based on its extensive skills in the construction industry, SGS also conducts Construction Supervision for the Belchatow Power Plant. With a team of highly qualified experts, SGS supports the client in carrying out independent site inspections and Factory Acceptance tests to guarantee that the new unit is constructed according to local and international standards.

SGS provides effective Technical Consultancy services, which results in the project being kept on time and within the budget, to the full satisfaction of the client.

SGS Industrial Services is one of the biggest business lines of the SGS Group, a global service provider for technical verification, inspection, testing and conformity assessment, ensuring that the customer’s installations, materials, equipment, facilities and projects meet all quality and performance requirements, whether they are regulatory, voluntary or customer-based.

SGS IS THE GLOBAL LEADER AND INNOVATOR IN INSPECTION, VERIFICATION, TESTING AND CERTIFICATION SERVICES. FOUNDED IN 1878, SGS IS RECOGNISED AS THE GLOBAL BENCHMARK IN QUALITY AND INTEGRITY. WITH MORE THAN 67,000 EMPLOYEES, SGS OPERATES A NETWORK OF OVER 1,250 OFFICES AND LABORATORIES AROUND THE WORLD.