

From the Desk of the Executive-In-Charge

Dear Stakeholder,

I wish you and your family a very Happy, Safe & Healthy New Year - 2011.

2010 was a challenging year for us. As we look back, we not only see how we have battled the challenges thrown up by the environment, but also the way we have converted the challenges into opportunities. One of the most important challenges was undertaking the Open Yard Structural Fabrication. This has been one of the Critical Success Factors for the 3 MTPA Expansion Project of Tata Steel.



Our plans for the future, as a Nation Builder and as one of the most important enablers in fulfilling the aspirations of Tata Steel building World Class Steel Plants, are well placed, and, we look forward with confidence, commitment and perseverance, for the benefit of the communities we operate in.

With your valuable contributions, ongoing support and guidance, I am sure we will demonstrate excellent performance in the coming year with a focus on Safety, Quality and Innovation.

With warm regards,

Rajesh Ranjan Jha

TGS *From the archives*

In the late 1950's the import of equipment had become prohibitive in light of the precarious foreign exchange position of the country. A well conceived revamping program of the pre TMP (Two Million Ton Expansion Program) implemented in 1955-58, equipment of the steel plant, mines & collieries and the ensuing modernization programs necessitated Tata Steel to focus on the critical need of achieving self reliance in the field of design and manufacture of steel plant equipment.

It was at this juncture that the initiative of the then Vice Chairman of Tata Steel and an outstanding Technocrat, Mr. Sumant Moolgaonkar, led to the establishment of the Tata Growth Shop. Tata Growth Shop(TGS) was conceived as a major facility which would assist in fostering the growth of TATA STEEL.

The prime objectives of setting up Tata Growth Shop were

- *To design and manufacture a wide variety of steel plant equipment, custom-built EOT cranes, material handling equipment and equipment for mines & collieries required at Tata Steel for revamping / replacement of its old units.*
- *To manufacture pilot plant and prototype equipment for the R&D division with a view to developing new processes and products for commercialization of the same (eg. DRI)*
- *To design and develop new equipment exclusively required for specific applications at Tata Steel.*
- *To supply the capital spares of high quality to Tata Steel.*
- *Design and development of special equipment as import substitute.*

A dedicated project team was constituted in 1966 to ensure speedy implementation of the project. A design cell was set-up with handpicked experienced engineers. In 1969, in the picturesque backdrop of Gamharia, 16 Km from Tata Steel works, Tata Growth Shop was set up.



To be continued

Open Yard Fabrication at TGS

Mr. H M Nerurkar, Managing Director, TATA STEEL LIMITED inaugurated the new Open Yard Fabrication for Structures and the Feeding Group for seamless flow of data and information from basic design to gas cutting machines.

Structurals, a new line of TGS business, evolved with the potential to provide consistent base load, having advanced features e.g. automated fabrication, better quality control aimed at enhancing top line growth.

With this inauguration, Open Yard Fabrication is now spread to over 94,000 m² area, thereby, increasing the fabrication capacity of TGS to around 5000 tons per month. The facilities serve the requirement of external customers as well as TATA STEEL. The area is manned by over 350 people with advanced machinery like submerged welding machine which are four times faster than the conventional ones.

The feeding group equipped with engineering software TEKLA, facilitates detailing and nesting of all feeding items thereby providing an advantage in the area of quality, cost and delivery.

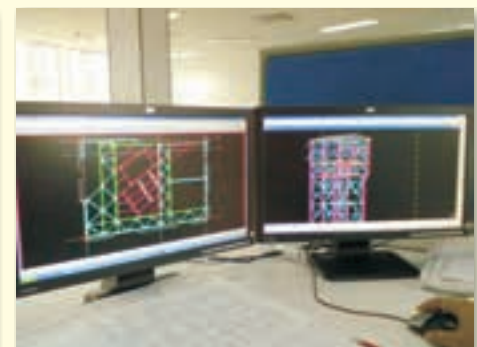
Moreover, the direct feeding of the cutting program to the CNC Gas cutting machines results in improvement in the raw material yield. The feeding group regulates & controls the inputs required for manufacturing with a view to reducing manufacturing cycle time, improvement in labour productivity and reduction of Work In Progress.



Design Cell at Kolkata Office

A Design Office has been set up at TATA CENTER, Kolkata in the month of September 2010. At present, the Kolkata office is buzzing with activities as engineers & draftsmen are engaged with structural and pressure vessel designing and detail engineering as well as marketing. For industrial, building and technological structures, advanced software for 3D modeling, like TEKLA is being used by the engineers. Similarly PV Elite is being used for designing and detailing of pressure vessels and the heat exchangers. The main objectives of setting up of the Design Cell are

- Better market accessibility
- Proximity to consultants
- Attracting experienced human resources.



Supporting the Railways to build more Diesel Locomotives

Looking back in time, Diesel Locomotive Works (DLW) was identified as a potential customer by TGS sometime in 2000-2001 and over the years TGS and DLW formed the bond, with TGS successfully manufacturing crank cases, underframe assemblies, engine couplings, covers & frames, different types of engine blocks etc. for the Railways.

