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**Presents** 









#### From the Editor's Desk



#### The New Normal

It is with great pride and happiness that I would like to present to the very first edition of the Economic Times Promising Plants - where we recognise and felicitate some of the very best factories and plants in India.

The manufacturing sector is crucial to the recovery and balancing of the Indian economy in a post-pandemic world - as the sector has the maximum amount of backward and forward linkages. The ET Promising Plants honours the factories which are contributing towards this recovery, in a manner embodying the very essence of Make in India, Skill India and Digital India. The ET Promising Plants is not just about the best factories today, but factories of the future.

The plants being awarded today have not only excelled in their respective fields, but have done so with innovative technologies, empowerment, and most of all, by being sustainable.

The world, as we know, has evolved quite a bit over the past year and a half and continues to do so. Resilience, adaption and learning new things are the mantras now, and our panel discussion is therefore on a topic very close to the heart of every manufacturer and plant head - "Manufacturing 4.0 in the new normal."

Let us together adapt and conquer the New Normals, and celebrate these plants who have done just that, in a manner befitting the very best of Indian manufacturing.

Rahul Kamat



# About 'The Economic Times Promising Plants' Initiative

This is the maiden edition of The Economic Times Promising Plants 2021. This is an ET Edge initiative, and The Machinist Magazine is putting this together from the editorial point. The promising plants are not just about plants but about those which are an edge above the rest. Manufacturing has emerged as one of the high growth sectors in India.

The Prime Minister of India, Mr Narendra Modi, launched the 'Make in India' program to place India on the world map as a manufacturing hub and give global recognition to the Indian economy. Keeping this in mind we have drawn the idea of this initiative. We aim that the plants featured and felicitated on this platform are success stories for other plants on the path towards making their units state-of-the-art facilities. We also aim that this is a significant initiative on way forward to work on building the right image for the manufacturing industry so that this opens new avenues for the younger generations, and that we fulfil the government aim of 100 million jobs.

For this initiative, we will be assessing Manufacturing plants based on the set criteria. We assess plants across India to decide on these promising plants. These plants are not put based on rank or rating but on the overall basis of the most promising in the segment.



## About ET Edge

ET Edge strives to build global business intelligence through summits, conferences, communities, exhibitions in overarching lectures and presentations, hands-on workshops, panels, roundtables, case studies, buyer-seller meets and networking platforms. These forums ensure senior decision-makers are equipped with information and networks to respond to challenges they face not just in India but also globally.

ET Edge was launched in 2013, making its foray through domestic conferences. It has now steadily moved into new formats not just covering knowledge-sharing platforms such as conferences but also including exhibitions, community building and much more.

While ET Edge is well established in the domestic market with expertise in sectors panning Infrastructure, Education, Technology, Retail, BFSI and Telecom amongst other sectors, it is also expanding geographies by building initiatives in South East Asia and is covering new segments including the government segment as well as the B2C segment.

ET Edge conferences are primarily B2B platforms that bring together industry heads, vertical experts, academicians, government, visionaries and thought leaders for insightful conversations that aid in drawing the blueprint for policy changes and giving directions to these critical sectors. Delegates at the conference are key management personnel and decision-makers who further enrich the gatherings with their crucial insights and vast experience.

ET Edge builds engagement for its conferences through validated content through third party market research agencies and interactive formats. It deploys cutting edge formats such as fishbowl sessions, speed networking and other diverse formats such as keynotes, one to one discussions, workshops, panel discussions, roundtables, case studies and awards.

# Research Methodology

The Machinist conducted detailed research to identify a list of the promising plants in India for the debut 2021 edition. The Machinist conducted detailed research to identify a reasonable and vast list of established and emerging plants which are recognised in the country and where applicable, have a global outreach. The data was collected from various databases including industry associations, published lists and participant lists of various major Indian and global events. A list of over 50 Promising Plants companies was created.

The list was then subjected to further detailed assessment across various dimensions such as technology, product range, geographical presence in India and exports, manufacturing capabilities and clientele.

Core Dimensions applied to 360 companies spanning across 7 sectors to identify the best Technology Innovation undertaken by the entity to introduce new products Products Product mix made to appeal to different market segments Geographic Presence & Exports Spread of office presence in current and potential markets Manufacturing Capabilities Capability to integrate & deliver value and respond to changes in business environment Clientele Range of customers

With the screening, a final short list of companies was prepared to arrive at the names mentioned in this Coffee Table Book as the best, recognizable plants for this edition.



#### FEATURED BRANDS

All Time Plastics Private Limited
Cooper Corporation Pvt Ltd
Faurecia India Private Limited
Grasim Industries Limited
Hyundai Motor India Ltd
Omega Seiki Mobility
Piaggio Vehicles Pvt Ltd
Stanadyne India Private Limited
Timken India Limited
Vitesco India Private Limited

<sup>\*</sup>Company names are arranged in alphabetical order





#### www.mobil.in/business





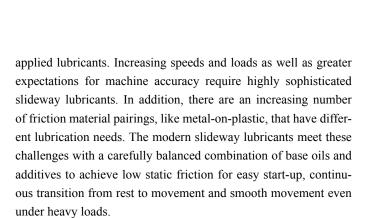
ExxonMobil is a pioneer in lubrication technology helping the Indian manufacturing companies to increase their productivity and profitability goals. Today, extensive use of technology and modern machinery form the base for the cutting industry. However, optimization of productivity and reduction of downtime are major concerns for the sector. Mobil<sup>TM</sup> provides a range of cutting edge products that keep the machines running better and longer. Our product range Mobil Vactra<sup>TM</sup> Oil Numbered Series is designed to meet the requirements for accuracy, aqueous coolant separability, and equipment protection of precision machine tools. The Mobilcut<sup>TM</sup> Series is the trademark for ExxonMobil's line of high performance water miscible metal removal fluids. The products under this series provide dependable performance in a wide array of metal removal processes.



xxonMobil is a pioneer in industrial lubrication solution. Mobil's high-performance solutions for machine tool slideways enhance efficiency on the shop floor, boost productivity and profits. Be it the simple production of nuts and bolts or a complex metalworking process, friction and heat are synonymous with the operations of any shop floor. While the heavy-duty processes require machines to be both precise and efficient in their working, lubricants play a vital role in cutting the friction and boosting the machine's performance. With companies looking for ways to reduce costs and increase profitability, many players in the metalworking industry are focused on reducing wastage and downtime by switching to lubricants with longer shelf life and higher efficiency. Choosing the right lubricant ensures that the machine tools run smoothly with minimum friction, delivering maximum output. Loss of frictional control can cause inaccuracies, which in a metal removal process, ultimately results in loss of machine tool productivity. Mobil<sup>TM</sup> offers lubrication solutions that cut friction and protect the machine to enhance efficiency and improve productivity.

