



WEST-RU

Worldwide Engineering Services and Technology
European Group of Engineering Companies

WEST-RU is the independent privately held European Group of Engineering Companies providing to its Customers on the territory of Europe the high-quality Engineering services and Manufacturing Turn-key Solutions basing on the long-term multi-year and multi-project practical experience of working with the European Customers and Partners

Main activities



Engineering services

- WEST-RU is the largest Eastern European provider of the Classical Body-in-White engineering services (design and simulation of sportwelding lines for automotive industry)
- WEST-RU also supplies engineering services by method planning, die design, transportation systems and steel structures for brand-name customers in automotive and other industries



Manufacturing systems

- Services by planning, design, manufacturing, installation, commissioning and aftercare of production systems (turn-key solutions) for automotive and other industries
- Selling, installation and maintenance of components of European industrial production systems manufacturers: Tuenkers, Docerm, Bräuer, Applied Robotics, Lang Tube Tec and other



IT-services

- Adaptation of CAD/CAE/PLM software products under customer requirements by writing applications, interfaces and macros. Development of specialized interfaces: Robcad/Process Simulate - Automation ML/COLLADA. Optimization of methods and processes.
- Support throughout the process chain from planning to introduction

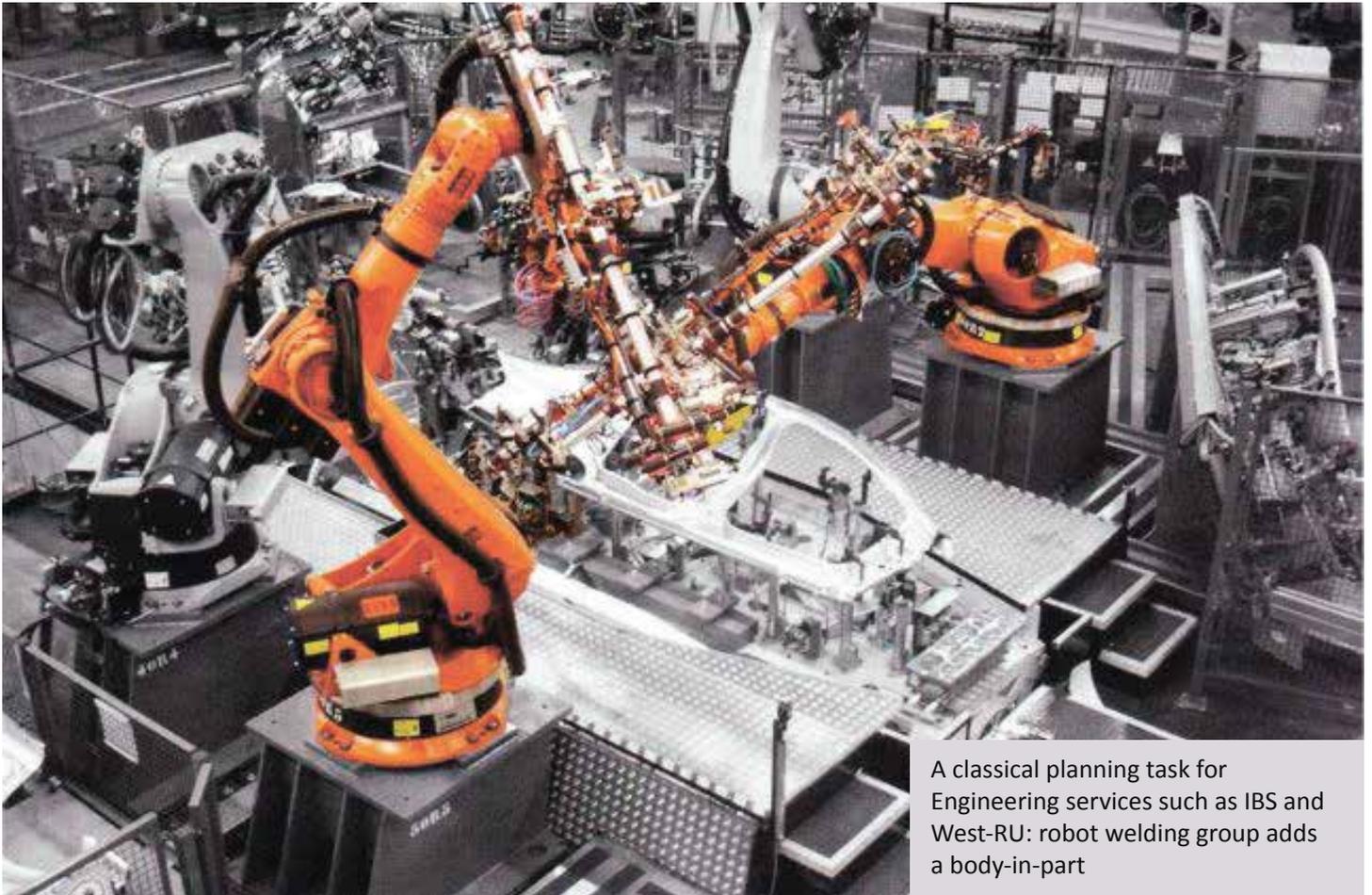
SHORT, BUT EFFECTIVE



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A classical planning task for Engineering services such as IBS and West-RU: robot welding group adds a body-in-part

Volkswagen once started out with a single car model – the VW Bug. Today it is the variety of products that dominates the market, particularly among premium car makers. Since the 90's the number of models manufactured by Mercedes, BMW and Co. alone has tripled. At the same time, innovation cycles have become shorter. As a result, long production periods due to technical considerations and distribution

processes are now unthinkable. Many OEMs are moving to yearly model upgrading, as is the case in the U.S.

