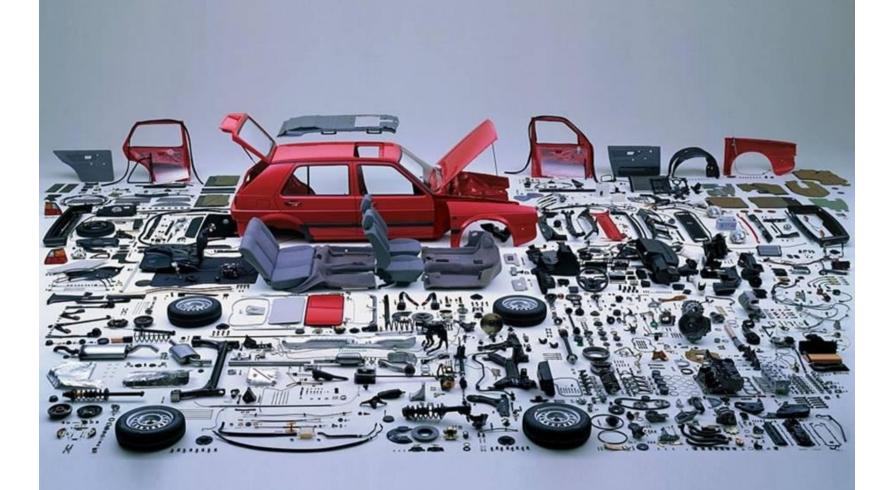
Decoding Auto Ancillaries

Disclaimer:

Viewers/readers should note that objective of these articles/interviews is to communicate with our unit-holders and share with them our thought process. It should be noted that views expressed here are based on information available in public domain at this moment. Views expressed here can change depending on change in circumstances. Nothing discussed here, constitute a buy/ sell/ hold recommendation.

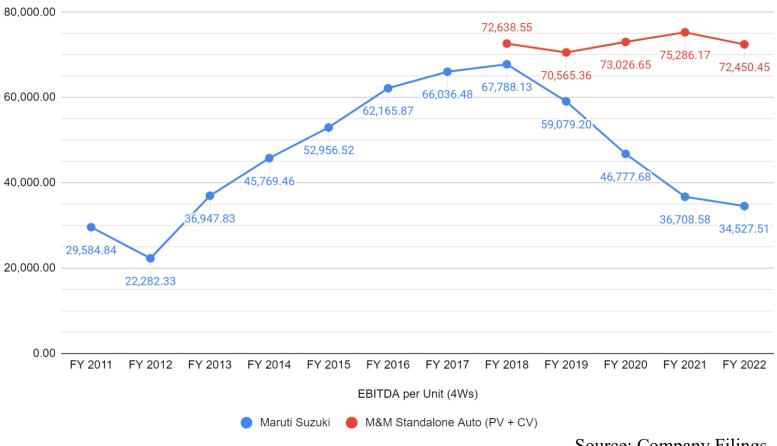




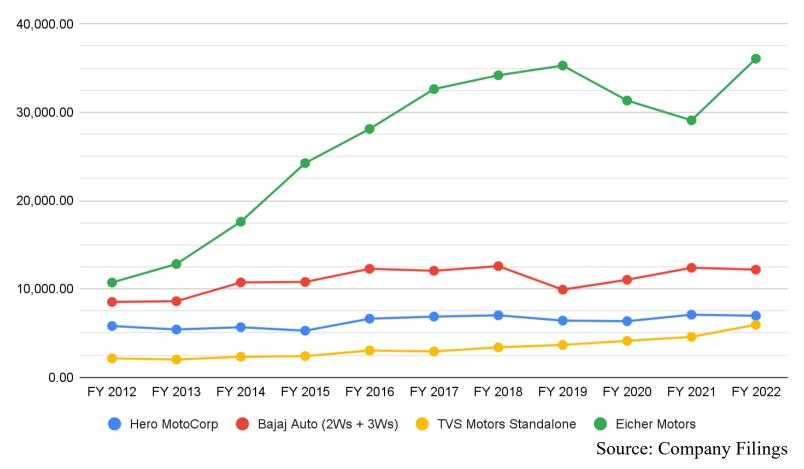
No Pricing Power

Question #1

EBITDA per Unit for 4 Wheelers



EBITDA per Unit for 2 Wheeler Companies



Question #2

OEMs v/s Ancillaries - Is one better than the other?

Question #2

It's all **RELATIVE**.....

How the Industry has evolved?

Evolution of the sector



Before 1982



- Closed market
- 5 players
- Long waiting periods & outdated models
- Seller's market

1983-1992

- Indian Government & Suzuki formed Maruti Udyog and commenced production in 1983.
- Component manufacturers entered the market via joint venture (JV).
- Buyer's market.

