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THE INDIAN TYRE INDUSTRY: DRIVEN BY TECHNOLOGY

The Indian tyre industry has been quick in adopting the latest technology trends through foreign collaborations and tailoring these to Indian needs. The manufacturers are also investing in development of 'green tyres'.



The Indian tyre industry has been reporting good growth figures over the past few years, spurred by the growing passenger vehicle and two-wheeler market. It has emerged as one of the most competitive markets in the world and with the emergence of new technology, ultra-modern production facilities and availability of raw materials, the sector is poised to grow further.

Major technological changes have taken place in tyre design from the conventional bias or diagonal ply of the past to the current steel-belted radial tyres, tubeless tyres, tyres with low aspect ratios, puncture-resistant tyres, etc. Testing standards have also evolved accordingly to ensure high performance, mileage, safety, reliability and longevity of the tyres. The Indian tyre industry has been quick in adopting the latest technology trends through foreign

collaborations and tailoring these to Indian needs. The manufacturers are also investing in development of 'green tyres' and in capacity expansion for radial tyres. Innovative technologies like self-inflation and run flat tyres (RFT) are also gaining popularity in the Indian market.

The market for radial tyres in the commercial vehicles segment has seen rapid growth in recent times. In the medium and heavy commercial vehicle segment the current adoption levels of radial tyres is around 15 per cent. In the light commercial vehicle segment, it is estimated to be 18 per cent. The passenger car segment switched to radial tyres earlier, and within a short period of time, penetration levels reached almost 100 per cent. This segment will surely be the focus for Indian tyre manufactures as it is expected to grow at about 15 per cent over the next few years to Rs 393 billion by 2015.

Global scenario

Increasing sales of passenger and commercial vehicles in developing countries and a strong demand for replacement tyres is providing significant opportunities for players in the automotive tyre industry. A projected CAGR of around 4 per cent

over the next five years for the global tyre market means an estimated \$187 billion by 2017.

The passenger car segment is forecast to witness the highest growth over the next five years. Regionally, the APAC region is anticipated to lead growth during the forecast period. It is expected to see the strongest growth in rubber demand, reflecting the strength of the tyre market in China, India, Thailand and Vietnam.

The global automotive tyre market is highly consolidated and consists of passenger car tyres, heavy truck tyres and other segments. North America dominates this market with approximately 30 per cent of the total global demand for tyres. Fuel efficiency and safety concerns are key factors influencing the purchase of tyres in developed markets, which are transitioning into higher-performance tyres. Japan and Europe have implemented stringent tyre performance criteria

(covering rolling resistance related fuel saving, wet grip-related braking distance and noise reduction). Europe anticipates a 20 million tonnes reduction in traffic-related

carbon dioxide emissions per year due to enhanced tyre performance.

Indian scenario

In 2011-12, the Indian tyre industry recorded a turnover of Rs 300 billion, producing 119.2 million tyres, amounting to 1.49 million metric tonnes. Currently, India has 40 listed tyre manufacturing companies, of which the top 10 account for over 96 per cent of the country's total tyre production. The tyre export market in India is valued at Rs 3.6 billion. While the tyre industry is largely dominated by the organised sector, the unorganised sector dominates the bicycle tyre market. With the focus on providing better products and services, Indian tyre manufacturers are setting up well-equipped in-house R&D centres with emphasis on developing cutting-edge technology for new compounds, new designs for different segments and new reinforcement materials. Cost optimisation for quality improvements and orientation towards changing customer requirements are also areas of research.

The concept of 'green tyres' is now emerging as a benchmark for the industry's competitiveness. Though the technology has been around since the 1990s, due to higher manufacturing costs, it was put on a backburner until recently. Green tyres provide numerous benefits over normal tyres, including lower fuel consumption.

Domestic and export markets hold huge potential

India is set to break into the league of the top five vehicle producing nations.

