





THE WORLD'S 100 BIGGEST AUTOMOTIVE SUPPLIERS IN 2018.

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MANAGEMENT SUMMARY.

- **Record Revenues Despite Difficult Circumstances:** Despite the Brexit chaos, impulsive US trade policy and a cooling of the Chinese economy, the global 100 biggest automotive suppliers achieved revenue growth of 7.6% year on year.
- Investment Spending in the Future Puts Pressure on Margins: CASE technologies demand their tribute, resulting in margins declining by one percentage point to an average of 7.7% (operating income / EBIT).
- **M&A Momentum Takes On New Dimensions:** Spin-offs of business units in the "old automotive" field, acquisitions in the "new automotive" field and mergers with competitors raised the M&A market to a new level and are fueling the continuing advance of industry consolidation.
- German Suppliers Assert their Market Position: Bosch in first place, Continental second and ZF Friedrichshafen on a shopping trip, in fifth place: these positions underscore the strength of the German suppliers, including in future technologies.
- Chinese Suppliers Advancing: CATL is the climber of the year, profiting from the increasing penetration of electromobility, and increasing the number of Chinese companies among the Top 100 to a total of 6.

REVENUES UP, PROFITS DOWN

The end turned out differently than had been forecasted at the start of the year: 2018 held surprises, with high growth rates and new record revenues. But the omens for this had been poor at the start of the year. However, there were also severe skid marks in 2018, since many companies were confronted with declining margins.

A veritable storm had actually been signaled: a US president dealing out tariffs to the global economy at whim, China - the world's biggest automotive market - with a shaky start in the new year, Europe and the UK taking one step forward and two back on the road to Brexit, the new WLTP emissions test cycle took many OEMs to the limits of their capabilities and the general opposition to diesel was certainly also not helpful in 2018.

In the end, however, (almost) everything turned out well: the omens were set for growth again among the 100 biggest automotive suppliers: Some 85 companies were still able to increase their revenues year on year. On average, it even took it to a new level, since the total revenue of the top 100 increased by 7.6% to \leqslant 889 billion, thereby growing much more strongly than in the prior year. In 2017, the world's biggest automotive suppliers had only grown by 1.1%.

In order to become a member of the "Top 100 club" in 2018, at least € 2.9 billion revenue was necessary. In 2017, € 2.6 billion had been necessary to be a member.

INVESTMENT SPENDING IN THE FUTURE PUTS PRESSURE ON MARGINS

However, the cooling economy was not without its consequence, since profitability worsened almost across the board. The suppliers shared this fate with many OEM customers; in the end effect, even premium OEMs were disappointing, with margins below those of 2017 and outside their own target corridor.

The causes in many cases were high investment spending in future technologies and weakening sales in China. Of the 71 suppliers of the Top 100 who published their profitability indicators, 48 had to record declines in earnings. On average, profitability fell by 1 percentage point. Only 22 companies were able to improve their earnings year on year.

CHINESE SUPPLIERS ADVANCING

The ever growing group of Chinese suppliers (6 companies, compared to 4 in 2017) closed the 2018 business year very successfully. The figures stand out clearly; they are well ahead of the competition with average growth of 31.5% and the companies improved in the ranking by 12 places on average. Even the profitability was right, despite the breakneck growth: with an average of 8.7% (OI, EBIT), the average of the Chinese suppliers is clearly above the overall average of the Top 100.

The South Korean automotive suppliers around Hyundai Mobis, LG & Co. could not compete with the successes of the Chinese in the prior year. On the contrary, the South Koreans were the relegated team this year, losing three places in the ranking on average. Exchange-rate effects additionally made life difficult for the South Koreans, in addition to the uncertainties already mentioned, and left hardly any room for growth. Revenues even fell by 4.2%. With 4.3% EBIT / operating income, the South Koreans also trailed in in terms of profitability.

The Japanese companies lie between the Chinese and South Koreans in terms of earnings, with a far larger number of companies (28). Favorable exchange-rate effects supported a solid growth in Euro, amounting to 10% on average. With an average profitability of only 6.5%, however, the Japanese suppliers are at the lower end of the scale in a regional comparison. Most Japanese companies were able to keep their places in the ranking due to their high growth rates.

GERMAN COMPANIES MAINTAIN THEIR MAR-KET POSITION

The major German suppliers Bosch and Continental remained steady in the two top positions; on average, however, the 17 German companies fell by 2 places last year. Some fell considerably more, though. AUNDE, supplier of automotive textiles and seat covers, for example, dropped out of the ranking altogether.

