

Award for TPM Excellence
Lumax Auto Technologies Limited,
Plot No. G-8, G. Block, Chakan Industrial Area,
Phase 3, Village - Kuruli, Tal Khed, Dist. Pune,
Pin Code - 410501,
Maharashtra, India



1. Company, Plant/Factory Profile: -

LUMAX has grown to success since its foundation in the year 1945. The company went Public in the Year 1984, and thus in the same year embarked on its highly successful technical collaboration with STANLEY, Japan. And the partnership is live from then up to date.

Lumax has a futuristic vision with an experienced and customer focused management team. This is clear from our financial growth which has seen a steady upward trend right since our inception.

Lumax strives for continual improvement of manufacturing processes with emphasis on consistent quality and cost effectiveness. Lumax signifies LUMINOSITY MAXIMA for today's demanding automobile users.

We at Lumax in the new millennium are committed to retain excellence in quality of our products and services, with focus on customer satisfaction and market leadership. We vow to remain a responsible corporate citizen, contributing to the lives of our people and the preservations of our planet's eco-balance.

Lumax has strived to bring latest technologies to the Indian roads with the objective of enhancing vehicle performance, improving body styling and aerodynamics, reducing weight of vehicle parts and driver fatigue. Lumax has constantly endeavored to keep abreast of the latest trends in technology and production techniques. Its manufacturing facilities are equipped with modern machines such as automatic bead laying, ultrasonic welding, hot melt sealing and hot plate sealing etc.

TPM is a backbone and main principle for surviving in current market conditions. From top management to bottom level TPM methodology is followed in each plant. As a result, a total of 14 JIPM Awards were achieved in 8 Plants including 1 special award and 6 Awards is in Process. Next Calendar year applied for 6 more awards,

Lumax Group consists of two listed companies - Lumax Industries Limited and Lumax Auto Technologies Limited.

1.1. Lumax Industries Limited Profile:

Lumax Industries Limited is a public limited company. It has twelve manufacturing plants spread across India strategically located near Customers. Out of these, three are located near New Delhi, in the cities of Gurugram, Dharuhera, and Bawal in the state of Haryana. three plants in Pune, near Mumbai in Maharashtra, two plants in Uttarakhand - Pantnagar, Haridwar, one is located in Bidadi, near Bengaluru in the state of Karnataka, and one plant was recently commissioned after expansion at Sanand. These facilities have been laid out to match the world's best plant engineering standards. Our plants are producing automotive lighting for almost all OEMs.

1.2. Lumax Auto Technologies Ltd. Profile:

Lumax Auto Technologies Limited is also a listed company. Having range of Products & Services Integrated Plastic modules, 2-wheeler Chassis, Swing arms, 2/3 wheeler Lighting, Gear Shifters, Emission systems, Transmission Products, Seat Frames, Aftermarket, Telematics Products and Services, Oxygen Sensors, On-board Antennas, Vehicle Interior Systems & Components, Manufacture and supply of electric devices and components including software related to automotive industry Partnerships • Cornaglia– Italy • Mannoh–Japan • Ituran– Israel • FAE–Spain • JOPP–Germany • YOKOWO–Japan • Alps Alpine– Japan • IAC–USA • IO Industry - Japan • Greenfuel - India

1.2.1 Lumax Auto Technologies Ltd. Plant: (Plant Challenging TPM Excellence Award 2025)

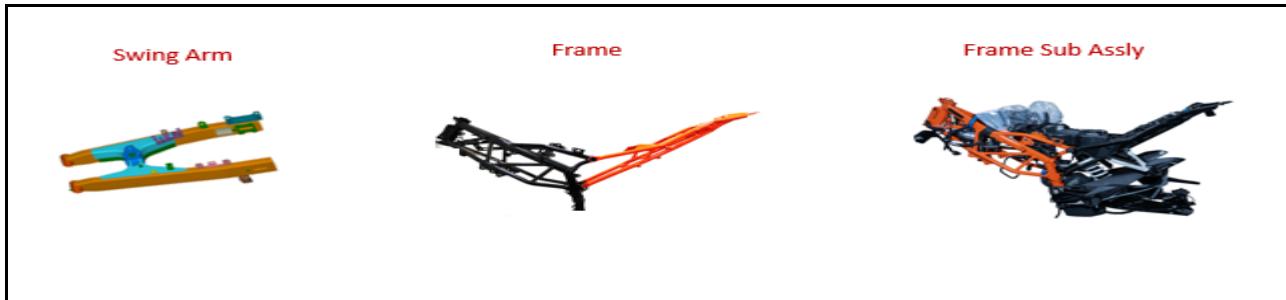
" This is the first non-lighting plant from Lumax group who challenging TPM Excellence award"

