

Information Platform User Guide



MarkLines Co., Ltd.

Inquiries: +81 (0)3-4241-3907 / info@marklines.com

A members-only Automotive industry information service that saves companies time and money by providing essential information from around the world about suppliers (including who supplies whom, plant data, and market trends), sales and production statistics, reports on technology and market trends, model plan data including forecasts, and more. All information is available in English, Japanese and Chinese (at the click of the language buttons at the top-right).

The Information Platform can be used by members as a B2B information tool, e.g. for daily information gathering and sharing with your business partners.

Information Menus

◇ Daily News Worldwide [1](#)

Automotive industry news worldwide. Can be searched with keywords, countries and terms.

◇ Market & Tech Reports [2](#)

Topics include international OEMs, regional trends, trade shows held around the world, technology, the environment, safety, and much more. 200 reports are published every year.

◇ Automotive Sales & Production

- Models by Country [3](#)
- Search by EV/Model/Country etc. [4](#)
- Engine Data

Vehicle Sales & Production Data provided with Models by Country, Advanced Search and Engine Data. Data can be downloaded in Excel format and searches performed for multiple countries and automakers.

◇ Model Launch Schedules

- By OEM / Market [5](#)
- Models/Refined search [6](#)

Engine data by country (31 countries), maker, or model (provided annually)

Model launch plans for major international OEMs for the upcoming 5 years. Specific search by selecting "Electric powertrain", "Launch year", and other categories.

◇ Electric/Autonomous [7](#)

- Refined search [8](#)

A database of detailed specs and model release plans for around 680 green vehicles (HV/PHV/EV/FCV) globally that are on the market or currently under development.

◇ Benchmarking/Teardown [9](#)

Vehicle and Electrical component teardown reports are available. We also provide fee-based reports and can help you procure parts.

◇ OEM Plants [10](#)

- Plant Location
- Search (OEM/Region)
- OEM Updates

OEM plant data listed by category including production models, capacity, actual production, and more. The data can be filtered by OEM and country, and plotted on a map. Downloadable in Excel format.

◇ Who Supplies Whom Supply Info

- 300 Parts Supply Chain [11](#)
- Search (Model/Supplier) [12](#)
- Analysis Reports

Supplier information filtered by part and model for around 300 components (Japan, Europe, the U.S., China, India, etc.).

◇ Supplier Database

- 70,000 Database [13](#)
- Top 400 Suppliers [14](#)
- Global Exhibition

Analysis reports for major components such as automatic transmissions, air conditioners, seats and navigation systems.

Database covering information on approximately 70,000 automotive component suppliers around the world. Contains detailed reports on the top 400 suppliers, business trend reports, news, as well as photos and panel information from trade show exhibitions.

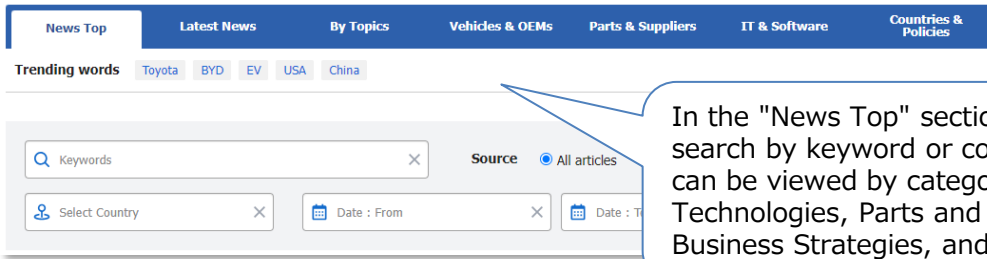
1 Daily News Worldwide

<https://www.marklines.com/en/news>

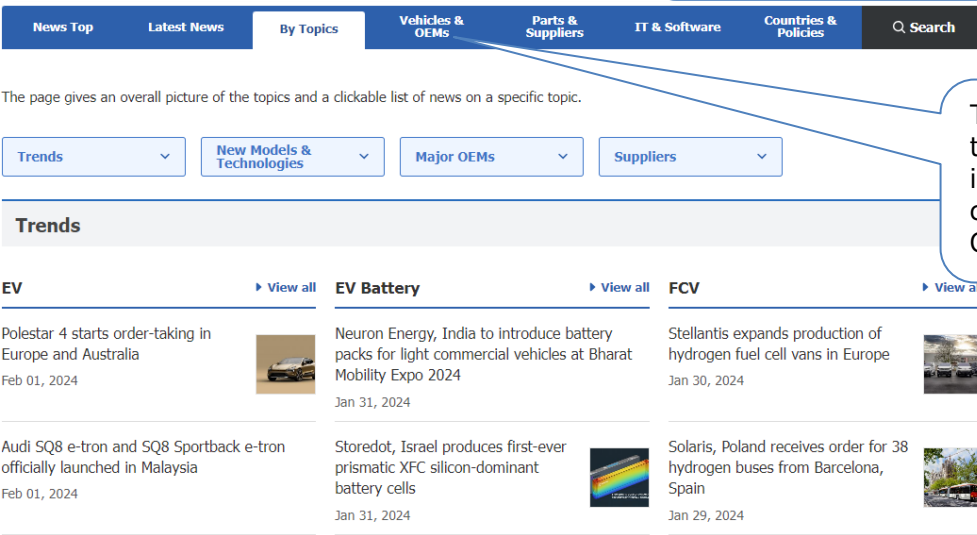
MarkLines provides 30 global news articles every day, over 13,000 per year.

Local news from the major automotive countries (Japan, China, India, Thailand, USA, Mexico, Europe) is delivered quickly. You can catch articles that are not available except in the local language in a timely manner.

Because we publish high quality articles based in partnership with the Nikkan Jidosha Shimbun (Japan Automotive Daily) and various overseas media, you will obtain reliable information.



In the "News Top" section, a search box allows you to search by keyword or country, and the latest topics can be viewed by category: New Models & Technologies, Parts and Suppliers, IT & Software, Business Strategies, and Policies.



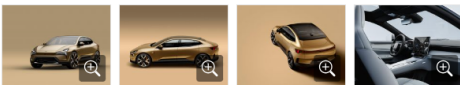
The page gives an overall picture of the topics and a clickable list of news on a specific topic.

The "By Topics" tab allows you to keep up with automotive industry trends and easily check the latest trends of OEMs and Suppliers.

Polestar 4 starts order-taking in Europe and Australia

Feb 01, 2024

[Polestar](#) [Volvo Cars](#) [EV](#) [Vehicles & OEMs](#) [New products & technologies](#)



On January 31, Polestar announced that the all-new **Polestar 4** started officially order-taking in Europe and Australia.

In the design, Polestar eliminated the rear window and extended the full-length glass roof. Instead of a regular rear-view mirror, they put in a high-quality screen that displays a live feed from a camera on the roof.

The vehicle belongs to segment D. Its wheelbase is 2,999 mm with a total length of 4,840 mm, width of 2,139 mm and height of 1,534 mm.

Polestar 4 is the fastest production vehicle the brand has developed to date, allowing the car to go from 0 to 100 km/h in 3.8 seconds. Its motors are of a permanent magnet, synchronous design and available in dual and single motor variants.

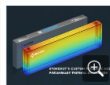
Point

The same news is published in three languages, English, Japanese, and Chinese, enabling you to switch languages to share information easily with overseas sites.

Storedot, Israel produces first-ever prismatic XFC silicon-dominant battery cells

Jan 31, 2024

[EV battery](#) [Parts & suppliers](#) [New products & technologies](#)



On January 31, **Storedot** produced its first-ever prismatic XFC silicon-dominant battery cells. Prismatic cells, which are rectangular and stacked in layers, now represent the form factor of choice for a growing number of electric vehicle manufacturers.

