

Industrial Inspection Services: Comprehensive Heat Treatment Services for a Wide Range of Verticals

Indian heat treatment market is expected to reach USD 8.37 billion by 2027 at a CAGR of 7.5 percent. The rise in penetration of heat treatment in automotive, aerospace, construction, machining, electrical and electronics industries is the driving factor fuelling the market growth. In a time when digitalized technology is playing a major role in upgrading mechanisms across industries and being functional in the Fourth Industrial Revolution, a need for automation of infrastructure has been felt in heat treatment industry as well in order to run faster and error-free operations.

This is where Industrial Inspection Services comes into the picture to provide a comprehensive range of heat treatment services for projects like refineries, fertilizers, petrochemical complexes, sponge iron projects, chemical plants and cross-country pipelines with digitized system to modulate their operation in order to achieve accuracy and faster pace. Since its inception in 1991, IIS is supporting several verticals in enhancing their manufacturing facility in terms of competence as NDT, heat treatment and inspection assistance, NDT level-III service provider and NDT training institute. They undertook DOWTHERM testing of RIL pump blocks at Larsen & Toubro Ltd. and ran thermal dry out of refractory lining in various projects.

Range of Services

IIS specialized in a diverse range of heat treatment services including pre-heating, post-heating, stress relieving (SR), intermediate SR, normalizing, solution annealing, water quenching, tempering, step cooling and drying of refractory material. They carry out industrial heat treatment on simple materials like CS and MS and the critical ones such as P9, P11 and P91 & high alloy like CrMoV. They have extensive capacity to handle heat treatment procedures ranging from 12.5 mm diameter to 16500 mm dia with thickness between 4mm to 330mm. IIS performs heat treatment on equipment like regenerator, stripper column, pressure vessel, boiler headers, modules, deck pipeline and structure and boiler heater tube. Along with skilled workforce, they have the resources such as 220 and 80 volts panel, latest 12/24 point recorder with digital display, coil heaters and pad heating element and they are also carrying out heat treatment using oil firing systems & gas firing systems.

IIS has the expertise to design and calibrate electrical modular furnaces that is capable of heating 100 ton of structure up to 1000°C. They have designed electrical modular furnace for the consumers in Abu Dhabi, India, and UAE. They have designed & operated diesel fire furnace for clients in Sharjah & India and gas fire furnaces their



customers at Oman & India largest being 8meter Wx8meter H x 30 meter L.

IIS provides Non-Destructive Testing (NDT) as well comprising PT, MT, UT, and ultrasonic thickness measurement along with NDT level-II & ASNT- III technicians.

IIS runs welding inspection as per ASME, SEC-IX, BS and several other regulatory bodies with their team of QA/QC engineers. They provide inspection personnel for various operations as well.



IIS has extended their operations in Tanzania, Abu Dhabi, Oman, China, Nigeria, and Sharjah. They examined a weld length of more than 500 km by dye penetrant testing last year and successfully participated in 4 ASME U stamp audit in eight months for multiple clients

Experience and Expertise

IIS has provided TPI third party inspection services to for Shell LNG project, Hazira and Larsen & Toubro Ltd. Powai. As they are providing trained inspection engineers. IIS' team of efficient engineers to company like Larsen & Toubro Boiler, Larsen & Toubro Ranoli, Larsen & Toubro Hazira runs inspection in different stages, supervises and undergoes interpretation of NDE and proper documentation of data. IIS has been generating widespread employment in the country through their consultancy and training while engaging them in various operations of inspections in projects ventured by renowned industrial organizations. IIS has extended their operations in Tanzania, Abu Dhabi, Oman, China, Nigeria, and Sharjah. They examined a weld length of more than 500 km by dye penetrant testing last year and successfully participated in 4 ASME U stamp audit in eight months for multiple clients. The company has executed projects in the country as well as many foreign regions as has been mentioned above. It hopes to carry on with the excellent work and gain grounds in other countries as well.

Rajesh Gandhi, Director of Industrial Inspection Services adds, "I started off this journey with one technician in 1991. Now we got a team over 100 people in heat treatment. Our overall workforce strength is about 350 people deployed



Rajesh Gandhi,
Director

in different divisions. One vertical is dedicated to heat treatment, while other verticals cater to inspection, NDE testing & consultancy. So in our initial days we used to do small scale heat treatment operations for pipe joints. From there we geared up and now we are providing heat treatment services for big vessel joints in critical industries like fertilizers, steel, windmill, shipping, refinery, defence & nuclear energy in many projects in India & abroad.

Vision for Future

Starting off with just one employee over 30 years ago, the company has been able to establish itself as a qualified and trusted solution provider in this domain and worked on major projects in and out of the country. Speaking about the roadmap ahead for the company, Rajesh concludes, "We are focusing more in automation as the process is increasingly becoming more complex. We are upgrading our materials and equipment's concentrating on innovation as heat treatment is one of our priorities. And we would like to improve our operations in such a way so that we can take up any kind of challenge where our automated system will be capable of managing critical operations". 