Table I
Domestic and Export Potential
(US\$ billion)

Domestic market potential			Export market potential			
Year	After-market	Original equipment	Year	North America	Western Europe	Other markets
2010	4.0	18.0	2010	1.1	2.3	0.4
2015	6.1	42.9	2015	3.6	4.2	1.7
2020	103	69.7	2020	10.6	12.9	4.0

Source: ACMA, Aranca Research

Table II
Tyre Production in India

(in 1000s)

Category	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Trucks and buses	11,941	12,367	13,137	12,839	14,811	15,668	16,085
Passenger cars	13,605	14,264	16,437	16,571	20,047	26,201	27,141
Jeeps	1272	1368	1467	1469	1402	1500	1595
LCVs	4529	4820	5320	5298	5739	6029	6688
Tractor fronts	1383	1754	1814	1842	2386	2595	2756
Tractor rears	1134	1296	1234	1315	1634	1777	1889
Tractor trailers	596	823	886	758	903	1051	1022
ADVs	325	381	409	281	294	311	293
Scooters	9519	9643	11,604	10,882	13,558	20,140	22,194
Motorcycles	21,053	26,079	27,921	30,148	35,664	43,118	44,857
Mopeds	55	0*	0*	0	0	0	0
Industrials	514	635	733	568	538	616	681
OTR (off-the-road)	106	115	141	136	161	191	196
Aero	0	0	0	0	0	0	0
Total	66,032	73,545	81,103	82,107	97,137	119,197	125,397

*With effect from April 2006, moped tyre production has been included in the scooter category
Source: ATMA

Table III
Tube Production in India

(in 1000s)

Category	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Trucks and buses	10,522	11,257	12,016	11,911	14,142	14,990	15,404
Passenger cars	6990	8509	11,490	10,773	9922	9127	10,219
Jeeps	1066	1132	1416	1411	1430	1746	1980
LCVs	3775	4156	4147	4213	4912	5232	5417
Tractors	1232	1425	1443	1334	1970	2006	2145
ADVs	165	213	181	184	235	198	166
Scooters	7044	7461	9128	8242	11,610	16,321	17,177
Motorcycles	22,263	28,067	30,817	31,526	37,095	43,156	45,091
Mopeds	227	0*	0*	0	0	0	0
Industrials	99	108	112	79	64	74	100
OTR	38	48	60	60	68	97	112
Aero	0	0	0	0	0	0	0
Total	53,421	62,376	70,810	69,733	81,448	92,947	95,835

*With effect from April 2006, moped tube production has been included in the scooter category
Source: ATMA

Table IV
Category-based Tyre Exports

(Numbers)

Category	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Trucks and buses	2,408,759	2,276,049	2,431,545	1,933,959	2,052,946	2,008,859	2,247,268
Passenger cars	1,052,874	966,046	1,091,715	991,558	845,688	1,116,192	1,564,804
Jeeps	885	1420	7461	10,263	6946	93,356	119,292
LCVs	1,390,814	1,599,230	1,621,880	1,630,483	1,465,991	1,454,027	1,692,673
Tractor fronts	13,408	11,078	17,072	13,051	12,052	10,899	18,463
Tractor rears	98,807	56,186	66,644	46,347	46,206	43,472	33,305
Tractor trailers	3833	8665	17,468	20,067	4692	1320	3537
Motorcycles	84,908	151,677	322,630	453,226	362,784	755,892	950,236
ADVs	0	0	30	0	0	0	0
Scooters	289,984	320,536	45,338	435,778	441,965	627,093	913,157
Implements	2447	4045	5637	9962	15,693	106,430	88,675
Industrial	7303	11,543	12,777	7605	8002	124,943	105,063
OTRs	33,480	43,085	45,919	36,774	35,515	111,902	184,635
Antique	0	0	0	0	0	0	0
Total	5,387,502	5,449,560	6,094,116	5,589,043	5,298,480	6,454,385	7,921,108

Source: ATMA

The total turnover of India's auto-components sector is expected to almost treble in size to \$113 billion in

the financial year 2021-22 from \$43.5 billion in FY 2012-13.

The domestic market is expected

in the automotive sector this year as the truck/bus segment, in which it is the market leader, recorded a growth

to account for 80 per cent of the total sales by 2020. Exports will account for the balance 20 per cent of the market by 2020.