These types of cells offer added mechanical protection and performance advantages, while the flat surface simplifies the integration into electric vehicles with better thermal management and safety considerations - thus reducing pack assembly cost and complexity.

The solution is based on careful design of the stack thickness, formation currents, and pressure regimes as well as managing the associated swelling of silicon-dominant anode technology and high currents in a prismatic hard case enclosure. StoreDot will continue to optimize the design to achieve up to 170Ah of cell capacity and over 700 Wh/L volumetric energy density.

New Frequently searched keywords and topics

EV, Tesla, Emerging EV Makers, Battery, eAxle, Inverter, Electrification/Electric, Carbon Neutral, Semiconductor/Chip Shortage, Camera, LiDAR, ADAS/Autonomous, China, ASEAN, India, Motorcycle, Commercial Vehicle, Teardown, Exhibitions, LMC Automotive Forecast, Analysis of Major Systems, Supplier Rankings

- Recent Reports
- CASE / Exhibitions / Teardowns
- OEMs
- Parts Suppliers
- Regional Reports



NEW Sales Forecast
SAIC: Investing CNY 300B in smart EVs, transforming into a user-oriented high-tech company

Aiming to hit carbon emissions peak by 2025 and sell 2.7 million NEVs



NEW Sales Forecast
LMC Automotive European Passenger Car Sales Update (December 2021)



NEW Sales Forecast
Decarbonization - Global agreement at COP26 and its deployment to regions/OEMs

Electric Powertrain Market Forecast in Major Countries



NEW
E-Axle (Electric Powertrain) Comparison by Teardown Analysis

From a report on components benchmarking activities by the Next Generation Vehicle Center Hamamatsu



NEW
Analysis Report: Air Conditioning System (Japanese Market)

Trends among major suppliers

Links to narrow down related reports by frequently searched keywords and topics.

More than 250 Reports per year are published. We select topics of high interest such as vehicle teardown and autonomous driving.

Related reports can be viewed by selecting Category.

- Recent Reports
 - CASE / Exhibitions / Teardowns
 - OEMs
 - Parts Suppliers
 - Regional Reports
- Exhibitions/Auto Shows
 - Teardown Reports
 - Autonomous driving/Connected cars
 - EVs/Green Vehicles
 - Parts/Materials
 - Production and processing technology
 - VSI AV technology
 - TTDC patent trends
 - ATZ automotive technology

Point

All graphics, photos and text can be freely used for your business needs such as making internal reports. Also, data can be easily shared internally via email in PDF format, etc.

Forecast & Trend Reports and Global Exhibition Reports are also provided.

U.S. battery electric vehicle strategies for GM, Ford and Stellantis

Detroit Three rapidly accelerating electric vehicle development in 2021 with large investments

2021/12/02

- Summary
- Early electric vehicles in U.S. market starting to expand across variety of segments
- GM battery electric vehicle strategy development
- Ford battery electric vehicle strategy development
- Stellantis battery electric vehicle strategy development

Summary

As societal awareness of climate change has grown and national governments have implemented regulations to reduce pollution, OEMs have announced commitments towards increasing sustainability. These commitments include significant investments in vehicle electrification as well as the integration of fully electric vehicles into their vehicle lineups. OEMs have recently accelerated their electrification strategies due to both increased governmental pressure and potential competitive advantages from improved marketability. All of the Detroit Three have formed joint ventures with major battery manufacturers within the past two years in preparation of creating multiple domestic battery plants.

In January 2021, General Motors Co. announced its goal of eliminating all tailpipe emissions from light-duty vehicles by 2035. GM had previously committed in November 2020 to having 40% of its U.S. lineup as fully electric models by 2025. Ford Motor Co. announced in February 2021 that it would invest USD 22 billion through 2025 for battery electric vehicles, focusing on the commercial van and pickup truck segments. This represents an increase in investment compared to the total announced in June 2020 of USD 11.5 billion through 2022. Stellantis N.V. presented its updated electrification strategy during its EV Day event in July 2021, announcing a EUR 30 billion investment through 2025 and a goal of over 40% of U.S. sales as low-emission vehicles by 2030.

This report highlights the electrification strategies of GM, Ford and Stellantis within the U.S., focusing on their efforts with respect to battery electric vehicles. It includes information on recent investments made by the OEMs and previews their current and upcoming battery electric models.



Chart showing joint ventures and future battery plants between Detroit Three and major battery companies

GM Historical and upcoming battery electric model lineup

As of October 2021, GM has two battery electric models in its lineup with the Chevrolet Bolt subcompact car and the Bolt EUV subcompact crossover. The Chevrolet Bolt originally launched in 2016 at a base MSRP of USD 37,495, which was lowered to USD 31,995 in the summer of 2021. The Bolt EUV launched in the summer of 2021 at a starting MSRP of USD 33,995. Prior to the Chevrolet Bolt, GM's only other recent battery electric model for the U.S. market was the Chevrolet Spark EV subcompact car. Developed as a compliance car, the Spark EV launched in June 2013 starting at USD 27,495 and was discontinued in 2016, costing USD 25,995 before production halted.

GM's next battery electric model will be the GMC Hummer EV pickup truck, which is set to be launched at the end of 2021. Initial models have a starting price of USD 112,995, though later trims will reduce the base price to USD 79,995 by Spring 2024. The GMC Hummer EV will also be launched as an SUV for U.S. markets in early 2023, with an initial price of USD 105,995. Less expensive trims will be available at USD 79,995 in Spring 2024. Cadillac is expected to launch the Lyriq premium mid-size crossover in the first quarter of 2022 starting at USD 59,990. The new Cadillac Celestiq premium car will launch as the brand's flagship sedan before 2025. Chevrolet will debut a battery electric version of the Silverado 1500 full-size pickup truck at CES 2022. The electric Silverado is expected to launch in the winter of 2023 or early 2024. Furthermore, the Cruise Origin autonomous electric vehicle will be assembled beginning in 2023.



Chevrolet Bolt EUV
Source: Chevrolet



GMC Hummer EV pickup truck
Source: GMC

Most of the stator windings use round magnet wire (enameled wire with a round cross section), and only the relatively new Jaguar I-PACE uses hairpin windings with square wire, which has been seen in many Japanese hybrid cars in recent years.

The stator winding of the Tesla Model 5 on the right side of the photo is made by the conventional method of winding round wire onto a reel and inserting it into the stator core using an inserter, and after forming, the wire is lacod and varnished. Other companies that use inserter-type distributed winding with round wire seem to do the same.

The winding of the Jaguar I-PACE on the left side of the photo is made by inserting a flat wire formed into a hairpin shape (U-shape) from the front side of the photo, forming it on the opposite side, and then welding it to form a coil. The efficiency is improved by increasing the conductor cross-sectional area because the conductor filling ratio (occupancy ratio) in the slot of the stator can be increased.

Although it cannot be confirmed from the angle of this photo, the height of the coil (the part of the coil protruding from the stator) is also smaller in the hairpin winding using flat square wire compared to the inserter type distributed winding with round wire.

The housings (motor cases) are liquid-cooled and have water jackets except for the Tesla Model 3 which is internally oil-cooled.

The water jacket must have a structure that seals the coolant. There are two types of water jackets: (1) a double pipe structure that allows coolant to pass between the inner case and outer case, which is in close contact with the stator core, and (2) a method that allows coolant to pass through the water jacket, which has channels formed by casting.