1992-2020

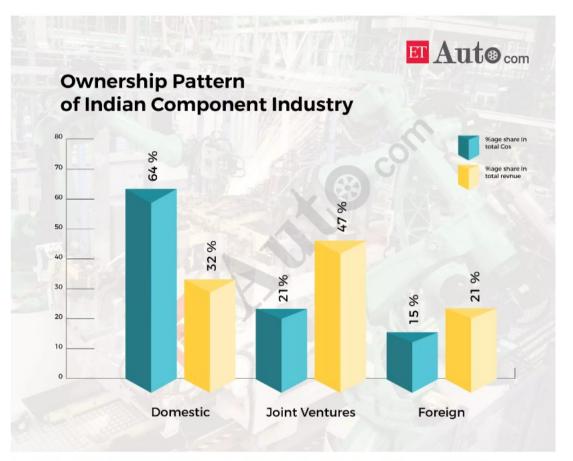
- Sector de-licensed in 1993.
- Major OEMs started assembly operations in India.
- Imports permitted from April 2001.
- Introduction of value-added tax in 2005.
- Automotive Mission Plan 2016-26 launched in 2015.
- Bharat Stage (BS) IV emission norms used since April 2017, and BSVI norms adopted from April 1, 2020.



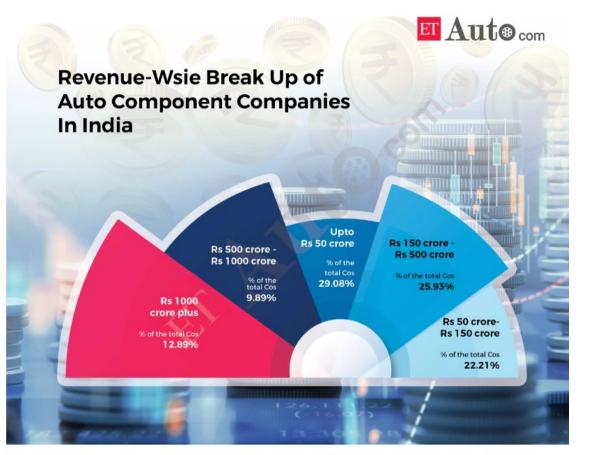
- In June 2022, three-wheeler sales stood at 26,701 units.
- In FY22, total commercial vehicle sales stood at 716,566 units, three wheeler sales stood at 260,995 units and two wheeler sales stood at 13.466.412 units.

- TechnologyTransfers /JVs
- MNCSubsidiaries
- Family connections

Activa Go to Se

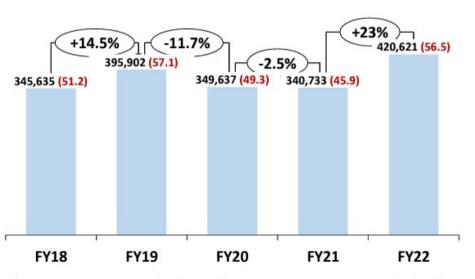


A large number of Indian component makers are heavily dependent on foreign companies to get technology.



Indian parts makers on average still spend less than 1% of their revenue on R&D, even as these JVs and technical alliances come at a huge cost.

Size of industry | INR Cr (USD Bn)



The auto-components industry has grown 23% y-o-y on the back of strong exports performance & replacement market growth



Automobile Domestic Sales Trends

(In Numbers)

Category	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Passenger Vehicles	3,047,582	3,288,581	3,377,389	2,773,519	2,711,457	3,069,499
Commercial Vehicles	714,082	856,916	10,07,311	717,593	568,559	716,566
Three Wheelers	511,879	635,698	7,01,005	637,065	2,19,446	260,995
Two Wheelers	17,589,738	20,200,117	21,179,847	17,416,432	15,120,783	13,466,412
Quadricycles	0	0	627	942	-12	124
Grand Total	21,863,281	24,981,312	26,266,179	21,545,551	18,620,233	17,513,596

Source: SIAM

Automobile Exports Trends

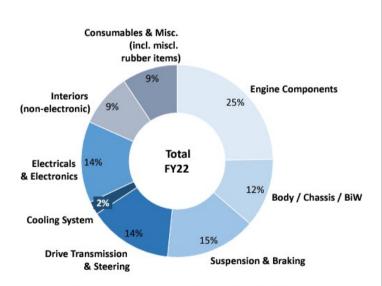
(In Numbers)

Category	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Passenger Vehicles	758,727	748,366	676,192	662,118	404,397	577,875
Commercial Vehicles	108,271	96,865	99,933	60,379	50,334	92,297
Three Wheelers	271,894	381,002	567,683	501,651	393,001	499,730
Two Wheelers	2,340,277	2,815,003	3,280,841	3,519,405	3,282,786	4,443,018
Quadricycles	1,556	1,605	4,400	5,185	3,529	4,326
Grand Total	3,480,725	4,042,841	4,629,049	4,748,738	4,134,047	5,617,246

