



We will **engineer and manufacture** a custom steel building **turnkey** based on our new online service **WebSteel**



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Factory PK VESTA has been in business since 1991

Our feature – we serve customers online 24/7 in WebSteel for markets in Eurasia, the Middle East and Africa







At the Oktoberfest, 1 320 860 gallons of beer are drunk, more than 400 thousand fried pork sausages and about 480 thousand chickens are eaten.

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«We are on the verge of a revolutionary change in customer service in the non-residential global construction industry»

Denis Kulakov (the main developer of WebSteel)

Using the new "Smart Techno Design" concept (methods, principles, innovations), the client's communication with the building manufacturer is now fully based on the unique patented on-line WebSteel system, which combines the main internal business processes of the plant and allows the client to negotiate and order buildings in real time via the Internet.



Vision: in the near future, any person will be able to independently design and engineer custom steel buildings on the Internet, buy them on the website and receive the turnkey building kit in any part of the world.



I-Cloud technologies: the analytical core for calculating the price of steel buildings was placed on the server, which allows serving almost an unlimited number of users instantly 24/7.



Culture-based Design: PK VESTA is gradually introducing the "cultural design cliché", which allows the client to design steel buildings related to the worldwide famous architectural styles and motifs.



Flex-Production: a certain combination of semi-automated modules on the production line is used in order to minimize the number of line readjustments for prefabricated steel buildings of less than 1 500 sq.m.

«Greek style»

Uhite)

Production facility (city Thessaloniki)

The culture of Greece developed over millennia, starting from the Aegean civilization, continuing to develop especially rapidly in the classical era, later through the influence on Ancient Rome and the Hellenized East embodied in the culture of the Byzantine Empire.

MEGA

Greece includes more than 2 000 islands (Crete, Euboea, Patmos, Chrysi). They account for about 20% of the entire Greek territory.



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«Czech style»

Warehouse complex (city Prague)

Architecture in the Czech Republic has always been a priority. It was ahead of art and literature. Today, the country has several thousand palace complexes, castles, cathedrals, fortresses and historical monuments of all eras.

Czech beer is considered to be one of the most delicious ones. Czech breweries have great success and a high reputation in the world.



WebSteel – the only high-tech interactive powerful on-line service in EuroAsia, the Middle East and Africa for designing and instant pricing of pre-fabricated steel buildings over the Internet with the FREE 3D rendering and tech specs generation feature (websteel.pkvesta.com)





WebSteel system: an innovative online project, the result of many years of efforts by an international team, allowing anyone, regardless of technical background, to quickly and conveniently design custom buildings in real time (authentic style) and calculate their costs via the Internet. PK VESTA manufactures these steel buildings turnkey and ship worldwide.

The WebSteel system minimizes the metal consumption of the building, taking into account the basic building codes in real time. The online core of the system is based on the Unified Parametric Building Modeling (BIM) The system offers over 500 000 building variations with various options and accessories. The client spends usually around 10 minutes receiving the detailed price quote for free.

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Customization in WebSteel – more than 500 000 variations of buildings

The system considers all technical requirements of quotes in parameterized online environment!



Gable and lean-to are the most popular types of steel building structures



Individual project designing with 30 TOLL-FREE colors from RAL catalogue Making any factory-located framed openings (windows, gates and doors)





Calculations of **top-running crane beam** with the capacity of up to 20 tons Making **empty framed openings** on side- and endwalls of a steel building



Canopy designing in the form of an empty section in any part of a steel building





Online calculations of both flat and stepped parapets



Designing of a **wide opening** for large vehicles on the endwall sides



WebSteel System – Nº1 choice for SMALL and MEDIUM BUSINESS

Create your own culture of a foreign country in the façade of your steel building!



Custom online project designing on the basis of a «Cultural Design Cliché concept» (architectural motifs of different countries)



IN CONCORDANCE WITH YOUR LIFESTYLE

WebSteel community unites people of different nationalities, professions and interests!



WebSteel community consists of assembly contractors, designing companies, general contractors and ordinary people. WebSteel online system will conquer your heart! It is a unique chance to implement your creative potential into practice. New **"SMART TECHO DESIGN»** technologies will allow any user to create a pre-fabricated steel building based on his own imagination, lifestyle, travel experience and world top architectural styles.

You are welcome to apply «Cultural design cliche»

based of individual types of steel buildings design, decoration elements, color palette and accessories!



WebSteel allows any international clients to DESIGN authentic steel buildings at absolutely no costs over the Internet







Custom <u>H-BEAM</u> steel buildings (classic rigid framing technology)

PK Vesta will manufacture any steel building turnkey based on the FREE online platform WebSteel!



Pre-engineered steel buildings are some of the most popular ones in Russia and the CIS. Roughly from 60% to 80% of all industrial buildings abroad are made predominately from steel.

You will definitely enjoy designing steel buildings online. All international clients can choose such parameters as Width, Length and Height **with the**



Rigid framing - a powerful, reliable and most common solution in global industrial markets

A steel building backbone consists of welded columns, H beams (framing) and cold-formed profiles. In contrast to the modular building, the custom buildings can be designed with the **single span** of up to 100 meters wide without interior load-bearing columns. Such buildings are stronger in terms of calculated loads.

Steel buildings **INDI** are erected with built-up or composite sandwich panels with a filling material of three major types, namely mineral rock wool, foam plastic or polyisocyanurate foam. The width varies from 40 to 250 mm. The enclosure structures are highly energy-efficient with high sound- and heat

properties.





Hangars, garages, offices, warehouses, car service facilities, production facilities and small markets are the most **common types** of usage for these pre-fabricated steel buildings.