In the photo of the BMW i3 and Audi e-tron, the separate inner and outer cases are combined and cast into a cast.

According to LMC Automotive's sales forecast (Q3 2021), SAIC Group's light vehicle sales in 2021 are expected to increase by 0.36% year-over-year (y/y) to 2.63 million units, of which overseas sales are expected to increase by 68.7% to 289k units. In the next three years, the sales are expected to increase year by year, reaching 2.98 million units in 2024.

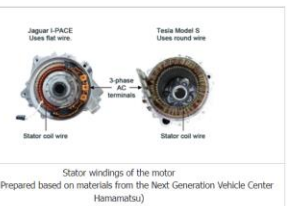
LMC Automotive comments regarding SAIC Group's Situation, Trends and Outlook as follows:

LMC Automotive comments regarding SAIC Group's Situation, Trends and Outlook as follows:
Trends: Sales for the Roewe brand rose by 21% YOY in October, driven by the RX5 and S5, while the MG brand posted robust growth of 67% YOY. The upward momentum in the overall EV market has boosted SAIC's NEV sales. But with a major share of China's ridehailing sector, the group's brand image has been tarnished, which has impacted its standing with private consumers. SAIC has also suffered from the chip shortage for several months this year, although the supply issue is now improving for the overall group.

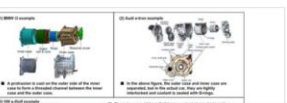
Wuling is facing competition from the low-end MPV sector. As well as weak sales of the Baotian 730, demand for the Baotian S10 and Baotian 310 has also declined. To shore up its brand image and market presence, the OEM has launched three new models, the RS-5, RC-6 and RS-3, under a new logo, but demand so far has been weak. In contrast, the group's product plans in the Mini EV segment are proving successful, with the Hongguang Mini EV leading the group's sales since it first arrived in the market.

Outlook: In a bid to strengthen its competitiveness in the future, SAIC has launched the high-end IM brand to target China's NEV market. The group's new-generation Car and SUV products will benefit from the company's latest design language. These new models should help the group to expand its share of the PV market in the years ahead.

Wuling has benefited from its strategy of launching new products that are competitively priced, while also being very well designed, such as the Baotian 310 and Baotian S10. More recently, however, its approach has been challenged by competitors rushing to bring products to the market at similar price points.



Stator windings of the motor
(Source: Prepared based on materials from the Next Generation Vehicle Center Hamamatsu.)



LMC Automotive, Q3 2021



SAIC Group's light vehicle sales forecast (LMC Automotive)
 (1,000 units)
 Legend: China, Other
 Y-axis: 0, 500, 1,000, 1,500, 2,000, 2,500, 3,000, 3,500
 X-axis: 2018, 2019, 2020, 2021, 2022, 2023, 2024

3 Automotive Sales & Production

▼ Models by Country

(Sales)

https://www.marklines.com/en/vehicle_sales/

(Production)

https://www.marklines.com/en/vehicle_production/

Passenger Cars/Light Trucks (62 Countries and Regions) Statistics Alerts

North/South America : USA, Canada, Mexico, Brazil, Argentina, Colombia, Chile, Uruguay
 Western Europe : Germany, UK, France, Italy, Display all countries
 Asia/Oceania : Japan, China, India, Thailand, Display all countries
 Central/ Eastern Europe : Russia, Turkey, Poland, Czech Rep., Display all countries
 Middle East/Africa : South Africa, Egypt, Israel, UAE, Saudi Arabia, Kuwait, Oman

North/South America

Country/Region	Monthly Statistics			Annual Statistics		Last update date
	Bulletin	Passenger Cars/Light Trucks	Medium/Heavy Trucks & Buses	Passenger Cars/Light Trucks	Medium/Heavy Trucks & Buses	
USA	May	May (by model)	May (by make)	2021 (by model)	2021 (by make)	2022/6/15
	May (Days supply by model)					2022/6/8
	May (Import units)					2022/6/9
Canada	May	May (by model)	May (by make)	2021 (by model)	2021 (by make)	2022/6/15
Mexico	May	May (by model)	-	2021 (by model)	-	2022/6/7
Brazil	May	May (by model)	May (by make)	2021 (by model)	2021 (by make)	2022/6/9
Argentina	May	May (by model)	May (by model)	2021 (by model)	2021 (by model)	2022/6/16
Colombia	-	Apr. (by model)	-	2021 (by model)	-	2022/5/23
Chile	-	May (by make)	May (by make)	2021 (by make)	2021 (by make)	2022/6/3
Uruguay	-	May (by make)	May (by make)	2021 (by make)	2021 (by make)	2022/6/16

For customers who need statistics updates every month, we have a Statistics Alerts system. To use this feature, press the Statistics Alerts button, check the country(s), and Save settings.

※Also can set with "Email Settings" button at the top-right of screen.

Click "by model" Monthly or Annual Statistics for your required countries.

Automotive Monthly Sales by Maker/Brand in USA Statistics Alerts

Automotive monthly sales in Display Comparison with previous year

Monthly figures by model in USA Monthly figures by maker in USA

Download collectively monthly figures of all countries by maker/brand or model(Download takes time)

Download in Excel Format

2021 (units)

Type	Group	Maker/Brand	Jan.	Feb.	Mar.	Apr.	May	Jun.	First Half (Jan.-Jun.)	Jul.	Aug.	Sep.	Oct.	Nov.
Cars	VW Group	VW	8,922	9,539	14,102	13,159	12,422	6,915	65,059	6,194	5,484	5,717	6,114	7,125
		Audi	4,752	4,577	6,555	6,871	7,207	6,548	36,610	4,354	2,472	2,031	2,176	2,031
		Porsche (2013-)	1,892	1,286	2,421	1,843	2,008	2,330	11,780	1,658	1,395	1,589	1,289	1,454
		Bentley	182	186	291	238	289	304	1,490	392	313	287	319	239
		Lamborghini	175	162	228	199	238	253	1,255	242	186	201	205	161
		VW Group Total	15,923	15,750	23,597	22,310	22,264	16,350	116,194	12,840	9,850	9,825	10,103	11,010
	Toyota Group	Toyota	45,974	53,453	73,919	74,427	80,992	80,908	389,673	67,270	54,166	39,734	29,333	30,669
		Lexus	5,075	5,539	8,226	6,695	8,647	7,602	41,784	8,422	7,212	5,275	4,296	4,009
		Toyota Group Total	51,049	58,992	82,145	81,122	89,639	88,510	431,457	75,692	61,378	45,009	33,629	34,678
	Renault-Nissan Alliance	Nissan	25,518	27,993	45,948	35,646	36,444	27,387	198,936	25,832	20,657	14,343	16,983	18,725
		Infiniti	1,444	1,296	2,248	1,594	1,752	1,674	10,008	1,399	1,057	1,122	1,043	906
		Renault-Nissan Alliance Total	26,962	29,289	48,196	37,240	38,196	29,061	208,944	27,231	21,714	15,465	18,026	19,631
Stellantis	Fiat (2021-)	148	167	235	177	217	94	1,038	37	32	20	53	4	
	Dodge (2021-)	8,631	12,833	13,375	11,980	13,760	11,676	72,255	11,118	11,589	10,685	8,231	8,799	

The statistics by maker will be displayed.

⇒Click the Maker/Brand.