Lumax Auto Technologies Ltd., Kuruli, Pune plant was established in 2007. Previously located at Bhosari, Pune and now shifted to Kuruli in 2021. Lumax Auto Technologies Ltd. is a manufacturer of Frames, Swing Arms, & Frame Sub Assly for KTM, Triumph, Pulsar. Lumax Auto Technologies Ltd., Kuruli is situated in a Plot area 10965 Sq.mtr and built-up area 7860 Sq.mtr. Connected load is 600 KVA with back up DG set capacity 625 KVA & Solar Installed with Capacity 400 KW(AC) & 559.8 KW(DC). This plant is having total permanent employees i.e., 56 staff and @ 450 contractual workers. At present the plant is manufacturing 100% fabricated products for 2-wheeler with Powder coating as well as Sub Assly and having Bajaj Auto Ltd. as a major Customer with 98 % of SOB and rest for Piaggio Vehicle Pvt. Ltd. for 2-Wheeler

Lumax strives for continual improvement of manufacturing processes with emphasis on consistent quality and cost effectiveness

Lumax Auto Technologies Ltd. Kuruli Plant won Award for BAL TPM from customer Bajaj Auto Ltd. in 2023 and now challenging next level award i.e., Award for Excellence in TPM

1.2.2 Plant Product Range: Swing Arm – 8 variants., Frames -7 Variants and Sub Assly – 5 Variant.



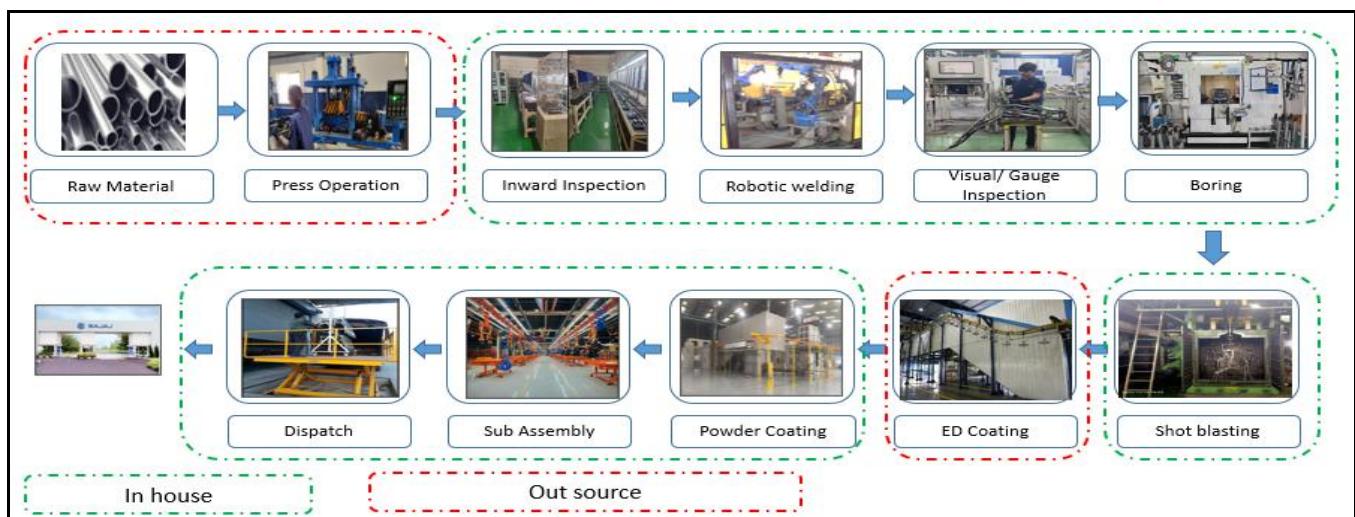
1.2.3 Plant's Key manufacturing processes: Robotic Welding, Powder Coating & Sub Assly.



