



TRADE-PRODUCTION-INVESTMENT  
GROUP OF COMPANIES

READY-MADE BUSINESS SOLUTIONS  
RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH  
CONVERSION FROM OLD TO NEW “SMART” SYSTEMS



RIM GROUP

Management Company



RIMMARKET

Trade – customer research



TEPLOSTROYPROYEKT-S

From Incoming Request to Contract Execution



RIMBUILDING

Innovation and R&D  
From Idea to Project Realization  
Technologies

# BUILDING THE FUTURE!



## INDUSTRIAL AND CIVIL CONSTRUCTION

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INDUSTRIAL FACILITIES

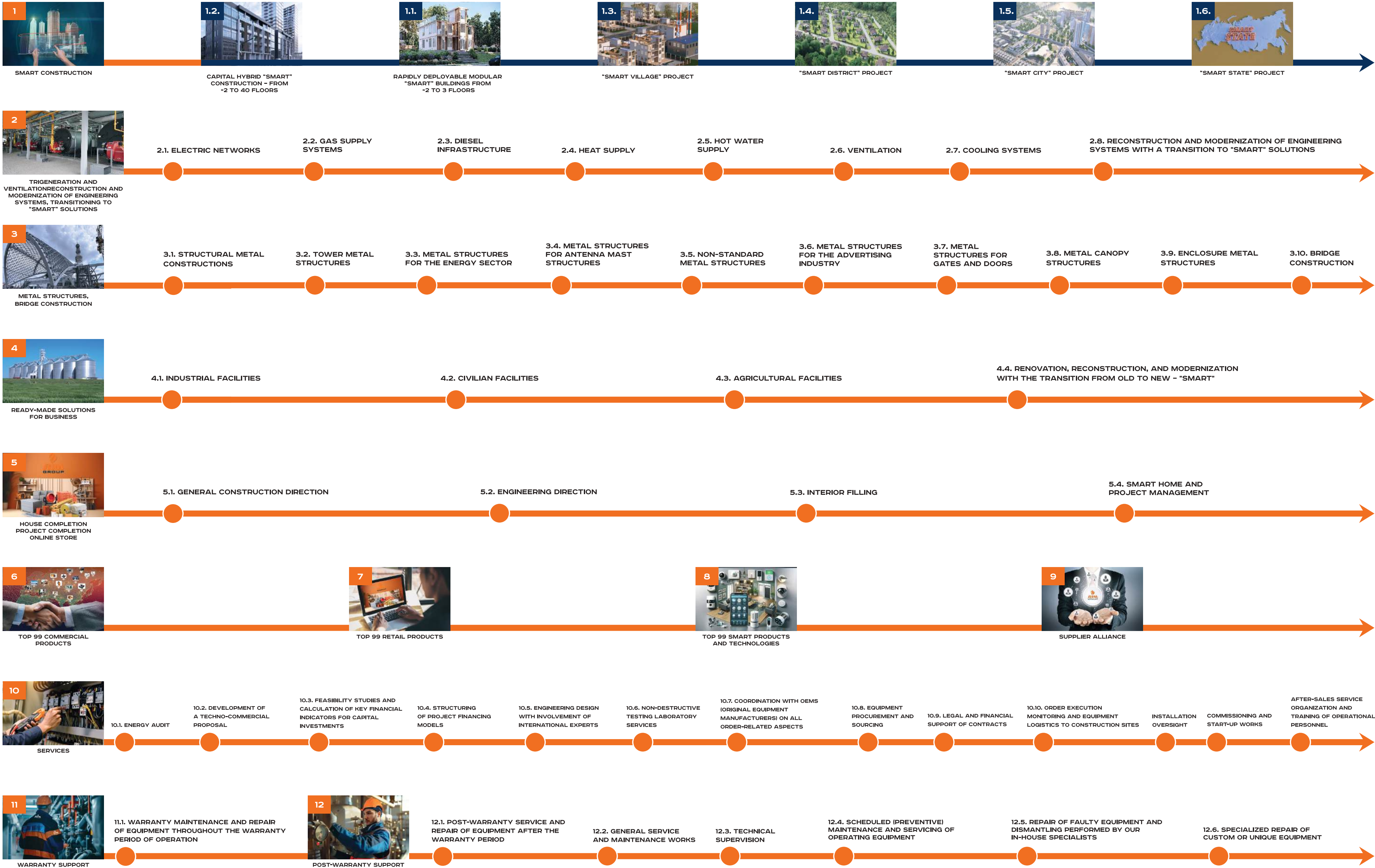
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RENOVATION, RECONSTRUCTION,  
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CONVERSION FROM OLD TO NEW  
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## COMPLETED PROJECTS

