

Statistics of Global Car Production & Sales in 2016

by Gang Hao Chang, Fastener World

Source: OICA, Statista (Unit: vehicle / in descending order according to figures of 2016 / estimates are in grey color)

The Production Trend in 2016

- The production almost reached 95 million vehicles
- The global production showed a 4.5% YoY growth
- Europe and N. America showed mild growth
- More than 7% growth in Asia Pacific and Africa
- Only S. America showed over 10% decline

The global car production in 2016 reached 94,976,569 vehicles, up 4.5% from 2015. The production in Europe was around 21.7 million vehicles; production in Americas was around 21 million vehicles (18 million vehicles in N. America + 3 million vehicles in S. America); production in Asia/Oceania was around 52 million and around 1 million in Africa. Compared with 2015, S. America showed a substantial drop of 10.6%, whereas the other continents/regions showed a growing trend (especially Asia/Oceania and Africa, both had a growth margin of over 7%, higher than the global average). Production in Europe and N. America both showed mild growth.

Top 3 Car Manufacturing Countries in Each Continent/Region

Europe	↑	Germany	↑	Spain	↑	France
N. America	↑	USA	↑	Mexico	↑	Canada
S. America	↓	Brazil	↓	Argentina	↑	Colombia
Asian/Oceania	↑	China	↓	Japan	↑	India
Africa	↓	South Africa	↑	Morocco	↑	Algeria

(Note: ↑ means growth in 2016 ↓ means drop in 2016)

The top 10 car manufacturing countries in 2016 were: China, USA, Japan, Germany, India, S. Korea, Mexico, Spain, Canada and Brazil.

Top 3 Countries in Each Continent/Region with the Highest Car Sales

Europe	↑	Germany	↑	UK	↑	France
N. America	↑	USA	↑	Canada	↑	Mexico
S. America	↓	Brazil	↑	Argentina	↑	Chile
Asia/Oceania/Middle East	↑	China	↓	Japan	↑	India
Africa	↓	South Africa	↓	Egypt	↑	Morocco

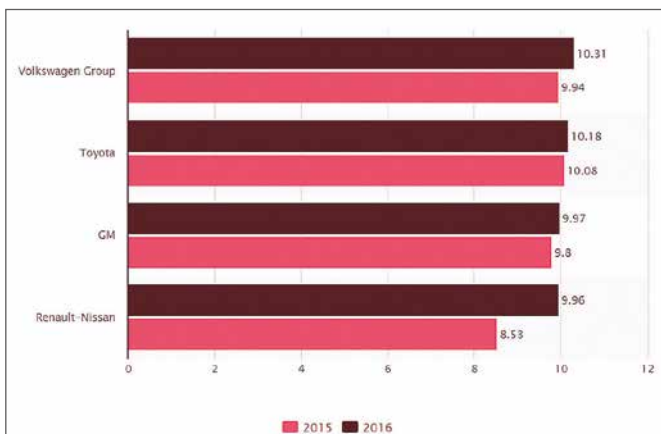
(Note: ↑ means growth in 2016 ↓ means drop in 2016)

The top 10 countries with the highest car sales in 2016 were: China, USA, Japan, Germany, India, UK, France, Brazil, Italy and Canada.

The Sales Trend in 2016

- Sales will soon break the level of 94 million vehicles
- A global 4.65% YoY increase
- Mild growth in N. America
- More than 5% growth in Europe and Asia Pacific
- Over 10% shrinkage in Southern & Central America and Africa

The global car sales in 2016 were 93,856,388 vehicles, up 4.65% from 2015. Sales in Europe were around 21 million vehicles; sales in Americas were around 26 million vehicles (around 22 million vehicles in N. America + around 4 million vehicles in S. America); around 47 million vehicles in Asia/Oceania/Middle East; around 1.4 million in Africa. Except for Southern & Central America and Africa, which showed an over 10% drop in sales, other continents/regions all showed results better than 2015. Sales growth in Europe and Asia Pacific was the highest, showing the growth margin of 5.77% and 7.9% respectively. N. America showed a slight growth of 1.52%.