For certain items like engine blocks TGS is **the sole manufacturer** outside DLW, Varanasi for the last 10 years.

TGS and DLW have enhanced their fruitful association further. TGS continues to be the sole supplier for DLW's new enhanced 4000 HP EMD locomotive components like

- cover and frame
- 16 cylinder engine block
- Engine coupling & machined crank cases.



Tata Power

Faced with a pressing problem in a turbine at its Haldia project, Tata Power turned to TGS for its assistance to resolve it. The turbine lacked adequate clearance and therefore required close machining between the fins to repair it.

This was the first time a job of this nature was to be undertaken at TGS. While reaching between the 147 fins required immense accuracy, it also required precision to ensure that none of the fins were damaged.

TGS not only rose to both the level of accuracy and precision required, but also executed the job in the stipulated time frame.

Tata Power complimented TGS for this support & the good job.



TGS *Learning & Improvement*

Reduction in machining time of ROT rollers by the SGA Team

Wotan – TOS SGA Circle were faced with a situation of a tight delivery schedule of ROT rollers to Tata Steel. The machining time was 10 hours, which did not match the customer's requirement.

The team put on their thinking hats and rose to the occasion by creating a fixture which enabled the machining of four pieces in a single set-up thereby reducing the machining time to 6 hours from the initial 10 hours per piece.

TGS congratulates the team!



TGS industrial membership at TWI: RESEARCH AND DEVELOPMENT

In order to strengthen the theoretical and applied knowledge in the area of welding and material cutting technology, TGS has enrolled itself as an industrial member of The Welding Institute (TWI), UK – a global leader in technology engineering providing research and consultancy to its members. TWI's business is built around the development and exploitation of advanced technologies. It is a company on the cutting edge of technological advancement and is recognized as one of the world's leading research and technology organizations.

Tata Growth Shop will benefit from TWI's specialised knowledge in manufacturing, fabrication and repair technologies, structural integrity & corrosion management, materials & structural testing, inspection & maintenance, failure investigation and material processing & training.

Customer Meet

There is no substitute to listening to & understanding the “Voice of the Customer” which many of us have listened to, from Diesel Locomotive Works , one of the Key External Customers of Tata Growth Shop. A customer meet was organized by TGS at Diesel Locomotive Works at Varanasi on 23rd April 2010. This type of customer meet was organized by TGS for the First time and on the whole it can be said that it was “Mission Successful”.

Before the customer meet, team of TGS senior executives met with the General Manager, Controller Of Stores & Chief Mechanical Engineer individually and had very fruitful discussion for overall business association of TGS with DLW. DLW officials have assured and demonstrated full support to TGS to strengthen the relationship for increasing business volume.

Other officers of TGS team visited DLW plant to see various facilities and work done by DLW. Participation in the customer meet was beyond the expectations of TGS when it was found that more than 180 people from DLW joined the proceedings. Starting from the General Manager, Controller Of Stores , Chief Mechanical Engineer and all Departmental heads, the participants included representatives of various levels from all departments of DLW. Chief (Business Development & Sales), made a presentation, giving details of TGS, its customers, products, facilities and relevant details of business with DLW. On behalf of DLW, the Chief Inspection Officer, Mr. Satish Kumar ,shared a presentation where issues related to TGS supplied products were shown. This meet reaffirms DLW's commitment to and interest in TGS & its improvement initiatives which would in-turn help serve DLW better with the focus even stronger now on the development and stabilization of Process-Centric work culture to achieve Consistency & Quality in delivery, the two main requirements from any customer.



Young officers' group formed and projects taken by individual teams

A Young Officers' Group has been formed in TGS with the objective of helping the young engineers to get acquainted with the new organization and harness the potential of young and innovative brains. The group comprises 6 teams, each with 4 to 5 members, and relevant projects are taken up by each group based on their common field of interest.

4 of the short-listed projects were presented to the Vice President (Engineering and Chattisgarh Project), Mr. Varun Jha, who appreciated the effort by the teams. The projects are in the implementation stage.

CSR : JAGRITI - An unfolding Story

Sometime in 1988, Mahila Pragati Niketan was formed with the ladies residing in TGS Colony with a purpose of doing social work in adjoining villages. Over a period of time, the objective became more diversified and structured, and the organization was renamed JAGRITI.

More employees' wives joined in to contribute to the cause Jagriti was set up for. Hence, along with the Management (of TGS), the Tisco Mazdoor Union also came forward to support the cause of social upliftment.

In those days the organisation did not have a proper building. Meetings were conducted at the Gamharia Club. The committee members of Jagriti approached the management of Tata Growth Shop (TGS), to build a small hall, in order to be able to run the Nursery School too. It was sanctioned and the building was constructed in 6 month's time. Mrs Daisy Irani graced the occasion of Bhumi Pooja and Mr. K.C. Mehra inaugurated the new building.



To be continued in the next issue

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