

ZEBRA GROUP s.r.o.
The youngest vehicle manufacturer in the Czech Republic
INFORMATION ABOUT THE COMPANY
INTEREST IN EXPORT PRODUCTION COOPERATION

Summary:

The company ZEBRA GROUP s.r.o. is the youngest car manufacturer in the Czech Republic. It focuses on the development and own production of multi-purpose commercial vehicles with a total weight of up to 3.5 tons (so far), which offers first-class technical functionality with a wide range of superstructures for various uses.

The original vehicle platform has its history in the early 1990s, but the new ZEBRA brand has built up an excellent awareness of the Czech car market in the first years of its existence. The company is, and according to all available information, will be the only domestic serial manufacturer in the segment of multi-purpose commercial vehicles, a similar manufacturer is not in Slovakia, Hungary or Poland.

In addition to the above ZEBRA GROUP s.r.o. completes the development and prepares for the launch of an expanded product range with the ZEBRA alternative propulsion vehicle and its introduction into series production, and is already registering interest in these vehicles from a number of existing and potentially new customers (eg from the cities of Prague, Pardubice, Ostrava, Brno) , etc.).

Intro

ZEBRA GROUP s.r.o. (hereinafter referred to as “ZEBRA”, “Company”) was established in 2014 and since 2015 it has been gaining an increasingly stable place on the market with its own product - the ZEBRA multi-purpose commercial vehicle, sometimes also presented as ZEBRACAR.

Mass-produced vehicles of our own production are launched on the market, including a structure with a load capacity of up to 3.5 tons, which can be driven with a type B driver's license. hours (when transporting materials or moving to the workplace) and can also offer a cabin for two or three people. Since August 2018, ZEBRA has been the only manufacturer to produce interchangeable body carriers with engines with an EURO5 emission limit without reducing the vehicle's power from the current 72 kW.



In the past period, it was confirmed that the ZEBRA product is unique in its penetration into a relatively free part of the attractive market and its business has the potential to grow in the current and above-standard (so-called high-tech) segment. The company builds on the original successful production of cars and plans to occupy a significant part of the unsaturated market. ZEBRA already has a functional sample of the new concept of an alternative propulsion vehicle and is taking further strategic steps to gain a competitive advantage in the field of low-emission and emission-free vehicles. E-mobility is perceived in the automotive industry as a trend that will have a major impact on the development of the entire industry.

Company

History

The basic concept of the ZEBRA vehicle is the original Czech brand MAGMA based in 90' of the last century. Those vehicles have gained a relatively important position on the Czech and Slovak markets, as well as in other countries. In 2014, the production know-how of the companies was taken over and the related activities were unified into a new legal entity - ZEBRA GROUP s.r.o., which became the bearer of production, technical development and development of business activities.

ZEBRA GROUP in brief

2014-2017

After taking over the production specifications and know-how for the MAGMA vehicle by ZEBRA GROUP s.r.o. The company obtained homologation for serial production of ZEBRA vehicles - swap body carriers. The chosen strategy of the Company was confirmed and confirmed as correct. The extended version of the cabin in the variant for 2 passengers was homologated.

2018

This year is characterized by significant changes and development of the company:

- ZEBRA began works on prototypes of vehicles with the EURO 6 emission limit
- ZEBRA began activities on a prototype low emission vehicle ZEBRA
- ZEBRA received development subsidies in the donations EU program APPLICATION (development of a smart vehicle for low emission vehicle)
- ZEBRA vehicles gained a stable place on the Czech market

2019

The beginning of the year was another successful development step and the start of homologation of the low emission vehicle. To increase sales activities, the so-called ROAD SHOW system is applied on the market and used vehicles begin to be sold:

- ZEBRA together with important partners received subsidy resources for the development of a hydrogen range extender
- ZEBRA became a member of the European Association VAK (<https://www.vak-ev.de/>)

2020

In 2020, ZEBRA was to take part in the IFAT international trade fair in Munich and take part in a competition for a technological development award. In the 2020 financial year, ZEBRA should already have 2 types of vehicles - with the EURO5 emission limit and with low emission vehicle. In its activities focused on the so-called SALE and AFTERSALE, ZEBRA uses the former AVIA network and experience and at the end of the year launches an online spare parts catalogue.



Production intro

Production activities are concentrated in the production branch in Pardubice, ie in the area chosen by the Company due to the high number of available qualified employees, whether for a professional or production role. Substantial production cooperation partners are logistically located within a radius of approximately 30-50 km. Our own design, production and logistics facilities allow us to set up not only sufficiently efficient processes but also has the prerequisites for further (and leap) increase in production.

The production process can be characterized as a combination of subcontracting cooperation and own assembly. All production cooperations are entered according to ZEBRA's own technical documentation and are divided among several subjects. This allows not only the elimination of supplier delivery risk but also allow the economic screening of these suppliers. The assembly activity is performed by our own employees, so the key procedures and their documentation make it possible to achieve not only an increase in the skills of the employees, but also comprehensive control over the entire assembly process. This assembly concept allows AFTERSALES activities to easily replicate a similar model in another country when connected to an experienced local partner.

2021

In 2021, ZEBRA is ready to present to the market vehicles with additional motorization, namely with the EURO6 emission limit, as well as the ELZEBRA product with purely electric drive of its own production. Using a flexible assembly concept according to its own documentation, ZEBRA wants to replicate the business model of sales and AFTER SALES in other countries, always in conjunction with an experienced and commercially capable local partner, while respecting recommendations to improve performance according to local market expectations.