### PORTFOLIO - 30 YEARS OF EXCELLENCE



# COMMERCIAL ACTIVITIES

## GOODS AND SERVICES



### INDUSTRIAL FACILITIES



### CIVIL FACILITIES



### AGRICULTURAL FACILITIES



### RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH CONVERSION FROM OLD TO NEW “SMART” SYSTEMS



### PRODUCTION PROCESS

PRODUCTION AND TECHNICAL DEPARTMENT (PTD) , DESIGN INSTITUTE (DI) ,  
FACTORY, CONSTRUCTION AND INSTALLATION DEPARTMENT (CID), WARRANTY  
AND POST-WARRANTY MAINTENANCE SERVICE



### COMPLETED PROJECTS PORTFOLIO - 30 YEARS OF EXCELLENCE



# FACTORY TEPLOSTROYPROYEKT-S



The plant's production area covers more than 7,000 square meters. More than 100 units of state-of-the-art equipment are used in the manufacturing process.

## The plant carries out a wide range of operations

### The following are manufactured here:

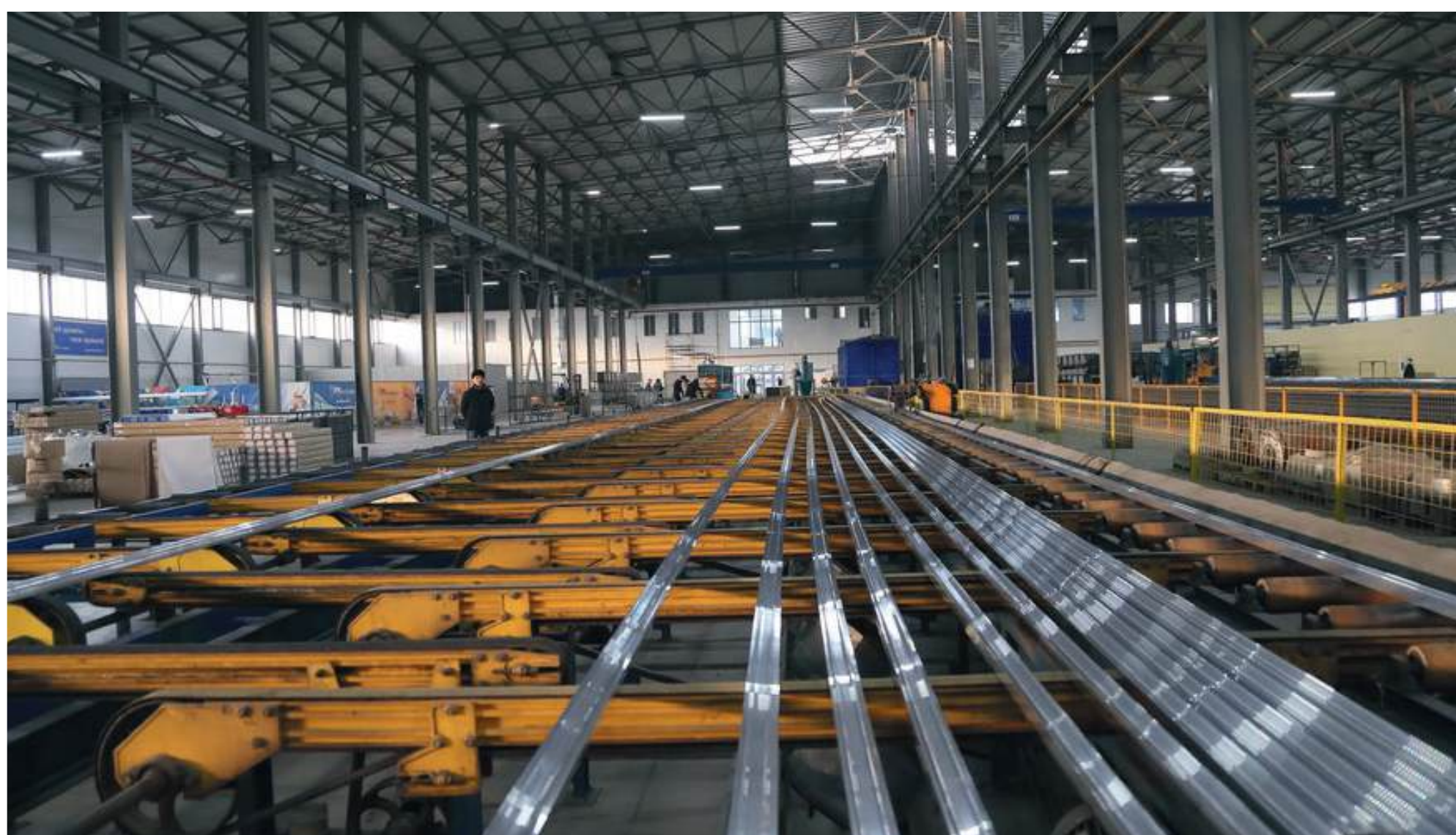
- stationary, automated block-modular and roof-mounted boiler houses with a capacity of up to 360 MW;
- steam, fire-tube and water-heating boilers with a capacity of up to 60 MW, as well as accessories for them;
- up to 20,000 tons of steel structures per year (welded steel structures for construction, industrial, and technological purposes, as well as storage equipment);
- quickly erected modular houses up to 3 stories high and permanent hybrid buildings from -2 to 40 stories;
- structures for civil construction, piles, mast and advertising structures, non-standard steel products in small and large series.