Source: SIAM

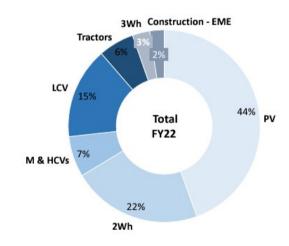
FY 2022: Sales by Category & Revenue from OEMs

Component Sales By Category:



Total Sales: Rs.421,620 Cr. (USD 56.5 Bn) Growth:23%

Component Sales By OEM Segment:



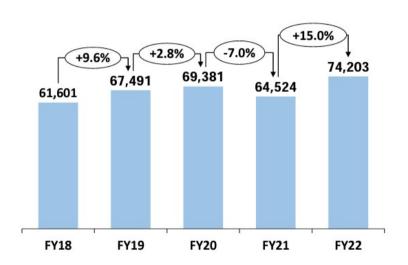
Total Sales to OEMs: Rs.341,203 Cr. (USD 45.8 Bn) Growth:22%



FY 2022: Indian Auto Component Aftermarket

Aftermarket grew by 15% Y-o-Y; impact return to normalcy

Aftermarket | INR Cr



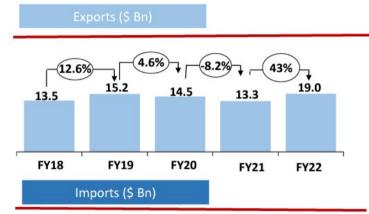
FY22 Aftermarket

- Industry size surpassed pre-pandemic levels due to a combination of factors;
 - More vehicles on road
 - Prolonged usage of vehicles
 - Increase in demand of secondhand vehicles
 - Increase in commodity prices
 - Changing Automotive ecosystem emergence of new sales channels like online e-retailing and multi brand outlets (MBOs)



FY 2022: Exports & Imports - Balance of Trade

India had a trade surplus of 700 Mn USD for auto components- strong demand for exports



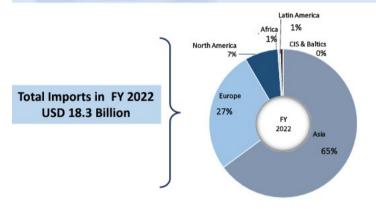


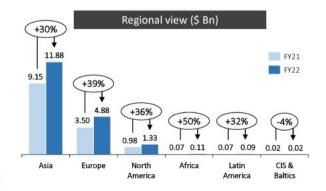
FY22 EXIM Performance

- \$700 Mn trade surplus in FY22 vs. \$ 500 Mn trade deficit in FY21
- Exports grew by ~43%
 - diminished impact of the second wave on foreign markets.
 - sharp recovery in developed economies.
- Imports grew by ~33% increase due to supply chain disruptions predominantly in H1/FY22.
- 'Drive Transmission & Steering' alongside 'Engine components' remain dominant segments for both exports and imports, accounting for 54% of all exports and 49% of imports.



FY 2022: Region wise Imports





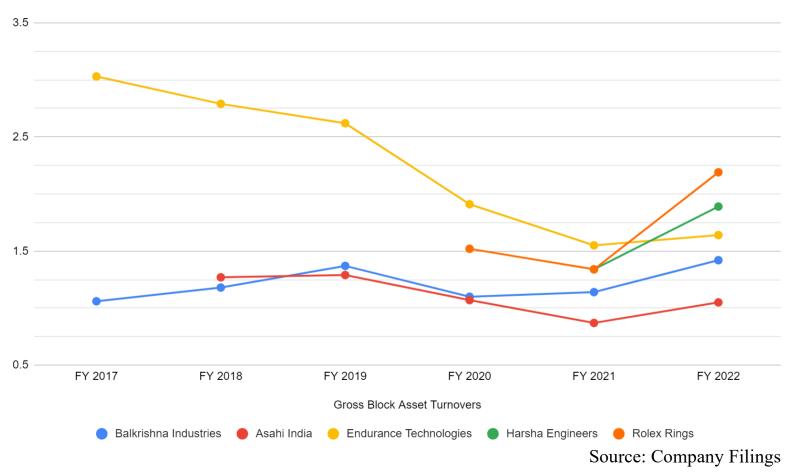
FY 2022 – Import performance

- China remains the biggest source of auto components import, accounting for 30%
- Germany is the 2nd largest source of the auto parts import and occupies 11% market share of the import.
- ~33% increase in imports Y-o-Y supply chain disruptions primarily in H1 FY22 and domestic market recovery



What makes it a tough business?

