



IPO Note – Sona BLW Precision Forgings Limited

11-June-2021



Issue Snapshot: Issue Open: June 14 – June 16, 2021

Price Band: Rs. 285 –291

*Issue Size: 190,721,649 eq shares (Fresh issue of 10,309,278 eq sh (Rs 300 cr) +offer for Sale of 180,412,371 eq sh (Rs.5250 cr))

Issue Size: Rs. 5435.6 - 5550.0 cr

Reservation for:QIBatleast75% eq shNon InstitutionalUpto15% eq shRetailUpto10% eq sh

Face Value: Rs 10

Book value: Rs 22.75 (Mar 31, 2021)

Bid size: - 51 equity shares and in multiples thereof

100% Book built Issue

Capital Structure:

Pre Issue Equity:	Rs.	572.98 cr
*Post issue Equity:	Rs.	583.29 cr

Listing: BSE & NSE

Book Running Lead Manager: Kotak Mahindra Capital Company Limited, Credit Suisse Securities (India) Private Limited, JM Financial Limited, J.P. Morgan India Private Limited, Nomura Financial Advisory and Securities (India) Private Limited

Registrar to issue: KFIN Technologies Private Limited

Shareholding Pattern

Shareholding Pattern	Pre issue %	Post issue %
Promoter and Promoter Group	100.0	67.3
Public & Employee	0.0	32.7
Total	100.0	100.0

*=assuming issue subscribed at higher band Source for this Note: RHP

Background & Operations:

Sona BLW Precision Forging Limited (SBPFL) is one of India's leading automotive technology companies, designing, manufacturing and supplying highly engineered, mission critical automotive systems and components such as differential assemblies, differential gears, conventional and micro-hybrid starter motors, BSG systems, EV traction motors (BLDC and PMSM) and motor control units to automotive OEMs across US, Europe, India and China, for both electrified and non-electrified powertrain segments. It was among the top ten players globally in the differential bevel gear market on the basis of overall volumes of differential bevel gears supplied to PVs, CVs and tractors. It is also amongst the top ten global starter motor suppliers based on its exposure to the PV segment and market share in calendar year 2020. The Company has nine manufacturing and assembly facilities across India, China, Mexico and USA, of which six are located in India, from where it supply its products to six out of the top ten global tractor OEMs by volume. It is also one of the two largest exporters of starter motors from India

SBPFL is a technology and innovation driven company. With a strong focus on research and development ("R&D"), it develops mechanical and electrical hardware systems, components as well as base and application software solutions, to meet the evolving demands of its customers. It is one of a few companies globally, with the ability to design high power density EV systems handling high torque requirements with a lightweight design, while meeting stringent durability, performance and NVH specifications, enabling EV manufacturers to enhance the vehicle range, acceleration and the overall efficiency. Currently the Company supply differential assemblies, differential gears, EV Traction Motors to customers in US, China and India, for use in hybrid and battery electric passenger vehicles, hybrid and battery electric light commercial vehicles, electric two-wheelers and electric three-wheelers.

With its product offerings spanning across all types of conventional and electrified powertrains, SBPFL is one of the few automotive technology manufacturers that are well-positioned to gain from high growth industry trends as well as various initiatives introduced by the GoI to facilitate the growth of the automotive industry in India, including the recently announced Rs.570.42 billion production-linked incentive scheme, which is likely to increase exports resulting in increased demand for differential gears in India.

The chart below describes the products and their end-use application across various powertrains and vehicle segments.

	Des P	oduct Offenings	Across Vehicle or	nienis	Description	
Products	Products Possenger Vehicles		CE-Fighway Vehicles	Three. Whomers		
Offerentia Alsombly	BEV & Hybrid	BEV	BEV	BEV		A mechanism including gean that ironism's power to the
	ICE	IC:	ICE	ICE	NI4	speeds while executing a turn. Differential assembly is part of the driventain.
Differential Gears	BEV & Hybrid	BEV	88V	SEV		Gen announced which massives the differential
•	ICE	ICE	ICE	ICE	Her	naemb);
State-Moton Micro-Hybrid and Conventional	Hybrid	Hybrid	itur	34	94	Micro Hybrid- An electric device that apart from cranking the engine, automatically shuts the engine to reduce engine idle time
-	ICE	ICE	No presence	No presente tr	No presence	Conventional. An electric device required to crank the engine and provide initial storing power to the engine
ec.	Hybrid	Hybrid	.86	No preserve	No presence	Synchronous or asynchronous electric machine, which provides forque to the powertrain in mater mode and produces electricity in generator mode
EV Traction Maton BLDC & PMSM and Mator Control Julie	BEV & Hybrid	1 o prorenzo	Ио резонае	BEV	BEV	Synchronous Motors sowered by direct current (DC) electricity to arise the electric vehicles - PM3M for BEV & Hybrid PVs, 8LDC for electric 2V/s & 3V/s Mator Control Units regulate the power given to motors for providing the forque and speed to vehicle, and it also charges battery during before.



Objects of Issue:

The Offer comprises the Fresh Issue and the Offer for Sale.

Offer for Sale

The Selling Shareholder (Singapore VII Topco III Pte. Ltd.) will be entitled to the proceeds from the Offer for Sale. SBPFL will not receive any proceeds from the Offer for Sale.

Fresh Issue

SBPFL proposes to utilise the Net Proceeds from the Fresh Issue towards funding the following objects:

- Repayment and pre-payment of identified borrowings in full availed by SBPFL (Rs.241.1 cr); and
- General corporate purposes

The main objects and objects incidental and ancillary to the main objects set out in the Memorandum of Association enable SBPFL (i) to undertake its existing business activities (ii) to undertake the activities proposed to be funded from the Net Proceeds, as well as the activities towards which the loans proposed to be repaid from the Net Proceeds were utilised. Further, the Company expects that the listing of the Equity Shares will enhance its visibility and brand image among its existing and potential customers.

Competitive Strengths

One of the leading manufacturers and suppliers to global EV markets: While BEV sales as a percentage of total global vehicle sales was 3.3% in calendar year 2020, according to the Ricardo Report, Rs.2,056.98 million representing 13.8% of SBPFL's income from sale of goods was derived from the BEV market for Fiscal 2021. As a percentage of its total sale of goods, income from sale of goods to the BEV market has grown from 1.3% (Rs174.19 million) in Fiscal 2019 to 13.8% (Rs2,056.98 million) in Fiscal 2021. For Fiscal 2021, Rs11,157.80 million representing approximately 74.9% of its income, from sale of goods was derived from sale of goods to BEV, hybrid/ micro-hybrid and power source neutral products.



SBPFL has been supplying differential gears in the global EV market since April 2016 and differential assemblies since 2018. It also design and manufacture traction motors and motor control units for electric vehicles, with PMSM motors for EV and hybrid PVs and BLDC motors for electric two-wheelers and electric three-wheelers. It is one of the leading suppliers of BLDC motors in India for the two-wheeler and three-wheeler EV market. Further, it is developing a 48V BSG motor for hybrid PVs, for which it has successfully completed vehicle level demonstration for selected global OEMs. SBPFL is among a limited number of players who are well placed to combine its motor and driveline capabilities to offer a compelling value proposition to its EV customer base. SBPFL is committed to achieving better and stronger ESG norms as a company, and its focus on developing EV specific products to facilitate the growing electrification trend enables it to implement ESG related commitment. Its high power density EV systems and ability to engage with customers from concept to testing, has resulted in being awarded 15 development programs for EV systems and components by 10 different customers as at March 31, 2021, of which active production process has commenced for eight programs and regular production is yet to commence for seven programs.