Average growth of 3.3% for the German suppliers is a positive sign, in view of the challenging background conditions in 2018. With a profitability of 8.3% (-1.7 percentage points compared to 2017) they are at a similar level to the Chinese – a respectable result against the background of very challenging market conditions

US SUPPLIERS MOST PROFITABLE

And the US suppliers? Has the "America First" policy had tangible benefits? 13.1 % average growth by the total of 19 companies is a remarkable figure. Though it cannot be entirely attributed to organic growth, but in many cases is very much the result of M&A activities. Parts of companies that do not promise future success and do not contribute to CASE and digitalization, are in many cases simply sold off by the Americans in order to advance their transformation with no regard for traditions. Visteon, still at position 81 in 2017, consequently disappeared from the Top 100 in 2018. Johnson Controls, currently at place 38, will probably follow in 2019, since the last automotive division, Power Solutions, has since been hived off to financial investors and is now called Clarios. Favorable exchange-rate effects further favored the high growth rates of the US suppliers. The profitability, at 9.5% EBIT / operating income on average, and the average improvement of 2 places in the ranking, demonstrate the Americans' dynamism.

THE GERMAN SUPPLIERS REGISTERED PARTICULARLY SEVERE DECLINES IN EARNINGS IN 2018 IN A GLOBAL COMPARISON.

REVENUE DEVELOPMENT PER REGION (TOP 100) 2016–2018, in billion EUR.

EARNINGS DEVELOPMENT PER REGION (TOP 100)

2016-2018, in % of revenue1

				2016	2017	
825.8	826.7	889.2	Euro billion @	8.3%	8.7%	
78.3	90.1	93.8	ASIA (without JP)	6.5%	6.3%	
224.4	221.7	246.7	JAPAN	7.7%	7.1%	
48.8	37.9	43.4	AMERICAS (without USA)	8.5%	8.9%	
20.4	119.3	135.1	USA	9.9%	10.5%	
20.4	158.4	166.3	EUROPE (without DE)	8.7%	9.8%	
190.0	199.3	204.0	GERMANY	7.5%	10.0%	
2016	2017	2018				

"TOP DOG" BOSCH STILL IN FIRST PLACE

The sale of the Bosch starter division to a Chinese consortium had caused a stir in the prior year. In 2018, much of the good news was overshadowed by the diesel crisis. But despite the debate about the self-igniter and despite the sale of some divisions, Bosch was able to report another record year, thereby taking top position among the Top 100, leading Continental by \leqslant 3.2 billion.

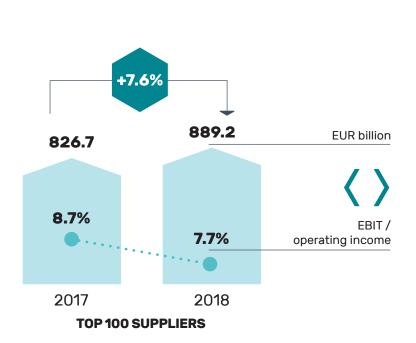
The decline in car diesel injection systems was made up for by higher sales in heavy truck systems and exhaust aftertreatment systems. In the world of classical combustion engines, Bosch, with over 1,000 patents, is increasingly making itself independent in the field of autonomous driving, and thereby taking a leading position in CASE technologies.

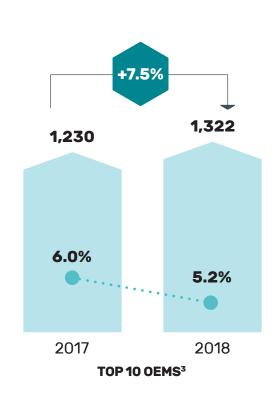
Bosch is planning to integrate artificial intelligence in all its products by the middle of the next decade and the supplier is already more broadly positioned in e-mobility than all its competitors, with its product portfolio including electric powertrains, from bicycles through to heavy goods vehicles.

INVESTMENT SPENDING IN FUTURE TECHNOLOGIES IMPACTED THE 2018 EARNINGS OF BOTH THE TOP 100 SUPPLIERS AND TOP 10 OEMS

REVENUE AND EARNINGS¹

2017-2018, in billion EUR2, as % of revenue, only automotive





1 EBIT or operating income of companies for which the revenues and earnings are available

2 With exchange-rate effects 3 Acc. to 2018 sales volume (VW, Toyota, Renault-Nissan-Mitsubishi, Hyundai, GM, Ford, Honda, FCA, Suzuki, PSA)

THE DRIVERS OF THE TRANSFORMATION

Bosch, Continental and Denso, the three leaders now earn such high revenues that there seems little possibility of their rankings changing in the coming years, or of them being ousted from the top positions.

However, the industry is proceeding full speed ahead with the transformation, and company parts are being sold off in large M&A transactions. Though the splitting up of Continental into the three business divisions, tires/rubber, supplier business and powertrain, would represent a significant break. From the second half of 2019, the former Powertrain division will be a largely independent organizational unit operating under the name Vitesco Technologies. As a consequence Denso would overtake Continental and become the second biggest supplier globally.