Gross Block Asset Turnovers (x)

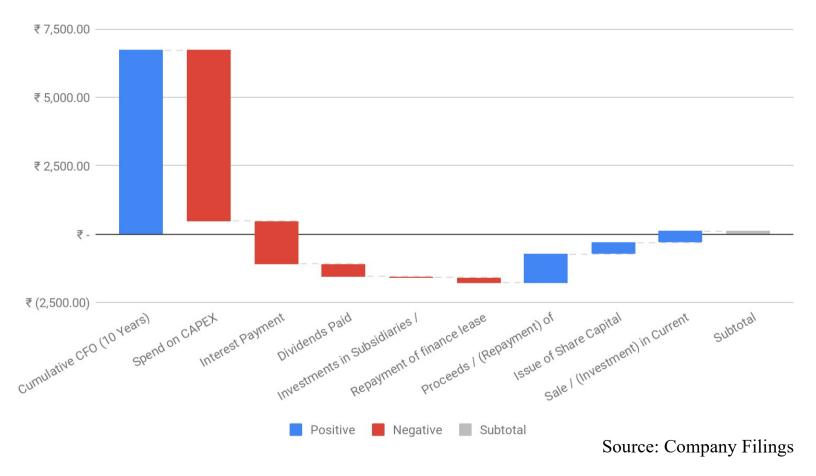


Gold Plus

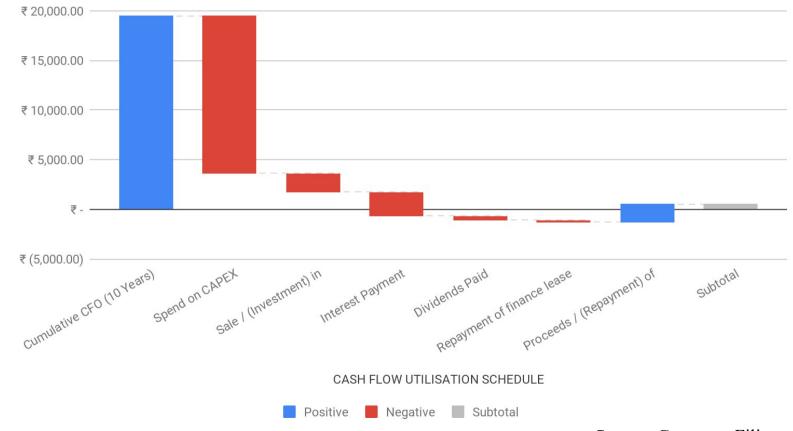
The float glass industry is characterised by high entry barriers because of the capital-intensive nature of the industry, long gestation period and the need to cater to the entire range of products (Source: CRISIL Report). Setting up a float glass manufacturing line generally takes two to three years, and requires refurbishment of furnaces every 10 to 12 years. In order to achieve operational sustainability and profitability, a minimum float line capacity of 500 TPD to 600 TPD is required which requires considerable investment (Source: CRISIL Report). In addition, a wide distribution network is also required to be set up before the commencement of operations which may not be possible for new entrants in the market. (Source: CRISIL Report)

- CAPEX cost per TPD is equal to ~Rs 1.2 Crores
- Minimum 2 lines to cater to the entire range of products
- Translates to minimum investments of ~Rs 1200 Crores

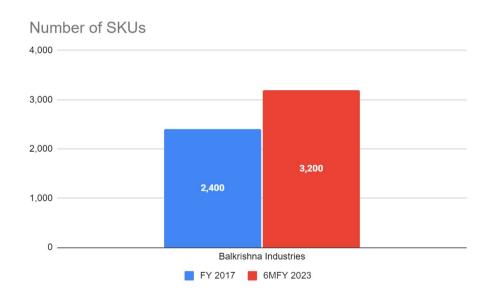
CEAT 10Y Cash Flow Utilisation



MRF 10Y Cash Flow Utilisation



SKU Intensive Business



Harsha Engineers:

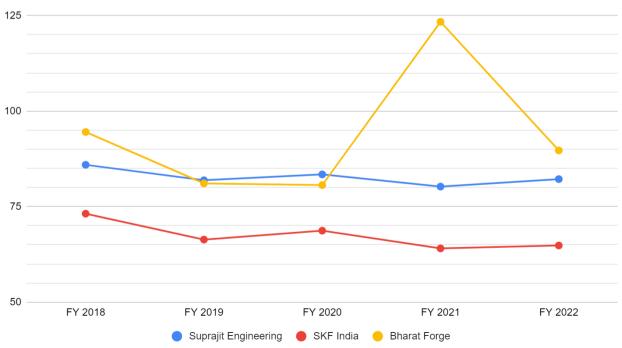
- 3,700 Steel Cages v/s 4,000+ SKUs for Nakanishi Metal Works
- 3,500 Brass Cages v/s 2,000+ SKUs for Manu Yantralaya