There is approximate 450 Nos. of manpower out of those 3% managers, 9.5% engineers, & rest 87.5% are contract labour.

1.2.4 Process Flow:

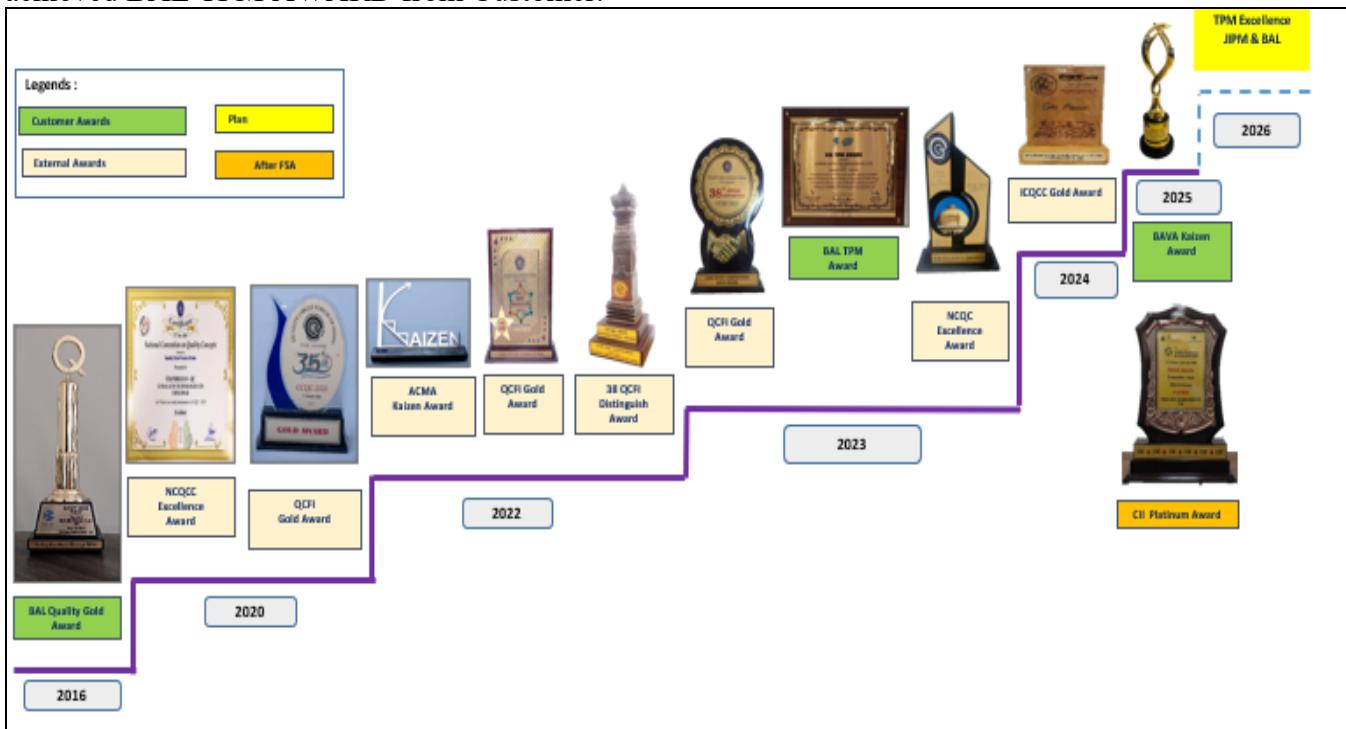
Following are the process flow of Frame & Swing Arm product. Dotted green line indicates In house & Red line colour indicates outsource process



As per Typical automotive manufacture industry Lumax Auto Technologies Ltd, Kuruli Plant having 62 Robots, Surface treatment process and then Assembly Lines.

