“JSL is working with all major nuclear players in India and expecting a major share in the nuclear segment by supplying required stainless steel for the sector”

Stainless Steel in Nuclear Industry – How does these two amalgamate resulting in effective results in the present time?

Nuclear power plants demand highest safety standards which lead to uses of stainless steel as it helps preventing the failures due to corrosion, which can cost the industry billions of Euros in just maintenance. Corrosion occurs within the steam cycle of nuclear and fossil power plants and on the fire-side of fossil fired power plants. Steam cycle related corrosion has been most troublesome, causing failures to major components such as boilers, steam generators, turbines, feed-water heaters, condensers and the piping throughout the steam plant.

Stainless Steel, due to its idiosyncratic traits of Weight-to-Strength Ratio, Corrosion Resistance, High Ductility and Durability, is one of the most preferred metals in the industry. Be it the Storage tanks or Piping in Nuclear plant, structural components of Pressurized Water Reactors (PWR), Fast Breeder Reactors (FBR), a Fusion Demonstration Reactor (DEMO), or envisaged for the International Thermonuclear Experimental Reactor (ITER) and the forthcoming Gen-IV Fission Reactor, this metal has performed magnificently, demonstrating wonderful durability and safety.

Discuss about the steel grades supplied by the stainless steel sector which are extensively used in the related industry.

Stainless Steel grades supplied by Jindal Stainless Limited for usage in Atomic Energy Applications:

- 304L (NAG)
- 304/304L/304LN zest
- 316/316L/316LN

How Jindal Stainless Limited (JSL) is contributing its lineage in the nuclear industry?

We at JSL strongly believe that stainless steel can help in creating a sustainable tomorrow while proving to be the most viable choice for the nuclear industry.

JSL feels proud to be a preferred supplier of stainless steel plates/sheets/coils to organisations such as Bhabha Atomic Research Centre (BARC), Nuclear Power Corporation of India Limited (NPCIL), Bharatiya Nabhikiya Vidyut Nigam Ltd. (BHVINI), Nuclear Fuel Complex (NFC) and Indira Gandhi Centre for Atomic Research (IGCAR) meeting all the stringent technical requirements.

What are JSL’s current projects in hand regarding the usage of stainless steel in this industry?

Recently, due to our continuous endeavours, we have received order for supplying stainless steel plates/sheets for the renowned International Thermonuclear Experiment Reactor (ITER) prestigious project. We are already in receipt of orders to the tune of 1000MT for this project and are proud to be able to significantly contribute to the technological advancement in the power sector.

Also, discuss about any upcoming MoUs or projects which JSL is looking up, catering the effectuate contribution of stainless steel in the nuclear sector.

JSL is working with all major nuclear players in India and expecting a major share in the nuclear segment by supplying required stainless steel for the sector.