Rolex Rings:

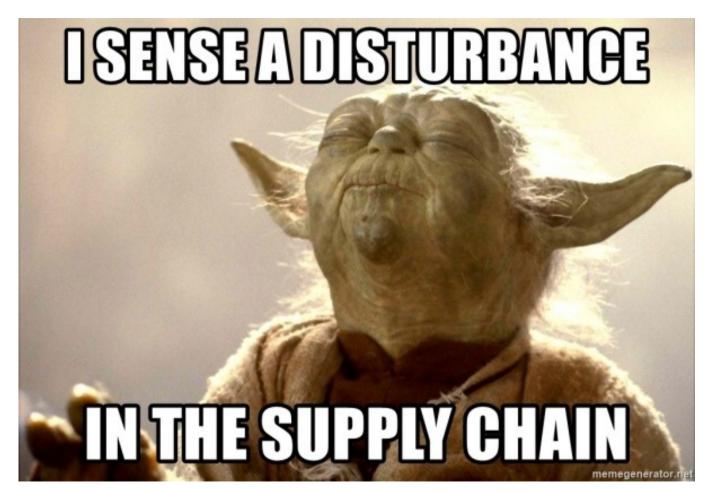
- 25mm to 900mm (Diameter)
- 5mm to 160mm (Agrasen Engineering)
- 40mm to 400mm (Ravi Technoforge)

Working Capital Intensive

Cash Conversion Cycle (Relative to Sales)



What makes it a good business?



Source: Google Images

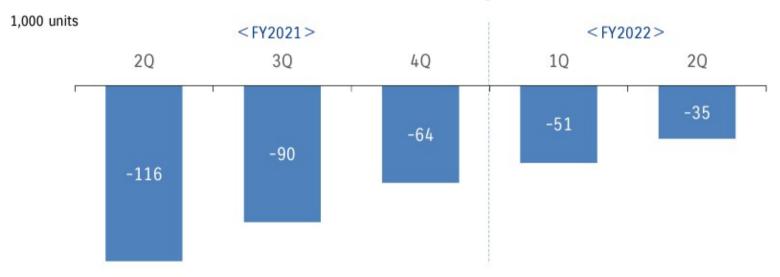


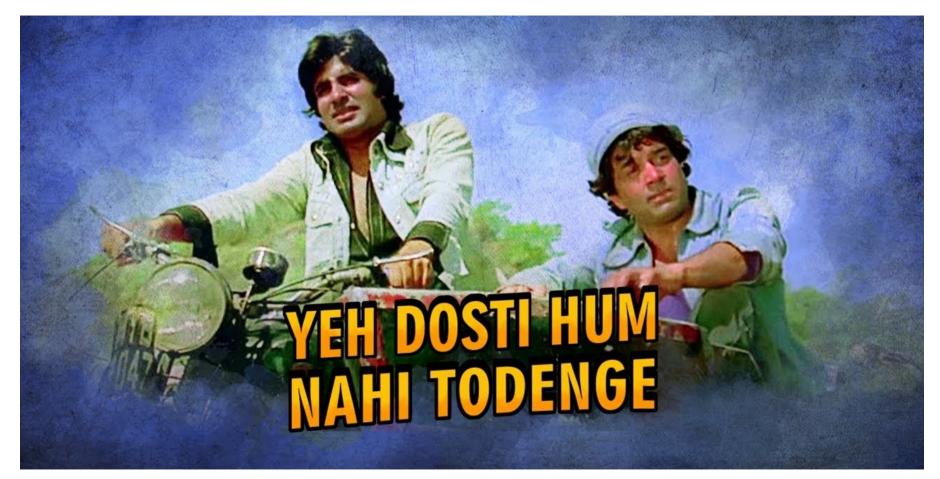
Production impact due to shortage of electronic components

Loss of production due to parts shortage decreased every period

The company has been making efforts to minimize the impact of shortage

Loss of production due to electronic components shortage (announced in MSIL financial results)





Source: Google Images

We have long-standing relationships of 15 years and more with 13 of our top 20 customers. The table below sets forth the details of our long-standing relationships with our top 20 customers.