#### **Versatile new-age lubricants**

Modern machine tools and slideway designs demand more of the



It is critical to choose the right slideway lubricant for machine tools that will help to improve the productivity of the equipment, protect the parts as well as prevent friction stick-slip. There are several recognized friction tests to demonstrate frictional properties of slideway lubricants such as Cincinnati Lamb Friction Test, SKC Tribometer and Darmstadt Rig Test, which enable evaluation of static and dynamic friction characteristics of a lubricant and the effect of various slideway materials.

#### The Mobil advantage

Mobil<sup>TM</sup> lubricants are developed by working closely with leading equipment builders. Mobil engineers gain deep insights into equipment trends and lubrication requirements to guide lubricant researchers and formulators in designing highly effective lubricants. These lubricants are specially formulated to protect the equipment, ensure problem-free operation in extreme temperatures and tough conditions to provide longer lubrication intervals. Available in a range of viscosity grades to offer customers the right choice for their applications, Mobil<sup>TM</sup> lubricants help cut friction, enhance performance, reduce waste and improve productivity.



"With a long legacy of over 120 years in India, today Mobil is a byword for industrial lubrication solution. We have deep knowledge of our customers and their needs – we work directly with more than 6,000 Original Equipment Manufacturers (OEMs) to understand new industry trends, technologies and their impact on equipment design. Mobil products are designed to meet the requirements for accuracy, equipment protection and reduce downtime. Along with a range of cutting edge products, Mobil also provides a host of services to help save time and money, while boosting equipment reliability and productivity. Mobil understands the requirements of the Indian market - in its endeavour to help India realise its self reliance mission in manufacturing, the company works alongside industrial workers to provide insights and give a competitive edge."

#### **Rupinder Paintal**

Director - Market Development, ExxonMobil Lubricants Pvt Ltd

ExxonMobil is a pioneer in lubrication technology helping the Indian manufacturing companies to increase their productivity and profitability goals. Today, extensive use of technology and modern machinery form the base for the cutting industry. However, optimization of productivity and reduction of downtime are major concerns for the sector. Mobil provides a range of cutting edge products that keep the machine running better and longer. Our product range Mobil Vactra<sup>TM</sup> Oil Numbered Series is designed to meet the requirements for accuracy, aqueous coolant separability, and equipment protection of precision machine tools. The Mobilcut<sup>TM</sup> Series is the trademark for ExxonMobil's line of high performance water miscible metal removal fluids. The products under this series provide dependable performance in a wide array of metal removal processes.





#### www.alltimeplastics.com



All Time has always strived to 'exceed our customers' expectations while fulfilling our social and environmental responsibilities for a better future.

When we talk about sustainable

manufacturing, there are a variety of aspects. Although the focus remains on the raw material used, there must be a continuous push to reduce packaging, energy and natural resources used like oil, water etc. It is the factories' responsibility to see beyond what customer sees, focus on best ways to reduce footprint and once we start doing that, we automatically manufacture great sustainable products. Sustainable manufacturing at All Time means it has to be socially, environmentally and economically beneficial to all stakeholders in the value chain. At All Time, we have a goal to use 80 per cent green energy by 2025 and a constant push to reduce GHG emissions in the entire

**Kailesh Shah**Managing Director
All Time Plastics.

value chain.



# SMART SUSTAINABLE MANUFACTURING

Under our Industry 4.0 initiatives, we recently implemented a Manufacturing Execution System (MES) which gives us real time view of our production and shop floor activities. The live status display of all our machines that are currently in production will enable our teams to take immediate actions as and when required as well as help the shop floor engineers to take faster decisions and further translating into better monitoring, improving part quality and increasing efficiency.

We will also be implementing an electronic data interface (EDI) very soon. This will help seamless and end-to-end integration of all our business processes. These technological innovations will help in quick exchange of relevant information between our client systems and us, making data transfer smooth and effortless.



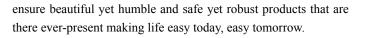
Il Time wishes to radically alter the way the world looks at, evaluates and experiences plastics.

It is this purpose that drives our constant focus on value optimization, obsession with quality and inspires us to push the limits of spatial, functional and aesthetic design. We strive for excellence in all we do and are open to new ideas and on a continuous learning curve.

All Time Plastics sits delicately poised between the passion and vision of a family-owned business and the professionalism to deal with billion dollar organizations. Over the years, our global export operations have allowed us to strike a fine balance amongst technology, scale, processes, and controlled protocols. Today, products with the brand All Time are widely available in India. In addition, we offer a holistic spectrum of solutions ranging from product design to manufacturing and packaging innovations to our customers globally.

Two world-class manufacturing plants in Daman and Silvassa running almost 100 injection moulding machines and total installed capacity of 22,000 metric tons annually, manufacture around 200 million plastic based space solutions annually, including homeware, kitchenware, bath-ware, tableware and children's products

State-of-the-art technology in latest manufacturing, analytical and quality control facilities combined with best practices in manufacturing, health, safety and conservation of natural resources,



As a company, our long term aim has always been to invest into the most modern machinery and technologies. With an army of all-electric injection moulding machines and robots, All Time Plastics strives to be at the forefront of the Plastics Industry and has already implemented many aspects of Industry 4.0. Our facilities are equipped with state of the art material handling systems, high tech warehousing, palletised handling and a full scale quality lab. Automation initiatives have been put in place to ensure the best balance between robots and human intervention.

Another exciting development in the pipeline for our company is the installation of the most modern ASRS (Automatic Storage and Retrieval System) along with a WMS (Warehouse Management System) at our Silvassa facility. This will give us 100 per cent traceability of each product shipped to any of our customers. By

investing in this, the WMS provides a high flexibility, high density storage and the best utilisation of space along with an added benefit 2x throughput.