The Japanese supplier, globally at number three in the Top 100 in 2018, is also forging ahead with its transformation. Denso recently acquired a stake in Infineon. The two companies want to cooperate more closely in the fields of autonomous driving and electromobility In the future. For Infineon (position 81), Denso's holding is extremely advantageous, since foreign suppliers traditionally have a hard time in Japan. With the close connection, the Dax-listed corporation now has a direct line to this market.

As is shown by the cooperation between Denso and Infineon, the very big players among the Top 15, too, participate very actively in M&A activities. The are the best placed to take over smaller companies and startups, who often help them in niche areas, allowing them to position themselves even better for the future of the automotive industry. However, these takeovers had little effect, if any, on the placings in 2018, but rather serve strategic interests.

In the case of Magna (position 4), too, two takeovers did not lead to big leaps in the ranking in 2018. In acquiring the Dresden based company Haptronik, it was buying a small software developer with expertise in controlling mechatronic systems.

Magna improved its expertise in lighting technology by integrating the Italian SME Olsa S.p.A. The purchases are logical with a view to the increasing automation of driving tasks in the next vehicle generations.

HARDLY ANY MOVEMENT IN THE TOP 15

Magna's improvement by one place pushes ZF down to position 5. However, following its recent takeover of the brake manufacturer Wabco, ZF will change in the ranking again in the following year. In 2015, the takeover had been vetoed by the supervisory board, which didn't want to pursue the too rapid expansion strategy of Stefan Sommer, CEO at that time. Not least, in taking over TRW in 2015, ZF was clearly pursuing a goal of becoming an integrated system supplier and, in this role, wants to benefit more strongly from the megatrends of electrification and autonomous driving. This is because OEMs are ordering ever more complex systems, such as complete electric rear axles. Suppliers who are capable of meeting such requests are likely to gain greater importance in the future.

The switch in places between Magna and ZF, then, also represents the only movement within the Top 15. Whereas the revenue-based ranking in the top third did not see any major position changes, profitability dropped off sharply in many cases. In 2018, Valeo revised its margin targets for the entire year twice. Due to significantly weaker sales figures in China and the new rules for emission tests for vehicles in Europe, Valeo expected lower profitability early on. With an operating income of 6.3%, the French companies were therefore behind the prior year's value (7.8%).

FOR THE FIRST TIME, THE "PROFITABILITY CHAMPIONS" DO NOT INCLUDE ANY TIRE MANUFACTURERS, BUT MANY "SPECIALISTS"

"PROFITABILITY CHAMPIONS" (ONLY COMPANIES WITH AN AUTOMOTIVE SHARE OF >50%)

Top 5 acc. to EBIT / Operating Income

			MARGIN (OPER	RATING INCOME)	DIFFERENCE	
#	COMPANY	COUNTRY	2018	2017	2018 vs. 2017	COMMENTS
1	ITW		22.5%	22.8%	-0.3%	"Serial winners" among the profitability champions suppliers of, for example, connectors, interior and exterior components, as well as powertrain and brake systems
2	TE Connectivity	0	18.1%	18.4%	-0.3%	Former division of Tyco International; specialist in connectors and antenna technology with US roots, legally domiciled in Switzerland
3	EATON		17.2%	16.4%	0.8%	Diversified supplier of commercial vehicle trans- missions, differentials, compressors, as well as complete drive systems for hybrid commercial vehicles
4	Garrett Motion		15.6%	15.7%	-0.1%	Spun off in 2018 by Honeywell (one of the market leaders in turbochargers alongside BorgWarner)
5	CATL		15.6%	24.2%	-9.0%	Largest Chinese manufacturer of lithium-ion batteries for use in xEV; 2018 result impacted by high investments in further growth

Source: Berylls Strategy Advisors

ASIAN SUPPLIERS SHOW A MIXED PICTURE

2018 also turned out to be a difficult year for the biggest Korean supplier Hyundai Mobis. Though it was able to defend its position 7 in the ranking, a currency-related decline in revenues of over 10% meant that Bridgestone, at position 8, was hot on its heels. 2018 saw crises directly in Hyundai's core markets: business in China was beset by production stoppages due to supply interruptions, and the manufacturer was not able to score in the USA with the SUVs that are actually in demand there.

The weakness of the OEM was passed directly onto Hyundai Mobis. Nevertheless, the company still laid some groundwork for digitalization, in order to counter the downward trend, and will cooperate closely with the MIT in the future. This now gives the supplier excellent contacts with 1,700 MIT startups, working on virtually all relevant future issues. Hyundai Motor Company, but also BMW, Honda, Samsung and LG, are working with the MIT in similar cooperation programs.