S. No.	Customer	Commencement of Customer Relationship	Number of Years of Customer Relationship
1.	Mahindra & Mahindra	1998	23
2.	Indian OEM of PVs, CVs and EVs	1999	22
3.	Global Tier 1 Supplier for PVs and CVs	1999	22
4.	TAFE	2000	21
5.	Dana	2001	20
6.	North American OEM of PVs and CVs	2002	19
7.	Maruti Suzuki	2002	19
8.	JLR	2003	18
9.	Indian OEM of OHVs- 3	2003	18
10.	Carraro	2003	18
11.	Indian Tier 1 Supplier for CVs	2003	18
12.	CNH	2004	17
13.	Volvo Cars	2006	15
14.	John Deere	2008	13
15.	Escorts	2008	13
16.	North American Tier 1 Supplier for PVs, CVs, OHVs and EVs	2009	12
17.	Linamar	2015	6
18.	Renault Nissan	2015	6
19.	Geely	2016	5
20.	Global OEM of EVs	2017	4

Source: Sona BLW Precision Forgings Ltd RHP

long-standing relationships with several well-known Indian and global OEMs. In the two-wheeler vertical, we have relationships spanning over 20 years with HMSI, 25 fiscal years with Bajaj and over 20 years with Yamaha, the second, third and fifth largest two-wheeler Indian OEMs in terms of domestic production volume for Fiscal 2021, respectively. (*Source: the CRISIL Report, page 31*). In the passenger vehicle vertical, we have relationships spanning more than 30 years with Maruti Suzuki, the leading Indian passenger vehicle OEM in terms of domestic production volume for Fiscal 2021 (*Source: the CRISIL Report, page 54*), over 10 years with Stellantis N.V. (formerly Fiat Chrysler Automobiles), a leading European passenger vehicle OEM, (*source: the Ricardo Report, page 6*) and over 10 years with one of the leading North American passenger vehicle OEMs. We were suppliers to 71 customers during Fiscal 2021 as compared to 64 during Fiscal 2019, which helped to decrease our reliance on our top customer, Bajaj. For Fiscals 2021, 2020 and 2019, our top customer, Bajaj, contributed 20.75%, 22.08% and 22.71% of our revenues from sale of products, respectively.

Source: Sansera Engineering RHP

Long Gestation Periods

We would be first company in India to produce PU artificial leather in bulk: Suresh Kumar Poddar















ET Now: Brokerages are indicating that you are in talks with <u>BMW</u> and <u>GM</u> for potential business opportunities. Could you give us more details on that?

Suresh Kumar Poddar: Yes, we are talking with GM, not BMW, but mainly Mercedes. In fact, we are the officially-approved supplier for Mercedes. They came to our factory and approved us as a supplier. Actually in the automotive industry, it takes at least one to one-and-a-half years to get approved. In the next six months, we will come to know what happens with these customers. We are hopeful.

Source: ET Now

Growth Strategies / Sources of Competitive

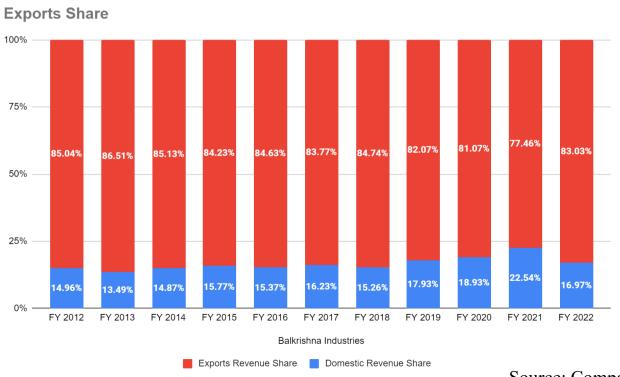
Advantage

Lowest Cost Producer



Source: Google Images

India as an Exports Hub



Schaeffler India to invest over Rs 300 cr for setting up facility in Tamil Nadu

For this purpose, Schaeffler India on Tuesday signed a Memorandum of Understanding (MoU) with Tamil Nadu government's nodal investment promotion and facilitation agency, Guidance, at the Tamil Nadu Investment Conclave in Coimbatore.

PTI • November 23, 2021, 17:29 IST

Source: ET Auto

New Product	SRB and CRB
Expected Commercial Production start date	January, 2025
Investment	Approx. Rs 600 crores
Mode of financing	Internal accruals
Rationale	The Company at present does not manufacture SRB and CRB in India. SRB and CRB are mainly imported from Timken group companies across world and sold in India. The Company believes that SRB and CRB overall have good market in India and outside India.
Target Market	Domestic as well as International market including US and Europe.

You are kindly requested to take note of the above.