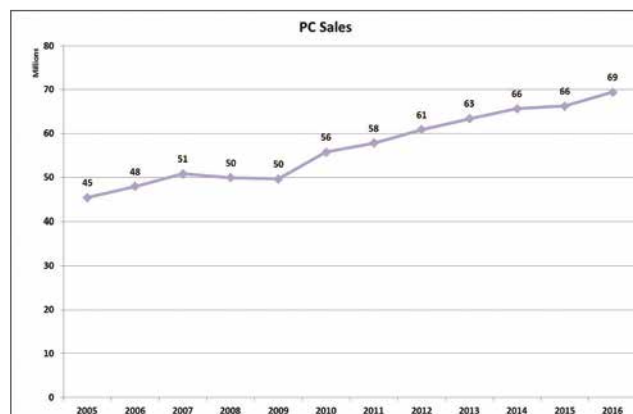
The left graph shows the sales of the top 4 car brands (VW, Toyota, GM and Renault-Nissan) in 2016. The sales of the VW Group in 2016 had exceeded the sales of Toyota, making it the car brand with the highest car sales (sales: 10.31 million vehicles). These 4 leading car brands all reported that their results in 2016 were better than 2015. In addition, the sales of each of the top 4 car brands were all around the level of 10 million vehicles, representing about 40% of the global total car sales.

2015-2016 World Motor Vehicle Production By Country

All Vehicles	2015	2016	% change
EUROPE	21,167,017	21,699,589	2.5%
Germany	6,033,364	6,062,562	0.5%
Spain	2,733,201	2,885,922	5.6%
France	1,972,000	2,082,000	5.6%
United Kingdom	1,682,156	1,816,622	8.0%
Czech Republic	1,246,533	1,349,896	0
Russia	1,378,246	1,303,989	-5.4%
Italy	1,014,223	1,103,516	8.8%
Slovakia	1,038,503	1,040,000	0.1%
Poland	660,692	681,837	3.2%
Hungary	495,370	472,000	-4.7%
Belgium	409,253	399,427	-2.4%
Romania	387,177	359,306	-7.2%
Sweden	188,987	205,374	8.7%
Portugal	156,626	143,096	-8.6%
Slovenia	133,092	133,702	0.5%
Austria	121,200	108,000	-10.9%
Uzbekistan	185,400	88,152	-52.5%
Serbia	83,630	80,320	-4.0%
Finland	69,053	55,280	-19.9%
Netherlands	44,122	44,430	0.7%
Belarus	15,033	16,864	12.2%
Kazakhstan	14,477	10,651	-26.4%
Ukraine	8,244	5,264	-36.1%
Azerbaijan	415	247	-40.5%
Turkey	1,358,796	1,485,927	9.4%
AMERICA	20,962,739	20,854,138	-0.5%
NAFTA	17,954,513	18,165,870	1.2%
USA	12,105,988	12,198,137	0.8%
Mexico	3,565,218	3,597,462	0.9%
Canada	2,283,307	2,370,271	3.8%
South America	3,008,226	2,688,268	-10.6%
Brazil	2,429,421	2,156,356	-11.2%
Argentina	526,657	472,776	-10.2%
Colombia	77,748	79,036	1.7%
Venezuela	18,300	2,850	-84.4%
Ecuador	4,800	0	-100.0%
ASIA-OCEANIA	47,878,892	51,521,214	7.6%
China	24,567,250	28,118,794	14.5%
Japan	9,278,238	9,204,590	-0.8%
India	4,160,585	4,488,965	7.9%
South Korea	4,555,957	4,228,509	-7.2%
Thailand	1,909,398	1,944,417	1.8%
Indonesia	1,098,780	1,177,389	7.2%
Iran	982,337	1,164,710	18.6%
Malaysia	614,664	513,445	-16.5%
Taiwan	351,085	309,531	-11.8%
Pakistan	229,686	220,950	-3.8%
Australia	173,009	161,294	-6.8%
Philippines	112,493	135,840	20.8%
Vietnam	50,000	66,030	32.1%
Bangladesh	540	580	7.4%
AFRICAS	835,291	901,628	7.9%
South Africa	615,658	599,004	-2.7%
Morocco	288,337	345,106	19.7%
Algeria	19,346	42,008	117.1%
Egypt	36,000	36,230	0.6%
Tunisia	540	0	-100.0%
TOTAL	90,843,939	94,976,569	4.5%

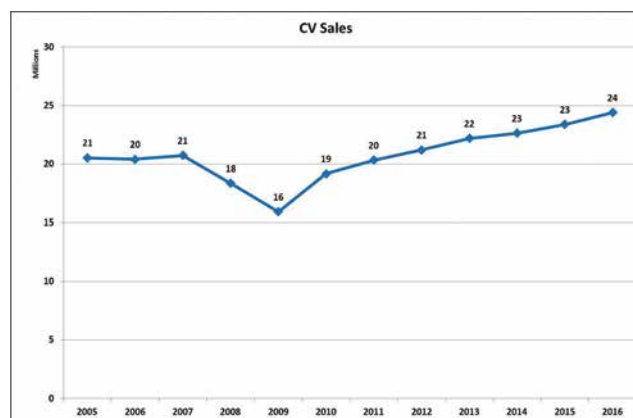
The sales of **passenger cars** gradually increased from 45 million vehicles in 2005 to 69 million in 2016 (only a slight drop during the financial crisis in 2007-2009).