Though Weichai Power, China's strongest representative in the Top 100 (place 20), dropped three places in the ranking, its revenue and profitability point to a continuing positive development. With the strategic alliance with Ballard Power (manufacturer of automotive fuel cells), the Chinese are going down an exciting path. They are thereby departing from the monothematic drive toward purely battery-electric vehicles. This cooperation is an important step in the renaissance of fuel-cell technology, which represents a good alternative to battery-electric drives for long distances or for heavy-duty vehicles.

THE "GROWTH CHAMPIONS" ARE DOMINATED BY TWO CHINESE SUPPLIERS: JOYSON ELECTRONICS AND CATL

"GROWTH CHAMPIONS" (ONLY COMPANIES WITH AN AUTOMOTIVE SHARE > 50%) Top 5

			REVENUE (MILLIO	N LOCAL CURRENCY)	GROWTH	
#	COMPANY	COUNTRY	2018	2017	2018 vs. 2017	COMMENTS
1	Joyson Electronics		CNY 56,181	CNY 26,606	111.2%	Takeover of the insolvent Japanese sup- plier Takata (passenger safety systems) In 2018
2	CATL		CNY 29,611	cny 19,997	48.1%	Largest Chinese manufacturer of lithium -ion batteries for use in xEV
3	LG Electronics	,	KRW 4,287,6 00	KRW 3,338,600	28.4%	Product portfolio comprises, e.g., infotain- ment , battery packs, ADAS, cameras and lighting technology (ZKW)
4	Tenneco	4	USD 11,763	usd 9,274	26.8%	Supplier of both OEM and aftermarket parts (including shock absorbers, catalytic converters, and particulate filters)
5	Meritor		USD 4,313	USD 3,551	21.5%	Product portfolio comprises, e.g., axles and brakes for cars and commercial vehicles

THE SPECIALIST CATL IS THE CLIMBER OF THE YEAR

CATL, on the other hand, still puts its faith in the breakthrough in battery-electric vehicles. It entered the Top 100 at position 71 – the most successful new entrant by far. 2018 could hardly have been better for the Chinese supplier of lithium-ion batteries. A stake in Valmet Automotive and its announced intention to build battery cells for electric vehicles in Erfurt boosted the degree of recognition of the Chinese company significantly.

In economic terms, too, things went well. The revenue increased by a record 46.5%; however its extensive investment spending put severe pressure on profitability: with an operating income of -9%, CATL is trailing among the Top 100.

A CHALLENGING YEAR FOR SCHAEFFLER

Schaeffler, the system supplier based in Herzogenaurach, Germany, (position 23) was also good for headlines, though rarely positive ones. Trade conflicts, changeover to WLTP, a weak Chinese market - the market environment could have been more favorable for Schaeffler and led to a profit warning, which was also followed by a slight decline in revenue (-0.1%).

Efficiency drives and portfolio optimization are planned to put the company back on a successful course in the next three years. In addition, the Schaeffler Venture Forum promotes cooperation between startups and commitment to electromobility. Schaeffler further strengthened its competence in autonomous driving in 2018 by purchasing the South German SME Paravan.

M&A ACTIVITIES TAKE ON A NEW LEVEL

In the midfield and at the lower positions, veritable takeover battles were fought in 2018. A clear indication that the transformation of the industry is proceeding apace. The CASE technologies unanimously require high investment, in most cases, though at the expense of profitability.

Many of the big suppliers are able to handle this investment, though it is increasingly proving too much for some SMEs. Many smaller suppliers therefore seek the protection of a larger one with the resources to provide the necessary investment. In addition, many OEMs require suppliers to go along with their internationalization plans and build up production abroad. Small suppliers cannot generally manage this financially.

For the aforementioned reasons, the M&A carousel is picking up ever greater speed; consolidation of the industry gained momentum, shaking up the Top 100. Tenneco purchased Federal Mogul and improved its ranking by two places at first, until complete consolidation.

Calsonic Kansei purchased Magneti Marelli from the FCA Group, and improved its standing by one position initially. The Chinese supplier Joyson closed the takeover of the insolvent airbag supplier Takata of Japan in 2018, thereby climbing 35 places to 38th position.

GKN was taken over by the finance investor Melrose. The South Korean electronics specialist LG purchased the Austrian lighting specialist ZKW and gained 4 places in the ranking. Autoliv divested its electronics business, spinning off Veoneer (focus on lidar and radar components, among others). Honeywell completely spun off its turbocharger division (Garret, position 98), thereby, just like Johnson Controls, departing completely from the automotive business.

WAS 2018 THE LAST RECORD YEAR FOR THE TIME BEING?

The developments in the early months of 2019 indicate that the current year will not be easier than the past year 2018. On the contrary. Washington's threats to Beijing have seamlessly turned into a trade war, which will benefit no one.