Thanking you,

Yours faithfully,

For TIMKEN INDIA LIMITED

(i) Disabable class

Diversification



Source: Company Filings

Investments in Product Diversification



Approved the proposal of **Diversification of its product portfolio** by starting manufacturing of **new production line in auto component segment** i.e. ecoantification (asbestos free) materials to begin with products like **brake lining**, **brake shoes etc.**

Key Highlights of the Investments



- Name of the product: Brake Lining, Brake Shoes etc
- Industry: Auto Component
- Expected timeline to commission: Trial production in Q3 FY23 and Commercial production in Q4 FY23
- Product will be initially catering to the Domestic Market
- Customers: All OEM's into HCV / LCV / Heavy Duty Vehicles & Aftermarket & trailer manufacturers
- The project will be funded through a mix of internal accruals & debt

•

Investment Rationale

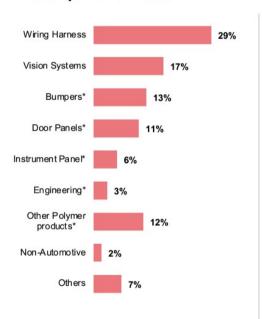
- Synergy with the existing manufacturing
- Involvement of High-End Technology
- Safety product
- Enjoys very good brand equity, having established robust Pan-India Network of 350+ Dealers and Distributors in place
- Easy Access to market
- Low Gestation period
- Huge Potential: Brake lining are required to be changed after 40,000 kms i.e. 4 times a year for HCV and 6 to 8 times in a year in mining operations.
- Will cater to OEM's, Aftermarket, STU's, Railway and having presence in aftermarket across the globe, eventually we envisage to be one of the leading exporter of these products



Continued Focus on risk mitigation via diversification : 3CX10 (H1FY23)



Component wise.



Customer wise.



Country wise.



¹Emerging markets defined as Brazil, China, India, Mexico, Sri Lanka, Thailand, South Korea, South Africa, Czech Republic, Hungary, UAE, Slovakia, Serbia, Turkey, Argentina, Philippines, Morocco, Indonesia, Poland as per MSCI Emerging Markets Index

Notes:

1. Total revenue considered is including 100% of joint venture and associate companies consolidated under equity method.

2. Revenue by country is based on manufacturing locations.

* Under Modules and Polymer Products business division

Bharat Forge's subsidiary bags \$155.5 mn order to export artillery guns

Bharat Forge has been consolidating its defence and aerospace business under Kalyani Strategic Systems with an aim to target export opportunities in the defence sector

Topics

Bharat Forge | Artillery guns deal | Defence ministry

BS Web Team | New Delhi Last Updated at November 9, 2022 15:52 IST

Source: Business Standard

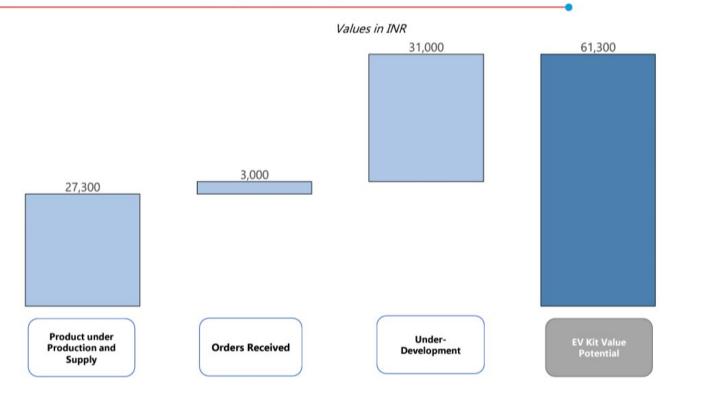
Content per Vehicle



Source: Company Filings



POTENTIAL EV KIT VALUE (2W & 3W)

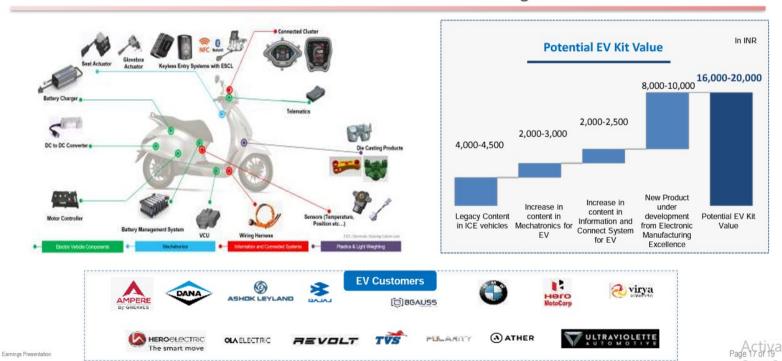


Ac 27 Go

Electric Vehicle: Growth Opportunity



Most of our Products are Electric Vehicle Agnostic



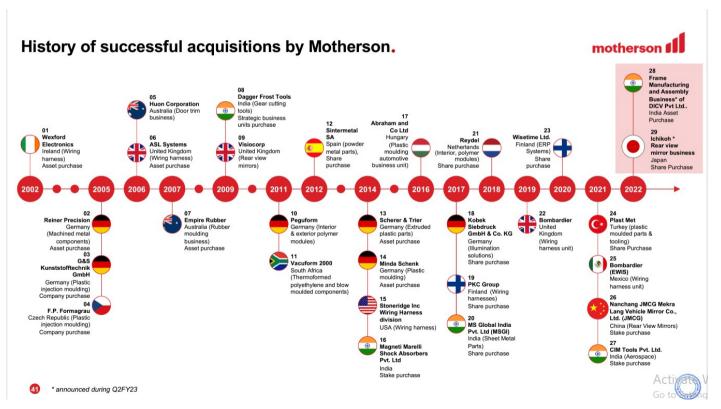
Source: Company Filings

Concentration Risk?



