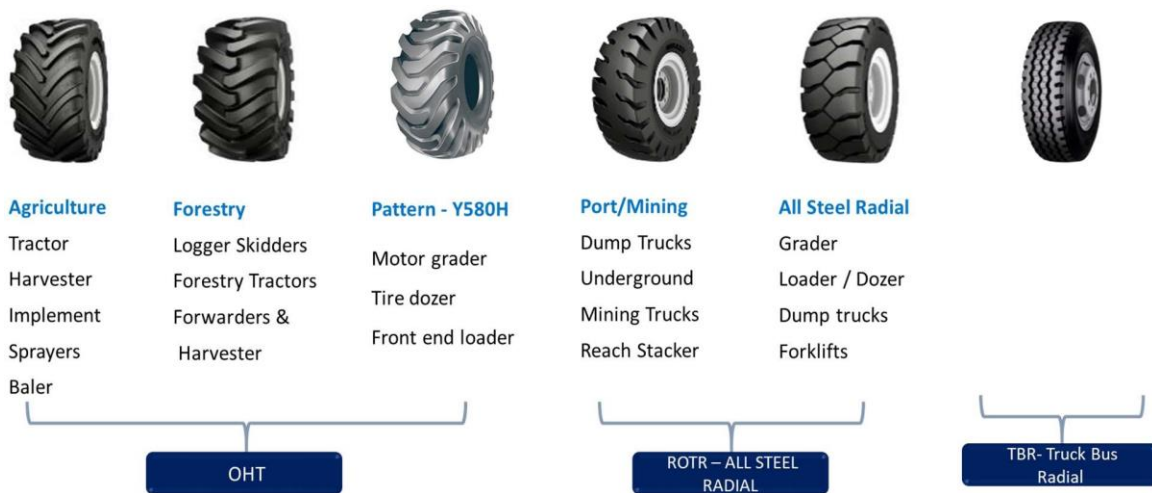


1. Company, Plant/Factory Profile

Yokohama Off Highway Tires (ATC Tires Ltd) is a premium and reputed company engaged in design, manufacturing, sales & service of Off- Highway Tires (OHT) used in Agriculture, Mining & Forestry segments. It is a wholly owned company of the Yokohama Rubber Company Ltd (YRC) of Japan which was established in 1917. YRC has range of business interests ranging from Passenger Car Tires, Off Highway Tires, and other rubber industrial products. It is a large diversified group having Sales Revenue of 1016285 million Japanese Yen with more than 25000 employees worldwide.

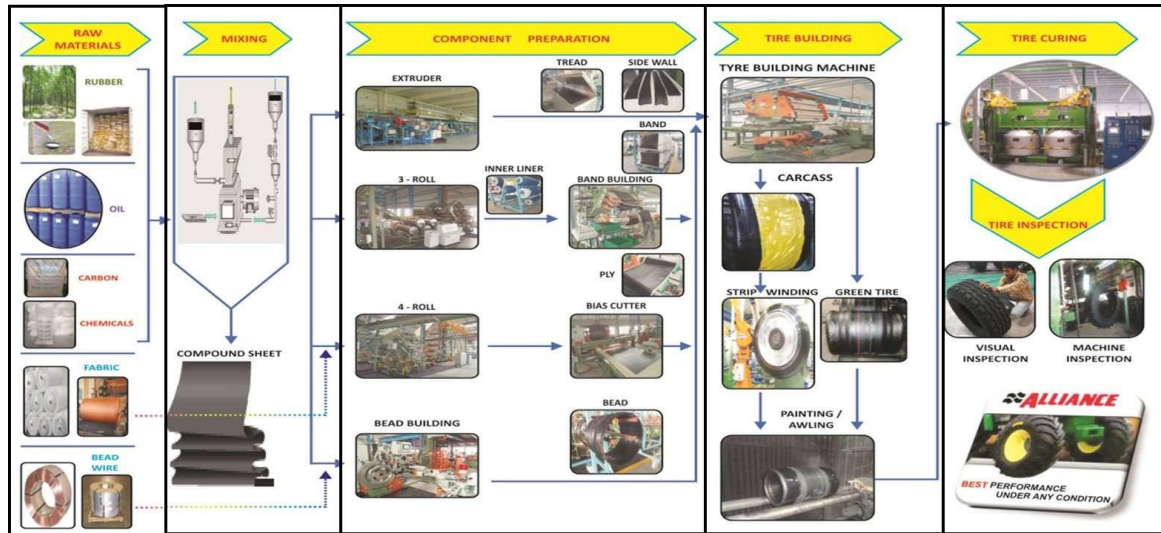
Yokohama Off- Highway Tires has 3 manufacturing locations in India viz Dahej in Gujarat, Tirunelveli in Tamil Nadu, Visakhapatnam in Andhra Pradesh. Apart from this, 5 more manufacturing plants are outside of India. Following are the product portfolio:



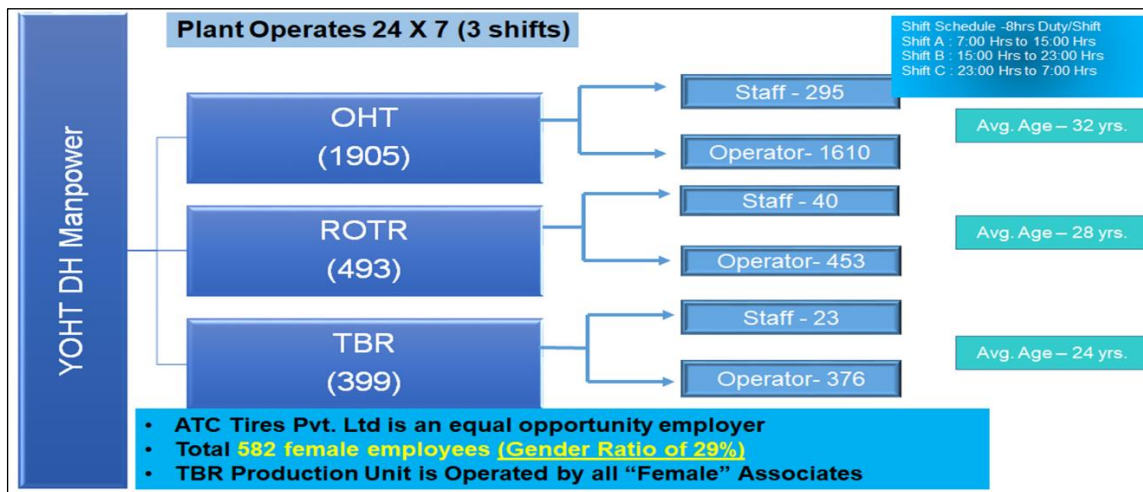
Note: Above illustrations are not exhaustive but indicative. There are few more tire products that are not shown above.

Yokohama Off-Highway Tires (ATC Tires Ltd) Dahej plant is situated in Gujarat State of India, approximately 120 kms from Surat International Airport. It has an annual installed capacity of 140000 MT of Bias type OHT, Radial Off Road & Truck Bus Radials.

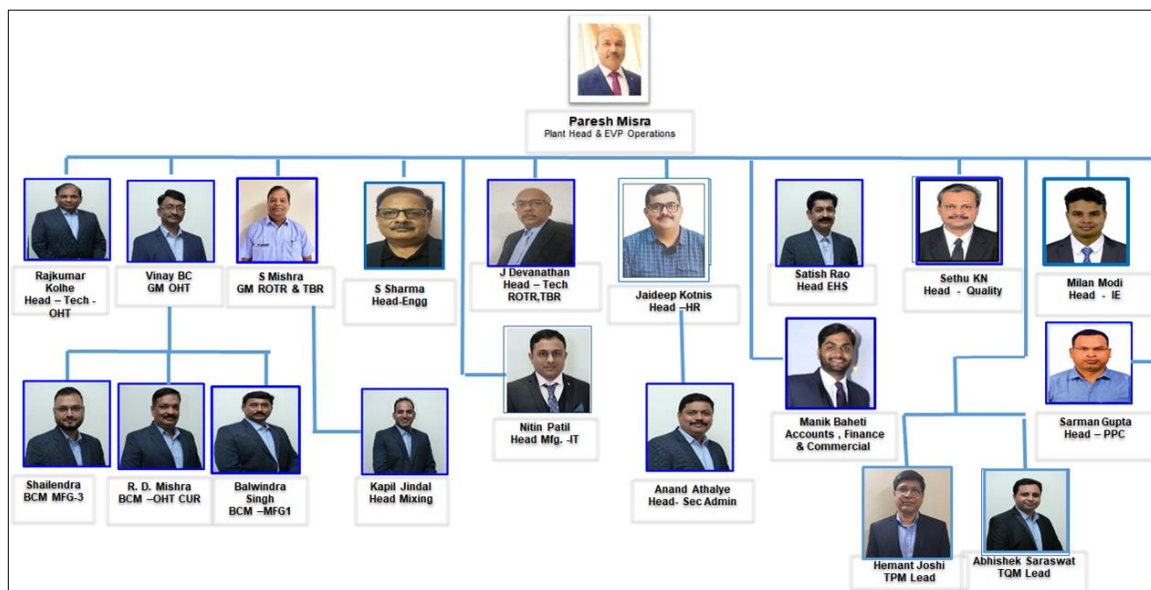
Tires manufacturing process is a combination of Bulk Process manufacturing in upstream stock preparation and is discreet manufacturing downstream. Components of Tires are manufactured and thereafter assembled in Tire Building machines. Detailed process is as follows:



Following is the staffing structure at Yokohama Dahej plant:



Management organization for Yokohama Dahej plant is as follows:



2. Milestone on the journey of Manufacturing Excellence

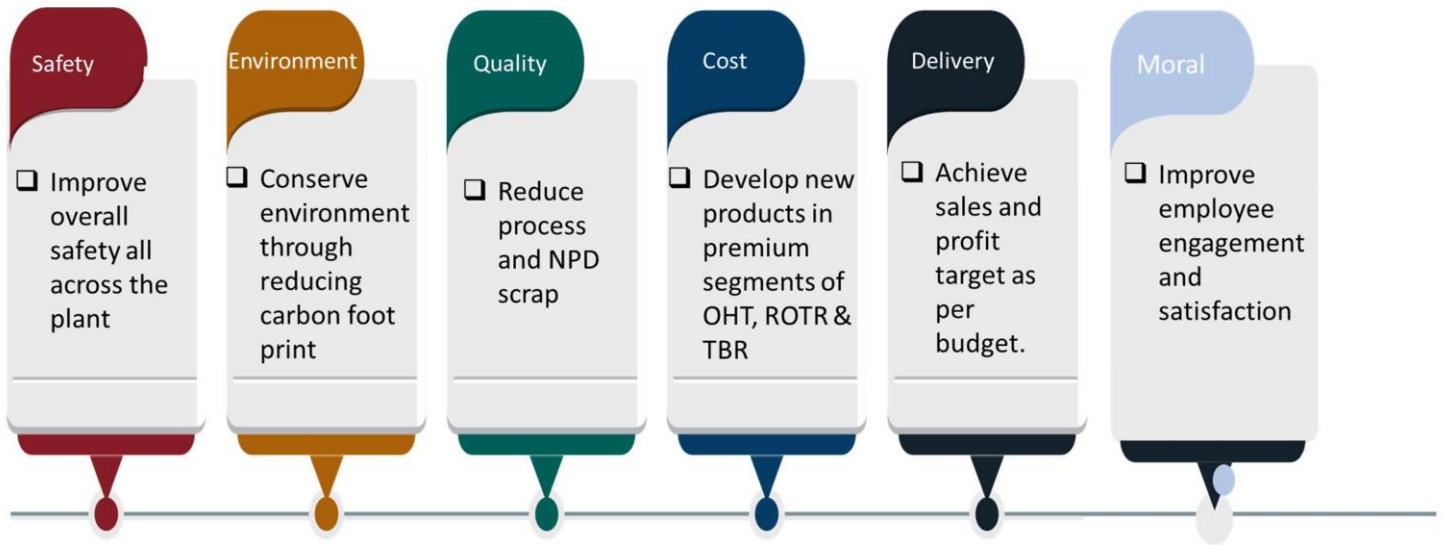
Yokohama Off-Highway Tires has an ambition of growing to be amongst top 3 global player in Off-Highway tire segment.