And the latest events on the Persian Gulf do not auger well. This year, again, suppliers will encounter a powerful headwind. Not all are adequately prepared to meet it yet.

THE TOP 100 AUTOMOTIVE SUPPLIERS (1-50).

			RANK REVENUE IN €												
COMPANY	COUNTRY	2018	2017	Δ	2018	2017	Δ ABSOLUTE	Δ RELATIVE	TYPE	2018 €	2018 %	2017 €	2017 %	Δ	NOTE
Bosch	DE	1	1	0	47,600	45,984	1,616	3.5%	EBIT	3,531	7.4%	3,322	7.2%	0.2%	A, 1, AU
Continental	DE	2	2	0	44,404	44,010	395	0.9%	EBIT	4,028	9.1%	4,562	10.4%	-1.3%	B, 1, EC
Denso	JP	3	3	0	42,572	36,418	6,154	16.9%	OI	2,699	6.3%	2,947	8.1%	-1.8%	B, 2, EC
Magna	CA	4	5	1	35,605	30,540	5,065	16.6%	EBIT	2,710	7.6%	2,583	8.5%	-0.8%	A, 1, EC
ZF Friedrichshafen	DE	5	4	-1	33,975	33,528	446	1.3%	N.A.	-/-	-/-	-/-	-/-	-/-	B, 1, AU
Aisin	JP	6	6	0	31,945	28,426	3,519	12.4%	OI	1,814	5.7%	1,868	6.6%	-0.9%	B, 2, EC
Hyundai Mobis	KR	7	7	0	24,604	27,413	-2,809	-10.2%	OI	1,418	5.8%	1,580	5.8%	0.0%	A, 1, EC
Bridgestone - Firestone	JP	8	8	0	24,106	22,460	1,646	7.3%	OI	3,112	12.9%	2,868	12.8%	0.1%	B, 1, AU
Michelin	FR	9	9	0	22,028	21,960	68	0.3%	OI	2,775	12.6%	2,742	12.5%	0.1%	B, 1, EC
Valeo	FR	10	10	0	19,124	18,484	640	3.5%	OI	1,203	6.3%	1,448	7.8%	-1.5%	B, 1, EC
Lear	US	11	11	0	18,444	17,084	1,360	8.0%	EBIT	1,526	8.3%	1,435	8.4%	-0.1%	A, 1, EC
Faurecia	FR	12	12	0	17,525	16,962	563	3.3%	OI	1,274	7.3%	1,158	6.8%	0.4%	B, 1, EC
Cummins	US	13	13	0	17,074	13,895	3,179	22.9%	EBIT	1,829	10.7%	1,686	12.1%	-1.4%	B, 1, AU
Adient	IE	14	14	0	15,167	13,682	1,485	10.9%	EBIT	-894	-5.9%	891	6.5%	-12.4%	B, 2, EC
Goodyear	US	15	15	0	13,496	12,835	661	5.1%	OI	1,111	8.2%	1,299	10.1%	-1.9%	B, 1, EC
Sumitomo Electric	JР	16	18	2	13,414	11,913	1,502	12.6%	OI	701	5.2%	694	5.8%	-0.6%	B, 2, AU
Yazaki	JР	17	19	2	13,181	11,007	2,173	19.7%	N.A.	-/-	-/-	-/-	-/-	-/-	A, 4, AU
Mahle	DE	18	16	-2	12,600	12,788	-188	-1.5%	N.A.	-/-	-/-	-/-	-/-	-/-	D, 1, EC
Aptiv	GB	19	21	2	12,589	10,754	1,834	17.1%	OI	1,285	10.2%	1,182	11.0%	-0.8%	B, 1, EC
Weichai Power	CN	20	17	-3	12,527	11,928	599	5.0%	OI	1,174	9.4%	1,070	9.0%	0.4%	B, 1, AU
Panasonic	JР	21	23	2	11,238	9,721	1,517	15.6%	OI	437	3.9%	312	3.2%	0.7%	B, 2, AU
Toyota Boshoku	JP	22	22	0	11,165	10,301	863	8.4%	OI	517	4.6%	508	4.9%	-0.3%	B, 2, EC
Schaeffler	DE	23	20	-3	10,856	10,869	-13	-0.1%	EBIT	1,001	9.2%	1,284	11.8%	-2.6%	B, 1, AU
