



8TH D. L. SHAH MEMORIAL LECTURE

on

Creating a Quality Culture in an organization

The Tata Steel Way by Mr. Anand Sen, President TQM & Steel Business, Tata Steel Limited

Lecture Proceedings

Eighth D. L. Shah memorial lecture was held on 18th February 2017 in the afternoon at Hall of Harmony, Nehru Centre, Worli-Mumbai – 400018.

Mr. Mahesh V. Gandhi, Trustee NCQM welcomed the guests and dignitaries who included, among others, learned speaker Mr. Anand Sen, Mr. H. K. Taneja, Trustee of D. L. Shah Trust (DLST), Mr. Khushroo Khambata, CEO of DLST, Dr. H. M. Mehta, Trustee of NCQM and Mr. B. Banerjee, President NCQM. Mr. Gandhi also gave an update of NCQM's activities & achievements over the past 27 years. Mr. H.K. Taneja gave an update of D. L. Shah Trust for Applied Science, Technology, Arts & Philosophy and its activities.

Mr. Banerjee introduced the speaker whose brief C V was already there in the invitation letter itself. To start with, Mr. Sen highlighted global presence of Tata Steel having products & services in over 50 countries, over 80,000 employees in 5 continents, and operations in over 100 countries.

He categorized TSL's expanse in 3 industry type (a) Mining – 3rd Largest (b) Iron & Steel Manufacturing – 3rd Largest and (c) Engineering & Projects which has an annual capex outlay of Rs. 8000 crores. Further the profit centres, Joint ventures, Steel Processing Units, together make TSL operation complete and fulfilling. TSL's uniqueness is in being able to manage its 'trilemma' and provide value added products, services & solutions to its customers. While maintaining the 'supplier of choice' status for its customers, TSL's endeavor is to create value over time for all its stakeholders.

Embedding the 'culture of quality' at the roots of the organization has helped TSL to continually spiral up the journey of business excellence over the years and be the industry leader. However, the journey had its challenges of dealing with a large and complex value chain with diverse employee base, operating characteristics and capabilities. This quality journey which started almost 3 decades earlier in '90's as a mere initiative was cultivated to a continual journey around 2005 post which it found roots in the organization and became a culture! Quality Circles, Total Productive Maintenance, Total Operative Performance, Theory of Constraints, Corporate Quality Assurance, Innovent, Shikhar – 25 etc were some of the key initiatives undertaken by the organization to stay abreast with the changing times. Blessed with a leadership with continuity of thought and a dedicated workforce, TSL has always been able to do many things to keep the organization engaged on this journey of excellence.

The Deming journey that TSL undertook around 2005 brought about the next phase of transformation in the organization with the focus largely being on establishing system thinking and process approach in a uniform manner - from mining to finished products. A customized TQM framework helped provide a common lexicon so that all could understand and speak the same language across the diverse and long value chain. TQM vehicles such as Policy Management, Daily Management, Cross Functional Management and Employee engagement were used to drive systematic improvements for a process oriented business results. Maturity was built over the years through relentless focus on rotating PDCA in every aspect.

Along this journey, TSL attempted to win awards; not so much for the joy of winning but to have systematic approach to Quality. The efforts were vindicated with several awards from time to time and TSL went on to become the 1st integrated steel company outside Japan to win the DAP (Deming Application Prize) Award in 2008 and later the DGP (Deming Grand Prize) in 2012! A key realization of the Deming journey was the need for strong collaboration to unearth value residing within the 'crevices'. Much against the convention, TSL in

its pioneering spirit, chose to focus on aspirational targets and adopt customized problem solving approach to meet the varied needs across the breath & depth of the organization.

The TQM culture today is not only limited within the steel boundaries but has been extended at an enterprise level and the focus is on adopting integrated thinking – interdependencies between factors affecting organization's ability to create value over time – for sustainable business is another new dimension of TQM. The journey of 'getting better at getting better' is a never ending one and true to its spirit, TSL continues in its endeavor to seek newer challenges in the areas of Quality, Safety, and Asset Management etc.

150 seater hall was full with professionals from over 60 organisations attended the prestigious Annual event.

Power Point Presentation slides of Mr. Sen's lecture are provided in this newsletter issue itself.

Mr. Santosh Khadagade, Vice President NCQM proposed a vote of thanks to all concern who made the entire proceedings a memorable one.

The event concluded with a social meet over high tea.