# ALUMINUM PROFILE MANUFACTURING FACTORY

Magas, Republic of Ingushetia





# RECYCLING FACTORY

## DIRECTION

### Glass

One of the best and most sought-after types of secondary raw materials is glass and cullet, which account for about 17% of household waste. At the same time, 30-40% of modern glassware is made from recycled materials.



### Waste paper

Waste paper is used to produce cardboard, building materials, sanitary and hygiene products, medical clothing, packaging, and new paper. With rational use, about 3/4 of used paper is recycled.

### Plastic

Ordinary plastic (PET) bottles are an excellent source of recycled material for the production of chemical fiber and flex. This material looks like flakes, colored or white. PET bottles are made from flex, which can be recycled indefinitely. Not only bottles, but also various types of film, bags, disposable tableware, and other plastic products are suitable for recycling.





# WASTE PROCESSING FACTORY

A WASTE PROCESSING FACTORY IS DESIGNED FOR WASTE DISPOSAL AND RECYCLING. AS A RULE, SUCH FACTORIES CAN BE DIVIDED INTO TWO BROAD CATEGORIES:

Solid waste processing (metal, glass, paper, and plastic waste);

Chemical processing.



## THE MOST PROMISING BUSINESS AREA WITH THE POSSIBILITY OF RECYCLING VARIOUS TYPES OF WASTE

- Car tires – tires are decomposed by pyrolysis of synthetic oil, and the cord is sent to scrap metal collection points.
- Glass – in recycled form, it is delivered to glass factories or ceramic manufacturing plants;
- Plastic – in crushed form, it is remelted to produce granules used by companies that manufacture packaging containers, film, brooms, and car body parts;
- Construction waste with residual elements of brick, concrete, wood, and metal is sorted and ground into gravel for use in road construction and other construction projects.
- Waste paper is recycled to produce toilet paper, packaging paper, and roofing materials.





# WOOD PROCESSING FACTORY

## MAIN ACTIVITIES OF WOOD PROCESSING ENTERPRISES:

- Woodworking
- Sawing and planing of wood
- Production of sawn timber
- Production of paper and cardboard
- Manufacture of pulp
- Production of veneer
- Production of plywood
- Manufacture of panels and boards
- Manufacture of wood products