Top 10 tyre companies in India in 2012

Here is a list of the top 10 tyre companies, ranked on the basis of net sales, as of 2012:

1. MRF. MRF, which stands for Madras Rubber Factory, has been the market leader for the last 21 years. Starting out as a toy-balloon manufacturer, it became the first Indian tyre company to touch a turnover of Rs 50 billion. MRF has built a strong association with sports, mostly cricket and motor sports. Most cricket lovers will remember the MRF logo on Sachin Tendulkar's bat.

2. Apollo Tyres. With its portfolio of six brands—Apollo, Dunlop, Kaizen, Maloya, Regal and Vredestien—Apollo Tyres caters to all segments of customers ranging from passenger and commercial vehicles to off-highway tyres. It is the 15th largest tyre manufacturer in the world. The company managed a growth rate of 37 per cent in 2012, having been slightly hit by rising raw material costs. In the car segment, Apollo is the biggest supplier of tyres.

3. JK Tyres. The company was hit by slowdown

of just 7 per cent and the car sales saw a growth of 2.7 per cent. Overall, the company registered a growth of just 17 per cent, which is pretty low by industry standards. On a positive note, its all-radial plant coming up in Chennai is on course. Increased capacity is expected to give JK Tyres a renewed strength in the market.

4. CEAT Tyres. CEAT, owned by the RPG Group since 1982, is probably the most visible face of the Indian tyre industry. Cricket lovers are familiar with the CEAT Cricket Ratings, which was the first international cricket rating system. More recently, its advertising campaign “The road is full of idiots” won many awards and critical acclaim. The

company scaled the Rs 10 billion export benchmark in 2012.

5. Balkrishna Tyres. BKT operates in the niche category of ‘off-highway tyres’ used in segments like agriculture, construction, industrial and earthmovers. The company has enjoyed a year-on-year (y-o-y) growth rate of 46 per cent in 2012. Its sales mostly come from overseas markets and hence the continued downturn in Europe and US could slow down its growth in the coming years.

6. Goodyear Tyres. The company was named after the inventor of vulcanised rubber, Charles Goodyear. Internationally, it has been associated with motor racing for a

very long time—both as a supplier of tyres and as a sponsor. Goodyear also supplies tyres to tractor companies in India. It was conferred the Super Brand status in 2010-11. Its active marketing campaigns—be it the ‘Women With Drive’ programme, the ‘Highway Helper’ iPhone app or the Goodyear blimp—have a high recall value with customers.

7. TVS Srichakra. This company is primarily a manufacturer of rubber tyres, tubes and rubber products for two and three wheelers. It supplies tyres to vehicle manufacturing units, OEMs and the domestic after-market segment as well. With its two manufacturing units at Madurai and Rudrapur, TVS Srichakra produces nearly 11 million tyres every year. Growth in the overseas market and the domestic OEM segment helped the company register a y-o-y growth rate of 28.44 per cent in 2012.

8. Falcon Tyres. Falcon Tyres is known under the brand name of Dunlop in India. It was taken over by the Ruia Group in 2005. Its association with Sumitomo Rubber Industries Ltd of Japan has given it access to the latest technology and enabled it to streamline its processes. Based in Mysore, it has clientele including big names like Hero Motor Corp, Bajaj Auto and Honda Motors.

9. Govind Rubber. Though it started off as a small player in the bicycle tyre industry, GRL has

Table V

Production, Consumption and Imports of Natural Rubber
(tonnes)

Year	Production	Consumption				Total consumption	Total imports
		Tyre sector		Non-tyre sector			
2004-05	749,660	406,220	54%	349,170	46%	755,390	68,700
2005-06	802,625	442,921	55%	358,189	45%	801,110	45,285
2006-07	852,895	462,081	56%	358,224	44%	820,305	89,799
2007-08	825,345	495,577	58%	365,878	42%	861,455	86,394
2008-09	864,500	508,121	58%	363,599	42%	871,720	77,616
2009-10	831,400	576,210	62%	354,355	38%	930,565	177,130
2010-11	861,950	597,623	63%	350,092	37%	947,715	190,692
2011-12	903,700	631,410	65%	333,005	35%	964,415	213,785
2012-13(E)	912,200	631,800	65%	340,180	35%	971,980	216,642

Source: ATMA

Table VI

Automobile Production Trends
(numbers)