We have a strong product range that consists a spectrum of articles ranging from food grade storage containers to recycled dustbins. The consumer needs are evolving very rapidly and moving towards sustainability and our product range is evolving to cater to that as well. The push is now to develop and design products keeping in mind the usage of sustainable products throughout the lifecycle of the product and not only manufacturing. Our product design cell works full time to innovate and launch new products with this aspect of sustainability in focus.







www.coopercorp.in



# LEADING ENGINE, ENGINE COMPONENTS AND GENSET MANUFACTURER

We have recently introduced future-ready 5KVA compact diesel gensets in India which has the contemporary Air-cooled singlecylinder engine designed by Ricardo, UK. We have a technical collaboration with Ricardo, for designing its state-of-the-art family of engines that meet the current & forthcoming emission norms. This collaboration offers the entire range of 2-cylinder to 6-cylinder diesel engines from 10 KVA to 250 KVA. Our engines are available in diesel and gas versions in sizes from 1.2 Litre to 7.8 Litre. Our engines have proven their performance efficiency on Gensets supplied to domestic and international markets. Our engines are being inducted in various other applications like Agriculture, Construction equipment, Marine, Automobiles, Pump, tractors, and more.



ooper Corporation is one of India's leading homegrown auto components and engine manufacturer. Under the engine division, Cooper Corporation manufactures an entire range of 2, 3, 4 & 6-cylinder diesel engines from 3.5 KVA to 1000 KVA powering applications for diverse sectors including automotive, gensets, marine, defence, construction equipment, and agriculture. These engines are designed to meet all future emission norms.

In the auto components vertical, Cooper Corporation is India's largest supplier of critical auto spare like crankshafts, cylinder liners, cylinder heads/ blocks, intake manifold, valve seat inserts, flywheels. Having an extensive client portfolio in Indian and overseas markets, the auto component business of cast iron, ductile iron, aluminium in high pressure, low pressure, gravity die casting contributes to nearly 80 percent of the company's overall revenue. The engine business is growing at a CAGR of over 25 per cent in the medium term (3 to 5 years).

Our manufacturing process is continuously updated to comply with the latest global standards and customer specifications. The production process is constantly monitored to ensure consistency in quality, and we use high-end robotised machine tools in each phase of the production process to achieve the desired surface finish through optimised machining operations.

Our manufacturing plants are equipped with precision casting, machining and honing facilities. All critical machines are imported from renowned global manufacturers such as Junker, WMW, Mori Seiki, Doosan, Makino, Mazak, Nagel, ACE, Buhler, Correa Anayak, Hommelwerke etc.



Time choses you, you do not choose the time. Time has chosen Farrokh Cooper who is first agricultural graduate in the country to make a tractor and the first Parsee in world who make a tractor. In America there is John Deere, in India, there will be Farrokh Cooper flying the Indian Flag. The legacy of Cooper Corporation resonates from 1922, it's a third-generation entrepreneurial business. Cooper Corporation activity supports the "Aatma Nirbhar Bharat Abhiyaan" initiative and produces all the design aspects, components of the COOPER BOLT Mini are 'Made in India' and are manufactured in our state-of-theart facility in Satara, Maharashtra. In the future, Cooper Corporation plans to launch engines that are designed for various applications. Essentially, for Generator and Pump set application which will be compact & lightweight Aluminum Naturally Aspirated Air Cooled Engine These will be rugged, durable design with long service intervals and long overhaul life. It will have Flexi Fuel Options i.e., Diesel and CNG as well. These engines will be future-ready and will be emission compliant.









# **INSPIRING MOBILITY**







aurecia is a global automotive technology leader offering innovative solutions to automotive challenges within its four strategic business areas: Seating, Interiors, Clarion Electronics and Clean Mobility.

With 266 industrial sites, 39 R&D centres and 114,000 employees in 35 countries, Faurecia is a top ten global automotive supplier.

#### **Business Groups : Product portfolio (India)**

- Clean Mobility -Passenger Vehicles, Commercial Vehicles & High Horsepower, Hot End & Cold End, Commercial Vehicles System
- Seating -Recliners, Tracks & Frames, Power Seat, Ventilation System
- **Interiors** -Instrument Panels, Door Panels, Centre Consoles, Air vents, Decoration
- Clarion Electronics Display Technologies

# faurecia

#### www.faurecia.com



Back-to-back "Top Employer" award, 4 years in a row since 2018

#### **Engineering capabilities**

Presence in two major automotive hubs:

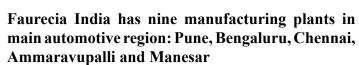
Pune and Bengaluru

- Fully integrated with Faurecia Group and works with 30 Faurecia Tech centers globally
- ~1400 Engineers
- Capabilities from Benchmarking, Innovation, A-Surface, Design, Development to Product & Process Validation (CAE, Testing, Geometry and Pilot plant)
- 24 new patents (in 2020)

#### Social responsibility

Faurecia adheres to the following CSR initiatives.

- Focusing on Girl child education
- School Infrastructure for Blinds
- 1000 tree plantation for green village
- Food packets distribution
- 1000 PPE kits distribution at villages
- 1000 Covid kits distribution to 100 tribal families



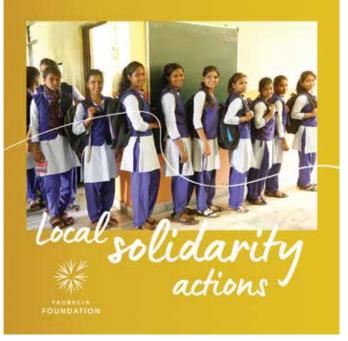


Faurecia's mission is to develop technologies for Sustainable Mobility and to create personalized experiences for the Cockpit of the Future. At the same time, we offer solutions to meet the challenges of future generations in line with our Convictions.

#### Bertrand Figueras

President

Faurecia India Pvt Ltd











To prevent any possibility of ground water pollution, Birla Cellulose business has invested substantially in the installation of Zero Liquid Discharge (ZLD) process at Grasim Nagda site, a first in the global viscose industry and the project was commissioned in Sep 2021.

The Unit invited water field experts to design the systems retrofitting several places for smooth operation of the ZLD process. Involved world's top three companies in membrane technologies to develop an ideal system that can handle all the nuances of viscose effluent. After months of study and analysis, a state-of-the-art ZLD system was designed to recover about 95% of wastewater feed

This will result in less water withdrawal and create larger access to the local society to draw water from the River leaving a positive impact on them.