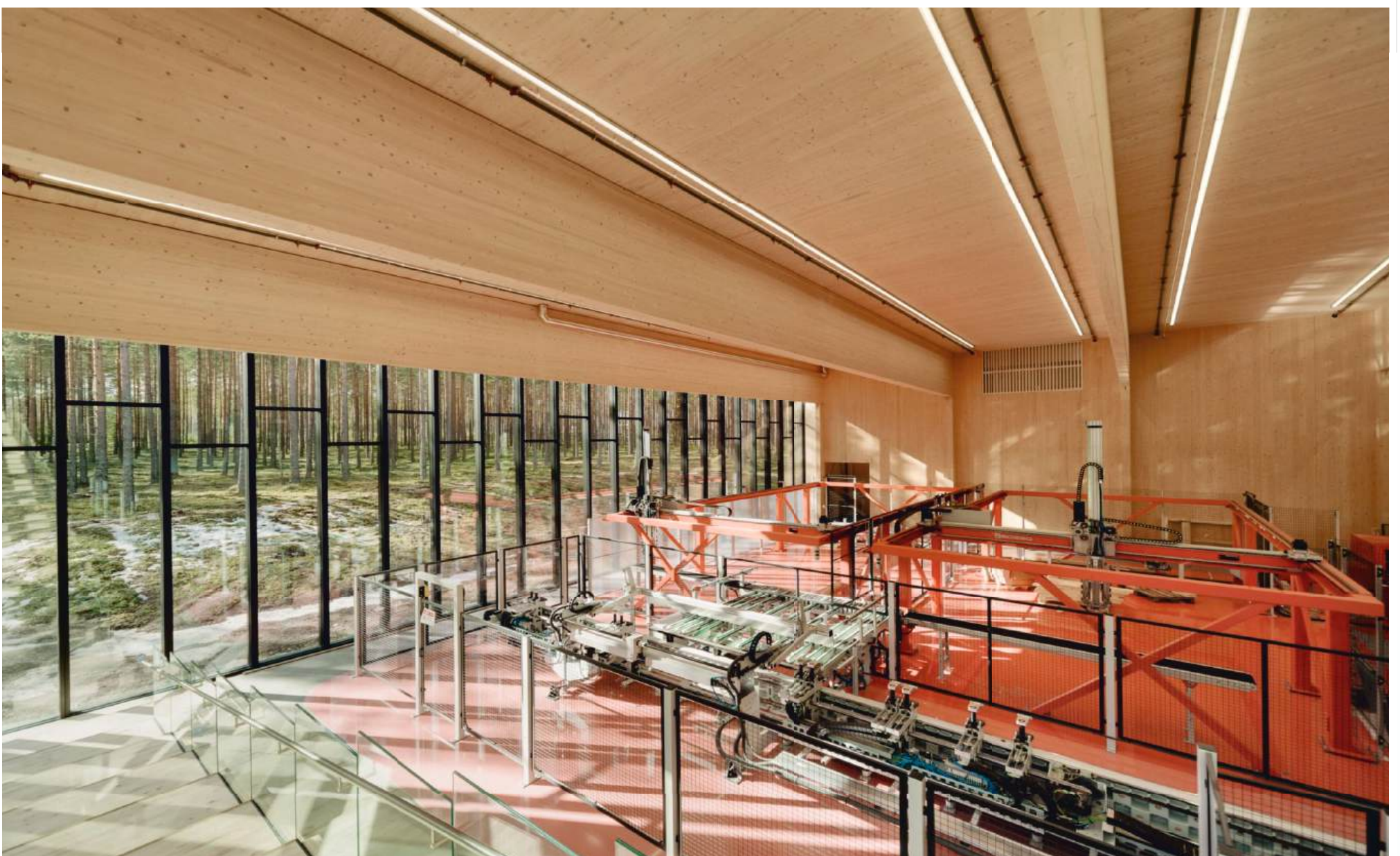
# FURNITURE FACTORY

A furniture factory is an enterprise that manufactures furniture. Furniture factories produce furniture of various types and styles, which can be used in residential, office, commercial, and other types of premises.

Furniture factories usually have large production areas, high-tech equipment, and many specialized employees.

## Furniture is divided by design into:

1. Cabinet furniture Items consist of separate cabinets that are fastened together to form a single set. Each element has its own purpose — storage, clothing storage, or use for work and eating.
2. Upholstered A finished product that can be used on its own or as part of another product. For example, a sofa, armchair, or pouf.
3. Frameless For example, a beanbag chair, which has a special filling inside and no frame.
4. Woven or bent The body is made using a bending or weaving method.
5. Transformable The special design of furniture items allows their purpose to be changed. For example, an armchair can be turned into a bed or its dimensions can be changed.
6. Universal and modular Consists of standardized elements that can be assembled into items of various shapes, sizes, and purposes.
7. Built-in Stationary, forms a single unit with the wall or partition of a room. This type of furniture includes partition cabinets and sliding door wardrobes.





# TEXTILE FACTORY

## Textile production technology

The key factor determining all textile production and the organization of its individual processes is the fabric manufacturing stage itself. It consists of several basic steps, which we will now examine:

1. Preparation. Obtaining yarn from fibers by processing them—loosening, beating, combing. 2. Spinning of raw fiber. A textile thread is obtained from loose cotton fibers. 3. Direct production of fabric on weaving looms. 4. Final finishing procedure. As a result of this stage, the fabric acquires properties such as strength, softness, smoothness, water resistance, and others.





# TECHNOPARKS AND INDUSTRIAL ZONES

WE DESIGN FACILITIES FOR VARIOUS INDUSTRIES. THE FACILITY IS COMMISSIONED AHEAD OF SCHEDULE THANKS TO THE DETAILED DESIGN OF STRUCTURAL ELEMENTS AND TECHNOLOGICAL SOLUTIONS, IN COMPLIANCE WITH ALL STANDARDS.



## We design and build:

- Machine-building factories.
- Cement factories.
- Specially hazardous production facilities.
- Metalworking enterprises.
- Woodworking enterprises.
- Tool factories.
- Plastic factories.
- Furniture factories.
- Reinforced concrete factories.
- Chemical enterprises.
- Various workshops and much more.