One of the leading global companies and gaining market share, diversified across key automotive geographies, products, vehicle segments and customers: SBPFL has nine manufacturing and assembly facilities, of which six are located in India and one each in China, Mexico and USA, as well as eight warehouses across India, USA, Germany and Belgium. Its facilities are strategically located in order to serve and prioritize its customers' needs. Its capabilities in precision-forging technology has enabled to become one of the top ten players globally in the differential bevel gear market in calendar year 2020 on the basis of overall volumes of differential bevel gears supplied to PVs, CVs and tractors. The Company is also one of the two largest exporters of starter motors from India and amongst the top ten global starter motor suppliers in calendar year 2020 based on its exposure to the PV segment and market share. It has increased its global market



share of differential gears and starter motors to 5.0% and 3.0%, respectively in calendar year 2020 from 4.5% and 2.5%, respectively in calendar year 2019 and its global market share of BEV differential assemblies was 8.7% in calendar year 202. Further, it is the largest manufacturer of differential gears for PV, CV and tractor OEMs in India, with an estimated market share of approximately 55% to 60%, 80% to 90%, and 75% to 85%, respectively.

Further, SBPFL aims to mitigate the impact of cyclical downturns in the automotive industry through its geographic diversification, together with distributed presence in PV, CV and OHV segments. It is not dependent on a single product, vehicle segment, customer or geography. It is also focused on diversification of its business through the growth of new and existing customer relationships. It supply its systems and components to leading OEMs and Tier 1 automotive suppliers in US, Europe, India and China.

Strong research and development and technological capabilities in both hardware and software development: SBPFL has developed strong in-house capabilities to deliver evolving green technologies for future mobility, with an aggregate expenditure on R&D of Rs.1,563.56 million during Fiscal Years 2019, 2020 and 2021. As at March 31, 2021, it had 186 on-roll employees engaged in R&D activities, representing approximately 15.4% of its total on-roll manpower, with 16 software engineers focused on R&D. Its R&D capabilities are further strengthened by its digital simulations, testing and validation facilities located at its three R&D centers in India (Gurugram, Chennai and MM Nagar), which are approved by the Gol's Department of Scientific and Industrial Research. They are equipped with modern facilities including, design software such as Creo, MotorSolve BLDC, ANSYS, MSC ADAMS, KISSsoft, Gear PRO, hyperMILL, Siemens Solid Edge, Siemens NX, Siemens SPEED, FRENCO, UG NX and Nastran and equipment for white light scanning, coordinate measuring machines, 3D printing, silicon molding and an electronic and endurance testing laboratory.

Further, for SBPFL's driveline systems and components, it has developed proprietary gear design software. Its software generates microgeometries to meet the specific requirements of its customers and allows to design gear tooth profile with minimal constraints and high flexibility. This flexibility to modify the geometry is fundamental to its core strength of precision-forging technology, which enables to design and make its tools and dies in-house and its precision forging process technology allows to develop gears with higher power density, which is critical for the powertrains of EVs. Its R&D capabilities are further supported by the intellectual property rights that it has in connection with its business. SBPFL holds assignment of license rights in relation to eight patents in USA. It has been granted one patent in USA, one patent in China and one patent in the United Kingdom and await 21 patent approvals in India.

Strong business development with customer centric approach: As at March 31, 2021, SBPFL has been awarded 58 programs from 27 customers across its product portfolio, from customers in India and overseas, where the start of production was either during Fiscal Year 2021 or a period subsequent to Fiscal Year 2021. It has have long-standing relationships of 15 years and more with 13 of its top 20 customers. Some of its key OEM customers include a Global OEM of EVs, a North American OEM of PVs and CVs, Ampere Vehicles, an Indian OEM of PVs, CVs and EVs, Ashok Leyland, CNH, Daimler, Escorts, Escorts Kubota, Geely, Jaguar Land Rover, John Deere, Mahindra and Mahindra, Mahindra Electric, Maruti Suzuki, Renault Nissan, Revolt Intellicorp, TAFE, Volvo Cars and Volvo Eicher. It also serve selected leading Tier 1 automotive system suppliers such as Carraro, Dana, Jing-Jin Electric, Linamar and Maschio. It engages closely with its customers from concept to delivery and aim to have all its systems and components be industry leading in its category.

In addition to technology and collaboration in development of systems and components, SBPFL also meet regularly with its customers to review its performance in a number of other areas including quality, delivery and cost. As a result of its superior performance, technological capabilities, and its stringent manufacturing processes, it has received several awards for the quality of its systems and components and customer satisfaction from several OEMs.

Consistent financial performance with industry leading metrics: As compared to the publicly listed top ten auto-component manufacturers in India by market capitalization, SBPFL is the highest in terms of operating EBITDA margin, PAT margin, ROCE and ROE and one of the top ten auto-component manufacturers in India in terms of operating EBITDA and profit before tax in Fiscal Year 2020. Its total operating income has grown at a CAGR of 10.9% from Fiscal 2016 to 2020, as compared to the average CAGR of 8.1% for the top ten listed auto-component manufacturers in India by market capitalization, in the same period. It has made substantial investments in its R&D and in building production capacities for future growth. As at March 31, 2021, it had a strong balance sheet with equity capital (including instruments entirely equity in nature) of Rs.5,729.80 million and other equity of Rs.7,309.21million. In addition, its cash flows from its operating activities (after tax) were Rs.2,689.43 million, Rs.3,092.42 million and Rs.1,427.26 million in Fiscal Years 2019, 2020 and 2021, respectively. Despite the overall slowdown in the global automotive sector in Fiscal Year 2020 and the impact of the COVID- 19 pandemic, SBPFL was able to maintain its EBITDA margins at 28.9%, 26.7% and 28.2% for Fiscal Years 2019, 2020 and 2021.

Highly experienced board of directors and management team: SBPFL is led by a highly experienced board of directors, and a professional and experienced management team with extensive experience in the automotive industry and a proven track record of performance. Mr. Sunjay Kapur, the Chairman on the Board of the Company, has over 21 years of experience in the automotive industry. A large number of its senior management personnel have worked with the Company for a significant period of time, resulting in effective operational coordination and continuity of business strategies. They have led the organization through acquisitions, development of new systems and components and pivoting the business to EV markets in the last five years. Its highly experienced and professional management team



provides a key competitive advantage. It also benefit from the resources, relationships, and expertise of Blackstone. Blackstone brings deep knowledge of local markets along with global best practices in development, investment and asset management.