Automotive Monthly Sales by Chevrolet in USA by Model Statistics Alerts

Automotive monthly sales in Display Comparison with previous year

Download in Excel Format

2021 (units)

Group	Maker/Brand	Type	Segment	Model	PowerTrain	Jan.	Feb.	Mar.	Apr.	May	Jun.	First Half (Jan.-Jun.)	Jul.	Aug.	Sep.	
GM Group	Chevrolet	Cars	A	Spark	ICE	3,317	4,080	4,108	3,583	2,446	1,725	19,259	1,645	948		
				A Total		3,317	4,080	4,108	3,583	2,446	1,725	19,259	1,645	948		
				Chevrolet Bolt	EV	1,698	2,123	5,204	4,244	4,243	2,370	19,882	1,632	508		
			B	Sonic	ICE	371	319	375	196	159	92	1,512	25	18		
				B Total		2,069	2,442	5,579	4,440	4,402	2,402	21,394	1,657	526		
				Chevrolet Cruze	ICE	3	4	6	6	15	23	57	0	0		
			C	Volt	PHV	-	2	3	0	2	9	16	0	0		
				C Total		3	6	9	6	17	32	73	0	0		
				D	Camaro	ICE	2,099	1,925	3,065	1,673	471	648	9,881	1,031	1,642	
			Impala		ICE	186	118	158	90	68	94	714	13	10		
			Malibu		HV	0	0	2	0	0	1	3	0	0		
			Malibu		ICE	15,341	6,375	5,269	3,374	1,011	513	31,883	65	69		
			Malibu Total			15,341	6,375	5,271	3,374	1,011	514	31,886	65	69		
			D Total		17,626	8,418	8,494	5,137	1,550	1,256	42,481	1,109	1,721			
			F	Corvette	ICE	2,545	1,566	2,500	3,301	2,854	1,816	14,582	3,406	3,482		
F Total		2,545		1,566	2,500	3,301	2,854	1,816	14,582	3,406	3,482					
Cars Total						25,560	16,512	20,690	16,467	11,269	7,291	97,789	7,817	6,677		

The statistics by model will be displayed.

※Information of "Powertrain" has been added to sales figures.

※Sources may vary by country. For details, please double check "Sources and references" URL:

"Sources and references"

https://www.marklines.com/en/vehicle_sales/search_note

https://www.marklines.com/en/vehicle_production/search_note

4 Automotive Sales & Production

▼ Search by EV / Model / Country etc.

(Sales)

https://www.marklines.com/en/vehicle_sales/search

(Production)

https://www.marklines.com/en/vehicle_production/search

Search By Model/EV/etc.

<NEW> Information on mild hybrids has been added to sales figures for January 2021 onwards (current as of October 28, 2021) for the following countries:

Germany, France, Netherlands — Clicking on the links, you'll get the search results.

EV/HV/PHV/FCV vehicle data search method

Statistics Alerts

Select data organization type

- By Country: Figures are organized by maker/brand and model for selected countries
- By Maker/Brand: Figures are organized by selected group and maker/brand
- By Chinese Maker/Brand: Figures are organized by selected Chinese group and maker/brand
- By Model: Figures are organized by selected models

Step2. Select Countries

All Countries

North America/South America

- USA
- Argentina
- Venezuela
- Canada
- Chile
- Colombia
- Mexico
- Puerto Rico
- Uruguay

Western Europe

- Germany
- Portugal
- Netherlands
- Sweden
- Greece
- France
- UK
- Austria
- Norway
- Spain
- Ireland
- Switzerland
- Finland
- Italy
- Belgium
- Luxembourg
- Denmark

Central & Eastern Europe

- Russia
- Hungary
- Bulgaria
- Belarus
- Poland
- Romania
- Kazakhstan
- Estonia
- Czech Republic
- Croatia
- Ukraine
- Turkey
- Slovakia
- Slovenia
- Uzbekistan

Using the Advanced Search feature, the database can be filtered by Country, Maker and Model.

- ① Select 「By Country」
...You can select multiple countries.
- ② Select 「By Maker/Brand」
...Optimize data for global volumes, by multiple OEM, or multiple countries
Select 「By Chinese Maker/Brand」
...Optimize data by specific Chinese group and maker/brand
- ③ Select 「By Model」
...Excellent for comparing actual global sales and competitive models

Step3. Select time period and detail level

View annual or monthly data

- Annual
- Monthly
- Comparison with previous year

Select time period

from 2021 / 1 to 2021 / 12

If the data collection period is more than 12 years for annual data or more than 12 months for monthly data (maximum 36 months), the search results are output as Excel data.

Select detail level

- Country
- Country > Maker/Brand
- Country > Maker/Brand > Model (only countries that data exists for are displayed)

Please note: Large data queries can slow down performance. Try narrowing your search parameters to improve results.

Filter Search (Segment, E-mobility)

Search by Segment

- A
- E
- SUV-C
- Pickup Truck
- E-mobility
- Only EV/HV/PHV/FCV
- B
- F
- SUV-D
- Unclassified
- C
- SUV-A
- SUV-E
- D
- SUV-B
- MPV

Search

For Select detail level, if you check the 「Country > Maker/Brand > Model」 toggle, additional search filters will be displayed.

Point

You can filter by Segment and E-mobility (EV/HV/PHV/FCV).

Click Search

Automotive Monthly Sales by Country > Maker/Brand > Model

Download in Excel Format

Jan, 2021 - Dec, 2021

Country	Group	Maker/Brand	Type	Segment	Model	Power/Train	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.
USA	VW Group	Carr	C	C	Beetle	SCE	0	-9	0	0	2	-2	0	-1
					Golf	EV	3	4	15	2	7	2	0	0
					Golf	SCE	1,234	1,333	1,666	1,626	1,493	607	313	138
					Golf Total	SCE	1,237	1,337	1,681	1,628	1,495	609	313	138
					Jetta	SCE	6,284	6,620	8,800	8,880	7,756	3,659	3,021	3,010
					C Total		7,521	7,928	10,508	10,508	9,208	4,266	3,834	3,137
					Arteon	SCE	308	312	479	522	597	563	766	729
					Passat (Standard)	SCE	1,113	1,296	2,123	2,129	2,617	2,086	1,594	1,618
					Passat CC	N/A	0	0	0	0	0	0	0	0
					D Total		8,402	8,623	12,002	12,651	12,646	10,260	7,960	7,947
Cars Total		8,402	8,623	12,002	12,651	12,642	6,915	6,194	5,984					

The data will be displayed according to the selected conditions.
※You can change the language to Japanese and Chinese at the right-top of the screen at any time.

Point

You can download the data in Excel Format so that it is easy to make a graph.

If you download this vehicle statistics data as an Excel file, you will find the OEM Plants' names in the far right column which is useful for statistics By Plant.

5 Model Launch Schedules

▼ By OEM / Market / Model

<https://www.marklines.com/en/modelchange/>

Model Launch Schedules By OEM/Market/Model

New model schedule representing 90% of global vehicle production (excluding commercial vehicles).
To search by model name, electric powertrain, year of release, body type, etc., please refer to [the Models/Refined search](#).