"The award is a recognition for our dedication to sustainability, excellence in water management, our pledge to zeroliquid discharge, and, most importantly, our commitment to the socio-economic development of Nagda through improved healthcare, education, and infrastructure development for a better quality of life for all."

**Dilip Gaur**Managing Director
Grasim Industries

he saga of evolution of Grasim Industries goes back to the year 1947 on the day of 25th August when the early morning sun rose at small village called Nagda in Malwa region of western Madhya Pradesh.

This was the day when the foundation stone was laid for Grasim - realiation of the dream dreamt by visionary leader Late Shri Ghanshyam Das ji Birla.

The date marks an important milestone in India's industrial history marking rebirth of Nagda with Grasim Industries Ltd., one of Independent India's first companies being set up.

# Transformation of Nagda – A sea change journey

Nagda's growth and development is a testament to Grasim's efforts towards transforming the landscape of the town. A small non-existent hamlet once situated on the banks of River Chambal with small population, no schools, hospital or any other amenities like water supplies etc, today appearing prominently in the world map, boasts being a huge industrial town with Asia's largest viscose fibre manufacturing plant, thermal power plant and chemical plant. Today Nagda has a ISO certified railway station junction located

equidistant from 2 leading markets of India (Mumbai and Delhi). It has a modern hospital with state-of-the-art medical facilities, quality educational institutions and a strong infrastructure for leading a quality life. The opportunities created by Grasim have now transformed Nagda into a thriving town with a population of nearly 2.40 lakhs (urban & rural) and have helped improve its socio-economic status.

Over the last few years, Grasim Nagda has taken significant steps to address the concerns of local community in and around the Unit. The Unit has unequivocally focused on accelerating the process of continuous improvement by adopting the global best practices and standards in its operations, and taken necessary actions based on the outcomes of independent third party studies.

## **Adopting stringent EU BAT standard**

Grasim Nagda is committed to implement the European Union Best Available Technologies (EU BAT) and achieve the emission standard norms. In this aspect, USD 170 million capital project is under implementation across the business. The Unit already meets 11 out of the 13 EU BAT parameters, ahead of

committed timeline. The remaining two parameters are Sulphur emission to air and CS2 consumption would be achieved after the commissioning of Carbon Adsorption Process (CAP) system to increase the CS2 recovery. Currently, the CAP project at Nagda - the engineering work of the plant is in progress. Once implementing EU BAT technologies, CS2 production at Nagda is planned to be phased out and would be moved to another location with Natural Gas based advanced technology.





www.hyundai.co.in



# **SMART MOBILITY LEADER**

Hyundai Motor India Ltd has recently launched the most awaited i20 N Line, the first model under Hyundai's N Line range of cars in India with prices starting at 9 84 100 (Ex-showroom). Deriving inspiration from Motorsports styling, i20 N Line fuses exhilarating style with a dynamic driving experience to deliver excitement every day. With its exciting design and engaging interiors, i20 N Line is set to elevate driving excitement to a new level.

Hyundai i20 N Line features 27 unique and exclusive elements that translate Hyundai's Motorsport inspiration into fun and enthralling elements making every drive exciting. N Line is made for everyday fun of young and energetic customers, who view the world as their playground and have a different way of doing things. For the indulgence of those who crave a fun and fast paced lifestyle, the playful and cool Hyundai i20 N Line has been depicted with communication line 'It's time to play'.

Customers can now book i20 N Line online on the Hyundai Click to Buy platform <a href="https://clicktobuy.hyundai.co.in">https://clicktobuy.hyundai.co.in</a> or at Hyundai Signature Dealerships across the country for Rs 25 000/- only.



yundai Motor India Limited (HMIL), a wholly owned subsidiary of Hyundai Motor Company (HMC) is India's first smart mobility solutions provider and the number one car exporter since inception.

Hyundai strives to provide freedom of movement to everyone with its strong product portfolio including SANTRO, GRAND i10, GRAND i10 NIOS, all-new i20, i20 N Line, AURA, VENUE, Spirited New VERNA, All New CRETA, ALCAZAR, ELANTRA, New 2020 TUCSON & KONA Electric. With 12 car models across segments, customers can discover the car that best suits their needs.

As country's largest exporter of automobiles, HMIL forms a critical part of HMC's global export hub. It currently exports to around 88 countries across Africa, Middle East, Latin America, Australia, and Asia Pacific. Recording multiple milestones over the years, Hyundai also surpassed the 3 Million vehicle export milestone earlier in 2020. During the successful export journey, HMIL has won prestigious awards including - 7 EEPC National and 5 South Region Awards as Top Exporter of Year for Large Enterprise category.

To support its growth and expansion plans, HMIL currently has

541 dealers and more than 1343 service points across India. In its commitment to provide customers with cutting-edge global technology, Hyundai has a modern multi-million-dollar R&D facility in Hyderabad endeavouring to be a centre of excellence in automobile engineering.

Hyundai has been driving manufacturing excellence at its fully integrated state-of-the-art manufacturing plant in Sriperumbudur near Chennai that is spread across 540 Acres of land and has an installed capacity of producing 7.5 Lakh units annually.

Reinstating its commitment to government's Make in India initiative, Hyundai recently rolled out the fastest 10 millionth car from the plant which boasts of boasts of advanced production, quality, and testing capabilities.

Further driving supremacy and excellence across practises Hyundai's manufacturing facility as it stands is -

- Zero wastage 100 per cent water recirculation facility using recirculated water and rainwater harvesting systems
- 89 per cent energy utilization from renewable sources to be achieved in 2021
- 33 per cent of the physical expanse of the factory is under green cover
- Nearly 14 per cent of the cars manufactured at the plant are dispatched by eco-friendly railway route which drastically cuts down on emissions and carbon footprint.
- Smart Factory houses over 650 4th Generation robots, a perfect example of deploying Industry 4.0.
- Utilisation of AI in robotics automation for car manufacturing



Envisioning India at the heart of global manufacturing and commerce, Hyundai, began its journey with the country 25 years ago towards a mutual progress. It gives us immense pride to have come this far together, developing a sustainable and thriving ecosystem leading to collective evolution of the Indian Automotive Industry. Today, Hyundai is the country's leading smart mobility solutions provider redefining the mobility landscape with products that take customer aspirations to new heights. Inspired by our global vision 'Progress for Humanity' Hyundai Motor India will continue to drive excitement across the market through innovation in products and services. We thank all our customers who continue to believe in us and made Hyundai the most trusted smart mobility solutions provider in the country. As a part of our commitment to the nation, we will continue our efforts towards the betterment of society and communities.