# CEMENT PLANTS

OUR COMPANY OFFERS NEW CEMENT PLANTS WITH VARIOUS CAPACITIES, DIFFERENT CEMENT PRODUCTION TECHNOLOGIES AND VARIOUS METHODS OF PORTLAND CEMENT PRODUCTION:



**Mini cement factories** for the production of Portland cement with a capacity of 100 - 300 tons per day (24 hours - continuous production) using cement production technology - vertical shaft kilns.

**Small cement plants** for the production of Portland cement with a capacity of 500 - 1000 tons per day (24 hours) using cement production technology - rotary kilns.



**Large cement plants** with a capacity of 1000 - 2500 tons per day (24 hours) using rotary kiln technology.

**Cement clinker grinding plants** with a capacity of 100 - 2500 tons per day.



# ASPHALT PLANTS

THERE ARE SEVERAL CRITERIA FOR CLASSIFYING ASPHALT CONCRETE FACTORIES.



## By capacity:

- Low capacity (mini-factories) – up to 56 t/h.
- Medium capacity – up to 100 t/h.
- High capacity – up to 350 t/h.
- Ultra-high capacity – up to 400 t/h and above. Mini-factories have been gaining popularity in recent years, as their mobility and compact size allow them to be built on relatively small sites and serve settlements that do not have their own asphalt concrete production facilities.

## By mobility:

- Stationary plants. Operated in one place, located on a prepared foundation site and have a service life of 10 years. For higher production rates, they can be equipped with 6 mixers.
- Inventory plants. Also located in one place, but designed to operate for no more than 4 years. Equipped with 1-2 mixers.
- Mobile plants. Lightweight mobile plants adapted for movement between different service points by means of semi-trailers. Equipped with no more than one mixer.