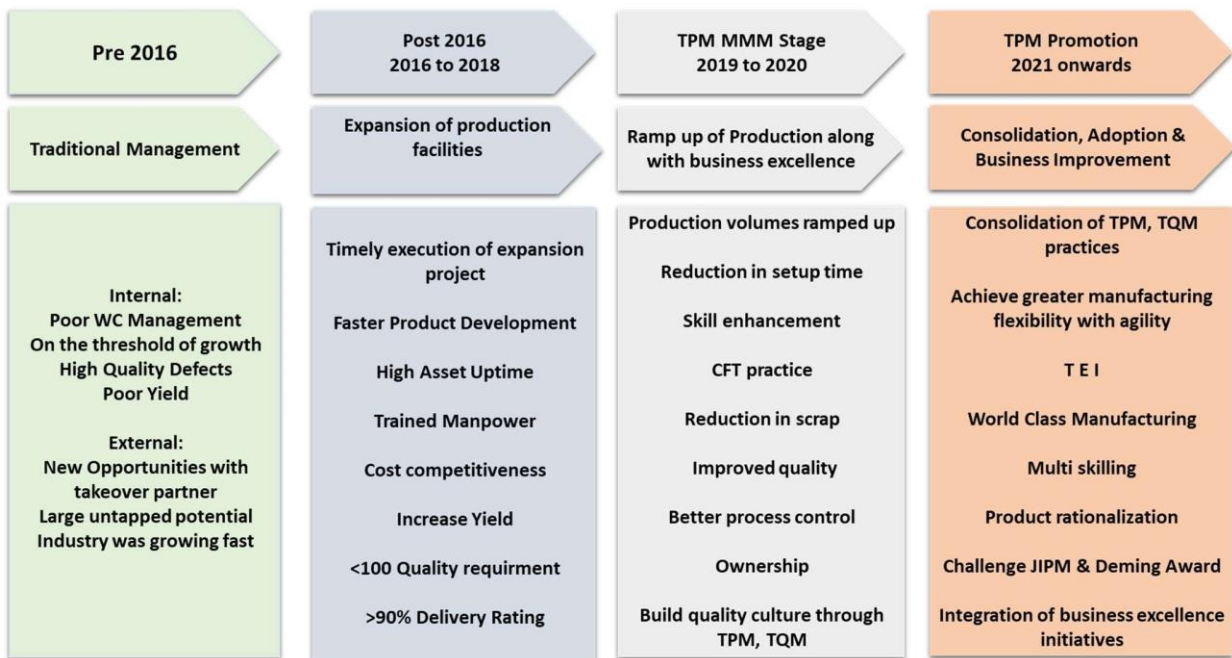
To achieve this vision, we have decided to adopt TPM approach to attain our ambition. Our major focus is in following areas to enable us to attain our ambition:

1. OHT business is highly quality sensitive, hence our product quality must be of the highest order.
2. The nature of our business is such that we have multiple SKU's & production runs are relatively of small lot size. Hence we have multiple Set-up Changeovers & losses related to it. Loss elimination is key to improve our internal efficiencies which can be addressed through Kobetsu Kaizen pillar of TPM
3. We have a very young and energetic workforce, and we need to keep them engaged for optimum utilization & long term career progression. Hence providing a platform for innovation and continual improvement is required which was possible through TPM.
4. Cost competitiveness is essential ingredient in winning amongst competition. Hence creating an atmosphere of innovation and introducing new improved processes and new products is important. Through KK & DM pillar of TPM, it is possible.
5. Plant & machinery get deteriorated leading to breakdowns, accidents & defects. Maintaining in basic condition will be possible through Jishu Hozen pillar hence TPM is essential for Yokohama Dahej plant.

From above business requirements, following have been our key management index:



At various stages of organization maturity, we have rolled out right manufacturing excellence initiatives in planned manner. 2019 to 2020, we practiced TPM on Model Machines and then from early 2021 we have commenced plant wide TPM activities for all 8 pillars.