Source: Google Images

Strength of the Balance Sheet



Source: Google Images

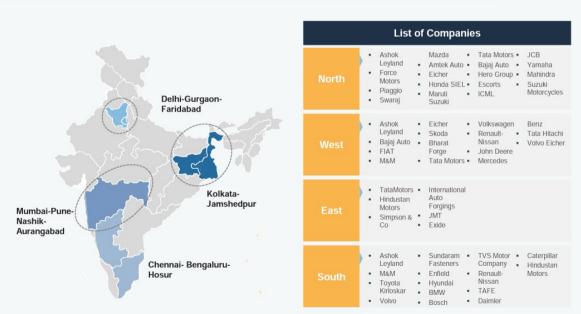
Distance from Consumer

Clusters and leading companies

players.

Sources: ACMA





Over the past few years, four specific regions in the country have become large auto manufacturing clusters, each having a different set of

Examples:

- Forgings
- Tyres
- Glass

Source: IBEF

Regulatory Actions

Import duties and tariffs across import trade partners

Country of import	Type of glass	Basic custom duty		Anti-Dumping Duty validity period	Anti-Dumping Duty	
Malaysia	Clear float glass of 4mm -12mm thicknesses	10%	•	Since September 2020- Valid for next 5 years	USD 272.9- 326 per MT	
Iran	Clear float glass of 4mm -12mm thicknesses	10%	•	Since May 2017- Valid for next 5 years	USD 52.3-55.4 per MT	
UAE	Clear float glass of 4mm -12mm thicknesses	10%	•	Since Dec 2019- Valid for next 5 years	USD 79- 111.15 per MT	
Saudi Arabia	Clear float glass of 4 mm to 12 mm thickness (reflective glass, tinted glass including green glass and transitional glass not included)	10%	•	Since Dec 2019- Valid for next 5 years	USD 165 per MT	
Pakistan	Clear float glass of 4 mm to 12 mm thickness	10%	٠	Since Dec 2019- Valid for next 5 years	USD 25.6-124.6 per MT	

Source: Directorate General of Trade Remedies

Source: Gold Plus DRHP





Six airbags could be mandatory in your car soon





Source: Google Images

Criteria / Applicability	Import Duty in %
Used car import	125
Cars CBUs whose CIF value is more than \$ 40,000 or Petrol Engine > 3000 CC or Diesel engine > 2500 CC	100
Cars CBUs whose CIF value is less than \$ 40,000 and Petrol Engine < 3000 CC and Diesel engine < 2500 CC	60
Two-wheeler CBUs	50
Commercial Vehicle CBUs (Trucks & Buses)	30
CKD containing engine or gearbox or transmission mechanism in pre-assembled form but not mounted on a chassis or a body assembly (Passenger Vehicles)	30
CKD containing engine or gearbox or transmission mechanism in pre-assembled form but not mounted on a chassis or a body assembly (Two-wheelers)	25
CKD containing engine or gearbox or transmission mechanism in pre-assembled form but not mounted on a chassis or a body assembly (Commercial Vehicles)	25
CKD containing engine, gearbox and transmission mechanism not in a pre-assembled condition	15

Source: SIAM

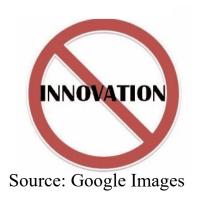
Shift to Organised?

- 3 Year Warranties by OEMs
- Higher complexity in vehicles and parts
- Rising digital channels for organised players
- Rise of the 3rd party aggregators
- High growth in Spares revenues for OEMs
- Shift towards SUVs / Premium Vehicles → More conscious consumer

Lack of Innovative R&D

"Traditionally, most of the Indian component makers did not focus on in-house R&D. For every new technology they have looked at their partners. Some component makers have collaboration running into huge numbers," said IV Rao, an industry veteran and one of the architects of Maruti Suzuki's research and development programme. "However, some of the Indian manufacturers are taking baby steps in this direction," he added.

Source: ET Auto article



Summary: How to analyse an auto ancillary company?

- Capital Allocation
- Market Size & Scalability
- Market Share & Defensibility
- Balance Sheet Strength
- Valuations

Thank You!

Any Questions?