S.S.Kim
MD & CEO
Hyundai Motor India Limited

With an investment of over \$ 4 Billion and its state of art integrated manufacturing facility producing world class products for Indian customers, Hyundai has been refining mobility experiences for customers with introduction of new and innovative technologies that surpass the aspirations of customers.

- India's First Fully Electric SUV- 'KONA Electric'
- India's First Fully Connected SUV 'VENUE'
- India's first online end to end Retail program Click to Buy
- India's largest customer outreach program Hyundai Mobility Membership
- India's First Intelligent Manual Transmission iMT Clutch-free Manual Transmission
- Democratised Turbo GDi Petrol Engines offered on VENUE, New CRETA, VERNA, the all-new i20, i20 N Line GRAND i10 NIOS, AURA







#### www.omegaseikimobility.com



We are doing everything to build a strong EV portfolio and lay out a robust EV ecosystem in the country towards our commitment for green mobility, and sustainability. We are a solutions provider, and we will supply anything that the customers would want. The economic advantage of EVs will drive commercial and personal vehicle penetration in India and we are addressing the range anxiety issue as well as laying out charging infrastructure. We will be the first or second EV company from India to come out with an IPO. Our objective is to be the Tesla of electric commercial vehicles from India.

Founder and Chairman, Anglian Omega

#### **Uday Narang**

Group and Omega Seiki Mobility

# (END TO END) SOLUTION PROVIDER

#### RECENTLY COMPANY UNVEILED INDIA'S FIRST ELECTRIC -SCV 'M1KA'

The small CV segment is expected to ride the coming electric wave as e-commerce companies induct more EVs into their fleets. Other e-commerce players and food delivery start-ups are expected to follow suit. Omega Seiki Mobility (OSM) also understand that demand for such vehicles will increase due to the reducing price gap between internal combustion engine vehicles and electric ones and pressure on e-commerce firms to shift their fleet to electric by the government. E-commerce players are looking at electric vehicles for last-mile distribution, and M1KA is the solution that would cater to their requirements.

The SCV will also be rapidly adopted by small businesses and start-ups who understand the need to incorporate everchanging technology into their processes to avoid redundancy and inefficacy. The e-models are more eco-friendly, quieter, and more efficient than ones with a combustion engine. The young entrepreneurs and their teams will see the practicality and the benefits of switching to e-vehicles for their businesses.

The advantages of commercial SCVs are apparent: They do not consume any fossil fuels or emit any CO2 in operation. If their electricity comes from renewable sources, they are completely clean. There are other benefits: An electric drive consists of fewer parts, especially moving ones. That means rarer breakdowns and less servicing – and that makes the vehicles cheaper to run. Because e-vehicles have a less complex design, they can also be built to be more compact. A further advantage: They make less noise than vehicles with a combustion engine. And they are also more efficient – they accelerate more powerfully, and a large part of the energy can be recovered by electric braking. Along with low running cost and viable, clean alternative, the four-wheelers are loaded with technology.

mega Seiki Private Limited is a part of the five-decade old Anglian Omega Group. Omega Seiki focuses on manufacturing cold-forming parts for the automotive & rail industries in India & abroad. It is involved in manufacturing high-precision machining powertrain parts using state-of-the-art and cutting-edge technologies. At present the company has its manufacturing facilities in Faridabad & Chennai, both of which cater to the two major hubs for OEM's in India.



Omega Seiki since 2018 has been expanding its horizon to EV Mobility under Omega Seiki Mobility (OSM). OSM was born with an aspiration to be an end-to-end electric mobility solutions provider. The company 1st product targeted the cargo segment with its highly customizable three-wheeler- RAGE+, which caters to the major intra-city movement of goods. The last mile delivery business for e-commerce platforms is OSM's primary targeted market. Currently OSM has a line-up of 8 products: Electric Threewheeler- Rage+ Rage+ Frost, Rage+ Swachh, Stream, Rexa ... Electric Two Wheelers- Zoro and Fiare... Electric Four Wheeler-M1KA

OSM has been all in for the Vocal for Local initiative right from the start, in lines with PM Modi's vision of an Atmanirbhar Bharat. OSM has achieved over 99 per cent localization as part of its endeavour towards the Make in India initiative of the Central Government.

The Indian market has great potential to capture EV technology on a larger scale. OSM believes that Indian startups are an integral part of India's electric vehicle revolution. Replacing conventional ICE driven vehicles with electric vehicles will benefit the nation in multiple ways by generating new employment possibilities, contributing to the economy, and sustaining the environment. Along with solving the last mile connectivity issue, Omega Seiki Mobility's first product Rage+ brings a whole new concept in emission-free cargo transportation that leads to maximum productivity and economic and environmental gain. OSM fleet is designed to target B2B and B2C markets and use the latest technology at the grassroots level.

To address the growing need for a robust supply chain

for COVID-19 Vaccine drive, Omega Seiki Mobility introduced Rage+ Frost, a Smart EV Three-wheeler with the refrigerated carriage purposely designed for pharmaceuticals & food delivery. Rage+ Frost powered by a large 10.8 kWh lithium-ion battery can maintain a temperature of 0 degree Celsius for 10 hours!

Recently OSM unveiled India's First Electric SCV- M1KA. The company sticking to its principals will continue to deliver sustainable solutions to the market







# INNOVATION TO PATH-BREAKING **SOLUTIONS**

Piaggio is one of the first to introduce electric vehicle products in both the fixed and swappable battery variants making it the only player giving both types of solutions in the 3 wheeler L5 Electric vehicle category to its customers.

By launching the aprilia SXR 160 & aprilia SXR 125 it is strengthening its product offerings in the 2wheeler space. With the Iconic Vespa celebrating the 75th anniversary and having a substantially large contemporary product range adds to its brand

Piaggio also launched their new Apé HT Range. The new 300cc Engine is developed in India with technology support from

Piaggio Italy. The engine is being manufactured in India in a new state of art of assembly line at Baramati.



iaggio Vehicles Pvt. Ltd. (PVPL), is a 100 per cent subsidiary of the Italian Piaggio Group. European leader of the 2Wheeler sector and India's leading manufacturer of small commercial vehicles.