The growth margin in the past 11 years was about: **53.3%**



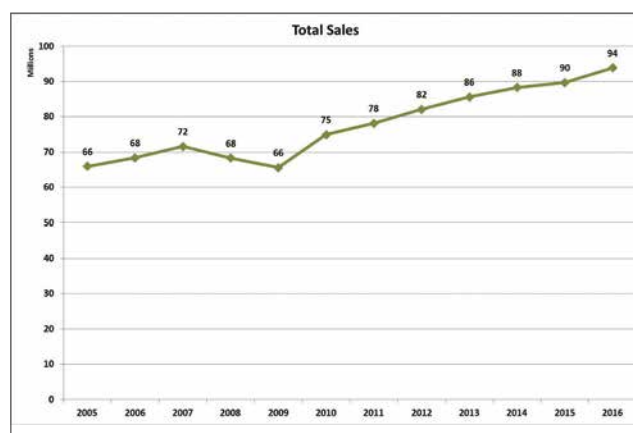
The sales of **commercial vehicles** also went up from 21 million vehicles in 2005 to 24 million vehicles in 2016 (though the sales volume substantially declined to 16 million vehicles during the financial crisis in 2007-2009).

The growth margin in the past 11 years was about: **12.5%**



The sales of **all vehicles** increased from 66 million vehicles in 2005 to 94 million vehicles in 2016 (except for the period of 2007-2009, growth was reported in every year).

The growth margin in the past 11 years was about: **42.4%**



2012-2016 World Motor Vehicle Sales By Country

Regions/Countries	2012	2013	2014	2015	2016
EUROPE	18,663,178	18,343,409	18,587,650	19,035,989	20,134,829
Germany	3,394,002	3,257,718	3,356,718	3,539,825	3,708,867
U. K.	2,333,763	2,595,713	2,843,025	3,061,406	3,123,755
France	2,331,731	2,207,373	2,210,927	2,345,092	2,478,472
Italy	1,545,764	1,420,814	1,493,008	1,726,079	2,050,292
Russia	3,141,551	2,998,650	2,592,396	1,440,923	1,404,464
Spain	790,991	822,950	1,029,782	1,277,059	1,347,344
Turkey	817,620	893,124	807,486	1,011,194	1,007,857
Belgium	550,519	547,139	545,255	571,524	617,854
Poland	329,799	353,197	392,476	432,439	504,550
Netherlands	571,803	481,435	450,330	521,178	469,410
Sweden	326,441	313,067	352,467	396,693	431,818
Austria	374,829	357,892	342,215	349,597	374,545
Switzerland	366,273	343,718	338,404	362,650	355,882
Czech Republic	193,795	185,939	215,594	260,070	291,008
Denmark	199,147	210,839	221,713	245,484	265,386
Portugal	113,435	126,689	172,357	213,654	247,343
Norway	176,909	180,042	180,273	190,106	197,991
Ireland	91,728	87,096	114,985	150,680	177,719
Romania	80,723	71,016	100,336	120,591	142,020
Finland	126,505	117,368	120,113	123,483	136,430
Hungary	68,168	72,975	88,719	100,933	123,807
Slovakia	78,189	75,204	81,960	90,091	100,600
Greece	62,518	62,570	76,665	82,044	85,008
Slovenia	57,042	59,782	61,934	68,973	76,213
Ukraine	259,586	232,894	105,957	52,341	75,209
Luxembourg	55,049	50,886	54,322	51,607	56,369
Croatia	35,654	33,819	40,196	43,668	53,929
Bulgaria	22,770	22,966	24,331	28,053	31,260
Lithuania	16,669	17,586	19,039	23,249	29,380
Serbia	26,700	26,800	27,800	25,000	27,600
Estonia	23,073	23,383	24,845	24,921	27,401
Belarus	24,500	24,000	25,800	25,800	22,500
Iceland	8,507	8,022	10,630	15,605	20,735
Latvia	14,497	14,480	16,261	17,764	20,345
Cyprus	11,563	8,051	9,447	11,834	14,559
Bosnia	10,740	10,520	9,500	9,300	10,200
Malta	6,475	6,312	7,034	7,929	8,157
Moldavia	5,300	5,400	6,000	3,800	4,500
Georgia	5,300	5,300	5,500	4,200	4,300
Macedonia	5,650	2,800	3,500	3,900	4,300
Albania	2,500	2,490	2,750	2,750	2,750
Armenia	5,400	5,390	5,600	2,500	2,700
AMERICA	23,670,893	25,030,005	25,475,531	25,688,159	25,549,212
NAFTA	17,526,688	18,764,508	19,910,156	21,174,615	21,497,241
U.S.A.	14,785,936	15,883,443	16,843,464	17,845,624	17,865,773
Canada	1,716,178	1,780,523	1,890,387	1,939,517	1,983,745
Mexico	1,024,574	1,100,542	1,176,305	1,389,474	1,647,723
Central & South America	6,144,205	6,265,497	5,565,375	4,513,544	4,051,971
Brazil	3,802,071	3,767,370	3,498,012	2,568,976	2,050,321

