Goodwin International Ltd as a British Engineering Company is synonymous with exceptionally high standards for precision engineering. Goodwin has supplied large machined components for over 60 years, ranging from 200kg to 60,000kg and assemblies up to 100,000kg in materials such as carbon steel, stainless and advanced ultra super critical nickel based alloys, such as inconel and duplex.



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We are a global supplier to the power generation, oil, petrochemical and nuclear sector industries. Our engineering knowledge is second to none and we have an open and honest approach which is exhibited by our continued and ongoing success. By ensuring we are providing the highest quality products and services, delivered at globally competitive prices we work with some of the world's leading engineering companies.

One such company, Laursen Toubro, contracted Goodwin to supply critical Main Steam Valves (MSV) for a 660MW steam turbine. The MSV Left and Right Hand fabricated assemblies equate to just over 44,000kg.

The valves were comprised of a combination of castings (G-X12CrMoWVNbN10-1-1), forgings (F91) and weld overlay (inconel). Goodwin therefore needed to ensure tight integration with our supply chain to ensure complete synergy between all interfaces. Goodwin were tasked with supplying raw material, machining, undertaking Non Destructive Testing (NDT), pressure testing and shipping these complex components.

Below is a diagram showing the welding plan.





Consistent project management and control methodologies were used across the project to ensure successful delivery. To facilitate smooth delivery of the project's overall baseline project plan, weekly project reports, weekly project update status and monthly financial completion status were provided.

Due to the nature of the project and working with engineers in India, it was essential to provide concise and detailed documentation in accordance with the specific project requirements. Goodwin were required to supply extensive Manufacturing Inspection Test Plans (MITPs). The NDT requirements included ultrasonic inspection, radiography, magnetic particle inspection and multiple customer witness points. All components had full traceability with certificates of conformity and certificate of origin furnished to our client.

Investment in the latest laser measurement and scanning technology coupled with one of the largest commercially available CMM capabilities in the UK and conventional



MSV fabrication beign positioned in the radiography facility prior to undergoing radiographic inspection

measurement techniques allows Goodwin International to that components were manufactured to the highest possible standards demanded by our customer.



Machined and pressure tested MSV undergoing final inspection prior to shipment

Completion of the parts was in line with technical documents and specifications. As such Goodwin International were consistent in providing Life Time Quality Records (LTQRs), submission date trackers (reported weekly), inspection reports, project specific painting / plating procedures, NDT and packing procedures – all in accordance with the project requirements.

Goodwin understands the value of quality assurance and that documentary evidence is of a firm equal to the component parts in highly regulated, technology and specification driven industry. It is quality assurance and control which sets Goodwin apart from our competitors.

Goodwin engineers have many years experience dealing directly with engineers talking their language and tailoring their needs with our ability to add manufacturability to designs, manufacture finished components as well as procure ancillary components to meet the project requirements.