With the introduction of the three-wheeler brand Piaggio Apé, the company started operations in India in 1999 which was an instant hit and Piaggio has grown stronger over the years. PVPL created the market, grew it & sustained its 3 wheeler diesel leadership for more than a decade Piaggio in truly fuel agnostic & manufactures a large range of vehicles in Diesel Petrol, CNG, LPG and Electric models, In addition to having 3 million plus happy customers, the Company exports its vehicles to more than 50 countries worldwide.

Piaggio invented the iconic Vespa in 1946. Having successfully established itself worldwide in the two wheeler segment, PVPL opened up a whole new premium space in the Indian scooter category with the launch of Vespa in April 2012.



piaggio-cv.co.in/ vespaindia.com/index.aspx www.aprilia.com/in EN/



aprilia was born into racing and is the real sporty flagship brand for Piaggio Group. With 294 Grand Prix races won in Road Racing World Championship, aprilia holds the record for the most wins of any European manufacturer in the history of maximum motorcycle competitions. Piaggio launched aprilia in India in August 2016.

Piaggio offers a variety of 2 wheeler products under these two brands.

In the Commercial Vehicle segment the Piaggio has the largest range independently in Diesel, Alternative fuel and now Electric with around 40 plus models and 200 plus variants and are recognised



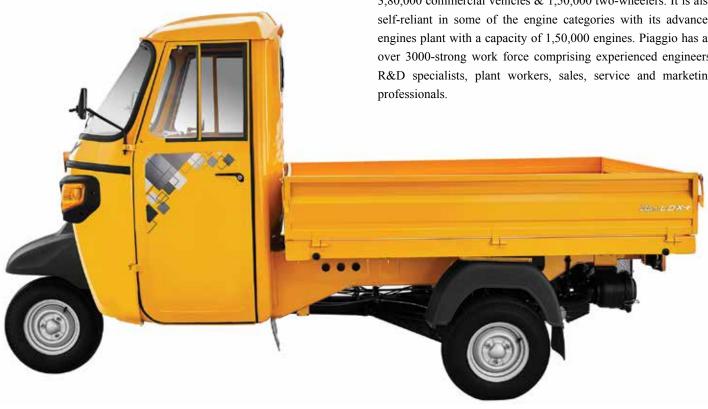
"It is our goal to continue bringing best-inclass and stylish products to our consumers in the 2-wheeler and 3-wheeler sector across our brands, which include Vespa, aprilia, and Apé. The product offerings are not only iconic, but also state-of-the-art and modern. We have the benefit of knowing client demands in India, as well as excellent R&D capabilities in Europe and India. We are concentrating our efforts on increasing Piaggio's market share and boosting customer demand for our famous brands in the 2w and 3w segments. I anticipate many new chances for us as the Indian market grows and PVPL grows to a dominating position in Piaggio's worldwide business."

#### Diego Graffi

Chairman and Managing Director Piaggio Vehicles Pvt. Ltd.

internationally for the three-wheeler brand Piaggio Apé.

Piaggio has a state-of-the-art manufacturing plant at Baramati in Maharashtra, with an installed annual production capacity of over 3,80,000 commercial vehicles & 1,50,000 two-wheelers. It is also self-reliant in some of the engine categories with its advanced engines plant with a capacity of 1,50,000 engines. Piaggio has an over 3000-strong work force comprising experienced engineers, R&D specialists, plant workers, sales, service and marketing professionals.

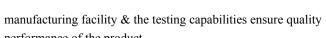






**Fueling Innovation** 

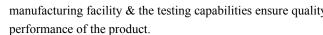
www.stanadyne.com

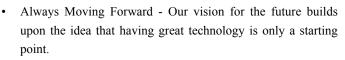


decisions for results & thereby improve the quality & standard of the product.

customers. With the addition of these new business Stanadyne India is expected to touch turnover of 500 crores by 2024. The to the increase in customer demand. Stanadyne India has plans to enter the two wheeler segment in the near future. Stanadyne India has a separate design and development centre at Chennai and the projects related to domestic customers are designed & developed in India & patented. With the other plants of Stanadyne shifting cost pumps (QLC Pumps) and injectors. The company has plans also for CRDI System in its new plant by 2025.







• Empowering People - Employees are empowered to take

Stanadyne India has 11 projects in the pipeline which has 3 new company is also planning to put up another plant in Chennai to cater to other products Stanadyne India will be the only supplier for domestic and international customers for rotary pumps, quality low

tanadyne is a global automotive technology leader in engine-based fuel and air management systems. We specialise in pioneering technologies in gasoline and diesel fuel injection systems for the engines that make our world move, and in aftermarket and remanufactured components that help keep those engines on the road. Our best-in-class products offer superior quality and a competitive edge, delivering power, performance, and efficiency, and enabling our customers to stay ahead of rapidly

Founded in 1876, our experience is rooted in the foundation of the automotive industry, and we've been a trusted partner serving some of the most well-known brands for more than 60 years. In 2019, we acquired Pure Power Technologies, a leader in engineering and remanufacturing diesel injectors, turbochargers, valves, and other components for OEM and the aftermarket. Stanadyne has five plants – US, India, China, Italy and Sharjah. Stanadyne India plays the major part of the total business of the company. Stanadyne India comprises of 65 per cent of the turnover of the company globally. There are about 11 customers for the India plant and it covers the entire business of Rotary pumps globally.

evolving emissions and consumer demand.

• Best-in-Class Performance - When it comes to performance, Stanadyne doesn't settle for less than the best. The



The Stanadyne Business System, and its focus on the development, deployment & continual improvement of global functional excellence, delivers an exceptional customer experience through a culture committed to highest performance in everything we do – from the design, development & delivery of products, to the partnering with suppliers & the development of employees.

The turnover of Stanadyne India over the past 3yrs is increasing & is also expected to touch 500 crores by 2025. Customer demands have increased for the existing models & that has helped in the increase of sales. Thanks to the in-house team for accomplishing the target sales & satisfying customer requirements. There is a growth in sales by 14.45% compared to last year & the expectations in the year 2021~22 is more considering the customer demand & also the start of production of two new projects. The sales from Apr'21 to Aug'21 is hitting the target & it would finish with 18 per cent growth minimum in this financial year.