Business Strategy:

"Electrification" – Capturing market opportunity in the growing EV space: The global trend towards electrification of vehicles continues to expand. The key drivers of vehicle electrification include climate change and public awareness of the importance to reduce CO2 emissions and other pollutants, ban on fossil fuel vehicles by some countries, government support and fiscal incentives that support the trend towards vehicle electrification, stringent emission and fuel economy norms introduced by several countries to combat the impact of climate change and encourage alternate cleaner fuels, increasing investment in charging infrastructure for EVs and decline in battery price contributing towards adoption of EVs. Among the available propulsion technologies, BEV has been the fastest growing at CAGR of approximately 46% between calendar years 2015 to 2020 and is expected to experience increased market penetration growing at a CAGR of approximately 36% between calendar year 2020 to 2025, SBPFL's product offerings span all types of electrified powertrains. Its commitment and focus towards ESG will continue increasing going forward as it plans to increase the EV share of its revenue. It seeks to continue to increase its commitment and focus towards compliance with ESG norms, as it plans to increase the share of its income derived from sale of goods in the EV market. As part of growth strategy, it plans to increase its market share in both the Indian and overseas markets by catering specifically to EV OEMs across three product groups as follows:

Differential assemblies and differential gears: The Deloitte 2019 Global Automotive Supplier Study, electric drivetrain is expected to be the fastest growing segment of the entire automotive supply chain and will grow approximately four times from US\$ 14 billion in 2018 to US\$ 56 billion in 2025 globally. Anticipating this market shift to electric mobility, SBPFL has developed its differential assemblies and differential gears with core design features that meet the demands of increasing vehicle electrification such as high power density, improved fuel efficiency and reduced weight. Gobal market share of BEV differential assemblies in calendar year 2020 was 8.7%. These efforts have led to new business awards and further position it to compete in the global marketplace. As at March 31, 2021, the Company had 11 EV program awards for production of differential assemblies and differential gears for supply to EV manufacturers across North America, Europe, China and India, of which five programs are currently under regular production. It expects to benefit from the growing trend towards electrified drivetrains by further increasing its customer base and expanding share of business with existing EV customers

48V BSG motor: The global mild hybrid market is expected to grow by approximately four times by calendar year 2025, accounting for approximately 20.9% of the propulsion split for PVs in calendar year 2025. Key global markets such as China, Europe and US have made significant commitments through stringent fuel economy and emission norms. In China, the share of mild hybrids is expected to grow from an insignificant share to approximately 25% in calendar year 2025. SBPFL is responding, in part, to such shift in market demand, through the development of its 48V BSG motor for hybrid PVs with features that enable fuel savings as well as reduction in CO2 emissions which will help to meet the CAFE norms. It has successfully completed vehicle level demonstration of the 48V BSG system to selected global OEMs, and it is currently undergoing rigorous testing in compliance with international specifications. It also aims to remain at the forefront of providing technologically advanced hybridization solutions through expanding its customer base for and increasing the sales of BSG hybrid motors globally.

EV traction motors (BLDC and PMSM) and motor control units: With the growing market shift towards electrification of vehicles, the demand for hybrid and battery electric PVs, electric two-wheelers and electric three-wheelers is growing rapidly in India as well as globally. The full hybrid market is expected to grow by approximately three times in terms of absolute volume by calendar year 2025, accounting for approximately 12.0% of the propulsion split for PVs in calendar year 2025 and the BEV market is expected to grow by around five times by 2025. Further, according to the CRISIL Report, the two-wheeler EV sales are expected to expand at a CAGR of 70% to 74% over Fiscals 2021 to 2026 and according to Ricardo Report, the electric three-wheeler segment is expected to grow at a CAGR of approximately 46% between calendar years 2021 and 2025 to reach 400,000 units in sales. Since SBPFL designs and manufactures traction motors and motor control units for electric vehicles, with PMSM motors for EV and hybrid PVs and BLDC motors for electric two-wheelers and electric three wheelers, It is well-positioned to benefit from the expected growth in the Indian EV market across all vehicle categories. As part of its growth strategy to establish market leadership in the Indian EV segment, it aims to further increase its customer penetration and acquire new customers for traction motors and controllers.

Increasing market share globally:

Achieving significant global share from existing systems and components: SBPFL has increased its global market share of differential gears and starter motors to 5.0% and 3.0%, respectively in calendar year 2020 from 4.5% and 2.5%, respectively in calendar year 2019 and its global market share of BEV differential assemblies was 8.7% in calendar year 2020. As part of its strategy, it intends to penetrate the European market for supplying differential assemblies and differential gears, where it currently has limited market share for its driveline products. It also plans to expand its presence in China for supply of its micro-hybrid starter motors for PVs and LCVs as well as its 48V BSG systems for hybrid PVs, as it expects to benefit from China's growing position as a leading market for EV manufacturers. As part of the growth strategy, SBPFL set-up an assembly plant in China in 2015 and Mexico in 2017, with an aim to capture higher market share in the Chinese and North American markets.



Benefiting from the industry trend towards multi-axle vehicle drives in India: The automotive industry, in India, as well as globally, is experiencing a growing market preference for multiple axle vehicles, in PVs, CVs as well as tractors. A gradual shift in demand towards four-wheel-drive vehicles, particularly in the utility vehicle segment, will likely result in higher per-vehicle gear content. It is expected that this trend towards preference for multi-axle vehicles to significantly increase the demand for its differential gears and aims to achieve its growth objectives by capitalizing on this shift in market preference for multiple axle vehicles.

Benefiting from integrated powertrain systems in EVs: SBPFL is among the limited number of players who are well placed to combine its motor and driveline capabilities to offer a compelling value proposition to its EV customer base. Integrated drive units have three key components namely, differential assembly, high voltage traction motors and high voltage inverters. Since it already manufactures electric drive motors and inverters for electric 2-wheelers and hybrid PVs, as well as differential assemblies for battery electric passenger vehicles, it is in a unique position to integrate the three key constituents of the electric powertrain into a single matched unit, offering an efficient and compact solution to EV OEMs.

Continue to focus on R&D to develop new and innovative systems and components : with the advent of electrification, the vehicle level bill of materials will be different from the current ICE vehicle and accordingly, revenue realization of various components such as differential bevel gears, differential assembly, starter motors, BSG and traction motors is expected to undergo a paradigm shift. SBPFL aims to capture the growth trend in revenue realization per component with increasing electrification by continuously investing in R&D to develop and deliver new and innovative systems and components. With the evolving vehicle electrification trend, a key area of its focus is on integrating the powertrain and the drivetrain components by creating an integrated drive unit. Control systems and software are becoming a critical part of powertrains. It has developed extensive in-house capability to develop embedded systems and application software, along with integration capabilities to offer its customers a complete solution. Although the core of its strategy is to continue to achieve growth organically through investment in its technological capabilities, business development skills and customer relationships, it continue to evaluate inorganic growth opportunities such as acquisitions and strategic alliances that may provide SBPFL with complementary technologies that have a similar financial profile.





Global Light Vehicle (Passenger Vehicles GVW <=3.5T) production has remained flat between 2015-19. However, vehicle production declined by approximately 18% in calendar year 2020 due to COVID-19. Given USA and most parts of Europe are still severely impacted by COVID-19, Ricardo does not expect a V-shaped recovery for the passenger vehicle market, but a more gradual recovery coming out of COVID-19. Calendar year 2021 growth will primarily be driven by the Chinese market. Growth in Japan will continue to be stable, while India is expected to reach its previous peak only beyond calendar year 2025. Ricardo expects overall global volumes to reach approximately 92 million in calendar year 2025 with China, Europe and North America accounting for approximately 70% of the global production volumes. According to the IEA Global EV Outlook 20201, passenger vehicles to lead electrification adoption (by volumes), followed by light commercial vehicle, busses and trucks through to 2030.