However, this differentiation leads to increased complexity within companies, as well as an increase in costs. The solution to this is found in standardizations in the form of platform and construction kit concepts, concealed by the variable automotive shell.

A MULTITUDE OF MODELS: AN OPPORTUNITY FOR ENGINEERING SERVICE PROVIDERS

According to a study conducted by consulting agency Oliver Wyman, this development will only be prosperous if OEMs cooperate more with external providers. In order to accommodate this demand, engineering companies will have to increase their planning capacity dramatically.

Engineering service provider IBS, located in Karlsruhe, is an example of

Questions
for...

located in Karlsruhe, is an example of this, as Matthias Kühn confirms:

“The planning packages offered by OEMs are growing progressively larger. This poses a challenge for us in times of an increasing skills shortage.” Almost the entire business of IBS GmbH is focused on equipment engineering for bodywork shell construction.

This field is of particular importance to every OEM: the car body decisively influences the design of a vehicle and consequently, its market profile. But with investments in the three-digit million range, bodywork shell construction is by far the most cost intensive production segment.

When IBS is assigned a project as engineering service provider, it is given a rough plan of the production facility in addition to the design of the particular body part (a door or underbody) as a foundation for the project’s execution. On this basis IBS designs all required equipment as well as the documentation necessary to put the system into operation. The result is a joining concept, usually a robotic welding system, including all other joining processes (bonding, riveting).

Through assignment of planning, simulation, programming and calibration contracts to external providers, the planning department of the OEM remains lean in spite of the variant increase.

SUBCONTRACTORS OFFER HELP

In the case of larger contract packages, however, the engineering service provider itself will seek out specialized providers as subcontractors to carry out smaller engineering packages. These subcontractors are located not only in Germany, but also in other parts of Europe or in other non-European countries. In order to prevent a loss in quality due to these additional interfaces, cooperation partners must be chosen carefully.



Matthias Kühn,
Operations Manager
at IBS GmbH



Georg Kremer,
Managing Director
of West-Ru
Engineering
GmbH

According to Matthias Kühn of IBS, it is not so much professional competence that is critical, but rather the underlying cultural differences: “Often attitudes concerning adherence to delivery dates and quality with regard to planning execution differ greatly from our own standards.”

IBS was spared this experience in a recent pilot project with the engineers of West-Ru. On the contrary, as Kühn emphasizes: “Our experience with the planning team

from Russia showed that we think and work alike, both on a personal and professional level. We’ve got good chemistry.” The fact that the engineers in Russia established a close contact to the customer in Germany through its German partner company West-Ru Engineering GmbH also contributed to the project’s success.

The pilot project contracted to IBS by a German premium car maker entailed a complete order for a car underbody. West-Ru executed the planning of the front side member

What developments in the automotive industry determine the requirements of an engineering service provider?

Matthias Kühn: More, and new vehicle types continue to enter the market, and the immense diversity continues to increase. One consequence for OEMs is, for example, that several vehicle types are assembled on a single production line. This requires precise coordination. In addition to this, the cycle time is reduced in order to increase the number of vehicles manufactured on a production line. The effort and intensity involved in the automatization process, and, on the whole, the complexity of the control technology, naturally increase. The situation requires more experienced personnel – a bottleneck for our business.

Georg Kremer: Timelines have become shorter in recent years; new vehicles enter the market at a faster pace. The current production planning time of 18 months continues to be optimized. In order to put this into practice in spite of the growing shortage of skilled personnel, service providers such as IBS need hands-on support.

What advantages does temporary cooperation with West-Ru offer?

Matthias Kühn: West-Ru is versatile and able to cover the design segment as well as the simulation, and is increasing its activity in programming. The competition does not offer this spectrum, and we want to avoid too many interfaces. Our cooperation with West-Ru may also be a door-opener for contacts in the region of Russia.

Georg Kremer: Our great advantage is the availability of planning engineers from our Russian-German engineering companies. By choosing West-Ru, the customer simply purchases more capacity. We also offer the additional advantage of an attractive cost structure and our expertise in automobile manufacturing.

floor as an independent section, requiring twelve welding robots for its production facility. "This was an excellent fit with respect to content and timeline", says Matthias Kühn. The contract in full included 30,000 engineering hours, 4.500 of which were carried out by subcontractor West-Ru.

The major advantage of this form of cooperation for IBS and other engineering service providers is the option of buying additional planning capacity at any time. There is also a

cost advantage. Cost structures for foreign subcontractors such as West-Ru are much lower than in Germany. Even more important in this particular case are the reduced interfaces: in its IBS assignment West-Ru not only took on the design planning, but also the simulation and a portion of the programming. In this, the delivery of the work result ran quite smoothly.

With increasing car model differentiation, it is becoming more and more important for production

facilities to flexibly switch between the different vehicle types of a single construction kit. Providers of engineering services can take a load off car manufacturers through execution of individual projects, resulting in an increase of the number of temporary and strategic cooperation for the realization of comprehensive packages. Due to cost issues, German suppliers such as IBS will seek international partners for this purpose.

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