

From the Desk of the Executive-In-Charge

Dear Stakeholder,

TGS has carved a niche for itself in Design and Manufacturing, in the country, ever since its inception. The last 40 years are a living testimonial to the capabilities of TGS. Our achievements have ranged from supplying the biggest blast furnace in India, a mobile launch pad for ISRO, to heavy duty cranes. And now, we are in the process of establishing ourselves as a Complete Solution Provider, by venturing into erection and commissioning. We believe, that what we attempt to share with you here, will further strengthen your belief and confidence in Tata Growth Shop's continuous endeavor to up-grade capability and match the world's best.



We realise that there are greater challenges ahead and we look forward to your partnership and guidance in overcoming these challenges into opportunities.

With warm regards,



Rajesh Ranjan Jha

TGS *From the archives*

(The journey so far...)

- *Import of equipment prohibitive in the late 1950's*
- *Pre 2Million Ton Expansion Program of Tata Steel implemented*
- *Need for self-reliance in design and mfg. felt by Tata Steel*
- *Establishment of TGS by Vice President (VP), Tata Steel & Mr. Sumant Moolgaonkar*

Starting with a single bay of less than 500 sqm of covered area, TGS expanded to 5 manufacturing bays, a preparation cross bay with full fledged fabrication, assembly and machining sections by the year 1980. It developed the capability of handling not only Tata Steel's captive requirements but external orders as well, comprising domestic and heavy engineering export markets.

The year 2006 marked a watershed year in the history of TGS, when, it completed an expansion program to cater to heavy precision machining & heavy fabrication and compete with the best in the world. It acquired heavy duty CNC boring machines, expanded its covered area to nearly 72000 Sq m and added facilities for heavy material handling.



To be continued

The Direct Reduction process

TGS is the market leader in the design and manufacturing of the 500 tpd (Tons Per Day) and 375 tpd sponge iron plants in India. It has supplied equipment for sponge iron plants to various customers like Bhushan, Jindal, Tata Sponge, in the country to name a few.

The technology has been mastered by TGS over the last 40 years with the active support and involvement of the Research & Development (R&D) division of Tata Steel.

In the early 1970s, the R&D division of Tata Steel felt the need to develop Direct Reduced Iron (DRI) using "non-coking coal" through the "rotary kiln" route. DRI is a highly pure metal without major tramp elements, can be stored & handled easily, and can be used for steel-making through the secondary route. Together with TGS, they found that non-coking coal, based on the direct reduction of iron-ore in rotary kilns, can be widely accepted for sponge iron production.

A pilot plant of 10 tpd was designed and built by TGS. The efforts of the R&D department were fully complemented by TGS, till the process was established and patented as the "TDR" process for making DRI. Subsequent modifications were made down the years for increased metallization, long campaign life, reliable drive systems and adequate

environmental control measures.

Based on the above TDR process in the early 1980s, a plant of 90,000 tpa (Tons Per Annum) capacity was setup at Joda by Tata Steel for the commercial production of DRI. In this plant, the entire process was designed and developed by Tata Growth Shop. The plant was subsequently upgraded to 1, 20,000 tpa. Today, based on this experience, TGS can confidently handle design, development and commissioning of DRI-based sponge iron plants of various capacities up to 500 tpd.



Column & Boom welding machines

TGS recently procured 2 column & boom welding machines which are more than 10 times faster than the conventional welding machines.

The machine is capable of welding pipes, shells and vessels of diameter up to 4.5 meters. The boom is designed with high section modules to minimize sagging when fully extended. The boom runs horizontally on the guide rollers fitted on a heavy mast plate. Due to the variable height of the boom, the welding can be done outside as well as inside of the pipes and vessels. The design is robust and vibration free.