Regions/Countries	2012	2013	2014	2015	2016
Argentina	830,058	963,917	613,848	644,021	709,482
Chile	362,331	397,643	353,525	297,785	319,606
Colombia	285,000	286,800	314,100	272,400	246,500
Peru	190,761	201,326	187,081	173,388	169,718
Puerto Rico	97,000	99,500	100,200	92,500	112,200
Ecuador	121,446	113,812	120,060	81,309	63,555
Costa Rica	36,000	36,200	42,100	52,800	60,000
Panama	48,000	48,300	52,200	56,300	57,700
Uruguay	56,459	61,054	56,548	51,318	47,114
Guatemala	26,000	27,900	29,800	31,200	29,900
Bolivia	21,000	22,400	30,900	21,400	27,800
Dominican Republic	15,373	16,481	17,436	21,489	24,024
Paraguay	30,000	30,600	31,000	28,200	22,700
Trinidad	14,500	14,900	16,000	19,600	20,200
Guadeloupe	15,452	14,716	14,773	15,720	16,571
Martinique	13,576	13,018	13,351	15,215	16,495
Nicaragua	8,000	9,300	9,400	11,200	12,700
El Salvador	11,000	11,400	11,800	12,400	10,600
Honduras	11,000	12,000	11,600	11,300	10,200
Cuba	4,500	4,530	4,500	4,500	6,900
Guyana	5,725	5,542	5,534	5,623	5,885
Jamaica	4,500	4,700	5,000	5,900	5,100
Bahamas	3,500	2,800	2,500	3,500	3,300
Venezuela	130,553	98,878	23,707	14,700	2,500
Belize	400	410	400	800	900
Asia/Oceania/Middle East	38,225,604	40,579,135	42,556,996	43,410,904	46,857,884
China	19,306,435	21,984,079	23,499,001	24,661,602	28,028,175
Japan	5,369,721	5,375,513	5,562,888	5,046,510	4,970,260
India	3,595,508	3,241,302	3,177,005	3,424,836	3,669,277
South Korea	1,532,087	1,543,564	1,661,868	1,833,786	1,823,041
Iran	1,044,430	804,750	1,287,600	1,222,000	1,448,500
Australia	1,112,032	1,136,227	1,113,230	1,155,408	1,178,133
Indonesia	1,116,230	1,229,811	1,195,409	1,031,422	1,048,134
Thailand	1,423,580	1,330,672	881,832	799,632	768,788
Saudi Arabia	705,000	740,000	828,200	830,100	655,500
Malaysia	627,753	655,793	666,487	666,677	580,124
Philippines	184,248	211,959	234,747	288,609	359,572
Israel	206,500	215,500	242,400	260,200	292,700
Vietnam	80,487	96,692	134,562	208,566	271,833
Taiwan	270,078	258,753	282,130	262,593	262,346
Pakistan	157,656	141,778	146,882	229,688	211,295
U.A.E.	268,900	263,100	263,100	256,700	198,500
Oman	204,500	215,000	208,400	167,600	154,900
New Zealand	100,795	113,294	126,508	134,041	146,753
Singapore	37,247	34,111	44,776	76,191	108,061
Kuwait	140,000	151,500	152,300	143,800	108,000
Qatar	80,000	85,000	92,900	86,400	63,700
Uzbekistan	57,000	57,500	58,100	58,100	56,300
Kazakhstan	98,231	165,710	163,561	97,469	46,712
Bahrain	47,000	53,000	61,100	58,300	46,300