Tenneco	US	24	26	2	10,259	7,741	2,518	32.5%	EBIT	267	2.6%	348	4.5%	-1.9%	B, 1, EC
BorgWarner	US	25	25	0	9,183	8,179	1,003	12.3%	OI	1,038	11.3%	895	10.9%	0.4%	B, 1, EC
Gestamp	ES	26	24	-2	8,548	8,202	346	4.2%	EBIT	527	6.2%	485	5.9%	0.3%	B, 1, EC
ThyssenKrupp Automotive	DE	27	28	1	7,891	7,392	499	6.8%	EBIT	88	1.1%	395	5.3%	-4.2%	B, 2, AU
Yanfeng Automotive Interiors	CN	28	30	2	7,849	7,345	504	6.9%	N.A.	-/-	-/-	-/-	-/-	-/-	C, 1, EC
Hitachi	JР	29	27	-2	7,817	7,465	351	4.7%	EBIT	-33	-0.4%	447	6.0%	-6.4%	B, 2, AU
Calsonic	JР	30	31	1	7,812	7,268	544	7.5%	OI	-/-	-/-	262	3.6%	-/-	D, 2, EC
JTEKT	JP	31	35	4	7,630	6,572	1,058	16.1%	OI	334	4.4%	339	5.2%	-0.8%	D, 1, AU
Autoliv	SE	32	32	0	7,568	6,792	776	11.4%	OI	598	7.9%	718	10.6%	-2.7%	B, 1, EC
GKN	GB	33	29	-4	7,552	7,361	191	2.6%	OI	-/-	-/-	555	7.5%	-/-	D, 1, AU
ВНАР	CN	34	36	2	7,456	6,562	894	13.6%	N.A.	-/-	-/-	-/-	-/-	-/-	A, 1, EC
Plastic Omnium	FR	35	33	-2	7,245	6,769	476	7.0%	OI	610	8.4%	641	9.5%	-1.0%	A, 1, EC
Johnson Controls	US	36	38	2	7,236	6,316	920	14.6%	EBIT	-/-	-/-	1,187	18.8%	-/-	B, 2, AU
TE Connectivity	СН	37	42	5	7,190	6,173	1,016	16.5%	OI	1,302	18.1%	1,138	18.4%	-0.3%	B, 2, AU
Joyson	CN	38	73	35	7,124	3,410	3,714	108.9%	OI	108	1.5%	232	6.8%	-5.3%	A, 1, EC
Flex-N-Gate	US	39	40	1	7,112	6,303	809	12.8%	N.A.	-/-	-/-	-/-	-/-	-/-	D, 1, EC
Dana	US	40	44	4	7,102	6,017	1,084	18.0%	EBIT	505	7.1%	409	6.8%	0.3%	B, 1, EC
Hella KG Hueck	DE	41	43	2	6,837	6,100	736	12.1%	EBIT	553	8.1%	509	8.3%	-0.3%	B, 4, AU
Federal Mogul	US	42	34	-8	6,579	6,573	6	0.1%	OI	-/-	-/-	391	5.9%	-/-	D, 1, EC
Brose	DE	43	39	-4	6,537	6,311	226	3.6%	N.A.	-/-	-/-	-/-	-/-	-/-	E, 1, EC
Toyoda Gosei	JР	44	46	2	6,476	5,766	709	12.3%	OI	-/-	-/-	301	5.2%	-/-	D, 2, AU
Koito Manufacturing	JP	45	37	-8	6,446	6,513	-67	-1.0%	OI	806	12.5%	765	11.8%	0.8%	B, 2, EC
American Axle	US	46	51	5	6,341	5,230	1,110	21.2%	01	93	1.5%	453	8.7%	-7.2%	B, 1, EC
Benteler	AT	47	41	-6	6,304	6,296	8	0.1%	N.A.	-/-	-/-	-/-	-/-	-/-	B, 1, AU
Samvardhana Motherson	IN	48	45	-3	6,197	5,795	402	6.9%	OI	383	6.2%	406	7.0%	-0.8%	B, 1, AU
Sumitomo Rubber Industries	JP	49	47	-2	6,067	5,606	461	8.2%	01	404	6.7%	432	7.7%	-1.0%	B, 1, AU
NSK Group	JP	50	48	-2	5,631	5,356	276	5.1%	01	432	7.7%	515	9.6%	-1.9%	B, 2, AU
1451. Group) PF	30	0	-2	3,031	3,330	2/0	3.170	- 51	+32	1.170	313	5.070	-1.570	D, 2, AU

