



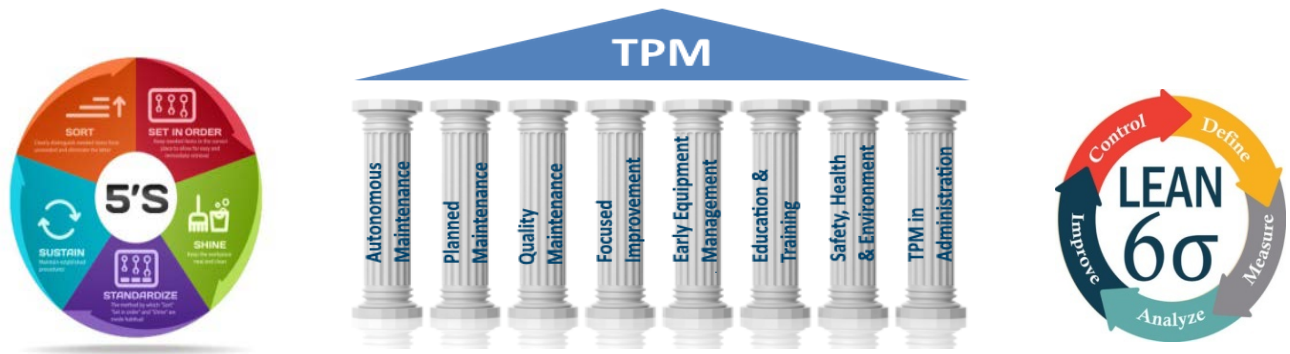
Tamilnadu Newsprint and Papers Limited



MANUFACTURING EXCELLENCE IN TNPL

TNPL has embarked on a Journey of “Manufacturing Excellence” - “ME”, encapsulating the concepts of “5S, Total Productive Maintenance (TPM) – Major Pillars, Lean and 6 sigma” to improve the overall efficiency of the company as a whole.

The main objective of the ME exercise is to Manufacture World class quality Products at Competitive Cost, ensuring Safety and Morale.



The Key focus area in our “ ME ” journey are











1. To Create a Culture of 5S, Safety and Methodical working with Analysis, within the Company creating a Clean and Efficient workplace.
2. To improve the Quality of the Products, by identifying and eliminating the defects using Lean and Six Sigma Tools.
3. To improve the Manufacturing Efficiency by increasing the Uptime of the equipment and by balancing the Pull & Push Production in the system.
4. To leverage the Information Technology / IT Platform, for all the possible Automation in the Processes.
5. To reduce the Manufacturing and distribution costs, through Lean Processes, by eliminating waste at various sub processes.
6. To extensively use Lean concepts for avoiding all the non-value adding activities.

ENABLING MECHANISMS

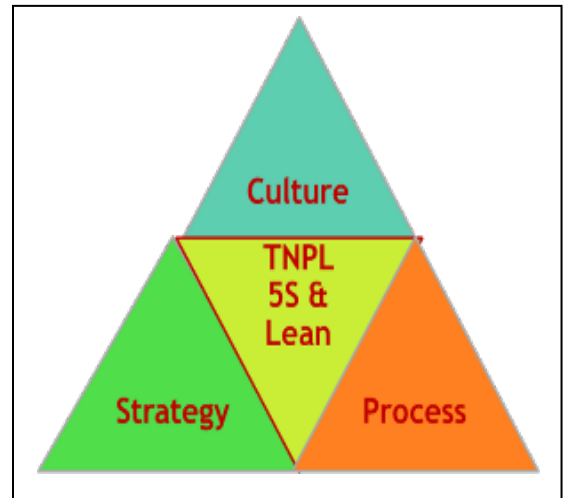
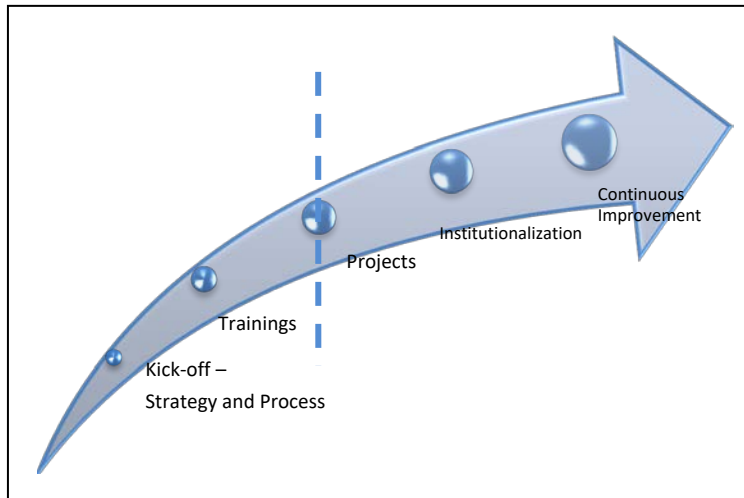
Parameter	Goal	How	Enablers/ Tools
Safety	Zero Accidents	<ul style="list-style-type: none"> ❑ People Involvement ❑ Right infrastructure ❑ Supplier development ❑ Robust processes ❑ Training & Development ❑ System support ❑ Rewards / recognitions 	<ul style="list-style-type: none"> ▪ TOS* ▪ 5"S" ▪ 7-Step ▪ 6 Sigma ▪ TPM
Quality	Zero defect		
Delivery	100% On time		
Cost	Control on Manufacturing & conversion cost.		

* TNPL OPERATING SYSTEM

TNPL OPERATING SYSTEM FRAMEWORK

 <p>Put the customer first, and provide real value</p>	 <p>Synchronize flows (material, physical and information)</p>
 <p>Design quality in every step of the process</p>	 <p>Use Six Sigma as the primary process improvement method</p>
 <p>Involve people, promote teamwork and establish the right environment.</p>	 <p>Paradigm shift from process waste to process by-product</p>
 <p>Create functional excellence</p>	 <p>Ensure reliability of equipment</p>
 <p>Follow methodical problem solving techniques</p>	 <p>Treat suppliers as partners</p>

ROAD MAP FOR THE IMPLEMENTATION OF THE “ ME “ JOURNEY



Kick-Off:

The implementation of Manufacturing Excellence in TNPL was started in Unit-I Factory during June 2019.

Trainings:

- Awareness on 5S were given to employees in the grade of Officer and above in Unit-I & Unit 2 and for Workmen in Unit 1, the training was given in Tamil during January 2020.
- Idea Generation was carried out under two head in unit 1. Ideate to automate and Ideate to innovate and projects were arrived from the Idea Hopper.
- Champions were identified in each area and trained in the concept of Lean, Basic 6-Sigma Tools such as Bar Chart, Pareto Chart, Trade Off Matrix, Concentration Diagram, Cause & Effect Diagram.
- A Knowledge Portal was created and presentations were updated in the TNPL Document Management System (DMS) Portal for constant knowledge updation of Officers.

IDEATE TO INNOVATE / IDEATE TO AUTOMATE

When you **ideate**, you're looking to generate the most refined idea possible.

Ideation is the launch point of the **innovation** process.

Ideate successfully, **innovate** successfully.

Presently we are at the Projects Implementation stage, as per the “ME” Road Map.



Benefits of “ME” Implementation at TNPL:

1. Involvement of People and Improved Team Work.
2. Clean Work Places that improve Safety and Productivity.
3. Methodical problem solving with analytical approach using Six Sigma Tolls and Techniques.
4. Creating a Culture of Continuous Improvement with Lean Thinking.
5. Profit Improvement through Cost Optimization programs.