Latest Updates ▼ Model list by major OEM ▼ European SOP ▼

Sales launch forecast by market (up to 2028)

OEM	Markets / Brands									
	USA	Europe	Thailand	China	Mexico	Japan	Indonesia	India	Korea	
GM	Cadillac / Buick / Chevrolet / GMC / Cruise / BrightDrop			Cadillac / Buick / Chevrolet / Baojun / Wuling	Cadillac / Chevrolet / GMC					
Ford	Ford / Lincoln	Ford	Ford	Ford / Lincoln	Ford / Lincoln					
Tesla	Tesla	Tesla		Tesla	Tesla					
Rivian	Rivian									
Lucid	Lucid									
VW Group	VW / Audi / Scout	VW / Audi / SEAT / Skoda		VW / Audi / SEAT / Skoda / JETTA	VW / Audi					
Mercedes-Benz Group	Mercedes-Benz / Maybach / AMG	Mercedes-Benz / Maybach / AMG / smart / DENZA		Mercedes-Benz / Mercedes-AMG / smart / DENZA						
BMW	BMW									
Renault Group										
Stellantis	Chrysler / Jeep / Ram / Fiat / Alfa Romeo									
Toyota	Toyota									
Nissan	Nissan									
Honda	Honda / Acura									
Suzuki										

History of Model Changes from 1990 and Model Change Forecasts until 2028 available for major markets of GM, Ford, FCA, VW, PSA, Toyota, Nissan, and Hyundai/Kia. For example, this would be useful in creating a sales strategy with data that supports customer info.

Click By OEM – Market

Select the Model

You can follow the history of the change of Platform with ♦ (mark of Full Redesign) in graphic form. You can check the sharing or changing term of platforms and the new models as well.

▼ European SOP by OEM / Model

Press the **European SOP ▼** button

European SOP (Start of production)

(Source: INOVEV, a French information service company)

Jaguar Land Rover Porsche Suzuki Volvo

We provide Model Launch Schedules of 8 automakers in Europe in cooperation with INOVEV, a French information services company.

Click the Maker, then model

♦ Full Redesign or New Launch
▲ Facelift
The data includes almost all models assembled in Europe.

Calendar Year	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28
Freelander																	
Evoque																	
Discovery Sport																	
Velar																	
Defender																	
Discovery																	
Range Rover																	
Range Rover Sport																	

6 Models/Refined search <https://www.marklines.com/en/modelchange/search>

- A model search can be performed using either the "Models search" or "Refined search" function.
- I. For the "Models search" function, the name of the model can be entered into the Model search box.
 - II. For "Refined search", you can perform a category specific search by selecting "Electric powertrain", "Launch year", "OEM/Brand" and other categories.

▼ I. Models search

Models/Refined search

Model: prius

Electric powertrain

Platform

Launch year

Body type

Segment

1

2

3

3

Excluding discontinued models

Display launch schedule info.

3

3

1. Enter model name and press "Enter" or click the "Add to search criteria" button on the right. After entering the model name, relevant models are displayed and can be selected from the search box.

2. The entered model will appear in the search results below.

3. Selecting "Display launch schedule info." will display info relating to a model, its chart and accompanying notes. (It is possible to remove a model so that it does not display in the launch schedule table by clicking the check box.)

▼ II. Refined search

Model: model name, full-text search

Electric powertrain

Platform

Launch year

Body type

Segment

Country/Region

OEM/Brand

1

2

3

3

Excluding discontinued models

Display launch schedule info.

3

3

1. Clicking the categories below (multiple categories can be selected) will allow you to refine your search further on the right hand side.

2. After specifying the criteria, click the search button to display relevant models.

3. Selecting "Display launch schedule info." will display info relating to a model, its chart and accompanying notes.

Point

Search results can be "saved as image" and pasted into Excel, etc., or can be printed out by switching to the "print" screen.

7 Electric / Autonomous

▼ Electrified Vehicles by Model

https://www.marklines.com/en/green_vehicles/case_top

Electric / Autonomous

Latest Updates:

M-Benz EQE | smart #1 | Nissan Juke HEV | Lexus RX450h+/RX350h/500h | Geely Emgrand L/Xingyue L PHEV | Honda Step WGN HEV

The target of publication is to update the data for every full model change and minor model change for the 688 major HEV (Hybrid electric vehicle), PHEV (Plug-in hybrid electric vehicle), EV (Battery electric vehicle), and FCEV (Fuel cell electric vehicle) models.

Autonomous driving technology is currently included in the 602 major models on sale. The criteria of SAE autonomous driving levels are shown below.

Level 0: The driver controls everything.

Level 1: The system assists with either acceleration/deceleration or steering operations.

Level 2: The system assists with both acceleration/deceleration and steering operations.

Level 3: Under specific circumstances and when parking, the system automatically controls acceleration/deceleration and steering operations.

Main posting items

Electric: Drive motor (type, number, output, torque), secondary battery (type, capacity)

Autonomous: Collision avoidance / damage mitigation, visibility / blind spot assistance, acceleration/deceleration control, steering control, parking assist and connected technology (devices, services)

* The autonomous driving level is N/A for models in the development stages, some commercial vehicles and models that have been discontinued.

All OEMs	Model name	Status	Launch	Electric	Autonomi	Note
All North American OEMs	Model name	Status	Launch	EV	Autonomous	Note
USA GM	GMC Hummer	Launched	2021	EV	N/A	A full-size pickup/SUV
USA GM	Buick Velite 7	Launched	2020	EV	Level 2	A compact SUV
USA GM	Chevrolet Malibu	Launched	2020	EV	Level 2	A compact crossover
USA GM	Buick Velite 6 EV	Launched	2019	EV	Level 2	A compact hatchback
USA GM	Chevrolet Bolt EV	Launched	2016	EV	Level 2	A subcompact hatchback
USA GM	Cadillac Lyriq	Under Development	2022	EV	N/A	A mid-size SUV
USA Ford	E-Transit	Launched	2021	EV	N/A	A full-size van
USA Ford	Mustang Mach-E	Launched	2020	EV	Level 2	A mid-size SUV
USA Ford	Territory EV	Launched	2019	EV	Level 1	A mid-size SUV
USA Ford	F-150 Lightning	Under Development	2022	EV	Level 2	A full-size pickup
USA Tesla	Model Y	Launched	2020	EV	Level 2	A compact SUV
USA Tesla	Model 3	Launched	2017	EV	Level 2	A compact sedan
USA Tesla	Model X	Launched	2015	EV	Level 2	A full-size SUV

We provide plans and detailed information by model for HVs, PHVs, EVs, FCVs. You can select by "European, North American, Chinese, and Japanese OEMs", "HV · EV · PHV · FCV", "Launched, Under Development".

- ① "OEM"...Select the Region (German, French, European, North American, Japan, etc.)
- ② "Status"... Launched, Under Development
- ③ "Electric"... HV · EV · PHV · FCV
- ④ "Autonomous"... Level 0-3



List of models matching search conditions is displayed

⇒If you click the Model name or the photo, you will see the model-specific information.

Point

For Chinese OEMs, you can display info on models launched and under development. On the detail page, you can see the specific information for the Power/Drive system, Fuel/Electric Efficiency, Range or Autonomous Driving Level.