This Promising Plant Award is a motivating factor for the hard work extended by all the employees in achieving the targets for the year 2020 – 21 rendering Quality Products & Services satisfying customer requirements.√

Thanks to the Economic Times & The Machinist Team for recognising Stanadyne India as the Promising Plant of 2021.

Dr. Sanjay Chadda,

Managing Director, Stanadyne India Pvt. Ltd.

The Emission level in India has migrated from BSIV to BSVI in 2020. The Customer Expectation is to have a cost effective mechanical system, a system with high pressure and timing authority will be a solution. Customer already has Diesel Common Rail system. Now an alternative with ease of service is expected.

ROTARY PUMP MANUFACTURER

Stanadyne has come up with its proposal for Low Cost Fuel Pump with its new SCUP (Solenoid Controlled Unit Pump). SCUP was designed to support the Greaves HD 502 Water Cooled, BS-VI, 3W model. SCUP is designed for BSVI 2020 emission norms and is an alternate to the Diesel Common Rail System. 125 employees from Application Engineering, Quality, Production, Maintenance and Manufacturing Engg. were involved in this project & has proved to be a highly successful project on the technical & also on the commercial aspect of the organisation



# TREAT REPORTS OF THE TOTAL STATE OF THE TOTAL STATE

# **KEEPING THE WORLD IN MOTION**

As the inventor of TRB and an expert in friction management solutions, Timken continues to innovate solutions for its customers. Some of them are listed here

- DuraSpexx<sup>TM</sup> and P900<sup>TM</sup> Bearings Extended fatigue life and durability via specified enhancements to bearing material, finish, and profile
- DuraSpexx<sup>TM</sup> Power Rating Series Bearings designed with 23 per cent higher ratings (2x catalog life)
- Debris Resistant Bearings For extended bearing performance in debris-contaminated environments
- Engineered Surfaces Provides improved wear, friction, and fatigue properties for bearings via proprietary coating and surface technologies
- AquaSpexx<sup>TM</sup> Bearings Water corrosion resistance via use of a proprietary zinc-alloy coating. Sacrificial protection.
- Timken TDC<sup>TM</sup> Bearings Corrosion resistance via use of proprietary Thin Dense Chrome coating. Hard, barrier protection.
- Timken Fuel Efficient Bearings Timken® Fuel Efficient bearings can make a significant difference by reducing bearing power consumption up to 30 per cent and increase fuel efficiency by up to 2 per cent.

imken India Ltd. is a subsidiary of The Timken Company, headquartered in the United States, which designs a promising portfolio of engineered bearings and power transmission products. Timken today applies its deep knowledge of metallurgy, tribology, and mechanical power transmission across a variety of bearings and related systems to improve reliability and efficiency of machinery, and equipment all around the world. A 120-year-old company, Timken employs more than 17,000 people in 42 countries, including more than 1,500 in India.

Timken started its operations in Indian in 1989. In keeping with global standards, the first state-of the-art manufacturing facility was set up in Jamshedpur in 1992. To cater to the growing market, Timken subsequently set up a manufacturing facility in Chennai in 2008. Further expanding its business in India, Timken acquired ABC Bearings in 2018, making it the third plant in India. The Timken Technology Centre in Bangalore is one of the four Timken innovation and development centres around the world, which provides our customers a unique opportunity to access global pool of engineering expertise and the latest technological advancements.



www.timken.com/en-in/



Timken is especially known for retaining the highly collaborative technical selling model. The India team works directly with large OEM customers and end users through a network of authorized distributors to make design and application recommendations to optimize performance and reliability. Commitment to quality is what preserves the integrity of the Timken brand, along with the confidence the company has built with its customers.

Timken offers a growing portfolio of engineered bearings, mechanical power transmission products and industrial services to keep industries moving efficiently and reliably.

#### **Engineered Bearings**

Timken engineered bearings feature precision tolerances, proprietary internal geometries, and quality materials. Our tapered, spherical, cylindrical, thrust, ball, plain, miniature, precision and housed unit bearings deliver strong performance, consistently and reliably.

#### **Power Transmission Products**

Timken offers a power transmission product portfolio which has been designed to enhance the efficiency and reliability of industrial equipment and machinery. Brands such as Rollon, Cone Drive, Drives, Groeneveld BEKA, Philadelphia Gear, Diamond chain, and Lovejoy couplings provide its customers a wide range of solutions and keep the industry running and progressing.

#### **Industrial Services**

Timken industrial services portfolio offers bearing and power system rebuild and repair services that can return components or entire systems to new specifications. The company refurbishes its



"It is a matter of great pride for our Chennai Plant to be bestowed with this prestigious award. On behalf of the entire Timken team, I thank Economic Times for recognizing our efforts in manufacturing and providing the most innovative friction management solutions to a wide spectrum of Indian industries. This award strengthens our belief in Timken's core values, especially Excellence and Teamwork. This also puts a lot more responsibility on our shoulders and encourages us to continue to contribute as India takes a giant leap to emerge as a global manufacturing powerhouse."

#### Sanjay Koul

Managing Director
Timken India Limited

products through its customers' drive train, including switch gears, electric motors and generators, gear drives, bearings, couplings, and central panels as well as provide up-tower wind turbine and crane repair.

In addition, in Timken Technology Centre in Bangalore, customers are given direct access to the engineering expertise and the latest technological advancements of the company.

Engineered bearing products are regarded as the core to Timken's business and reflect its long-standing innovative power in the advancement of the global industries. Next, power transmission products are adjacent to the core business and enable the company to fulfil the needs of its global customers in a more efficient way.

Timken follows a threefold strategy to leverage the potential of the excellent portfolio and create additional growth: outgrow markets, operate with excellence, and optimize capital deployment.

Timken India works very closely with customers to provide friction management and power transmission solutions that cater to their specific industry and applications covering industrial segments such as aerospace, automotive and heavy trucks, cement and aggregate, gear drives, machine tools, paper, rail, agriculture, construction, coal, oil and gas, mining, primary metals, and wind energy.





