



TRANSWAGON AD

WHO WE ARE:

“Transwagon” AD began its activities in 1890 when a workshop for repairing wagons and locomotives was founded in Bourgas. A step forward was made in 1951 with the manufacturing of the first two freight wagons that marked the beginning of the Bulgarian wagon-manufacturing industry. In the 1950’s and 1960’s new structures of uncovered and covered wagons for transportation of mass goods were developed. In the 1970’s flat wagons were developed and since the 1980’s the focus has been put on manufacturing specialised wagons that make it possible to load and unload goods with handling machines in order to protect from atmospheric influences the goods transported. Projects for reconstruction and modernisation have been successfully implemented. The certificate ISO 9001:2000 is a guarantee for the European quality and high standard of the company.

“Transwagon” AD is the biggest manufacturer of freight wagons in Bulgaria. It has modern manufacturing equipment on 200 square km with excellent infrastructure. Traditions, highly qualified staff, modern production technology that meet European standards are the foundation on which the company has successfully built its position on the Bulgarian and the international rail market.

The development activity is a priority for “Transwagon” AD. The evidence for that is the continuous investment in new developments, increasing the qualifications of engineer-constructors as well as the application of modern software products such as AutoCAD, INVERTOR and COSMOS. As a result, the projects developed in the construction department meet all requirements of the International Union of Railways UIC and the International Wagon Regulations RIV.

COLLABORATION INTERESTS:

“Transwagon” AD has its priorities in the manufacturing sector. The part of the organisation which will be involved in international cooperation would provide the application of particular research results. The company is interested in cooperation, including participation in networks of excellence, exchange of knowledge, transnational access to research infrastructure and studies.

Considering the position of the company on the Bulgarian and the international rail market, it is also appropriate to take the position of coordinator in certain R&D projects.

AREAS FOR R&D COLLABORATION:

“Transwagon” AD is interested in cooperation in R&D activities in the rail industry and in freight rail transport. It has an interest in participating and cooperating in joint projects to develop conceptual freight wagons, separate elements, units and aggregates. The company is ready to implement activities within con-

sortia, involving partners from different countries. The main goal of the company is to develop new technologies and new products. An accompanying goal is to pool resources for research. Additionally, it is interested in participating in construction and efficiency activities of networks of excellence. “Transwagon” AD is ready to collaborate with research teams within long-term cooperation timeframes, where it would integrate part of its available resources and activities.

MAIN ACHIEVEMENTS:

The main achievement of “Transwagon” AD is the European quality and high standard of industrial products, which are guaranteed with the ISO 9001:2008 certificate, awarded to the company. Another major achievement is the existence and maintenance of a highly qualified team of engineers in wagons and machinery. The regularly updated computer network, the software for 3D modeling, available for the necessary strength and braking calculations, construction drawings and specifications, the continuous investment in technological developments all facilitate the fast and efficient development of various modifications of wagons, bogies and parts of wagons as well as their testing and implementation into production. As a result, the company is capable of a flexible production program and quickly reorienting manufacturing in the direction necessary to satisfy customers’ requirements.

At present, the product list of “Transwagon” AD includes more than 30 types of modern freight wagons as well as the spare parts for them. The company is the only certified manufacturer of two-axle Y-bogie in Bulgaria. The products meet the requirements and conditions of international specifications and standards: TSI, UIC, ERRI B12/RP17 and ERRI B55/RP8. Another important achievement of the company is the reduced term of implementation of a new wagon type: in practice it happens for a period of less than a year.

WHAT MAKES US A GOOD PARTNER?

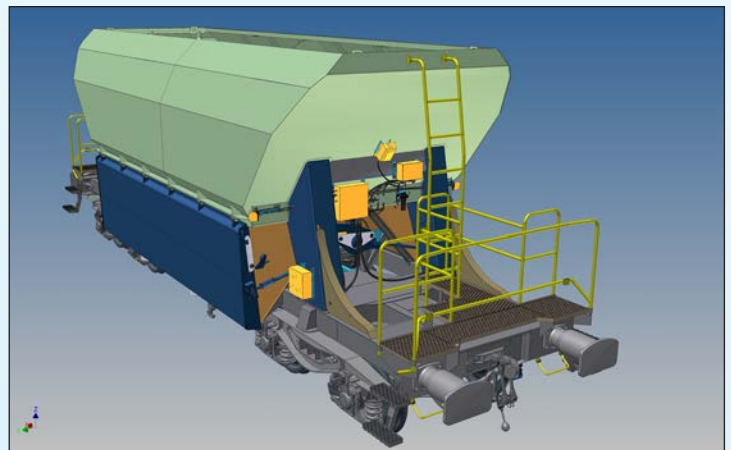
The base of the achievements of the company includes its 120-year history, accompanied with traditions and continuity between generations as well as the successful transition during the social reforms in Bulgaria. The certificates for producing five types of wagons and the most common and popular axle bogies in Europe are evidence of its capability to manufacture wagons which satisfy the specific requirements of customers at the European level. The most significant difference compared to other similar companies in the region is the existence of a strong designing unit with clear priorities in R&D activities. As compared to scientific or institutional teams, the R&D activities in the company are subjected to practical implementation and in this sense, its greatest advantage is the practical nature of the projects developed.



PROJECTS:

The company has not participated in projects supported by EC programs up to the present. For the past few years, a number of projects have been successfully developed by self-funding and the products have been presented on the European market as follows:

- A specialised wagon for transportation of bulk goods of relatively high density (more than 1,7t/m³). The wagon is designed to solve a specific logistical task: to carry a maximum amount of cargo within the parameters admissible for load on the European railways and train length. By doing this, the economic effect of lower transport costs can be achieved. The wagon is an automated hopper with a pneumatic drive mechanism with a possibility of remote control.
- Development, testing and implementation of a long flat car /26.24 m/ with a powerful brake of Rbnpss type. The wagon is designed to transport different types of heavy and long articles of iron and steel without the need of weather protection. The loading frame is 25m long, 2.52 m wide with a capacity of 62 tons. The wagon can run at 100 km/h with a load of 22,5 t and at 120 km/h with a load of 20 t. It can be used also to transport sections that are 35 m long as in that case it should be accompanied by safety cars.
- A covered 4-axled wagon for the transportation of bulk goods with a pneumatic or manually operated roof. It is designed for transporting bulk goods that can be crashed with transportation. To protect the environment and reduce losses, such goods have to be transported in covered wagons. An example, of such a load would be copper concentrate, which at present is transported by open wagons in many places.
- Development of a 2-axled hopper wagon, capable of operating at different gauges, different types of couplings and a possibility of placing it in a standard 20-foot shipping container.
- Development, implementation and manufacturing of an uncovered wagon according to the requirements of AAR with an axle load of 30 t.



OTHER INFORMATION:

Name of the organisation: Transwagon AD

Organisation type: Manufacturing enterprise

Name of the research department: Construction department

Number of researchers: 8

Working languages: Bulgarian, German, Russian, English

Webpage: www.transwagon-bg.com

Contact person: Nikolay Koldamov

Position: Head of construction department

E-mail: koldamov@transwagon-bg.com

Tel.: 00359 56 950 601

Fax: 00359 56 950 610