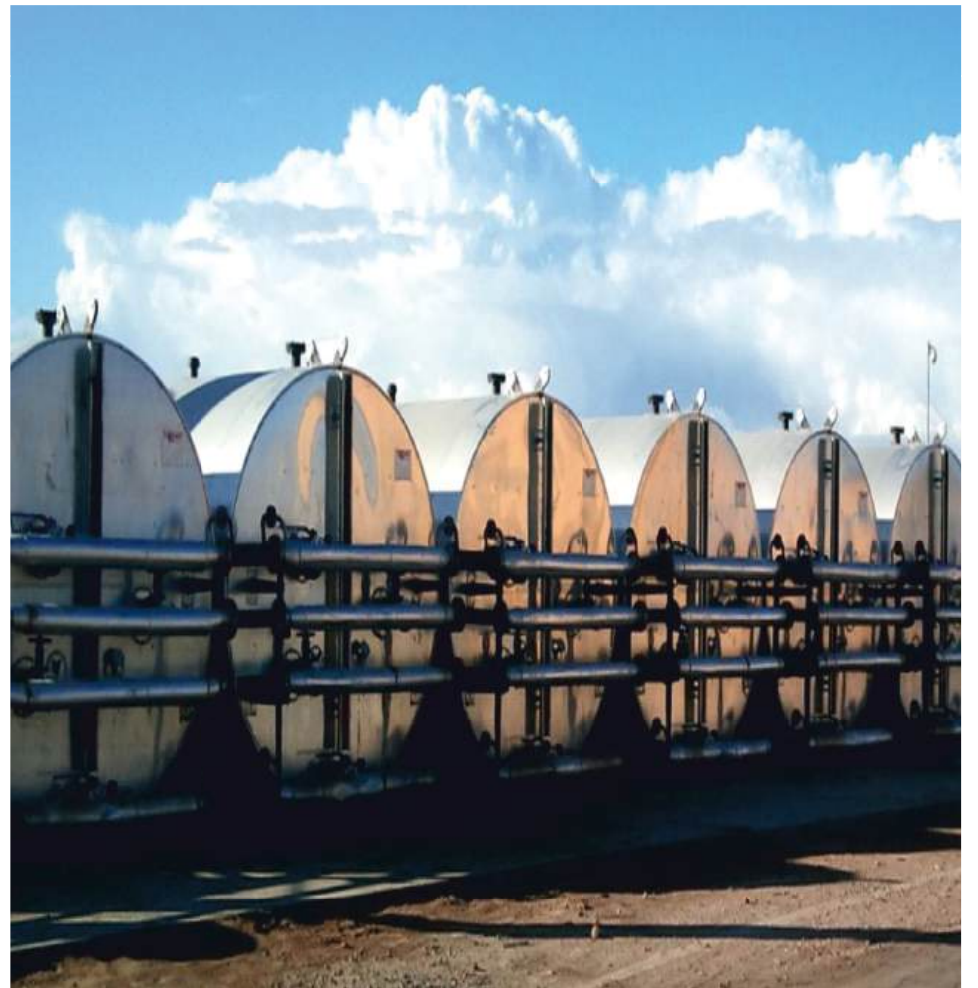




# BITUMEN STORAGE FACILITIES

## Pit and above-ground bitumen storage facilities:

Pit bitumen storage facilities are covered tanks with sloping or vertical side walls, consisting of one or more storage compartments. Above-ground bitumen storage tanks are freestanding vertical and horizontal metal tanks (with a capacity of 100 to 5,000 m<sup>3</sup>) manufactured in series in accordance with GOST 17032-71 and GOST 52910-2008. To ensure the operation of ground-based storage facilities, additional (reserve) capacity is required in the form of a drain tank, in which the bitumen is reheated to temperatures sufficient for pumping into the storage facility (when draining from railway tanks) or into the bitumen preparation workshop (when draining from storage facilities).



## OUR COMPANY OFFERS:

- Development of the necessary sections of project documentation.
- Support for the examination of project documentation.
- Development of working documentation for the construction of the facility.
- Development of construction technologies based on POS.
- Implementation of construction and installation works based on the developed projects.





# CONCRETE PLANTS

## Types of concrete plants

- Stationary concrete plants;
- Mobile concrete plants;
- Container concrete plants (without foundation pouring);
- Winter concrete plants.



Modern concrete factories use automated control for fast and accurate measurement of components or ingredients. Due to specific characteristics that depend on accurate measurement, digital scales for cement materials and aggregates, as well as moisture sensors for measuring total water content, are often used in these systems.





# BRICK FACTORIES



The RIM GROUP company group carries out design work for both the construction of new brick factories and the reconstruction of existing ones. The company's qualified specialists provide the customer not only with a ready-to-implement factory design, but also ensure the supply of the necessary construction materials and equipment.

We offer equipment from domestic manufacturers, as well as from the European Union and China. Considering that the financial efficiency of brick factory construction is an important factor for the customer, we offer brick manufacturing technologies with a payback period of only 2–3 years.

Thanks to a well-thought-out approach to design, the manufacturer will be able to produce compact, reliable, and easy-to-transport products.

**According to the production recipe, bricks are classified into two types:**

**Silicate bricks, the main components of which are:**

- Quartz sand
- Water
- Air lime

**Ceramic bricks, which are made from clay. Depending on the color of the raw materials, there are several types of bricks:**

- Clay (red)
- Yellow
- Silicate (white)



# BRICK FACTORIES

## Stages of brick production



### The main stages of brick production include:

- extraction and processing of raw materials. Clay is extracted using a percussion method. The soil is fed into special installations where it is mixed with additives. Wood shavings, which are sprinkled onto the conveyor belt in advance, help to prevent the clay from sticking to the surface.
- cleaning and crushing. At this stage, large particles are removed from the raw materials. As a result of grinding, the material becomes homogeneous, similar in consistency to plasticine;
- mixing. Fine grinding is achieved using roll mills. A vacuum chamber is used for deaeration and thorough mixing. The mass is fed in portions and separated manually.
- At the stage of forming the future bricks, the logs are automatically divided into blanks. Thin rolling allows the blocks to be cut perfectly and provides reliable protection against splitting.
- Drying and cycle compliance. Optimal air circulation is ensured for drying, which takes approximately 70 hours.
- The final stage of production is firing. The bricks are loaded into trolleys and subjected to high temperatures in a kiln.



# GLASS FACTORIES



Creation of modern production of high-quality exclusive glass containers for liquor, food, processing, wine, medical, chemical industry, as well as household purposes is one of the demanded directions.

The group of companies RIM GROUP offers a fully ready for realization project of a glass factory. At the Customer's request, construction materials and necessary production equipment are provided from domestic manufacturers, as well as from EU countries and China.

The peculiarities of the created production are the possibility to fulfill small orders with minimal production costs, mobility, assistance in design development and prompt production of molded tooling. This will allow to stand out favorably against the background of competitors.

## TWO METHODS ARE COMMON IN TODAY'S INDUSTRY - THE FURCO METHOD AND FLOAT.

### Furco method

This technology is based on the method of gradual pulling of glass melt from the glass furnace through special rollers. The continuous rolling of the glass mass results in a long web. As the melt is drawn, it enters a special chamber where it is gradually cooled by blowing heated air.



The cooled glass strip is then cut into sheets of the required size using special glass cutting machines. The thickness of the glass sheet is adjusted by changing the speed at which the melt is pulled out of the furnace. Due to the peculiarity of manufacturing, such glass is called «pulled».

Production of glass by the Furco method, despite the outdated technology, is still used today.

### Method of production Float

The production of sheet glass using the float method is considered more modern than the pulling technology. The name of the method comes from the English word «float» - «to float». This method was first developed by the British glass company «Pilkington».