Category	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Passenger vehicles	1,309,300	1,545,223	1,777,583	1,838,593	2,357,411	2,982,772	3,123,528
Commercial vehicles	391,083	519,982	549,006	416,870	567,556	760,735	911,574
Three-wheelers	434,423	556,126	500,660	497,020	619,194	799,553	877,711
Two-wheelers	7,608,697	8,466,666	8,026,681	8,419,792	10,512,903	13,349,349	15,453,619
Total	9,743,503	11,087,997	10,853,930	11,172,275	14,057,064	17,892,409	20,366,432

Source: Society of Indian Automobile Manufacturers

Table VII

Category-wise Tyre Production in India

Financial year 2011-12 to 2012-13 (April-December)

(million)

Types for	2011-12	2012-13	Per cent Change
Trucks and buses	11.951	12.709	6
Passenger cars/jeeps*	21.379	23.883	12
Light commercial vehicles	5.052	4.495	-11
Small commercial vehicles (SCV)**	—	1.697	—
Tractor fronts	2.059	2.113	3
Tractor rears	1.413	1.426	-0.3
Tractor trailers	0.748	0.677	-9
Scooters/mopeds	16.636	12.158	-27
Motorcycles	34.067	32.08	-6
Industrial/off the road (OTR)	0.144	0.225	56
Other tyres (Industrial & ADV)***	0.718	0.742	3
Total	94.184	92.205	-2

* W.e.f. FY 2012-13, the jeep tyre production merged with the passenger car tyre category

** New category

*** W.e.f. 2012-13 industrial and ADV tyre production merged as 'other tyres' (a new category)

Source: ATMA

Table VIII

Category-wise Tyre Export

Financial year 2011-12 to 2012-13 (April-December)

(numbers)

Category	2011-12	2012-13	Per cent change
Trucks and buses	1680837	1778527	6
Passenger cars/jeeps*	1268163	1314184	4
LCVs	1228694	1374309	12
Tractor fronts	12725	19164	51
Tractor rears	21808	27342	25
Tractor trailers	2480	1963	-21
Motorcycles	708993	849653	20
Scooters (2/3 wheelers)	643193	601571	-6
Implements	69238	103895	50
Small comm. vehicles (SCVs)**	—	1236	—
Other tyres (Industrial & ADVs)***	56305	82362	46
OTR	170662	116648	-32
Total	5863098	6270854	7

* W.e.f. FY 2012-13 jeep tyre exports merged with the passenger car tyre category

** New category

*** W.e.f. 2012-13 industrial and ADV tyre exports merged as 'Other Tyres' (a new category)

Source: ATMA

grown from its humble beginnings to become known for its high-quality and innovative products in this segment. GRL has given this industry many breakthroughs in the form of puncture-protection tyres and self-sealant tubes. It has recently started manufacturing tyres for other vehicles as well.

10. Krypton Tyres. Krypton Tyres was solely into manufacturing PU tyres for bicycles when it was set up in 1990. But with time, it has expanded its product line and now manufactures a range of tyres for not only bicycles but also wheel chairs and trolleys. It has further diversified into the footwear industry by launching its own brand Softflex.

Current market status of India's automotive industry

1. The Indian automotive market

is one of the most competitive markets with low manufacturing costs, which makes it an attractive assembly base for foreign automobile manufacturers.

2. India is the second fastest growing automobile market in the world after China.

3. Cars comprise the major segment in the Indian automotive industry with a growth rate of more than 19 per cent annually.

4. The large population growth of more than 20 million a year and the rising living standards are two important indicators that logically lead to an increasing demand for automobiles in India.

5. The Indian car industry is witnessing a shift from two wheelers to cars, due to the rising availability of low-cost cars and the car becoming a status symbol.

6. Based on the overall production of cars in the country, the In-

dian automotive industry is now the sixth largest in the world between South Korea (5th) and Brazil (7th). India is the fourth largest in the Asian region after China, Japan, and South Korea, in that order.

7. Car brands like Jaguar have an advantage when they are produced in India, since they become less expensive to sell. Imported cars are very expensive to acquire in India, due to the many import licences and tariffs that lead to higher prices of imported cars.

The industry produced 1,684,011 vehicles in April 2013 as against 1,721,455 in April 2012, showing a decline of (-) 2.81 per cent over the same month last year.

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