[Compiled by Mr. B. Banerjee]

Few Snap Shots of the Memorable Event



Mr. H. K. Taneja, Trustee D.L.Shah Trust and Mr. Anand Sen, President TQM and Steel Business, Tata Steels Ltd., (Speaker) garlanding portrait of Late Shri D. L. Shah



Mr. Taneja welcoming Mr. Sen with a lucky tree



Mr. Mahesh V. Gandhi, Trustee NCQM briefing NCQM's activities & achievements to the audience



Mr. Taneja briefing activities of Shri D. L. Shah Trust to the audience



Mr. B. Banerjee, President NCQM introducing the speaker



Mr. Anand Sen delivering his speech



A section of large audience



Another view of the audience engrossed in the lecture



Question / Answer session is in progress



Mr. Taneja presenting a silver plaque to Mr. Anand Sen



Dignitaries on the dias

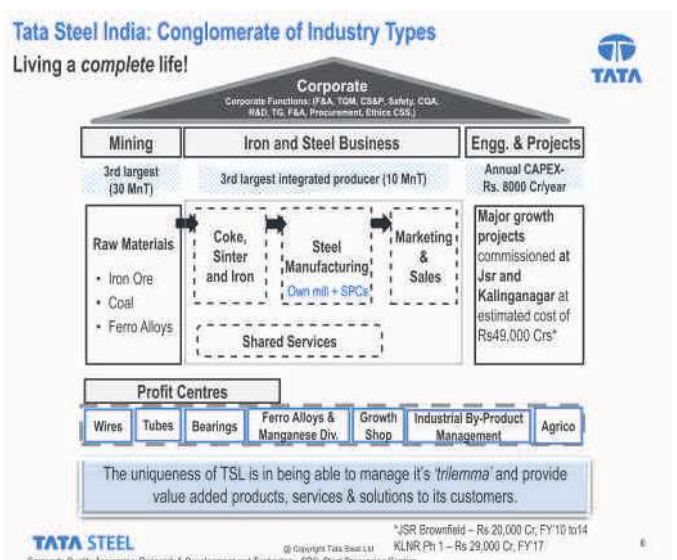
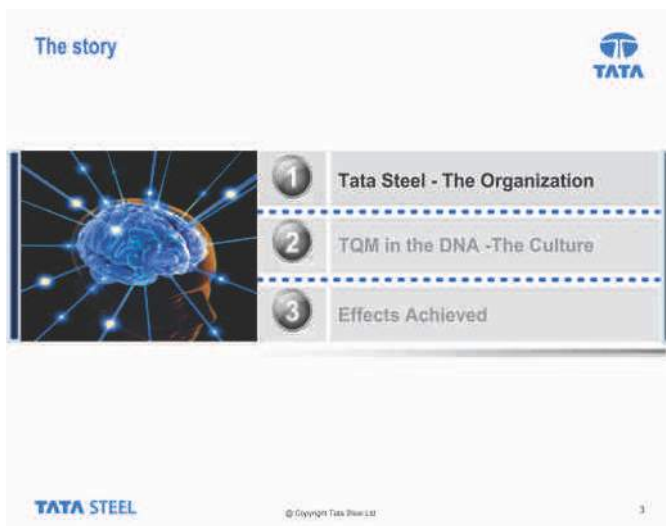
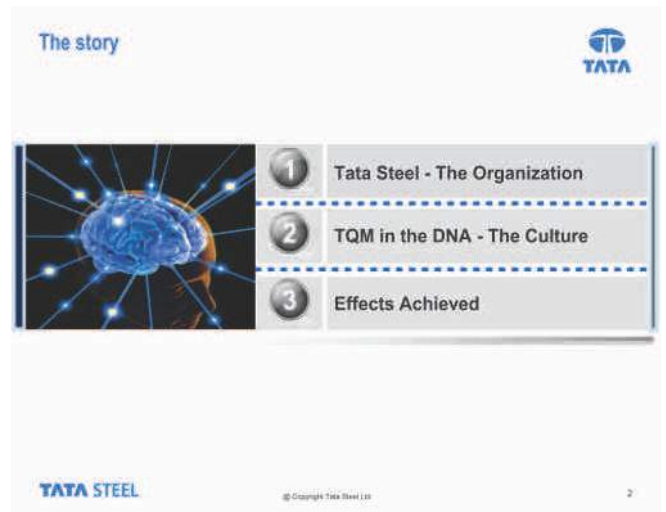
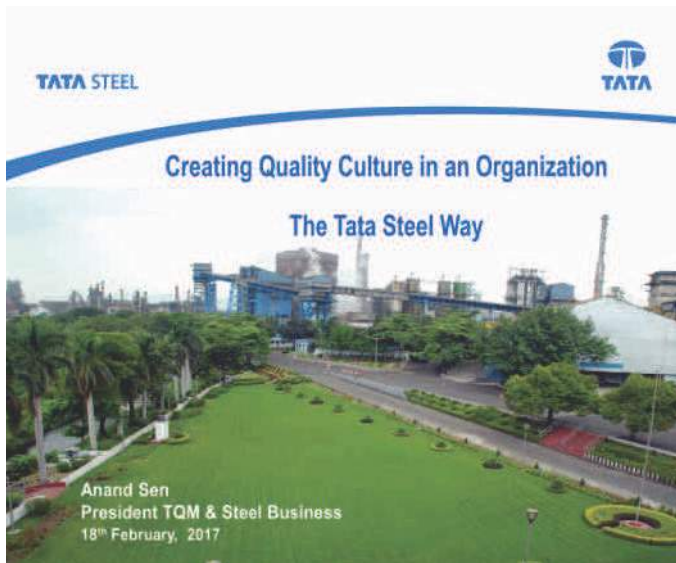
L-R – Mr. Santosh Khadagade, Dr. H. M. Mehta, Mr. H. K. Taneja, Mr. Mahesh V. Gandhi, Mr. B. Banerjee, Chief Guest Mr. Anand Sen, Mr. Khushroo Khambata, Mr. S. V. Viswanathan



