

The steel contract

Tomsk Electronic Company has been chosen to become a subcontractor of the world leader Siemens-Voest-Alpine.

«Tomsky Vestnik» reference:

Siemens-VAI (Linz, Austria) is one of the leading manufacturers in the world in the field of development and construction of engineering-scale plants for steel and iron making in the iron industry, and for flat section in the aluminum industry.



This news has impressed metallurgy enterprises

Nizhny Tagil Iron and Steel Plant (JSC "NTMK", member of "Evraz Group" holding) and Austrian company Siemens-VAI have concluded a contract to carry out a full-scale reconstruction of the oxygen-converter plant, substitute all four converters, gas-cleaning system and exhaust-heat boilers. The project duration is four years. After the reconstruction NTMK shall have a new pneumatic steelmaking complex with annual capacity 4,3 mio. tons..

- It is one of the first projects of that kind for Russian metallurgy. The updated oxygen-converter plant will enhance quality and reduce production costs of the steel, – emphasized Andrey Mokrinskii, the “Evraz” vice-president for the metallurgic assets administration.

This astounding news for the domestic metallurgical industry is connected with Tomsk, although the town is situated far from Ural. The fact is that Siemens-VAI has two partners in the full-scale project: Kharkov “Energostal” and TEC. These three enterprises will carry out the NTMK oxygen-converter plant upgrading: develop, produce and install sophisticated feed line and converters, electric and automation equipment, control and measuring systems, etc.

- This contract is special for us, because it is the first time we implement full-range turnkey works under an international contract, - says Andrey Shestakov, the general director of the SME «Tomsk Electronic Company». – We have undertaken to reconstruct the bulk materials charging system to converters and steel ladles, including full-scale engineering with detail design, to manufacture and deliver equipment, to carry out the civil and erection works, to test and to commission the equipment. To provide modern level of steelmaking, an automatic process control system will be installed.

The bulk materials charging system is vital for the metallurgical complex as the blood circulatory system for a human. And the fact, that the modernization of the essential for the steelmaking elements has been entrusted to TEC, has caused durable debates. Many experts grew suspicious about the word “electronic” in the company name. It should be “mechanical” or “engineering” instead!

- Our company would not have been chosen as the subcontractor, if it did not comply with the international manufacturing and corporate requirements, - says Sergey Khlyst, the technical director of the SME “Tomsk Electronic Company”. – Before the contract conclusion, Siemens-Voest-Alpine auditors came to Tomsk and proved our competence, qualification and, what is the most important, our assembly technology.

The positive conclusion of the auditors as well as the Customer (Nizhny Tagil Steel and Iron Plant) opinion were in favour of our company. NTMK had been convinced that TEC had ceased to be a single-purpose enterprise and acquired the machine-building industry.

The TEC plans to supply plants are going to be realized

Tomsk Electronic Company and Nizhny Tagil Steel and Iron Plant began to cooperate a year ago. That time TEC acted as general contractor/general design engineer and delivered two lines of finishing control of railroad wheels for the new NTMK wheel plant, carried out chief-erection, commissioning and start-up, provided consulting services. Our company managed to consolidate leading Russian and foreign enterprises and implement our own innovative solutions. At that time having in mind the scale and complexity of the task Andrey Shestakov, the general director of the SME «Tomsk Electronic Company», declared the following:

- Our objective is to equal the international companies, which supply the entire plants.

That challenging statement has proved to be realistic. The forthcoming four-year work at the largest metallurgical plant on order of the world leader Siemens-Voest-Alpine will constitute a principal new development stage for the Tomsk Electronic Company.

The most difficult part is to carry out the oxygen-converter plant modernization without interruption of the steelmaking process. That is why the project will be implemented in five stages. The converters will be shut down for reconstruction in turn. At first the double bulk materials charging system from the stockyard bunkers to the converter shop bunkers will be erected. The pre-engineering stage has already been concluded. In November we are going to fill the foundation of the duplicate line conveyor gallery. Then we are going to construct the duplicate bulk materials charging system and upgrade the existing one. The belt conveyor shall be installed. The weighing equipment shall be substituted. The automation of technical processes shall be provided for.

- When the upgrading works are completed, the weighing system at the Nizhny Tagil Iron and Steel Plant will surpass one of many similar enterprises. – voices his assurance Vladimir Gontar, the chief design engineer at the SME “TEC”. – One can say that our company is one of the leaders in terms of the weighing system automation among the metallurgic enterprises. Our technologic lines are installed in Kazakhstan at the Aksusk and Aktyubinsk ferro-alloy plants; in

our country in Chelyabinsk, Pervouralsk, Volgograd, Nizhny Tagil etc. The project provides for the first level automation system, with the three-level system as a prospect. Our objective is to reduce the human factor to zero, as the steelmaking is an uninterrupted process, the operator's slightest mistake will effect negatively the production quality.

All the works shall be completed according to the requirements of the general contractor - Siemens-Voest-Alpine, which manages the project and monitors the works. In addition, it is implied, that the project shall be consequently confirmed by the RF controlling authorities. We have to balance the interests of two Parties. However, we feel certain, that the oxygen-converter plant modernisation will be completed successfully as planned in July 2009.

Anton Engelmann: “We choose our partners carefully”

The specialist of technology department Siemens-Voest-Alpine, the chief technical manager of the project, Doctor Anton Engelmann spent 3 days in Tomsk. That time he discussed details of the project with the Tomsk Electronic Company directors and implemented installation of the enterprise documents flow system EXTRANET and SAP/PLM. A journalist of “Tomsky Vestnik” interviewed the Austrian specialist about the new partners.

- Anton, what was the most important in your choice of a partner?

- As you know, Siemens-VAI is an international metallurgic company, which has partners in many countries. I personally took part in the implementation of projects in Brazil, China and Europe. The oxygen-converter plant modernisation at the Nizhny Tagil Iron and Steel Plant is the first project in Russia for me, but not for Siemens-VAI, which upgraded the equipment at the Magnitogorsk iron and steel plant, JSC «Severstal». The company has good business connections with Nizhny Tagil. It defined the new project substance. The forthcoming steelmaking reconstruction is rather complicated technically. That is why the main factor defining our choice of the partner was the ability to find right technical solutions.

- Why did you choose Tomsk Electronic Company as an official partner? What convinced you of its qualification?

- It is well-known that Siemens-VAI chooses its partners carefully, both technically and commercially. TEC is a strong partner, a developing company with good innovation and production capabilities that is why I am assured that the Nizhny Tagil project will be successful.

- What is your assessment of the present steelmaking at the NTMK and the scope of works under the project?

The Nizhny Tagil Steel and Iron Plant was established relatively long ago and now it has to be modernized. However, the Plant has a great potential. The NTMK production specialties are processing of the vanadium-containing ore and the technology, designed to extract valuable vanadium from iron, so-called duplex process. Our company is proud to contribute to the steelmaking development at NTMK together with our partners from Tomsk Electronic Company.