Mustang Mach-E

- OEM**: Ford
- Market(s)**: North America, Europe, China
- Launch Date**: USA: December 2020; China: April 2021
- Production Facility**: Cuautitlan plant in Mexico; Changan Ford; Chongqing plant

Major Features

- Size**: Length 4,714/4,739/4,730 (185.6/186.6/186.2) X Width 1,862/1,861/1,868 (74.1/74.0 X weight 1,624/1,621 (94.0/93.8) mm(n), Wheelbase 2,985/2,984mm (117.5in)
- Weight**: -
- Chassis Style**: A mid-size crossover SUV
- Transmission**: -
- Power/Drive System**: EV, RWD/4WD; Permanent magnet synchronous motor (Max output: 158kW/214hp/290hp, 203kW/278hp, 224kW/305hp/294hp, 224kW/305hp, 258kW/349hp/375ps, 258kW/349hp/487ps, Peak torque: 430Nm/317lb-ft, 580Nm/428lb-ft, 730Nm, 813Nm/600lb-ft, 850Nm/634lb-ft); LG Chem Lithium ion battery (Capacity SR: 70kWh, 75.7kWh, ER: 91kWh, 98.7kWh)
- Fuel/Electric Efficiency, Range**: Europe Combined (WLTP mode): 17.2kWh/100km, 16.5kWh/100km, 19.5kWh/100km, 18.7kWh/100km, 20.0kWh/100km; USA Crossing range (EPA mode): 370.1km (230miles), 339.6km (211miles), 403km (250miles), 434.5km (270miles); Europe Crossing range (WLTP mode): 440km (273.4miles), 610km (379.0miles), 400km (248.5miles), 540km (335.5miles), 500km (310.7miles)

Items	AS	Front camera (All standard 1); Rear-View Camera (All standard 1)
Sensor	Sonar	-
	Millimeter wave radar	-
	Laser sensor	-
	LiDAR (Laser scanner)	-
	Monocular camera	-
	Stereo camera	-
Collision avoidance/damage reduction	Collision warning	AS Pre-Collision Assist with Automatic Emergency Braking (AEB)
	Collision avoidance	AS Evasive Steering Assist
	Automatic braking	AS Pre-Collision Assist with Automatic Emergency Braking (AEB)
	False start prevention	-
Safety	Steering control	AS Lane-Departure Warning (LDW); Lane-Keeping System (LKS)
		AS Lane-Keeping Assistance (LKA)
	Overhead 360-degree view monitor	PS 360-Degree Camera
	Rear side blind spot warning	AS Blind Spot Information System (BLIS) with Cross-Traffic Alert
	Reverse collision warning/braking	-
Visibility/ blind spot assistance	Warning/braking against vehicles crossing ahead	-
	Adaptive high beam system	-
	Automotive night vision	-
	Traffic sign recognition	AS Speed Sign Recognition
Other system	Driver attentiveness monitor/assistance	-
	Tire air pressure monitoring system	AS Individual Tire Pressure Monitoring System (TPMS)
Acc/Dec control	Adaptive cruise control	AS Intelligent Adaptive Cruise Control with Stop-and-Go
	Lane change assistance	-
Convenience	Steering control	AS Automatic lane-changing/overtaking
	Parking assistance	PS Active Park Assist 2.0
Driving automation level		Level 2

8 Electric / Autonomous

▼ Refined search

https://www.marklines.com/en/green_vehicles/search_top

In the "Refined search," you can narrow down models by specification information. You can select from "EV Technology," "Automatic Driving Technology," "Body Type/Segment," and OEM/Group.

EV Technology

Battery type Lithium-ion battery Lithium-iron phosphate battery Lithium-ion polymer battery Ni-MH battery

Battery capacity kWh
 - 40 kWh 40 kWh - 80 kWh 80 kWh - 120 kWh 120 kWh - 160 kWh 160 kWh -

Battery voltage **New** V
 - 100 V 100 V - 300 V 300 V - 500 V 500 V - 700 V 700 V -

Autonomous driving

Autonomous driving level Level 0 Level 1 Level 2 Level 3

Safety

Sensor Sonar Millimeter wave radar Laser sensor LIDAR (Laser scanner) Monocular camera
 Stereo camera

Collision avoidance / damage reduction Collision warning Collision avoidance Automatic braking False start prevention

Body type / Segment

Body type SUV Sedan Pickup truck Hatchback Coupe
 Wagon Tall wagon Crossover Minivan/MPV Van

Segment A (Basic) B (Small) C (Lower Medium) D (Upper Medium) E (Large)
 F (Luxury)

OEM / Groups

GM GM SAIC-GM-Wuling

Ford Ford

Tesla Tesla

Other U.S. OEMs Karma Automotive Fisker Lucid Motors

(1) "EV Technology"

... Search by battery type, capacity, and voltage

(2) "Autonomous driving"

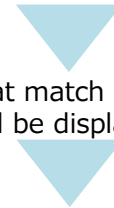
... Search by autonomous driving level, sensor, and collision avoidance.

(3) "Body type / Segment"

... Search by body type / segment

(4) "OEM/Group"

... Search by each OEMs



Models that match your criteria will be displayed.

Click on the model name link or thumbnail to view spec information for each model.

Electric / Autonomous - Search Results

[Download in Excel Format](#)

Battery capacity : **80 kWh - 120 kWh** / OEMs : **GM**

Results: 3

	Body type	Segment	Release date	Powertrain	No. of drive motors (max)	Motor
GM Cadillac Celestiq						
	Sedan	E (Large)	2024 Under Development	EV	2	- Motors (Max output: 600hp, Peak torque: 868Nm/640lb-ft)





Point

You can also download the results in Excel

Country	OEM	Model	Body type	Segment	Launch year	Status	Powertrain	No. of drive	Motor	Battery type
USA	GM	Buick Electra E5	SUV	D (Upper Medium)	2023	Launched	EV	2	Front: Permanent magnet syn	Lithium-ion battery
USA	GM	Cadillac Lyriq	SUV	D (Upper Medium)	2022	Launched	EV	2	Permanent magnet synchron	Lithium-ion battery
USA	GM	Chevrolet Menlo	Crossover	D (Upper Medium)	2020	Launched	EV	1	Permanent magnet synchron	Lithium-ion battery
USA	GM	Buick Velite 7	SUV	C (Lower Medium)	2020	Launched	EV	1	Permanent magnet synchron	Lithium-ion battery
USA	GM	Buick Velite 6 EV	Hatchback	D (Upper Medium)	2019	Launched	EV	1	Permanent magnet synchron	Lithium-ion battery
USA	GM	Chevrolet Bolt EV/Bolt EUV	Hatchback,SUV	C (Lower Medium)	2016	Launched	EV	1	AC synchronous motors (Max	Lithium-ion battery
USA	Ford	E-Transit/E-Transit Custom/E-Tourneo Custom	Van	Others / Unclassified	2022	Launched	EV	1	Permanent magnet synchron	Lithium-ion battery

9 Teardown / Benchmark

<https://www.marklines.com/en/teardown/>

Vehicle teardown	Electrical component teardown
Vehicle teardown reports	
 <p>E-Axle (Electric Powertrain) Comparison by Teardown Analysis From a report on components benchmarking activities by the Next Generation Vehicle Center Hamamatsu</p>	2022/01/05
 <p>Tesla Model Y Teardown: HMI (Structure and GUI Concept) As with the Model 3, a simple HMI with as few hard switches as possible</p>	2021/10/07
 <p>Tesla Model Y Teardown: Autopilot 3.0, Steering and Braking Systems Automated driving-capable hardware; based on Munro teardown survey data</p>	2021/06/18
 <p>Tesla Model Y Teardown: Suspension High-maneuverability design similar to European premium sedans; based on Munro teardown survey data</p>	2021/06/11

We provide Vehicle & Electrical component Teardown Reports in alliance with benchmarking service companies.

MarkLines also provides fee-based Teardown Reports of Munro & Associates, LTEC Corporation, and Fomalhaut Techno Solutions.



Summary

The Model Y is basically designed following the design of the Model 3, with about 54% of the vehicle's parts being carry-over parts. The mechanical parts of the steering and braking systems are basically the same as those of the Model 3, but compared to the 2017 Model 3 that Munro previously surveyed, the driver assistance system has been enhanced to Autopilot 3.0 (from April 2019), which supports automated driving.