#### www.vitesco-technologies.com

system solutions for today and tomorrow and for vehicles of all kinds. With smart principles like scalability and modularity, we cover the requirements of cars, commercial vehicles, and two-wheeled transport, as well as new mobility concepts. Thanks to intelligent systems and components for electric, hybrid, and combustion engines, Vitesco Technologies makes powertrains clean, efficient, and affordable. The product portfolio includes electric drives, electronic control systems, sensors, and actuators, and innovative exhaust gas cleaning.

#### **E-Mobility**

#### We Are Pioneering The Powertrain Electrification

Powertrain electrification holds the key to sustainable future mobility. Vehicles with electrified powertrain architectures, such as battery electric (EV), hybrid (HEV), and fuel cell electric (FCEV), will shape the propulsion landscape over the next decade.

As an electrification pioneer, Vitesco Technologies offers propulsion solutions for all types of electrified vehicles based on our long-standing expertise in powertrain systems, ranging from stand-alone components, to intelligent operating strategies and full turn-key systems. The future of mobility is electric.

#### **Solutions For The Internal Combustion Engine: Optimisation Of Combustion And Hybrid Engines For Maximum Efficiency**

Further ICE efficiency and emission improvements are still necessary to meet ever more stringent legislative requirements. Vitesco Technologies' engine management solutions increase engine thermal efficiency, while our electrically heated catalyst and accompanying catalyst controller greatly reduce pollutant emissions through smart exhaust after treatment.



Our commitment to clean air is fully aligned to local legislative norms. Apart from that our "in the market, for the market" - strategy ensures that our powertrain technologies are affordable for local markets. We are excited to working with all leading automotive manufacturers in India as their partner of choice.

Past year, Vitesco Technologies has also partnered Padmini VNA Mechatronics for setting up a 50:50 joint venture company for select powertrain technology solutions that meet the new BS-VI emission standard for domestic market. The product range of the new joint entity 'PV Clean Mobility Technologies' will be focusing on sensors and actuators, as well as fuel delivery modules for passenger cars, commercial vehicles as well as two-wheeler markets.

#### **Anurag Garg**

Managing Director and Country Head Vitesco Technologies

Between improvements of the ICE, innovative exhaust after treatment solutions, and various degrees of electrification, Vitesco Technologies offers a wide range of solutions for car makers in their journey to sustainable mobility.



# ELECTRIFIED, EMOTION, EVERYWHERE

Looking at the new wave of electrification and ongoing increase in stringent emission legislation in the automotive market, including the two-wheeler market, the organization has invested 30 million euros (Rs 240 crore) in 2019 to set up a new manufacturing plant at Talegaon in Pune. The facility has already begun production and is rolling out products such as engine management systems, sensors and actuators as well as fuel and exhaust management components, for passenger cars, two-wheelers and commercial vehicles. We have been continuous associates of several leading OEMs.



he demand for sustainable mobility is growing worldwide. Hence, Vitesco Technologies provides the right drive technologies: clean, smart and electrified. Based in Regensburg, Germany, with almost 40,000 employees at around 50 locations worldwide, we pursue the objective of playing a leading role in the electrification of vehicles. To achieve this, we follow a clear strategy emphasizing sustainability, we live our brand and our values: Passionate, Partnering and Pioneering.

Our solutions power the sustainable, efficient flow of people, goods, and services. We base our business on a clear commitment to reduce emissions. Through our solutions, we are shaping the future of clean mobility

- as part of our responsibility to society,
- as a reliable partner to our customers and
- as a smart choice for investors.

We empower our people to follow their passion in contributing to this goal.

#### **Powertrain Solutions**

Vitesco Technologies integrates innovative and efficient powertrain



#### Beyond Powertrain: Core Competencies To Applications Beyond The Powertrain

Vitesco Technologies is also utilising its core competencies in applications beyond the powertrain. A comfortable vehicle access system that utilises our sensor expertise, or the application of pressure sensors in the brake system environment are prominent examples.

# The Economic Times Promising Plants

AG Industries Pvt Ltd Abhijeet Dies And Tools Adaptive Engineering Solutions ANTB Ashok Leyland Ltd Astral Poly Technik Ltd Automould Bhagyoday Engineering Woks, Chhatral Biltz Cutting Tools Company Pune Brose India Automotive Systems Pvt Ltd CACO **CAM Tools** Carborundum Universal Ltd. Cello Household Pvt.Ltd CLAAS India Clarks CMD Precision Products Pvt Ltd Continental Automotive Components Cosmos Impex India Pvt Ltd Covestro Devu Tools Pvt Ltd Draexlmaier Electroplast India Pvt Ltd Elgi Equipments Limited Elmex Electric Pvt. Ltd Endurance Technologies Ltd. Entech Kunststoffe Solutions Pvt Ltd Epson India Pvt Ltd Euro Diesel Services Faiveley Transport, A Wabtech Company Fiat India Automobiles Pvt Ltd **GKN** Automotive

#### Continued

Godrej And Boyce Mfg Co Ltd
Grupo Antolin India Pvt Ltd
Havells India Ltd
Honda Cars India Ltd
Hotmold Engineering India Pvt Ltd
Indo Schottle Auto Parts Pvt Ltd
Jaguar Land Rover
Jay Bharat Maruti Ltd
JBM Auto Limited
JH Welltec Machines India Pvt Ltd
John Deere
Larsen And Toubro
Mahindra CIE Automotive - Stamping Divn
Mate Motherson
Minda Corporation
Mutual Engineering Pvt Ltd
Panasonic Life Solutions India Pvt Ltd
PPAP Automotive Limited Noida
Radiant Technologies
Renault Nissan Automotive India Pvt Ltd
Shapers India Pvt Ltd
Skoda Volkswagen
Steelbird Hi-Tech India Ltd
Supreme Treon Private Limited
Tata Ficosa
Tata Autocomp
Tata Motors
Techno Plast
Technocrat Incorporated
Toyoda Gosei South India Pvt Ltd
Walter Tools India Pvt Ltd

- Company names arranged in alphabetical order.
- This is a listing of Promising Plants. It does not imply ranking in any manner whatsoever.



### Disclaimer

The Economic Times Promising Plants 2021 is the result of cumulative inputs taken from a sampling of plants and does not purport or claim to be a comprehensive study on the subject. This book is not to be taken as a ranking of brands in the Indian context.

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