The essence of the method is the molding of glass on the surface of molten metal. Liquid glass from the melting furnace enters a bath of molten tin. Since glass is lighter than tin, it spreads on its surface and gradually solidifies. The melting point of tin is much lower than that of glass, which allows the glass sheet to be formed on its surface. The thickness of the glass is controlled by the volume of the glass melt, and the shape of the sheet is determined by the design of the bath.

Today, the float method is the main and most common method of glass sheet production in the world.



# PRODUCTION OF FOAM BLOCKS AND AERATED CONCRETE

## Specifics of aerated concrete production

Specificity of technology allows you to produce blocks only in a production way, requiring special equipment, automatic control of process parameters. Quality control of products is determined by a laboratory method. The basic ingredients used in the manufacture of aerated concrete are:

- Portland cement
- Technical water
- Quartz aggregate
- Slaked lime
- Aluminum powder
- Active reagents



## Specifics of foam concrete production

The basis of foamed concrete consists of:

- Sand
- Foam
- Cement
- Water

Manufacturing is carried out in industrial mixers. After the mixed concrete solution is ready, it is poured into molds. The foamed composition stands for 4 hours for setting. Ready blocks are transported on pallets for drying under atmospheric conditions. The process takes 14 to 20 days.

The production of products from foam mixes has the following features:

- Autoclaves and other special equipment are not required.
- Possibility of manufacturing in conditions of a small enterprise or construction site.



# CRUSHED STONE AND COLORED CRUMB PRODUCTION

## Equipment

For the production of decorative crumb and crushed stone in volumes of 1-2 meters per shift should be purchased:

- Two special hoppers for storage of bulk building materials. The first for raw materials, the second
- for drying the finished product. The capacity of each - a minimum of 10 meters.
- For painting, a concrete mixer is used.
- For sorting crushed stone by fraction, a special vibrating screen is needed.
- Painted products should not be stored in a warehouse without packaging. Spread the crushed stone in bags and sew them up immediately after drying. For this purpose, a specialized sewing machine for bags should be purchased.

## Technology

Raw materials - crushed stone (marble) and crumbs (marble or granite). Fraction - 10-30 mm. The surface of crushed stone should be clean and dry. Passing the raw material through a vibrating screen, you get the same fraction and get rid of debris. One batch is colored in about 15 minutes. The products can be dried in natural conditions or using a heat gun.





# BOTTLED DRINKING WATER FACTORY

## STAGES OF WATER PRODUCTION AND PURIFICATION USING SPECIAL EQUIPMENT:



1. Drilling a well or connecting to the city water supply system.

2. Next, the water passes through a filter, where large elements that contaminate the water are filtered out (coarse filter).

3. Fine purification involves the removal of small impurities.

4. The next stage is production quality control. Employees must measure the presence of minerals or harmful impurities in the water.

5. The product must be

disinfected using special ultraviolet radiation (appropriate equipment is purchased for this purpose).

6. The ozonation stage is necessary to enrich the water with minerals and protect it from rapid loss of beneficial additives. There is no need to chlorinate the water.

7. The final stage is another check of the water and bottling it using special equipment. This equipment also applies labels and, most importantly, disinfects the containers.





# NON-ALCOHOLIC BEVERAGE FACTORY

## PRODUCTION AND MANUFACTURING METHODS USING SPECIAL EQUIPMENT FOR NON-ALCOHOLIC BEVERAGES

The technology for producing non-alcoholic beverages is not complicated. For mass production of such products, a blending method is used.

### The production of non-alcoholic beverages is as follows:

- Water preparation and purification.
- Water supply to the syrup boiler.
- Mixing water with wort.
- Transfer of the finished mixture to the blending vessel.
- Sweetening of the finished mixture by adding syrup.
- Addition of gas and cooling of the beverage.
- Bottling of non-alcoholic beverages.



### For a small company whose main activity will be based on the production of these products, standard equipment for non-alcoholic beverages will be required:

- Water treatment system.
- Boiler for preparing the required amount of syrup.
- Containers for storing and mixing ingredients.
- Carbonator.
- Filling, capping, and packaging system for finished products.





# BAKERY

MODERN BAKERY ENTERPRISES ARE DIVIDED INTO BAKERIES (LAMB FACTORIES, DRY BREAD FACTORIES), MECHANIZED AND NON-MECHANIZED BAKERIES.



Bakeries are mechanized industrial enterprises designed for the production of bread, bakery, loaf or dry goods or both products in the prescribed range.

Mechanized bakeries are enterprises designed to produce the same products as bakeries, but only in a smaller volume.

Non-mechanized bakeries - enterprises producing bakery products in small quantities (up to 10 tons per day), equipped with hot ovens or ovens with channel heating, with manual kneading and dough cutting.