Target group

Most of the Company's customers fall into the following groups, which are similar for all of the above markets:

1. Municipalities and their supporting or special purpose companies
2. National or multinational companies focused on comprehensive waste and municipal services
3. Site manager companies and site owners
4. Construction companies or sellers of building materials
5. Companies using municipal vehicles to take care of their property

Product

Modely vozů ZEBRA s různými nástavbami

ZEBRA s valníkem a s hydraulickým hákem



ZEBRA se základní nástavbou



ZEBRA s kontejnerovou nástavbou



ZEBRA s přední sněžnou radlicí



Nástavba na nosič kontejnerů s hydraulickou rukou



ZEBRA se základní sklápěcí nástavbou



ZEBRA s přední sněžnou radlicí



Sypač vozovek a chodníků



ZEBRA s rotačním kartáčem



Vozidlo SKANSKA s hydraulickou rukou a sklápěčem



Kropicí nástavba KOBIT



Technical specifications and advantages of ZEBRA vehicles

ZEBRA vehicles belong to a group of vehicles generally referred to as small multi-purpose municipal vehicles. Currently, ZEBRA vehicles are included in the category of the so-called „special purpose vehicle“ - carrier of interchangeable superstructures. Those are vehicles with a total load capacity of up to 3.5 tons, which have the technical competence approved for serial production of the vehicle type by a decision of the Ministry of Transport of the Czech Republic.

Note:

We consider it a significant advantage to keep the vehicle in the category up to 3.5 tons of total weight with the use of a type "B" driving license. If there is a real business interest in vehicles of a higher weight category, we are ready to provide homologation also for a vehicle with a total weight of up to approx. 6 tons.

ZEBRA is currently produced in two variants. The shorter version has a length of 4,000 mm and a wheelbase of 2,250 mm, the longer variant then measures 4,350 mm with a wheelbase of 2,600 mm. The technical parameters and driving characteristics are the same for both variants, as well as the individual possible superstructures guaranteeing versatile use in any conditions.

Production of vehicles with the EURO5 standard with an engine of 72kW is possible until the end of 2022 and then it will be modified to lower power, but currently ZEBRA is completing homologation activities of the vehicle with the EURO6 emission standard directly with the Iveco / FPT (ITA) engine manufacturer.

ZEBRA is also completing the homologation of a purely low emission vehicle (ELZEBRA) electric vehicle which is equipped with electric drive of own production.

Advantages of ZEBRA vehicles.

ZEBRA vehicles provide first-class technical functionality. During their development, the company made sure that the operating costs for using the vehicle were as low as possible, and at the same time provided an easily and quickly accessible service for its customers.

- ✓ **4x4 drive: high throughput in difficult terrain on construction sites, frozen sidewalks, etc., electromagnetic differential lock**
- ✓ **Handsome driving:** the vehicle can be used in tight or confined spaces
- ✓ **Easy to apply service:** ZEBRA unifies spare parts thanks to the online catalog
- ✓ **Lower operating costs:** lower fuel and oil consumption compared to the competition
- ✓ **Robust construction:** rigid axles on telescopic shock absorbers in combination with semi-elliptical leaf springs and rubber stops
- ✓ **Hydraulics system:** up to three - circuit hydraulics, maximum pressure 18.5 MPa, flow 5-97 l / min. Compact hydraulics ensure the operation of each body, both front and rear, including the tipping body
- ✓ **Spacious cab:** The cab has been designed to accommodate up to 3 people with a helmet on head.
- ✓ **Bodies:** easy installation of a wide range of bodies from various manufacturers without limiting the country of origin or producer

Changes in used components from 1.Q 2021:

- ZEBRA received approval for the application of the BOSCH steering servo in 2020 and from 1.Q 2021 it should be applied to series production
- In February 2021, ZEBRA will undergo an application change to HYDAC hydraulics, which is especially important for foreign markets
- By the end of the year 2020 a cooperation agreement will be signed with FRITZMEIER
- In January 2021, tests of the functionality of superstructures from the company FIEDLER will take place

Proposal of a procedure for initiating cooperation

We consider the following procedure to be the most suitable for cooperation on the Hungarian market: Assess the business opportunities of an experienced business partner according to the submitted documentation

1. Try to identify business opportunities with an experienced business and assembly partner
2. Signature of the NDA
3. Make common assessment of business opportunities and especially the possible transfer of know-how, preferably in the form of licensed production, with the aim of building a professional and capacity background not only for the local market, but also for export activities.
4. Select appropriate local adjustments according to the business partner's recommendations
5. Identify suitable local modifications of the product according to the recommendations of the business partner. Discussion on possible cooperation with a focus on all local replacements and according to the submitted documentation. At the same time In case of agreement and interest of the partner to present the vehicle directly with selected superstructures at the place of installation in the Czech Republic
6. After agreement on the main parameters of business cooperation we could proceed to focused aim under usual agreements for international cooperation

To be clear and open in further discussion , we would like to confirm that we are interested in cooperation not only in the field of vehicles with conventional engines, but also in the field of low-emission vehicles and subsequently also with vehicles using the possibilities of hydrogen propulsion. **At the same time, we confirm that we are interested not only in business cooperation, but also in the transfer of know-how and production as such, so we are interested in the possibility of licensed production directly in Hungary.**

Thank you for your answer and we are looking forward to cooperation.

Best regards

ZEBRA GROUP s.r.o.

Petr Řihák, CEO

Praha, 10th November 2020