Electric Vehicle In Global Market Share

Passenger Vehicle – Electric Vehicle Market Share

In calendar year 2020, global production of BEVs (Battery Electric Vehicle) stood at approximately 2.3 million units. Tesla accounted for approximately 21% of the share while Renault Nissan & VW accounted for approximately 12% and approximately 10% respectively. SAIC-GM-Wuiling & Hyundai rounded off the top five BEV producers globally for calendar year 2020. The top five BEV models produced in calendar year 2020 were Tesla Model 3 & Y, Renault Zoe, Hyundai KONA & Hongguang Mini. VWs ID.3 and Nissan leaf were among the top 10 BEVs produced in calendar year 2020. For the next five years, automakers have announced plans to release more than 200 new electric car models.



Many OEMs have announced plans to for significant investment in electrification and introduction of several BEV models in the next three to five years. VW plans to be a carbon neutral company by 2050. VW plans to reduce their total life cycle Greenhouse Gas Emissions of passenger cars and light duty vehicles by 30% compared to 2015. VW plans to have at least approximately 30% of their portfolio to be BEVs in 2030. In 2020, VW sold approximately 230,000 units of BEV across the globe. GM has committed \$27B to EVs & AVs till 2025. GM plans to launch more than 30 BEVs till 2025 with more than half being available in North America and targeting 100% EVs by 2035. Hyundai plans to increase green car line-up from 31 models in 2020 to 44 models in 2025. Hyundai aims to be the second largest OEM in green car market. Between Hyundai and Kia they plan to invest approximately \$50 billion into electrification and new advanced technologies. Renault and Dacia brands plan to launch six new vehicles and two face lifts in 2021-22 across BEV, PHEVs & HEV technologies. Nissan plans to introduce more than 8 BEVs by 2023. Nissan intends to have 60% of its portfolio in Japan to be BEVs, 23% in China and 50% in Europe by 2023. Nissan plans to have more than 1 million BEV sales by 2023. Ford has indicated that it will invest \$11.5 billion through 2022 mainly oriented towards BEVs. Ford has outlined an electric vehicle strategy that encompasses mild hybrid, self-charging hybrid, plug-in hybrid (PHEV) and battery electric (BEV) solutions across its cars and light commercial vehicles. Ford plans to offer their LCV Transit as a BEV in 2021.

To support electrification of the portfolio, FCA is investing over \$11 billion in the design, development and production of electrified vehicles. PSA aims to have all its models electrified by 2025 – with an electrified variant available for every model range. At present, it offers ten electrified models (four fully electric vehicles and six plug-in hybrids). Finally, JLR plans to electrify 12 of 13 nameplates in FY21. Majority of the models are to be either plug-in hybrids or Mild hybrids.

Global Propulsion Split – Passenger Vehicles Production Volumes

Driven by stringent emission and fuel economy (CAFE) regulations across the globe, pure ICE vehicles will no longer be a viable propulsion choice for passenger vehicles. Hence, pure ICE will continue to decline leading up to calendar year 2025. Ricardo expects the share of pure ICE vehicles in calendar year 2025 to be approximately 18% of the total global production. Depending of the severity of CAFE norms across the regions, OEMs have a choice of micro (12v start-stop), mild/full hybrids, BEVs (Battery Electric Vehicles) and FCEVs (Fuel Cell Electric Vehicles) to meet corporate average fuel economy. Ricardo expects that Micro hybrid (12v Start-Stop) to be a standard offering across passenger vehicles and hence will account for significant share (approximately 38%) of the propulsion split in calendar year 2025. China and Europe will see a decline in Micro Hybrids in 2025 as the technology will not offer enough benefit to meet stricter FE. Currently, the US expected to increase in volume terms as this technology is enough to meet US FE regulations; however, the scenario may change with new administration.

Mild and Full hybrids account for approximately 32% of the propulsion split in calendar year 2025 with mild hybrids being the dominant technology. Mild hybrids offer the quickest route to electrification with limited complexity (compared to full hybrid) and substantial fuel economy benefit. approximately 80% of Mild Hybrid volumes in calendar year 2025 will be in Europe and China. PO Mild Hybrid technology is expected to account for approximately 70% of the mild hybrid volumes. VW, PSA, Renault Nissan are expected to account for significant PO volumes in Europe. Geely, FAW, Changan, GWM in China are key players implementing PO technology. As fuel economy norms get more stringent over time and countries introduce legislation to ban fossil fuel vehicles, the proportion of BEVs will increase over time. In calendar year 2025 Ricardo expects BEVs to account for approximately 12% (approximately 11 million units) of the global production. Ricardo expects FCEV to have limited volumes in calendar year 2025. Approximately 75% of BEV volumes are expected to be in China and Europe. In the US, Tesla, GM & Ford are expected to drive BEV volumes. The current China battery capacity is approximately 350GWh and expected to reach 800GWh in 2030.

Among the available propulsion technologies BEV has been the fastest growing at CAGR of approximately 46% between calendar years 2015 to 2020. BEV are expected to see an increased penetration growing at approximately 36% CAGR between calendar years 2020 to 2025.



Global Commercial Vehicle (>6T GVW) market share

Commercial vehicles with GVW of >6T had a market size of approximately 3.2 million units in 2019. The market is fragmented with 10 players holding approximately 70% markets share. However, Daimler led with approximately 12% market share followed by the Chinese



players, FAW and Dongfeng. Asia was the biggest CV market with sales of approximately 1.8 million units in 2019. Europe sold approximately 456,000 units across the >6T segment. NAFTA market sales (the US, Canada & Mexico) accounted for approximately 623,000 units in 2019 while rest of the world accounted for approximately 350,000 units. Off the approximately 3.2 million units sold in 2019, approximately 2.4 million units were in the >16T segment. The >16T segment is a HD segment with includes commercial vehicles with multi-axle. Globally HD multi-axle vehicles have a bigger share of the CV sales pie and this trend is expected to continue for the foreseeable future. In 2020, the European CV market (>6T) declined by approximately 28% YOY to approximately 328,000 units. The NAFTA CV market (>6T) declined by approximately 436,000 units. Sona Comstar supplies components to three of the top 10 global commercial vehicle OEMs.

Global Agriculture Tractor market

In terms of units, India dominates the global tractor market with approximately 802,000 while US leads in terms of value with approximately \$14 billion. In India and the US more than 95% of the tractors sold are 2WD. 4WD is currently niche volumes and used for specialty applications. In Europe majority of the tractors sold are 4WD. While the trends in the US and Europe with respect to 2WD and 4WD tractors are not expected to change, Ricardo expects the penetration of 4WD tractors to increase in India going forward. Top-8 OEMs account for approximately 93% of the global markets. Mahindra leads the global (China, the US, Germany, UK, France and Italy) tractor market with approximately 29% followed by John Deere, TAFE with approximately 13% & approximately 12% respectively.

India Automotive Market

Outlook On The Indian PV Industry (Fiscals 2021-2026)

Production outlook (Fiscals 2021- 2026)

CRISIL Research estimates overall PV production to grow at a robust pace of 8% to 10% CAGR in the next five Fiscals and reach 4.9 million units by Fiscal 2026.