Advantages of H-BEAM steel buildings:

- <u>Great ROI</u> = fast steel building commissioning as assembly can be executed any season of the year, heavy lifting machines are used in very few cases, no welding is required and simple bolted-together design.
- 2) Cost minimization of transportation services.
- 3) Cost of steel buildings is <u>20-30% lower</u> than that of the ones made of traditional materials (bricks and concrete)
- 4) High level of online steel building customization (dimensions, types of steel structures, factory-located framed openings for gates, doors windows)
- Use for 2-storey buildings, the buildings with crane beams, multiplane buildings and the ones with the special loads.

Assembly of <u>H-BEAM</u> steel buildings

Types of foundation: slab or pier. Such steel buildings (24W x 60L x 6H) are erected roughly in 3 weeks!

Nº1. Ground pocket (1.4 m), casing, and reinforcement of steel backbone and welding of 4 high-strength anchor bolts.





Nº4. Bay spacing is 6 meters. The horizontal rigidness of frames is provided by sidewall girts (cold-formed profiles) and diagonal braces.



№2. Slab foundation with four anchor bolts on which a frame (column/beam) is placed.

N25. Wall and roof sandwich panels are mounted with fasteners and screws. All framed openings are factory-located.



Nº3. Each frame is placed and fastened with four anchor bolts with the help of a crane. Wind braces are installed between the first two frames.



№6. A steel building is ready! Gates, doors and windows are waiting to be mounted.





Custom LSGF steel buildings (new cold-formed profiles technology)

The metal consumption of such buildings is usually lower by 20-30% than the ones made out of H-beams



The **LSGF** building series is a high-quality, affordable and high-tech product. The entire steel building is made out of a unique material - a galvanized coldformed profile with two sections: Z-shaped and C-shaped elements.

The steel frame is made by cold-bent profiling of stainless steel (350 MPa) with galvanized coating (275 g/1m2). The thickness of the profile varies

LSGF - the new progressive modern technology widely applied in Eurasia, the Middle East and Africa.

from 1.5 to 4 mm.

A steel building backbone consists of **zinc-coated cold-formed columns and trusses** (framing). In comparison with the series **H-BEAM**, the series **LSGF** is completely zinc-coated, which provides excellent corrosion resistance for many years to come. Such buildings are reliable, of high quality and durable. They are lighter and faster to manufacture.

LSGF steel buildings are erected with built-up or composite sandwich panels with a filling material of three major types, namely mineral rock wool, foam plastic or polyisocyanurate foam. The width varies from 40 to 250 mm. The enclosure structures are highly energy-efficient with high sound- and heat properties.







Hangars, garages, offices, warehouses, car service facilities, production facilities and small super markets are the **most common types** of usage for these pre-fabricated steel buildings.

Advantages of the LSGF series:

- 1) Due to the <u>cold-forming process</u>, the studs and joists are made stronger than the original steel.
- Light weight steel framing <u>decreases construction costs</u> (warranty call-backs are minimized because steel does not shrink, split, or warp. Savings of \$400)
- 3) Steel framing is easier to handle because steel studs weigh 1/3 less than wood studs
- <u>Discounts on builders risk insurance</u> for steel framed structures (savings of \$60)
- 5) Each piece of steel framing shipped to the job site contains <u>a</u> <u>minimum of 25% recycled content</u> and 100% recyclable at the end of its lifespan.
- 6) The zinc coating on the steel framing materials can protect <u>against</u> <u>corrosion</u> hundreds of years.

Man Barrister,

Erection of the LSGF series

The slab/pier foundation is used! Such buildings (7W x 20L x 4H) is assembled in 2 weeks!



№1. Making a lighter foundation for a small autoshop centre.

Nº2. Erection of the first columns and beams of two combined cold-formed profiles (Zshaped and C-shaped elements)







Nº4. Mounting of both wall and roof composite sandwich panels using screws, fittings and fasteners.





№6. The steel building is ready. It is time to start mounting gates, doors and windows.



Prefabricated car wash with a technical center

Tula, Russia





SERVICES

Based on the wide network of regional and national independent representative offices (contractors and builders) PK Vesta is proud to offer a number of services with excellent quality for all clients worldwide



FREE ONLINE PROJECT DESIGNING: by placing an order with PK Vesta a client receives the FREE set architectural drawings (steel framing, facades and base) In WebSteel.



ASSEMBLY SERVICES: A client can order erection of a steel building including the following: steel framing, enclosure structures, fittings and all accessories from a local regional representative.



BASE WORKS: That service includes land works, purchase of the consumables and foundation installation works. WebSteel online system calculates all foundation costs on the basis of conventional soil.



DELIVERY SERVICE: At the final stage of project designing, a client is informed in advance about the exact number of vehicles to be used for the finished goods delivery onsite.



QUOTE ONLINE PROCESSING: PK Vesta allows a client to trace all the stages of his quote processing through a personal account in WebSteel (project designing, approval, manufacturing, delivery, etc.)









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«Polish motif»

Hypermarket (city Warsaw)

Polish culture is characterized by thousands of years of commitment to the Roman Catholic Church and the proximity to the centuries-old Western cultural tradition.

During WWII 85% of buildings in Warsaw were demolished. Today Warsaw is the city revived from the ruins.



Our portfolio of projects in global markets









--up to five-year structural warranty

FULL CONFIDENCE. FULL SAFETY.

All international clients receive a basic or extended structural warranty on the pre-fabricated steel buildings worldwide. PK Vesta uses high internal "quality standards» within the framework of which all the production is manufactured and checked on the basis of «Electronic Card of quotes processing» (ERP online system) The manufacturer guarantees wind, snow and seismic load resistance according to the regional and international building codes as well as special conditions stipulated in Technical Specification.



PK VESTA can design, engineer and manufacture any custom steel buildings shipped worldwide based on WebSteel system!