3. Benefits achieved till date:

Tangible:

1. Safety – Major & Minor Accidents – Around 30% improvement since baseline
2. Specific fuel consumption – 12% improvement since baseline

3. Scrap – 67% reduction since baseline
4. Plant OEE – 27% since baseline
5. Loss Cost – 40% reduction since baseline
6. Delivery Performance – 15% since baseline
7. Employee Morale – Kaizen increase by 17 times

Intangible:

1. Better product appearance
2. Improved employee engagement
3. Better adherence to systems & SOP's by operators
4. Improved stakeholder relationships
5. Better & safe workplace environment
6. Improved communication flow

4. Key of our manufacturing excellence:

While we are implementing step wise TPM activities, we aim to challenge TPM Excellence Award and further challenge for JIPM Award for Consistent TPM Commitment & further to Special Award by 2026. To go to these levels, we intend to further improve through following initiatives:

1. Digitization of all TPM processes for better data management
2. Create pool of worker – teachers to percolate TPM concepts to last employee
3. Develop DOJO for more skilled operations to enhance skill levels
4. Further develop multi – skilling amongst operators such that they can work one process up as well as down
5. Develop problem solving approach through use of advanced tools like PM analysis, Makigami Analysis, VSM, Process Point Analysis, advanced statistical tools
6. Start Kaizen activity for improving flow of manufacturing processes through VSM
7. Benchmark our excellence processes vis-à-vis best in class TPM practices in other companies and develop roadmap to improve o their levels
8. Complete Step 4, 5 and move to Step 6 & 7 of JH.
9. Roll out QFD approach under DM pillar through VOC in developing new products

5. Achievement Sheet:

| Category | Index | Unit | Kick-off | Actual status 2024 | Target 2025 |
|----------|---|-------------------------------------|----------|--------------------|-------------|
| S | No. of work related accident requiring day's off work | Cases/Year | 6 | 2 | 0 |
| S | No. of work related accident not requiring day's off work | Cases/Year | 22 | 25 | 0 |
| S | Safety index | Accidents per 1000000 operator hour | 0.83 | 0.28 | 0 |
| P | Productivity for main products | Man Hr/MT | 35.3 | 36.03 | 31.23 |
| P | OEE (Or Overall plant efficiency) | % | 65.9 | 83.6 | 87 |
| P | Availability | % | 78 | 87.3 | 90 |
| P | Performance rate | % | 89 | 97.8 | 98 |
| P | Quality product rate | % | 95 | 98 | 100 |
| P | Number of breakdowns | Breakdowns/Year | 1210 | 254 | 0 |
| P | MTBF | Hour | 184 | 427 | 485 |
| P | MTTR | Hour | 42 | 25 | 10 |
| Q | Number of customer complaints | Cases/Year | 33 | 1 | 0 |
| Q | In-line defects rate/Scrap | % | 2.5 | 0.81 | 0.65 |
| C | Cost index | INR./MT | 26462 | 33095 | 31929 |
| D | Production lead time | Days | 4 | 2.7 | 2.5 |
| D | Delivery performance-OTIF | % | 79 | 91 | 100 |
| M | Employee Kaizen | Numbers/Year | 1122 | 19353 | 31200 |

Others:

1. Do you have a program where all employees can participate in TPM?

We have created multiple forums where all employees are encouraged to participate in TPM activities through TPM Circles. We have around 144 Circles across the plant where all employees participate in TPM. Various avenues like TPM Quiz, TPM Circle Competition, OPL Competition, Kaizen Competition, KK Case Study Competition are held which motivate employees.

2. Do you have a program allowing employees to be recognized for their achievements?

We have a well drafted Reward & Recognition Policy that motivates employees through various award categories. We have team awards as well as individual awards. We have also instituted awards at Circle level, Sub-Committee levels. Best performing employees are also nominated for visits to benchmark factories where they learn through seeing in person. They are also motivated through participation in TPM National Conferences,

Kaizen Conferences at national level. We are also encouraging our employees by nominating them for Monozukuri online tests.

3. Are top management involved in the audit/verification of completion of TPM pillar steps?

All Step 3 JH Audits are certified by Plant Head audit along with Pillar Chairmen & TPM Secretariat. Daily Management Gemba Rounds are conducted by all Leadership team in various circles for verification and motivation for Circle activities. Top Management reviews Pillar level activities & overall program in TPM Steering Committee meeting

4. Are all pillar activity boards displayed and reviewed by top management?

Every Circle has TPM Activity Board which are used for reviewing circle performance on daily basis. Pillar Chairmen reviews TPM Pillar Activity at Circle level on these boards at a frequency of once every week. Plant Head reviews monthly all KMI/KPI at steering committee meeting