After a consecutive drop in production in Fiscals 2020 and 2021, PV production is expected to increase at a robust pace over the next five Fiscals because of a spurt in domestic as well as exports demand. Domestic demand will be driven by an expansion in the addressable market, fast-paced infrastructure development and relatively stable cost of vehicle ownership, as crude oil prices are expected to stabilize at lower levels. The long-term outlook remains bright with regard to exports as efforts to penetrate newer geographies bear fruit and schemes such as PLI incentivize players to tap exports. CRISIL forecasts exports to clock 8% to 10% CAGR between Fiscals 2021 and 2026. Rising competition in Europe amid sluggish demand growth, though, will prevent further increase in growth. Moreover, penetration of electric and hybrid vehicles will be a key market to monitor.

Outlook On Indian CV Industry (Fiscals 2021-2026) Production outlook (Fiscals 2016- 2021)

Production of CVs in India is expected to increase at 12% to 14% CAGR over Fiscals 2021 to 2026 over a low base. Buses, in particular, are expected to rebound sharply, growing at 31% to 35% CAGR till Fiscal 2026. In Fiscal 2021, though, the production of buses has sharply declined because of low people mobility due to the pandemic. But Fiscal 2022 onwards, production of buses is projected to rise exponentially as sales recover on a low base of Fiscal 2021 on account of availability of vaccine. Also, production for goods vehicles is estimated to grow at 11% to 13% CAGR over the forecast period.





Outlook On Indian Tractor Industry (Fiscals 2021-2026) Production outlook (Fiscals 2021-2026)

CRISIL Research projects production and domestic sales of tractors to expand at 0-4% CAGR during Fiscals 2021 to 2026, after factoring in one to two years of below-normal monsoon during the period along with a 10% decline in investment in Pradhan Mantri Gram Sadak Yojana (PMGSY) over the next five years, due to lower targets impacting commercial demand.

Tractor is a cyclical industry, and it generally takes four to five quarters for the industry to recover after a downturn. Thus, assuming that the tractor industry will be impacted by poor monsoon for one to two years between Fiscals 2022 and 2026 with the industry taking four to five quarters to recover, CRISIL arrives at a CAGR of 4% to 6%. Growth will be supported by the low tractor penetration in India and government focus on improving farm incomes through various schemes, promoting farm mechanization, and investments to improve rural infrastructure.

Electrification

Regulatory roadmap key for rise of electric mobility in India

The US and China have seen an acceleration of sales of electric/hybrid cars, as most major global original equipment manufacturers (OEMs) have one or more models in their portfolios in these countries. With more model launches by OEMs, issues of range anxiety being addressed, and declining battery prices, CRISIL expects electric vehicle (EV) volume to grow at a faster pace globally. Currently, in India, the charging infrastructure required for EVs is not in place. With the Indian automobile industry seeing a slew of regulations and norms in the past few years, OEMs are skeptical about investing in EV manufacturing here.

The implementation of the National Electric Mobility Mission Plan, 2020 and other policy initiatives by the government to address infrastructure-related issues are key parameters to be monitored for the sector over the next five years. The government has announced Rs. 100 billion for Phase 2 of Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME). The policy aims to provide a subsidy of Rs. 10,000 per KWh to four wheelers (BEV (battery electric vehicle), PHEV, strong hybrid) for commercial purpose and public transport. It also mandates minimum range to be approximately 140 km and maximum ex-factory price to be approximately Rs. 1.5 million. It envisions creation of infrastructure for charging of EVs. CRISIL Research expects initial adoption rate to be high among cab aggregators.

Delhi has announced an EV policy that would provide purchase incentives of up to Rs. 0.15 million for the first 1,000 electric cars. The benefit would be provided in addition to FAME-2 policy benefits. The Telangana government is also providing 100% exemption of road tax and registration fee on purchase of the first 5,000 electric cars. The Tamil Nadu government is providing 100% exemption for battery-operated vehicles (BOVs). Such regional push will further enable adoption of EVs. Further individual tax payers are allowed to take a deduction on interest payments up to Rs. 150,000 towards electric vehicles under Section 80EEB. The benefit is available on EV loans sanctioned over April 1, 2019 till March 31, 2023 period. Such favorable tax laws are expected to encourage electric vehicle adoption for personal mobility. The government is also considering the establishment of a 40 gigawatt (GW) battery manufacturing plant to boost EVs and renewable energy initiatives. However, for any path-breaking changes to happen in the EV market, OEMs need to make more investments and the government should devise clear policies. Among the challenges, infrastructure shortage needs to be resolved urgently.

Electric PVs to contribute to approximately 4% of domestic sales by Fiscal 2026

As it stands, FAME-II subsidy is incentivized only towards commercial use. No benefits are provided to personal car owners. Following are the findings of CRISIL analysis on the cost of ownership of an electric passenger car versus petrol, diesel and CNG variants for cab aggregators. CRISIL Research has also compared the cost of ownership of an electric passenger car with the petrol variant of a passenger car. In case of commercial application like cab aggregators, Total Cost of Acquisition (COA) for EVs is almost 50% higher for diesel and CNG vehicle. However due to heavy running of the vehicles the Total Cost of Ownership (TCO) of EVs for cab aggregators is lower compared with



diesel alternatives by approximately 6% and higher by approximately 6% than CNG alternatives even in Fiscal 2021. By Fiscal 2026 TCO for EVs is likely to be lower by 11% in with diesel alternatives and marginally lower for CNG alternatives. The lower battery cost is expected to offset the lack of FAME subsidy and will help maintain competitiveness of BEVs against diesel and CNG variants for cab aggregators.

Currently, charging infrastructure, range anxiety and lack of large OEM presence is hindering EV adoption. The taxi segment accounts for 10-15% of sales within passenger cars, and within the taxi segment, cab aggregators are expected to lead adoption of EVs. This should result in an estimated approximately 25% adoption of EVs within cab aggregator segment by Fiscal 2025 (assuming adequate infrastructure is available by then).

TCO and COA of electric personal cars are still higher (approximately 33% and approximately 78%, respectively) compared with the petrol alternative and higher by (approximately 39% and approximately 53%, respectively) due to their lower running. Therefore, EVs are currently not a viable use-case. In addition, availability of charging infrastructure and range especially for intercity travels are likely to be key bottlenecks for adoption of EVs in the personal car segment. Hence, CRISIL Research expects the share of EVs in total passenger car sales to remain low (approximately 4%) in Fiscal 2026. Penetration in Fiscal 2019 was approximately 0.1%. EV penetration can be higher if government adopts stricter policies on OEMs for not meeting CAFÉ norms. The exact quantum of EV penetration in an aggressive case depends on incentives given for adoption and setting up of charging infrastructure.

Outlook On Indian 2W EV Sales (Fiscal 2021-2026)

Regulatory developments and player actions in the industry indicate that the share of large OEMs will continue to grow in the future, with adequate investments in capability building and a high degree of localization. Product characteristics imply that the industry is moving rapidly from lead-acid-based low-speed vehicles to lithium-ion-based high-speed vehicles, and providing features on par with equivalent ICE vehicles. Even though 90% to 95% of personal-use e2W are likely to be home-charged, the presence of public charging and fast-charging systems will allay range anxiety, help overcome the current trust deficit and drive faster adoption.

2W EV sales outlook in India (Fiscal 2021-2026)

CRISIL Research expects 2W EV sales to expand to between 2,120 to 2,140 thousand vehicles by Fiscal 2026 from 140 thousand to 142 thousand vehicles in Fiscal 2021, at a CAGR of 70% to 74% over Fiscals 2021 to 2026.