Mr. Santosh Khadagade, Vice President proposing a vote of thanks

Creating a Quality Culture in an organization

The Tata Steel Way by Mr. Anand Sen, President TQM & Steel Business, Tata Steel Limited,



Product, Service & Solution Offerings

Product Category	Applications	Service & Solutions	Brands
Hot Rolled Coil LPG Cylinders Railway Wagons Tubes & Pipes Auto components Tractors Earth Moving Equipment	Cold Rolled Coil Electrical Panels Furniture Drums & Barrels Galvanized Coil (Zinc Coated) Home Appliances Steel Roofing Automotive Skin Panel	Bar & Rods Individual House & Infrastructure Tyre Beards Railway Sleepers Mig wire	TATA Brands TATA Steel TATA Tyres TATA Tractors TATA Earth Moving Equipment TATA Tubes & Pipes TATA LPG Cylinders TATA Cold Rolled Coil TATA Galvanized Coil TATA Bar & Rods TATA Steel Roofing TATA Furniture TATA Drums & Barrels TATA Automotive Skin Panel TATA Home Appliances TATA Electrical Panels TATA Cold Rolled Coil TATA Hot Rolled Coil

While maintaining the 'supplier of choice' status for its customers, TSL's endeavor is to create value over time for all its stakeholders...

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The Stakeholder Connect

Organization seeks to be socially relevant

- Customer Focus**
 - Quality - 85% drop in ppm in last decade [5000 in FY'05]
 - Developed know-how to be customers' partner of choice
 - PAG
 - Focus on enhanced product performance
- Environment Focus**
 - Focus on environment friendly products (Hi strength CRCA...) and energy saving products (TSCR products)
 - Lowest CO2 emission (National benchmark since FY'09)
- Societal Focus**
 - 1.1 million lives touched
 - 1132* youth employed
 - 5,70,000* people aided
- Operation Focus**
 - One of the lowest cost producer
 - Near 100% capacity utilization
 - Robust supply chain management with consistent rating of 'Best in Delivery Performance' by Auto majors

The 'culture of quality' at the roots of the organization has helped to continually spiral up the journey of business excellence over the years.

TATA STEEL © Copyright Tata Steel Ltd * FY'16 performance

The story

- 1 Tata Steel - The Organization
- 2 TQM in the DNA - The Culture
- 3 Effects Achieved

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Culture building in the face of challenges

Raw Material Mining → Iron Making → Steel Making → Rolling & further processing → Customers

7 Types of RM 1 Hot Metal 291 Steel grades 955 Distinct Products 15000 SKUs

Heterogeneity → Homogenization → Customization

- Large and diverse employee base (> 30000 employees) at geographically spread locations
- Some operations located in backward areas (literacy & economic conditions)
- Diverse operating characteristics at different stages of steel making and selling
- Capabilities of production units and SPCs

Tata Steel chose to tread the path of 'quality culture' to not only address its challenges but to be the industry leader

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Initiation of Quality Journey

The early years....