The constant speed maintained by a thyristor driven DC motor, results in a very high quality of welding in addition to the inherent benefits of submerged arc welding process. The machine is being used for fabrication of pressure vessels and ducting applications



TGS People & Relationships

Customer Visit

Bhushan Power & Steel Ltd. (BPSL) has been one of the Key customers of TGS backed up with having continuous business association for more than 10 years. The long lasting association started with 1st order of supplying equipment for 2 units of 500 TPD Sponge Iron plant and has strengthened over the years with continuous flow of business viz supply of equipment for a total of 14 units.

In the continuous endeavor to improve upon the customer orientation by better understanding actual needs of the customer with the aim of providing best possible service by TGS, Mr. R N Pattajoshi Executive Director (Projects), BPSL was invited to TGS for a direct interaction with concerned officers / Supervisors in



During the meeting Mr. Pattajoshi not only expressed his full satisfaction on the long business association with TGS but also suggested number of improvement actions such as close interaction of TGS execution team with BPSL site team, knowledge of BPSL project progress, consolidated information, technicality of products, awareness of increasing competitiveness in the market etc. The interactive session, with Mr. Pattajoshi has been a very good learning experience for TGS team and we look forward to everlasting business association with BPSL..... No wonder BPSL is looking for few more 500 TPD Kilns from TGS

Industrial visit by workers and supervisors

TGS took up the initiative for gaining an insight into the best practices prevalent in various organizations, in the area of Safety, Quality & Innovation.

A joint industrial tour to companies like Blue scope, L & T, SANDVIK Asia & Tata Automotive Ltd. Was organized for a team of 11 members, headed by Manager Logistics, TGS, Mr. U.K. Mishra, in

The purpose of the visit was to observe some of the occupational best practices adopted by the organizations. During the visit, the team noted the various initiatives taken up by these companies and made strategies for implementing something parallel/similar at the TGS work environment. Some of the key learnings which are being implemented are : innovative arrangements for material handling & storage, Portable equipment for material lifting at heights and improvisations at the goggle cleaning centre.



An Annual Get-to-Gether

6th February, 2011 saw the TGS team assembling at TGS colony playground for an Annual Get-together. While there have been such gatherings earlier, it was the first time all workers, supervisors and officers attended the get together, in this scale where nearly 500 employees thronged to an array of fun, games, music and food.

There was a choice of engaging oneself in a game of volleyball, cricket, or in fun-games like rolling the ball, tennis ball throw, table tennis ball throw, musical chair and kite flying. Our EIC, Mr. Rajesh Ranjan Jha and President, TMU Mr. Rakeshwar Pandey made their striking presence by leading their teams to a game of volley ball and cricket. It was a fun-filled day sure to create lasting memories for all as it is said - for it has been said-

"We do not remember days, we remember moments." Cesare Pavese



TGS People & Relationships

CSR : JAGRITI - An unfolding Story

The story so far... The land-breaking ceremony by MRS. Daisy Irani and inauguration of the new building by Dr.K.C.Mehra..



While all these developments were taking place Jagirti or (what was then Mahila Pragati Niketan) was evolving in a silent and sure manner. Jagirti, under the patronage of Tata Growth Shop (TGS) attempted to provide employment to some needy women through small beginnings. A coffee vending machine and a cold-drink machine were installed in the canteen which were manned by women needing employment.



The formal land-breaking ceremony led the way for a new building which was Jagirti's operating centre, a nursery school was started by Jagirti. Now, Jagirti manages a nursery school at Tata Steel Adityapur Complex colony which started humbly with just a few children and one teacher. The school functions with an aim of providing quality education to the children from Gamharia & villages around it at a very nominal fee structure.



To be continued

TGS Focus on the Future - Quality

Workshop on Core Competencies of TGS

As part of the 5 year strategic planning exercise for TGS, a series of workshops was conducted, of which, the most recent one was a 1- day workshop on Core Competencies, which was held at the Centre for Excellence. The workshop was facilitated by Prof. Sharad Sarin of XLRI.

32 officers of TGS deliberated on the Core Competencies of TGS. At the end of the workshop the present and the future Core Competencies of TGS were identified. This is now being used for developing the 5- year strategic plan for TGS.



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