Three-wheeler electrification in India

The current market size of e-3Ws is approximately 87,000 units based on registrations in Road Transport Offices (RTOs). However, it is worth noting that the actual size of the market may be much higher as majority of the e- 3W segment is highly unorganised. There are three product categories in the e-3W segment namely e-auto (L5M), e-rickshaw and e-rickshaw with cart (L3/L5N). E-rickshaw with cart is the goods carrier while e-auto and e-rickshaw are passenger carriers. E- 3W segment is dominated by passenger carriers with approximately 93% share while the cargo carriers are limited to approximately 7%.

Market Sizing And Outlook For Relevant Auto Component Segments In India

Differential gears and assemblies

A differential gear is a critical component of a vehicle's power transmission system. Differential gears are mounted as an assembly of highprecision bevel gears on the drive axle. A differential assembly plays an integral role in how a vehicle turns. It is designed to drive a pair of wheels while allowing them to rotate at different speeds. This function provides proportional RPMs between the left and right wheels. For example, when a vehicle goes around a corner, the wheel on the outside must travel faster than the wheel on the inside. The differential distributes equal amounts of torque to both wheels. This permits the wheels to react to resistance, or provide traction, to give the wheel more resistance to rotate less. The wheel with less resistance rotates faster. Differential gears/assemblies find application in passenger vehicles (PV), commercial vehicles (CV), tractors, and construction equipment.





Differential gears are mounted on the rear and/or front axle, depending on the power transmission system design. For example, in the case of two-wheel rear-axle-drive cars, one differential gear assembly is installed on the rear axle and vice versa. In the case of four-wheel drive cars, two differential gear assemblies are installed. On the similar principal differential gears find applications in commercial vehicle, tractors and construction equipment. The intensity of differential gears in vehicles depends on vehicle type and configuration. Accordingly, two-wheel drive passenger vehicles (PV) have a set of four differential gears. In certain vehicle models, depending upon design a two-wheel-drive, PV can have six differential gears. Whereas, a four-wheel-drive PV has two sets of four differential gears mounted on each of the axle (rear and front) along with an inter axle differential. Inter axle differential performs the function of distributing power between the two axles. A differential gear manufacturer realizes more revenue in a four wheel-drive versus a two-wheel drive PV. Bigger vehicles like sedans, SUVs have better price realization per gear as compared to small cars.

Similarly in CVs, an LCV has six differential gears in a two-wheel-drive configuration, whereas a M&HCV has two sets of six differential gears each along with an inter- axle differential consisting of nine gears in a four-wheel drive configuration to support the torque requirement of respective vehicle segments. Therefore, in a four-wheel drive configuration M&HCV truck has total 20 differential gears. A higher payload vehicle requires higher torque. Vehicles with higher torque requirement not only have a higher number of gears, but also a more complex gear design compared with vehicles with lower torque requirement. CV applications such as construction, mining and defense require four-wheel-drive trucks that have a higher number of differential gears and require more complex gear designs to support operations in strenuous conditions. Like in PV, price realization for a differential gear manufacturer is higher in four-wheel-drive truck compared to a two-wheel-drive truck. In addition, price realization per gear also improves with increase in truck payloads.

Electric vehicle (EV) drivetrains are more complicated than conventional powertrains. Very high revolutions per minute (RPM) in electric drives cause noise, vibration and harshness (NVH) issues in EVs. This results in higher technological complexity in differential gears and assembly design. This in turn results in higher price realization for differential gear assembly in EVs than conventional powertrains. In tractors, two-wheel drive tractors have six differential gears whereas in a four-wheel-drive configuration a total of 18-20 gears of deployed in a tractor. Even in case of tractors, price realization for a differential gear manufacturer is higher in four-wheel-drive tractors versus a two-wheel-drive tractors. Price realizations are also better in higher hp tractors versus lower hp tractors.

Indian differential gears market outlook

According to CRISIL Research, the differential gears market in India is expected to expand at a CAGR of 8.5% to 9.5% to Rs. 33 to 35 million units by Fiscal 2026. The market is estimated to be worth Rs. 6.0 to 6.5 billion in Fiscal 2026. In a scenario where component manufacturers supply all differential gears as assemblies to vehicle manufacturers, CRISIL Research expects the market to be worth Rs. 8 to 8.5 billion by Fiscal 2026. Vehicle manufacturers are likely to outsource differential gear assembly to component suppliers gradually going forward. PVs are expected to account for 60% to 62% of the Indian differential gears market (by volume) by Fiscal 2026, followed by CVs (approximately 18% to 20%) and tractors (approximately 19% to 21%). By value, PVs are expected to account for 40% to 42% of the market in Fiscal 2020, followed by CVs (33% to 35%) and tractors (24% to 26%). PV EV differential gears market is estimated to garner 2.5% to 3% value share in overall PV differential gears market by Fiscal 2026 from approximately 0.1% in Fiscal 2020.

Competitive Scenario

In the PV segment, a few OEMs such as Hyundai Motors, Honda Cars, and Toyota Kirloskar Motor have supply tie-ups with auto component suppliers, which are subsidiaries or affiliates of respective vehicle manufactures. Differential gear requirement of these OEMs is largely met through imports. Sona Comstar, Sundram Fasteners, and India Pistons are the key manufacturers of differential gears in India. Sona Comstar is the largest manufacturer of differential gears for PVs, with an estimated market share of 55% to 60%. Sona Comstar, American Axle, Meritor and Dana are the leading suppliers of differential gears for CV manufacturers in India. Sona Comstar is the largest manufacturer of the CV segment differential gears with estimated 80-90% market share. Sona Comstar is also the largest supplier of differential gears for tractor manufacturers in India, with an estimated market share of 75% to 85%. Rest of the tractor OEM demand for differential gears is met through in-house manufacturing by tractor OEMs or through players like New Allenbery, Punjab Bevel Gears, GNA, Bharat Gears etc. Sona Comstar is the largest manufacturer of differential gears in India for PV, CV and tractor OEMs.

Global market for Differential Assemblies & Differential Bevel Gears

In calendar year 2015, Ricardo estimates that approximately 59% of the passenger vehicles produced were Front Wheel Drive (FWD) while approximately 10% of the vehicles were Rear Wheeled Drive (RWD). Both FWD & RWD would have one differential assembly per vehicle. Given this Ricardo estimates that in calendar year 2015, the total volumes of differential produced for FWD & RWD passenger vehicles were approximately 59 million units.

The proportion of Part time AWD and Full time AWD passenger vehicles accounted for approximately 31% of the passenger vehicles produced in calendar year 2015. Each of these drive configurations would require two differential assemblies (one on front axle and one on rear axle) to offer the ability to steer wheels on each axle in case power to transferred to the same. Based on this, Ricardo estimates that in calendar year 2015, the total volumes of differential produced for Part time AWD and Full time AWD passenger vehicles were approximately 53 million units. Hence, the total volumes of differential assemblies produced in calendar year 2015 for passenger vehicles is estimated to be approximately 112 million units.



In calendar year 2020, Ricardo estimates that approximately 55% of the passenger vehicles produced were Front Wheel Drive (FWD) while approximately 8% of the vehicles were Rear Wheeled Drive (RWD). Given this Ricardo estimates that in calendar year calendar year 2020, the total volumes of differential produced for FWD & RWD passenger vehicles were approximately 44 million units.