1967 - Set up Total Quality Management Programme to monitor the production of D.I. Iron

1968 - Introduced a system where employees could suggest improvements

1969 - Launched quality initiatives such as 5S/3A, 3A Data Quality Award (under the JRD QV Award) and 5A (Workmanship Award)

1970 - Steel SBU wins the first JRD QV Award

1980 - First award under TQM

2004 - Tata Steel becomes the first Tata Company to breach the 100 mark under TQM

1967-2004 - Journey of Quality

1967-2004 - Key milestones:

- 1967-1970: Concept of basic TQM (Total Operational Performance (TOP), Quality Improvement through TQM, Launch of ASP/SPC, Quality Improvement Projects, Production of TQM plans)
- 1970-1980: Value Engineering, Training & Education, Introduction of TQM, ISO's, TQM (TQM Awards)
- 1980-2004: ISO Systems, Deployment of IT Systems for Business, Evolution of Quality Culture, Formation of Improvement groups

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DAP Experience

The journey to winning the DAP in 2008

Disbelief -> Gradual Understanding -> Analysis -> Communication -> Shared Commitment

1998 (1st) - Business Excellence Journey (Year 1st)

2000 (1st) - Process: Refined Approaches, Good Deployment; Result: Some outstanding results of customer, market and process front

2004 (1st) - Industry Leader

2005 - TQM Diagnosis Feedback 2005

2008 (1st) - World Leader (2008-2009)

2008 (1st) - Industry Leader

2008 (1st) - Seeking World Class

2008 (1st) - Outstanding Approaches, Full Deployment; National & world leadership at customer, market and process front

2008 (1st) - Deming

2008 (1st) - Integrated TQM framework helped achieve system thinking & process approach across the organization (from Mining to Finished Products)

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Deming Prize Medal

Our efforts to embed TQM practices in the organization were rewarded with the Deming Prize, but the journey to challenge the DCP awarded us...

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To ensure organizational alignment with a common purpose and not degeneration into chaos of self-cancelling events, we attempted to win awards, not so much for the joy of winning but to have systematic approach to Q.

2012年度
デミング賞大賞・デミング賞授賞式
THE 2012 DEMING AWARD FOR THE QUALITY GRAND PRIZE, THE DEMING PRIZE

Tata Steel – the first and only integrated steel company outside Japan to win the Deming Grand Prize Award in 2012!

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...Since 2009, in pursuit of World Class, TSL has realized global benchmarking, innovation and grooming of TQM experts.
...TQM which attaches importance to customer, process and data, HR development and TEI* has been thoroughly deployed across the organization.
...TQM culture like sustenance and improvement has been cascaded based on continuous implementation of TQM

Excerpts from Deming report 2012

Flipping the pages of TQM journey

In the quest for excellence, the improvement orientation, painstakingly built over decades; stands out as the fundamental differentiator of organization culture at Tata Steel!

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TQM at Enterprise Level
Enterprise wide business excellence: going outside the limited boundary

- Synthesis:** Looking at the organization as a whole – going beyond islands of excellence
- Alignment & Integration:** Ensuring consistency of plans, processes, measures & actions (from Steel BUs to all PCs) and
- Unearthing value residing within the 'crevices' to institutionalize for the future
- Sustainable future** – Adopting integrated thinking – interdependencies between factors affecting organization's ability to create value over time – for sustainable business

Creating 'flow' ... fresh waves in the river

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Challenges & Way Forward
The road ahead BECKONS...

Safety: 'Committed to Zero'

Quality: Leadership in product & service quality

Asset Utilization: Win fight against obsolescence

The journey of 'getting better at getting better' is never ending and true to its spirit, Tata Steel continues in its endeavor to seek the 'true North'...

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The story

- Tata Steel – The Organisation
- TQM in the DMA – The Culture
- Effects Achieved

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Effects Achieved

<p>Financial & Market Related:</p> <ul style="list-style-type: none"> Value Creation: TSL in top quartile Consistent market leader in chosen segments New products & services – many 1st in India & World. Only Indian Co. to provide technical solutions at customer premise Customer satisfaction: consistently better than competition 	<p>Process Related:</p> <ul style="list-style-type: none"> Project Management: Commissioning of largest green field project at Kalinganagar Operational excellence: One of lowest cost producer with ~100% capacity utilization, lowest CO₂ emission – industry benchmark, etc. People: Highest National & International recognition to employees [ICQCC, NCQC, CCQC, PM's Shram Award,] 	<p>Sustainability Related:</p> <ul style="list-style-type: none"> Jamshedpur Steel Works - Only Steel Plant in India to be Greenco Platinum Rated (2016) by CII-GBC Recognised as the Global Steel Industry Leader in DJSI 2016 assessment Only company to win the CII-TC Sustainability Business of the Year Award 2014 for Corporate Excellence
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Effects Achieved

Best Integrated Steel Plant (9 times) PM's Trophy Assessment

Deming Application Prize 2008

JSD QV Award Steel Business Unit 2008

TBEM

JSD QV Award F&M 2011

JSD QV Award Tubes 2010

JSD QV Award Wires 2011

TOTAL QUALITY MANAGEMENT

Success is merely a milestone.....

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