This report describes the steering and brake system components based on the analysis report of the teardown survey of the 2020MY Tesla Model Y, AWD performance upgrade package (456 HP) 5-seater version conducted by Munro & Associates, Inc. (Munro). Parts not mentioned in this paper, as well as weight, manufacturing process analysis, and cost analysis for all parts, are shown in the main body of Munro's full report.

Point

Teardown reports include Hyundai Ioniq 5, Ford F-150 Lightning motors, inverters, reduction gears, ADAS PRK ECU, and more



Regarding Autopilot 3.0, Tesla's website claims that "Tesla cars come standard with self-driving hardware and software updates designed to improve functionality over time." (Photo taken at the MarkLines Benchmarking Center)



Model Y steering system (Source: Munro)

MarkLines works in cooperation with the Detroit-based vehicle benchmark engineering company Munro & Associates, Inc. (Munro). Munro conducts teardown surveys of various types of vehicles and conducts detailed specification and cost analysis of all the components, including weight and dimensions, and provides reports on the analysis results. For detailed information, please make an inquiry here.

Network control board

When the image processing board is removed, the liquid cooling block appears.

When this block is removed, the second large board appears. It is estimated that the temperature of the coolant for liquid cooling is maintained at around 70 degrees Celsius. An Ethernet connector is mounted on the circumference of the board, and wireless LAN and Bluetooth ICs are mounted on the board.

A large network processor surrounded by DRAM (dynamic random access memory) is mounted on the board, and it is presumed that this board is responsible for high-speed signal transmission processing spread throughout the vehicle.



Liquid cooling block (Source: Fomalhaut)

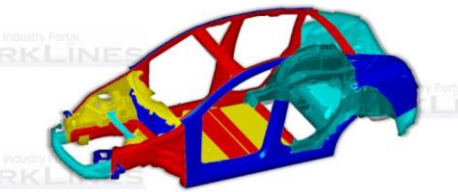


Network board



Network board back side

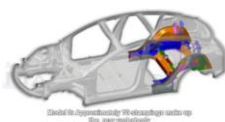
Summary of the body structure




Aluminum Mid Steel High Strength Steel Ultra High Strength Steel

Tesla Model Y body structure (Source: Munro)

The front section is mainly made of high and ultra-high strength steel, and aluminum is used for the bumper and several other longitudinal and transverse beams. The cabin frame is a double-layered structure, with an inner shell made of ultra-high-tensile steel to reduce deformation, and covered by an inexpensive steel outer shell. The distinctive rear section is made up of two large aluminum castings, one on each side, which are bolted and glued together with structural adhesive, dramatically reducing the number of parts compared to the Model 3 (see figure below). Self-piercing rivets and bolts are used to join aluminum to aluminum and steel, and structural adhesives are also used to prevent galvanic corrosion between aluminum and steel, such as when joining the inner and outer panels of the rear underbody.



Rear underbody of the Model 3
It is configured with a large number of steel and aluminum members.
(Source: Munro)



Rear underbody of the Model Y
It consists of only four parts plus fastening bolts.

10 OEM Plants <https://www.marklines.com/en/global/>

▼ Plant Location



OEM plant data can be accessed using the map, filtering by country

- 1 Click the country
- 2 Click the OEM plant on the map
- 3 Production Models, Products, Capacity and News Highlights will be shown.

Name (Model)	Production Capacity	Year/Year
Hyundai Tucson (EV)	100,000	2022
Hyundai Tucson (PHEV)	100,000	2022
Hyundai Tucson (HEV)	100,000	2022
Hyundai Tucson (FCV)	100,000	2022
Hyundai Tucson (Battery)	100,000	2022
Hyundai Tucson (Motor)	100,000	2022
Total	600,000	2022

Point

If you click the Manufacturers List in the area below the map, you can also access the detail for the OEM plants listed by country.

▼ Search OEM / Region <https://www.marklines.com/en/global/search>

- Select Country

Select OEM Plant Locations
- Select OEM

Select OEM
- Filter by Plant Type

Select All

 Assembly Display electrified vehicle plants only

 Engines Transmissions Battery Traction Motor Other Plants

 R&D Locations Headquarters

You can also search for plant detail by selecting Search (OEM/Region), then Country, OEM, and Plant Type.

- 1 Select Locations (Multiple selections possible)
- 2 Select OEM (Multiple selections possible)
- 3 Select Plant Type (You can filter by Assembly, Engines, Battery, Traction Motor etc.)
- 4 The list of OEM plants will be shown
- 5 Click each plant to see the details.

Point

You can also download the results in Excel

OEM	Country	Offices & Plants	Category	Models & Products
Nissan/Japan&Korea&USA	Mexico	Nissan Teacoo, Cuernavaca (China) Plant	Assembly	Nissan Nissan C-TRAIL, LADA, MURANO, Nissan Murano (2012-), NP200, NP300 Frontier, NP300 Xterra, NP300 Xterra (2017-), Chevrolet City Express (2018-2019)
Chrysler/FCA	Mexico	FCA Mexico, S.A. de C.V.	Headquarters	
Chrysler/FCA	Mexico	FCA Mexico, Durango Engine Plant	Engines	2.4 liter (E-4) I4 engines, 3.7 liter (V-6) HEMI, 5.2 liter (V-8) HEMI, 6.4 liter (V-8) HEMI engines
Chrysler/FCA	Mexico	FCA Mexico, Sotillo South Engine Plant	Engines	3.6 liter (V-6) Pentastar engine
Chrysler/FCA	Mexico	FCA Mexico, Sotillo Stamping Plant	Other Plants	Automotive body stampings and assemblies for RAM 2500/3500/4500/5500
Chrysler/FCA	Mexico	FCA Mexico, Toluca Stamping Plant	Other Plants	Automotive body stampings and assemblies
Dodge/Jeep/FCA/FCA	Mexico	FCA Mexico, Toluca Assembly Plant	Assembly	Dodge Journey, Fiat Freemont (2013-), 500 (2013-), Jeep Compass (2017-)
Ram/FCA	Mexico	FCA Mexico, Sotillo Truck Assembly Plant	Assembly	Ram 1500, Ram 2500/3500, Ram Heavy Duty, Ram 4500/5500 and Ram Chassis Cab, Ram Van Assembly Plant, Ram ProMaster, Ram ProMaster, Ram 3500
VW Group	Mexico	Volkswagen de Mexico S.A. de C.V., Volkswagen Mexico	Headquarters	
Audi/VW Group	Mexico	Audi Mexico, San Jose Chacabuco Plant	Assembly	Audi Q7 (2016-), Q8 (2017-)

Point

In the OEM Updates section, you can access News on OEMs (production facilities, etc.) listed in chronological order in Excel format.

12 Who Supplies Whom Supplier Info

▼ Search (Model / Supplier)

<https://www.marklines.com/en/wsw/refined-search>

Parts Supply Information - Search (Model / Supplier / Component category)

You can narrow down your search by setting one or more criteria from supply information of approximately 300 components.

Search form with filters:

- Maker / Brand / Model: + Select Do not specify
- Supplier: Enter Supplier name + Add to search
- Component category: + Select Do not specify
- Production Country / Region: + Select Do not specify

Buttons: Search, Clear

You can search by model, supplier, production country, and other criteria.