The proportion of Part time AWD and Full time AWD passenger vehicles accounted for approximately 37% of the passenger vehicles produced in calendar year 2020. Based on this, Ricardo estimates that in calendar year 2020, the total volumes of differential produced for Part time AWD and Full time AWD passenger vehicles were approximately 52 million units.

Hence, the total volumes of differential assemblies produced in calendar year 2020 for passenger vehicles is estimated to be approximately 96 million units. Ricardo assumes the price of a non-BEV differential assembly to be \$40 per unit. Ricardo's assumption is that the price of a differential assembly used in BEV is approximately 25% higher compared to non-BEV vehicle given the increased NVH requirements. So, the price of BEV differential is assumed to be approximately \$50. Hence, Ricardo estimates the size of the market to be approximately \$3.9 billion.

Ricardo estimates that total differential assemblies produced for BEV were approximately 2.9 million units in calendar year 2020. Given this Ricardo estimates the size of the BEV differential assembly market in calendar year 2020 to be approximately \$145 million. Sona Comstar's global market share of BEV differential assemblies in calendar year 2020 was 8.7%. As popularity of Sport Utility Vehicles (SUVs) and Crossover Utility Vehicles (CUV) increases, there is a preference towards Part time AWD and Full time AWD drive types. Ricardo expects this trend to continue over the next few years with Part time AWD and Full time AWD accounting for approximately 39% of the market in calendar year 2025. Given this passenger vehicles with FWD or RWD will decline to approximately 61% in calendar year 2025. Hence, the total volumes of differential assemblies produced in calendar year 2025 for passenger vehicles is estimated to be approximately 127 million units indicating a CAGR of approximately 6% between calendar years 2020 to 2025.

Based on the number of BEVs produced in 2025 and expected drive configuration Ricardo estimates that number of differential assemblies produced for BEV will be approximately 15 million units. This results in a CAGR of approximately 39% between 2020 and 2025. Ricardo assumes the price of a non-BEV differential assembly to be \$36 per unit in calendar year 2025. Their assumption is that the price of a differential assembly used in BEV will be approximately 20% higher compared to non-BEV vehicle in calendar year 2025 given the increased NVH requirements. So, the price of BEV differential is assumed to be approximately \$43 per unit. Hence, Ricardo estimates the size of the market to be approximately \$4.7 billion.

Each FWD differential would consist of four differential bevel gears. Typically, the differential is integrated into the transmission in case of FWD passenger vehicle. While RWD differential is exactly like an FWD differential and consists of four bevel gears. Given this, Ricardo estimates that in calendar year a total of approximately 448 million bevel gears were produced globally.

For calendar year 2020 Ricardo estimates that a total of approximately 384 million differential bevel gears were produced globally. Assuming \$11.50 for a set of four differential bevel gears, Ricardo estimates that the overall size of the differential bevel gear market in value terms is \$1.1 billion. Of the total bevel gears produced for passenger vehicles, approximately 11.6 million is estimated to be produced for BEVs in 2020. In calendar year 2025 Ricardo estimates that the total number of bevel gears produced for passenger vehicle application increased by approximately 6% to reach approximately 508 million units. Assuming \$10 for a set of 4 differential bevel gears Ricardo estimates that the overall size of the differential bevel gear market in value terms is \$1.3 billion.

Of the total bevel gears produced for passenger vehicles, approximately 60 million is estimated to be produced for BEVs in 2025. Given above volumes, bevel gears for BEVs are expected to increase with a CAGR of approximately 39% between 2020 to 2025. Finally, increased preference for AWD/4WD/Part Time AWD will potentially drive demand for differential assemblies and differential bevel gears.

Conclusions

Globally the electrification agenda will be driven by the passenger vehicle segment given the need to meet stringent fuel economy regulations and potential ban of fossil fuel vehicles across many European countries. The Light Commercial Vehicle (LCV) segment which is primarily used for transportation of goods lends itself well to electrification given the TCO benefit. However, Medium and Heavy-duty commercial vehicles will gravitate towards natural gas and hydrogen as an alternative propulsion source. Globally with increasing electrification, the trend is for individual component manufacturers (mechanical or electrical) to enhance their capabilities (organically or inorganically) to offer integrated system solutions. Examples include- differential/axle manufactures forming a tie up with electric motor manufacturers, or electric motor manufacturers teaming up with power electronics and/or software firms to offer seamless electric powertrain/drivetrain solutions to OEMs. As the level of integration increases, the system complexity increases, and it becomes very critical for organizations to build capabilities to handle this complexity. Finally, limited players like GKN, Schaeffler, Bosch, Valeo and Sona Comstar are well placed to combine their motor and driveline capabilities to offer a compelling value proposition to its EV customer base. Ricardo believes that this complexity presents a unique opportunity in electrification for companies such as Sona Comstar who are committed to building capabilities and products by bringing different elements (mechanical, electrical and software) of the puzzle together under one roof.



Key Concerns:

- Business is dependent on the performance of the automotive sector globally, including in SBPFL's key markets such as US, Europe, India and China. Any adverse changes in the conditions affecting these markets can adversely impact the business, results of operations and financial condition.
- Negative publicity about SBPFL's brand, or inability to protect any of intellectual property, including misappropriation, infringement or passing off of its intellectual property rights or failure to obtain patents or failure to keep its technical knowledge confidential could have impact on its business and in turn on results of operation or financial condition and cash flows.
- Business largely depends upon SBPFL's top ten customers and the loss of such customers or a significant reduction in purchases by such customers will have a significantly adverse impact on its business. The discontinuation or loss of business with respect to, or a lack of commercial success of, a particular vehicle model for which it is a significant supplier could adversely affect the business and results of operations.
- SBPFL may not realize all of the revenue expected from its new and incremental business backlog and does not have firm commitment agreements with customers.
- The COVID-19 pandemic, or a similar public health threat, could adversely affect the business, financial condition, and results of operations.
- SBPFL is dependent on the success of its R&D and the failure to develop new or improved products or process improvements or
 production techniques could subject it to write-offs or otherwise adversely affect its business, financial condition and results of
 operations and have a negative impact on its competitive position.
- SBPFL may not be successful in implementing growth strategies, including strategy to capture market opportunity in the growing Electric Vehicle market.
- Relies on the skills and experience of management team and other key personnel and the loss of any of these team members or the inability to attract and retain qualified personnel could have a material adverse effect on the business operations.
- Pricing pressure from customers may affect SBPFL's gross margin, profitability and ability to increase its prices, which in turn may
 materially adversely affect the business, results of operations and financial condition.
- Exposed to counterparty credit risk and any delay in receiving payments or non receipt of payments may adversely impact SBPFL's results of operations.
- If SBPFL is unable to anticipate, identify, understand and respond timely to rapidly evolving technological and market trends and preferences and develop new products to meet its customers' demands and to adapt to major changes and shifts in the automotive market, its business may be materially adversely affected.
- Business faces substantial competition.
- Growth of the Electric Vehicle market depends on the development and maintenance of the required charging infrastructure. Lack of
 availability of, and access to relevant and adequate charging infrastructure, will result in a slowdown in the increasing trend towards
 vehicle electrification, which may impact SBPFL's ability to capture the growth opportunity in the Electric Vehicle market.
- Business is subject to costs, risks and uncertainties, including those associated with laws and regulations in domestic and foreign jurisdictions in which SBPFL operates, tariffs and trades relations and international political conditions.
- SBPFL's international operations are subject to a number of risks.
- The geographical concentration of SBPFL's manufacturing facilities may restrict its operations and adversely affect the business and financial conditions.
- Depends on third parties for the supply of raw material and delivery of certain products. A disruption in the supply of components and raw materials or failure of its suppliers to meet obligations could impact SBPFL's production and increase its costs.
- Business could be adversely affected by volatility in the price or availability of raw materials, components and sub-assemblies, utilities and natural resources and transportation costs.