THE TOP 100 AUTOMOTIVE SUPPLIERS (51-100).

		R	ANK	X	REVENUE IN €										
COMPANY	COUNTRY	2018	2017	Δ	2018	2017	Δ ABSOLUTE	Δ RELATIVE	TYPE	2018 €	2018 %	2017 €	2017 %	Δ	NOTE
Mitsubishi Electric	JP	51	55	4	5,276	4,829	447	9.2%	OI	502	9.5%	600	12.4%	-2.9%	B, 2, AU
Pirelli	IT	52	49	-3	5,195	5,352	-157	-2.9%	EBIT	703	13.5%	674	12.6%	0.9%	A, 1, EC
Harman (Samsung)	US	53	56	3	5,156	4,803	353	7.3%	01	110	2.1%	44	0.9%	1.2%	B, 1, AU
Grupo Antolin	ES	54	53	-1	5,016	5,037	-21	-0.4%	EBIT	161	3.2%	291	5.8%	-2.6%	B, 1, EC
Magneti Marelli	IT	55	52	-3	4,998	5,204	-206	-4.0%	N.A.	-/-	-/-	-/-	-/-	-/-	D, 1, EC
NTN	JP	56	57	1	4,926	4,583	343	7.5%	OI	235	4.8%	261	5.7%	-0.9%	B, 2, AU
Hyundai WIA	KR	57	54	-3	4,795	5,025	-229	-4.6%	OI	84	1.8%	53	1.1%	0.7%	B, 1, AU
Hankook Tires	KR	58	50	-8	4,757	5,314	-557	-10.5%	01	493	10.4%	619	11.6%	-1.3%	B, 1, EC
Eberspächer	DE	59	58	-1	4,610	4,480	130	2.9%	N.A.	-/-	-/-	-/-	-/-	-/-	C, 1, EC
Alps Electric	JP	60	64	4	4,586	3,980	606	15.2%	OI	314	6.9%	301	7.6%	-0.7%	B, 2, AU
Delphi Technologies	US	61	63	2	4,237	4,047	189	4.7%	OI	378	8.9%	372	9.2%	-0.3%	B, 1, EC
Dräxlmaier	DE	62	62	0	4,200	4,100	100	2.4%	N.A.	-/-	-/-	-/-	-/-	-/-	D, 1, EC
Freudenberg	DE	63	61	-2	4,160	4,206	-46	-1.1%	N.A.	-/-	-/-	-/-	-/-	-/-	B, 1, AU
Hanon Systems	KR	64	60	-4	4,157	4,357	-200	-4.6%	OI	304	7.3%	365	8.4%	-1.1%	B, 1, EC
Nemak	MX	65	66	1	4,102	3,740	362	9.7%	OI	354	8.6%	309	8.3%	0.4%	B, 1, EC
Leoni	DE	66	65	-1	4,013	3,875	137	3.5%	N.A.	-/-	-/-	-/-	-/-	-/-	D, 1, AU
Tokai Rika	JР	67	69	2	3,972	3,548	423	11.9%	OI	249	6.3%	215	6.1%	0.2%	B, 2, EC
Mando Corp.	KR	68	59	-9	3,965	4,435	-470	-10.6%	01	138	3.5%	65	1.5%	2.0%	A, 1, EC
IAC	LU	69	67	-2	3,924	3,673	252	6.9%	N.A.	-/-	-/-	-/-	-/-	-/-	D, 1, EC
Meritor	US	70	85	15	3,761	2,964	797	26.9%	01	309	8.2%	197	6.6%	1.6%	B, 2, EC
CATL	CN	71	102	31	3,755	2,563	1.192	46.5%	01	568	15.1%	619	24.2%	-9.0%	A, 1, EC
Linamar	CA	72	68	-4	3,665	3,610	55	1.5%	EBIT	303	8.3%	363	10.0%	-1.8%	C, 1, AU
CITIC Dicastal	CN	73	76	3	3,614	3,334	280	8.4%	OI	-/-	-/-	131	3.9%	-/-	A, 1, AU
Yokohama Rubber	JP	74	74	0	3,593	3,408	185	5.4%	01	302	8.4%	297	8.7%	-0.3%	D, 1, AU
NHK Spring	JP	75	80	5	3,493	3,128	364	11.7%	01	140	4.0%	179	5.7%	-1.7%	B, 2, AU
Mann + Hummel	DE	76	75	-1	3,480	3,386	94	2.8%	N.A.	-/-	-/-	-/-	-/-	-/-	D, 1, AU
TI Automotive	GB	77	71	-6	3,473	3,491	-18	-0.5%	EBIT	374	10.8%	384	11.0%	-0.2%	B, 1, EC
NXP Semiconductors	NL	78	79	1	3,447	3,140	307	9.8%	N.A.	-/-	-/-	-/-	-/-	-/-	B, 1, AU
Webasto	DE	79	70	-9	3,433	3,512	-79	-2.2%	N.A.	-/-	-/-	-/-	-/-	-/-	E, 1, EC
Nexteer Automotive	US	80	78	-2	3,412	3,237	175	5.4%	OI	370	10.8%	357	11.0%	-0.2%	B, 1, EC
Infineon	DE	81	82	1	3,360	3,054	306	10.0%	01	480	14.3%	463	15.2%	-0.9%	B, 1, LC B, 2, AU
Saint-Gobain	FR	82	77	-5	3,342	3,265	77	2.4%	N.A.	-/-	-/-	-/-	-/-	-/-	B, 1, AU
Wabco	US	83	95	12	3,341	2,758	583	21.1%	OI	447	13.4%	363	13.2%	0.2%	B, 1, EC
Eaton	US	84	84	0	3,322	3,012	309	10.3%	01	571	17.2%	493	16.4%	0.8%	B, 1, LC
TS-Tech	JP	85	72	-13	3,283	3,454	-172	-5.0%	01	276	8.4%	330	9.6%	-1.2%	B, 1, EC
Stanley Electric	JP	86	87	1	3,217	2,948	269	9.1%	01	317	9.9%	293	9.9%	-0.1%	B, 1, AU
Futaba Industrial	JP	87	90	3	3,209	2,868	341	11.9%	01	45	1.4%	66	2.3%	-0.9%	B, 1, AU
Sumitomo Riko	JP	88	89	1	3,180	2,871	309	10.8%	01	-/-	-/-	76	2.7%	-/-	D, 2, AU
Cooper Standard	US	89	83	-6	3,165	3,020	145	4.8%	01	101	3.2%	223	7.4%	-4.2%	B, 1, EC
Knorr-Bremse	DE	90	88	-2	3,160	2,891	270	9.3%	EBIT	-/-	-/-	385	13.3%	-/-	B, 1, 20
Renesas	JP	91	81	-10	3,148	3,057	91	3.0%	N.A.	-/-	-/-	-/-	-/-	-/-	B, 1, AU
Asahi Glass		92	91	-10	3,139	2,862	277	9.7%	N.A.	-/-	-/-	-/-	-/-	-/-	
Toyo Tire & Rubber	JP JP	92	91	1	3,139	2,862	288	10.2%	N.A. Ol	335	10.8%	325	-/- 11.5%	-0.8%	B, 1, AU B, 1, AU
Mitsuba Corp.	JP JP	93	105	11	3,081	2,504	578	23.1%	01	127	4.1%	124	4.9%	-0.8%	B, 1, AU B, 2, EC
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CIE-Automotive	ES	95	93	-2	3,030	2,843	187	6.6%	EBIT	399	13.2%	339	11.9%	1.3%	B, 1, EC
LG Electronics	KR	96	100	4	3,001	2,604	397	15.3%	OI N. A	-84	-2.8%	-83	-3.2%	0.4%	B, 1, AU
Hutchinson	FR	97	86	-11	2,991	2,963	28	0.9%	N.A.	-/-	-/- 1E 60/	-/-	-/- 1E 70/	-/- 0.40/	D, 1, AU
Garrett Motion Inc.	US	98	101	3 -7	2,943	2,584	359	13.9%	OI	460	15.6%	406	15.7%	-0.1%	B, 1, EC
Rheinmetall Automotive	DE	99	92		2,930	2,861	69	2.4%	EBIT	262	8.9%	249	8.7%	0.2%	A, 1, EC
Illinois Tool Works	US	100	96	-4	2,911	2,730	181	6.6%	OI	655	22.5%	624	22.8%	-0.3%	A, 1, AU