Regions/ Countries	2012	2013	2014	2015	2016
Hong-Kong	53,909	57,549	62,200	58,800	46,200
Bangladesh	43,400	42,500	51,900	54,800	44,400
Syria	44,000	43,100	39,700	39,700	39,700
Lebanon	37,500	37,500	40,300	40,700	37,800
Palestine	36,600	35,800	35,800	35,800	35,800
Sri Lanka	9,500	12,000	15,500	17,000	34,900
Iraq	120,000	117,500	87,700	49,200	24,800
Jordan	23,000	29,000	23,800	22,800	20,500
Brunei	20,000	19,600	24,000	17,000	16,200
Laos	7,000	9,000	14,700	14,600	10,900
Nepal	5,600	5,500	8,300	5,900	9,300
New Caledonia	11,987	10,888	10,910	9,974	9,279
Cambodia	3,400	3,400	4,100	6,100	6,300
Tukmenistan	4,700	4,700	4,800	4,800	5,000
Azerbaijan	15,000	22,700	25,200	10,500	4,200
Tahiti	4,000	3,500	3,900	3,400	3,800
Yemen	4,100	4,000	4,600	5,600	3,600
Myanmar	3,100	3,000	1,800	1,800	2,300
Tadjikistan	6,300	6,290	6,400	6,400	2,300
Kirghizistan	4,800	4,800	4,800	4,800	2,000
Mongolia	2,290	2,200	1,600	1,000	1,700
AFRICA	1,569,463	1,653,587	1,717,921	1,549,556	1,314,463
South Africa	623,921	650,745	644,504	617,749	547,406
Egypt	286,300	283,000	349,100	332,100	264,100
Morocco	130,306	120,755	122,060	131,910	163,110
Algeria	255,167	304,854	292,100	215,400	96,600
Tunisia	49,000	47,000	50,900	48,500	50,800
Libya	29,000	45,000	45,000	54,100	46,400
Reunion	24,949	24,233	25,757	27,697	29,547
Nigeria	50,000	52,000	53,900	20,000	23,000
Mauritius	9,500	10,200	10,600	10,000	11,000
Kenya	9,500	13,000	13,500	14,100	10,600
Botswana	6,600	6,900	7,400	7,500	8,100
Ghana	14,500	13,600	13,000	4,800	7,400
Angola	28,000	29,000	35,700	18,000	7,300
Senegal	6,000	6,000	6,800	5,800	6,600
Ivory Coast	7,500	6,000	6,400	7,100	6,400
Tanzania	6,000	6,700	5,800	5,200	4,500
Cameroon	3,400	4,400	4,400	4,200	4,200
Uganda	4,500	5,000	4,900	3,100	4,000
Malawi	1,500	1,540	1,700	1,900	3,900
Sudan	3,500	2,500	3,000	3,600	3,400
Zambia	3,500	4,000	4,000	3,400	3,200
Gabon	5,500	5,500	4,900	3,300	3,000
Burkina Faso	800	1,100	900	1,400	2,300
Congo Kinshasa	3,000	2,400	2,400	3,100	2,300
Zimbabwe	4,400	5,000	5,800	2,500	2,200
Madagascar	2,200	2,200	2,600	2,300	1,400
Burundi	510	530	400	400	1,100
Liberia	410	430	400	400	600
All Countries	82,129,138	85,606,136	88,338,098	89,684,608	93,856,388

Trends in the Automotive Industry and How They Affect Fastener Suppliers

by Laurence Claus

Perhaps with the exception of the consumer electronics industry, no other high profile industry seems to embody and embrace change as much as the automotive industry. In fact, new car buyers have come to rely on the fact that the new model year will bring exciting new changes and innovations. And although it may take several years to launch a specific new model into the market, the automotive OEMS stagger releases in such a way that they are consistently releasing new models and complete model refreshers every year. As such, suppliers to automotive OEMs and their vast Tier network must be always vigilant and striving to keep up-to-date with industry advancements.

This article will explore five trends in the automotive marketplace. With respect to fastener suppliers several of these trends could have a significant direct impact on the types and quantities of both traditional and innovative new fastener designs, while others may only have a slight or little impact on fastener sales. In either case, however, companies either well established or wishing to break into the largest single fastener market worldwide should pay close attention because these trends are harbingers for what might be coming in the future.

Trend 1: Lightweighting

The single most significant trend in the world automobile industry is lightweighting. Regardless of the region, enhanced pressure to reduce weight to gain gas efficiency, reduce emissions, and to increase performance is universal. In fact, the two largest automobile markets, North America and Europe have increasingly seen more and more governmental regulation and restrictions. Take for example the United States' Corporate Average Fuel Economy (CAFÉ) requirements. They continue to increase each year and have a very significant milestone to hit by 2025. In that year, new CAFÉ requirements of almost 55 miles per gallon will go into effect, almost double the requirement when enacted in 2009 by the Obama Administration.

Efforts in lightweighting address all aspects of the vehicle and are leading to some interesting challenges for designers and suppliers alike. Methods that are commonly being employed include downsizing, replacement, or introduction of existing components with lightweight materials.