- SBPFL has significant power, water and fuel requirements and any disruption to power or water sources could increase its production costs and adversely affect the results of operations.
- SBPFL is subject to strict quality requirements and any failure by it or its component suppliers to comply with quality standards may lead to cancellation of existing and future orders, product recalls, product liability, warranty claims, litigation and other disputes and claims.
- SBPFL has undertaken and may continue to undertake strategic investments, acquisitions and collaborations (including in overseas locations) in the future, which may be difficult to sustain, integrate and/or manage successfully. These may expose it to uncertainties and risks, any of which could adversely affect the business, financial conditions and result of operations.
- SBPFL has assumed existing liabilities in relation to the Comstar Entities, which liabilities if realized may impact its profitability, cash flows and results of operations
- Any misappropriation or infringement of intellectual property rights of others could harm the business
- Continued operations are critical to SBPFL's business and any shutdown of its manufacturing facilities or other manufacturing or
 production problems caused by unforeseen events may reduce sales and adversely affect its business, results of operations and
 financial condition.
- Any disruption to the steady and regular supply of workforce for SBPFL's operations, including due to strikes, work stoppages or
 increased wage demands by its workforce or any other kind of disputes with its workforce or its inability to control the composition
 and cost of its workforce could adversely affect the business, cash flows and results of operations.
- The availability of counterfeit products, such as products passed off as SBPFL's systems and components by others, could adversely
 affect its goodwill and results of operations.
- Require certain licenses, permits and approvals in the ordinary course of business, and the failure to obtain or retain them in a timely manner may materially adversely affect the operations.
- SBPFL has substantial capital expenditure and working capital requirements and may require additional capital and financing in the future and its operations could be curtailed if it is unable to obtain required additional capital and financing when needed.
- Funding requirements and proposed deployment of the Net Proceeds of the Offer have not been appraised by a bank or a financial
 institution and if there are any delays or cost overruns, its business, financial condition and results of operations may be adversely
 affected.
- Certain of SBPFL's immovable properties, where some of its manufacturing units are located, are leased. If it is unable to renew
 existing leases or relocate its operations on commercially reasonable terms, there may be an adverse effect on its business, financial
 condition and operations.
- SBPFL is entitled to certain tax benefits in respect of certain of its manufacturing facilities and in-house Research and Development centers. These tax benefits are available for a definite period of time, which, on expiry or if withdrawn prematurely, may adversely affect its business, financial condition, results of operations and prospects.
- Changing regulations in India could lead to new compliance requirements that are uncertain.
- Political changes, natural disasters and other macroeconomic factors could adversely affect economic conditions in India.
- If inflation rises in India, increased costs may result in a decline in profits.



Particulars (Rs in million)	FY21	FY20	FY19
Revenue from Operations	15663.0	10379.8	6992.2
Other Income	23.4	57.8	32.8
Total Income	15686.4	10437.7	7025.0
Total Expenditure	11252.8	7957.1	4992.4
Cost of material consumed	7094.8	4424.2	1928.4
Changes in inventories of finished goods and work-in-progress	-641.7	31.8	122.2
Employee benefits expense	1474.5	1027.3	490.0
Other expenses	3325.3	2473.8	2451.7
PBIDT	4433.6	2480.6	2032.7
Interest	325.2	259.8	177.6
PBDT	4108.4	2220.9	1855.0
Depreciation, amortization and impairment expense	969.4	671.2	309.6
Profit before exceptional items and tax	3139.0	1549.7	1545.5
Share of profit in associate	0.0	0.0	2.2
Exceptional items	139.1	-2320.5	0.0
Tax (incl. DT & FBT)	848.3	266.8	546.5
Net Current Tax	666.0	365.0	471.5
Deferred Tax	182.3	-98.3	75.0
PAT	2151.7	3603.4	1001.1
EPS (Rs.)	3.8	6.3	1.7
Equity (Latest)	5729.8	5729.8	5729.8
Face Value	10.0	10.0	10.0
OPM (%)	28.2	23.3	28.6
PATM (%)	13.7	34.7	14.3
	· · · · · ·		(Source:RHP)

Particulars (Rs in million) As at	FY21	FY20	FY19
Assets			
Non-current assets			
Property, plant and equipment	3449.0	2845.1	1783.5
Right-of-use assets	1592.7	1419.4	405.1
Capital work-in-progress	821.4	581.4	131.7
Goodwill on consolidation (including assembled workforce)	1758.1	1758.1	0.0
Other intangible assets	5366.2	4629.2	723.9
Intangible assets under development	10.8	315.0	0.0
Financial assets			
- Investments	0.0	19.0	0.0
- Loans	57.8	50.8	23.1
- Other financial assets	0.0	0.9	38.1
Income tax assets (net)	186.7	291.4	11.2
Other non-current assets	296.2	278.5	84.2
Total non-current assets	13538.8	12188.7	3200.9
Current assets			
Inventories	3055.6	1962.4	677.8
Financial assets			
- Trade receivables	4169.9	2336.3	1521.0
- Cash and cash equivalents	249.5	1049.9	1.9
- Other bank balances	26.3	623.1	254.1
- Loans	15.1	4.9	0.2
- Other financial assets	151.7	5.3	32.3
Other current assets	541.6	336.3	130.4
Total current assets	8209.5	6318.1	2617.7
Assets of disposal group classified as held for sale	0.0	0.0	10506.9
Total assets	21748.3	18506.8	16325.6



Equity and Liabilities			
Equity			
Share capital	5729.8	471.5	277.2
Instruments entirely equity in nature	0.0	5.9	0.0
Other equity	7309.2	11301.9	1460.6
Equity attributable to equity holders of the Company	13039.0	11779.4	1737.8
Non-controlling interests	0.0	0.0	24.2
Total equity	13039.0	11779.4	1762.0
Liabilities			
Non-current liabilities			
Financial liabilities			
- Borrowings	1907.0	1768.2	733.1
- Other financial liabilities	1.2	1.2	1.2
- Lease liabilities	720.2	532.3	156.8
Provisions	86.8	66.8	23.8
Deferred tax liabilities (net)	1260.2	1076.7	110.6
Total non-current liabilities	3975.4	3445.3	1025.5
Current liabilities			
Financial liabilities			
- Borrowings	1145.0	846.1	389.1
- Lease Liabilities	105.3	71.7	24.1
- Trade payables			
total outstanding dues of micro enterprises and small enterprises	495.8	167.0	76.8
total outstanding dues of creditors other than micro enterprises and small enterprises	1745.3	995.3	615.4
Other financial liabilities	828.8	922.7	1027.4
Other current liabilities	170.8	110.4	120.9
Provisions	72.7	51.1	15.8
Current tax liabilities (Net)	170.3	118.0	0.7
Total current liabilities	4733.9	3282.1	2270.2
Liabilities of disposal group classified as held for sale	0.0	0.0	11267.8
Total equity and liabilities	21748.3	18506.8	16325.6
			(Source:RHP)

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