2. Milestone on the journey of manufacturing excellence.

Lumax Auto Technologies Ltd. Kuruli in line with philosophy of the company and the group has always been conscious of its product quality & services aiming to maximize shareholders value & services to all stakeholders. Quality is a never-ending journey at Lumax Auto Technologies Kuruli plant, which continuously improve all key performance parameters. Major challenges, during quality journey, include improving equipment reliability and employee competencies at all levels. In today's competitive scenario it needs team work and TPM is one of the best manufacturing practices followed by, Lumax Auto Technologies Ltd., Kuruli plant. TPM journey started in Apr. 2019 with one manager model machine. Plant launched TPM activities on 9 June 2019 with formal Kick-Off ceremony held in guidance of customer i.e., Bajaj Auto Limited. And then in 2022 Plant successfully challenged and achieved BAL TPM AWARD from Customer.



3. Benefits achieved:

TPM Implementation at Lumax Auto Technologies Ltd., Kuruli Plant helped in the achievement of business results (Tangible) and Intangible benefits. Through engagements activities employees were highly motivated. Below are some tangible benefits on Key performance Index in terms of PQCDSM

Company & Plant Name		Lumax Auto Technologies Ltd., Kuruli, Pune, Maharashtra			
TPM Slogan/Objectives		The Perfect Move towards Mindset Change			
Category	Index	Unit	Kick off / TPM Started (or last time awarded)	Actual Status 2025	% Improvement
Enter the year →			2019	As on Dec. 25	
S	Number of work-related accidents requiring days off work	Cases/ year	0	0	Sustained 
S	Number of work-related accidents <u>not</u> requiring days off work	Cases/ year	0	0	Sustained 
P	Productivity for main products (Swing Arm)	Parts/Operator hours	1.8	2.6	44.44% 
P	Productivity for main products (Frame)	Parts/Operator hours	0.15	0.26	73.33% 
P	Productivity for main products (Assly)	Parts/Operator hours	0.62	1.11	79.03% 
P	OEE (or Overall Plant Efficiency)	%	75.29	85.80	13.95% 
P	Number of breakdowns	Breakdowns / year	92	52	83.69% 
P	MTBF	Hour	2135	3234	51.47% 
P	MTTR	Hour	3.27	2	38.83% 
Q	Number of customer complaints	Number/year	42	2	95.23% 
Q	In-line defect rate (scrap)	%. To Sale	0.8	0.3	62.50% 
Q	In-line defect rate (rework)	%. To Sale	7.21	2	72.48% 
C	Cost index (Conversion Cost)	%. To Sale	20	17.8	11% 
D	Production Lead time	Days	2.5	1.5	40% 
D	Delivery performance	%	100	100	Sustained 
S	Safety Index (ex Lost time Incident Rate)	(Accident per 1,000,000 Operator hour)	0	0	Sustained 
M	Number of Employee Suggestions	Number/year/Man	7	11	57.14% 
E	Energy Index (Electricity)	%	2.42	1.68	30.57% 

4. Key of our manufacturing excellence:

The key to manufacturing Excellence lies in continual improvement activities and periodic review with Top Management of the result to meet the strategic performance & business results.

With the learning's of improvements made in existing equipment's and plants, we will install new equipment's / facilities by incorporating all improvements.

4.1 Lowest manufacturing cost

4.2 Deskilling of all processes

4.3 100% Poka Yoke for defect free systems

4.4 100% FIFO in all storage systems

4.5 Development of suppliers with TPM learning to provide cost benefits

4.6 Proficiency in new technology products CSR activities:

a) Adoption of School for Swatch Bharat Abhiyan and provide basic amenities and improve infrastructure of the school.

b) Support nation building mission of “Sarva shiksha abhiyan” in which Encouragement provided to key communities for education.

c) Lumax Ki Nahi Chhan (For Girl Child of Employee)

d) Adoption of school for juvenile diabetes care center and provide basic health checkup.}