A = Press release B = Annual or financial report C = Company forecast D = Own forecast E = Website

^{1 =} Calendar year 2 = Conversion from business year to calendar year 3 = Business year 4 = Approximation from business year to calendar year AU = Only automotive EC = Entire company

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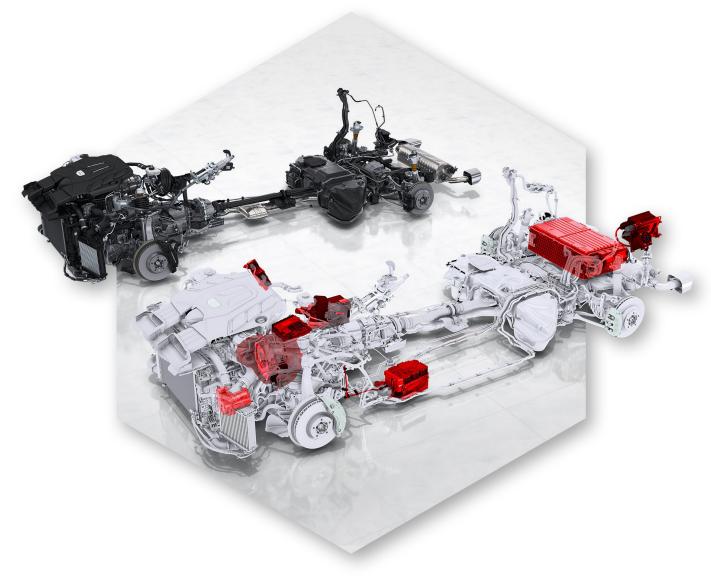
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