Narrow down components category and Select production country / region

Select components category (broad): e-Powertrain, ICE Powertrain, Driveline, Electrical and Electronic, Interior, Exterior, Chassis, Body

Select components category (narrow / fine): e-Powertrain, Drive Battery, Battery Management System, Traction Motor / e-Axle, DC-DC Converter, Inverter, Vehicle Control Unit, On-board Charger

Select production country / region: Asia & Oceania, Americas (USA, Canada, Mexico, Argentina, Brazil), Europe (Germany, France, Spain, Italy, Portugal, UK, Belgium, Netherlands, Austria, Switzerland, Sweden, Norway, Finland, Poland, Czech Republic)

Buttons: Set search conditions

For example...
Maker/Brand : GM, Ford, Tesla
Component category : Drive battery
Production Country : US, Mexico
 >>> Refined search

Search (Model / Supplier / Component category) - Search results

You are searching by these criteria:
 Component category: Drive Battery
 Production Country / Region: USA, Mexico

All areas Americas Europe China Japan ASEAN • India • Korea Show only NEW

339 items, showing 1 to 339

Region	Maker	Brand	Model	Model year	Supplier	Products	Component category
Americas	GM	Chevrolet	Blazer EV (Mexico)	2024	Ultium Cells LLC - Warren	NCMA lithium-ion battery cell (Pouch)	Drive Battery Cell/Module
Americas	GM	Chevrolet	Bolt EV (USA) NEW	2024	Zhejiang Sanhua Automotive Components Co., Ltd.	Coolant valve	Drive Battery Cooling/Heating System
Americas	Mercedes-Benz	Mercedes-Benz	EQE SUV (USA)	2024	AESC US LLC - Smyrna Plant	NMC lithium-ion battery cell (Pouch)	Drive Battery Cell/Module
Americas	Mercedes-Benz	Mercedes-Benz	EQE SUV (USA)	2024	TI Fluid Systems Plc. (Formerly TI Automotive Limited)	EV coolant hose	Drive Battery Cooling/Heating System
Americas	GM	Chevrolet	Equinox EV (Mexico)	2024	Ultium Cells LLC - Warren	NCMA lithium-ion battery cell (Pouch)	Drive Battery Cell/Module
Americas	Volvo Cars	Volvo	EX90 (USA)	2024	TI Fluid Systems Plc. (Formerly TI Automotive Limited)	Battery cooling line	Drive Battery Cooling/Heating System
Americas	Ford	Ford	F-150 Lightning (USA) NEW	2024	Zhejiang Sanhua Automotive Components Co., Ltd.	Battery cooling chiller	Drive Battery Cooling/Heating System
Americas	Ford	Ford	F-150 Lightning (USA)	2024	CATL (Contemporary Amperex Technology Co., Ltd.)	Lithium iron phosphate battery pack	Drive Battery Pack/System
Americas	GM	GMC	Hummer EV (USA) NEW	2024	Magna International Inc.	Battery enclosure	Drive Battery Case
Americas	GM	Cadillac	LYRIQ (USA)	2024	Ultium Cells LLC - Warren	NCMA lithium-ion battery cell (Pouch)	Drive Battery Cell/Module
Americas	Tesla	Tesla	Model 3 (USA) NEW	2024	Zhejiang Sanhua Automotive Components Co., Ltd.	Battery cooling system	Drive Battery Cooling/Heating System
Americas	Tesla	Tesla	Model Y (USA) NEW	2024	Zhejiang Sanhua Automotive Components Co., Ltd.	Battery cooling system	Drive Battery Cooling/Heating System

You can search for the supplier information you want to check using your preferred criteria.

13 Supplier Database

https://www.marklines.com/en/supplier_db/

▼70,000 Database

The database contains information on about 70,000 automotive parts suppliers around the world, including those in developing countries. Supplier searches can be performed by part name or type (around 1,000) and plant locations can be plotted on a map. It is also possible to search parts by their manufacturing process.

- ① "Parts / Production process"
 - ...Select parts / production process using the parts classification table or enter manually.
- ② "Country / Region" ... Select.
- ③ "Customer"
 - ...Select Customers (Example: Toyota, Nissan, Denso)
- ④ "Shareholder's country"
 - ...You can filter shareholding companies with at least a 20% ownership stake.
- ⑤ Click "Search"
 - You see the results.

Point

The results page will display info such as company information, product names, and customers. You can select the "Supplier List" to sort by size as well as download the list detail into Excel for your company's use.

14 Supplier Database

▼ Top 400 Suppliers

<https://www.marklines.com/en/top500/>

Major Parts Suppliers Reports

Major suppliers reports newly added:

Vitesco Technologies, PPES, LG Chem, Samsung SDI, SK Innovation

1. Bosch (Robert Bosch GmbH)
2. Hella International Inc.
3. Continental AG
4. Faurecia SE
5. ZF Friedrichshafen AG
6. Aisin Corporation (Formerly Aisin Seiki Co., Ltd.)
7. Hyundai Mobis Co., Ltd.
8. DENSO Corporation
9. Lear Corporation
10. CATL (Contemporary Amperex Technology Co., Ltd.)
11. Valeo Group
12. Jay Bharat Maruti
13. HUAYU
14. Hitachi Automotive Systems (China) Ltd.
15. BorgWarner Inc.
16. Continental Holding China Co., Ltd.
17. Bosch (China) Investment Ltd.
18. Denso Group (China)

Bosch (Robert Bosch GmbH)

Company Profile
Year Established
Headquarters
Website
Products
Representative
Address
News
Exhibits

Major Parts Suppliers Reports in detail. Company Profile, News, Business Overview, Exhibits, Products, Customers, Major Supply Agreements, Business Highlights, Facilities, etc.

Point

Information is available for business trends, news, exhibition photos and display panel information.

The latest HR info for Japanese OEM and parts suppliers is available (only in Japanese) from 2009.

▼ Global Exhibition

<https://www.marklines.com/en/exhibitions/index>

Global Exhibition Reports

Supplier Coverage by MarkLines

Exhibition Schedule for 2022

Archives of Past Exhibits

2022	2021	2020
2022 JSAE Automotive Engineering Exposition New WCX 2022 METALEX 2022 MWC Barcelona 2022 - Mobile World Congress CES 2022 >>>Click here for Sony exhibits	Vienna Motor Symposium 2022 World Smart Energy Week 2022 Toyota Business Fair 2022 AUTOMOTIVE WORLD 2022	The Battery Show Europe / Electric & Hybrid Vehicle Technology Expo 2021 CEATEC 2021 Aachen Colloquium 2021 IAA Mobility 2021 Shanghai International Automobile Industry Exhibition 2021 CES 2021
2020 Automechanika Shanghai 2020 SAE-China Congress & Exhibition MarkLines Online Exhibition 2020 World Smart Energy Week 2020 AUTOMOTIVE WORLD 2020	CEATEC 2020 2020 Auto China - Beijing International Automotive Exhibition electronica China 2020 Delhi Auto Expo 2020 CES 2020 >>>Click here for other exhibitions	

MarkLines covers global exhibitions. You can check reports on the exhibition and information on parts exhibited by each manufacturer.

The Battery Show Europe / Electric & Hybrid Vehicle Technology Expo 2021

Place: Stuttgart Germany
 Session: 30th November - 2nd December 2021

Suppliers

BorgWarner, Freudenberg, Gentherm, Miba, OTTO FUCHS, Podium, Saint-Gobain, Sensata Technologies, Showa Denko, Suncall, Webasto, Yazaki

Exhibits

2019 JSAE Automotive Engineering Exposition

Demonstration of Connected Parking
 New radar sensor generation
 Next generation of front video cameras
 Electric oil pump for automatic gearboxes
 Continuously variable transmission dedicated for hybrids
 Pushbelt / Speed sensors / Electronic compact actuator / Electric motor / Electric oil pump / Electric transmission pump for CVT applications / High-pressure sensors
 Electrical cooling fan module with FED 2.0 drive
 Electronic Compact Actuator