# OIL REFINERIES

## OIL REFINERIES (REFINERIES) COME IN FIVE BASIC TYPES:

1. Fuel refineries with shallow oil processing;
2. Fuel refineries with deep oil processing;
3. Fuel and petrochemical refineries with deep oil processing and petrochemical production;
4. Fuel and oil refineries;
5. Energy and petrochemical refineries.



The first two types of refineries produce mainly different types of fuel. At shallow oil refining no more than 35% of light oil products are produced, the rest is fuel oil. In deep refining the ratio is the opposite. This is achieved by application of secondary methods of oil refining - catalytic cracking, coking, hydrocracking, and others.





# TANK FARMS

## YPES OF SYSTEMS

The basic classification of tank farm for oil tank farm divides its systems into 4 classes according to the method of installation:

1. Aboveground type of tank farm for oil and its products.
2. Above-ground type of tank farm systems. Similar to the aboveground ones.
3. Semi-subterranean installation of tanks and tank farm.
4. Underground or subsea systems. Usually constructed in the underwater foundations of drilling platforms. Consist of underground or subsea.



Aboveground, aboveground, and semi-subterranean systems are designed for a capacity of no more than 200,000 cubic meters for each individual tank for oil and petroleum products. In order to ensure safe operation in the oil production or refining area (oil depot), such structures are usually surrounded by a perimeter boundary wall (bund) and marked with fire protection passages.





# FACTORY FOR PRODUCTION OF FUEL BRIQUETTES

## PRODUCTION TECHNOLOGY

### Cold pressing

This method is used in private production with small output. The resulting products have a low density. But it is possible to open your own production with the lowest costs. The chips do not need to be crushed and dried; they are moistened to 40% before pressing.



### Hot pressing

This method is used in industrial production with large volumes of output. It requires specialized equipment, including not only the press.





# FEED MILL

DEPENDING ON THE DEGREE OF TECHNICAL EQUIPMENT AND ON THE DEVELOPMENT OF THE TECHNOLOGICAL SCHEME FEED MILLS CAN BE CLASSIFIED BY TYPE:



1. The first: feed mills working on traditional technology. To such enterprises belong compound fodder plants which have no separate units of preliminary dosing and mixing of hard-to-feed, mineral, grain and granulated components;

2. Second: compound fodder plants with one unit of preliminary dosing of hard-to-feed components. These are mainly plants with productivity of 315 t/day, built according to the standard project;

3. Third: feed mills with two nodes of preliminary dosing: hard components, grain and granulated raw materials.





# COMMERCIAL ACTIVITIES

## GOODS AND SERVICES



### INDUSTRIAL FACILITIES



### CIVIL FACILITIES



### AGRICULTURAL FACILITIES



### RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH CONVERSION FROM OLD TO NEW “SMART” SYSTEMS



### PRODUCTION PROCESS

PRODUCTION AND TECHNICAL DEPARTMENT (PTD) , DESIGN INSTITUTE (DI) ,  
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### COMPLETED PROJECTS PORTFOLIO - 30 YEARS OF EXCELLENCE



# MULTIFUNCTIONAL COMPLEX



A unified methodological approach to the design of multifunctional complexes can be identified:

- Premises of various purposes included in such a complex are designed according to the norms adopted for each specific type of public building;
- Functional processes in them should take place independently of each other, while at the same time a unified volume-planning solution should ensure convenient interconnections and unimpeded possibility of joint functioning;
- In contrast to specific premises, common and auxiliary premises for various elements of a multifunctional complex may be combined;
- The volume-planning solution of the complex as a whole should meet the current norms for public buildings.





# WAREHOUSE COMPLEX



## Types and kinds of trade and warehouse complexes

- Transit and transshipment - designed for receiving goods and subsequent distribution into batches for sale.
- Seasonal storage warehouses - can be used for storing various fruits and vegetables in the cold season.
- Early delivery warehouses - relevant for the far north and other regions, where most of the time traffic is difficult and it is necessary to deliver a large volume of goods in a short time.
- Sorting and distribution warehouses - used at large bases where goods are received, sorted and re-distributed to specific points for realization.
- Accumulative - small shipments are accumulated until the volume reaches the required volume, after which a large volume of goods is dispatched.





# AMUSEMENT PARK

## TYPES OF AMUSEMENT PARKS.

- Waterpark
- Zoological theme parks
- Historical theme parks
- Regional theme parks
- Pop culture theme parks
- Eco-theme parks
- Golf courses





# SPORT COMPLEXES

## SPORTS FACILITIES ARE DIVIDED INTO:

- Sports and entertainment - equipped with stands for spectators (e.g. stadiums, velodromes, etc.).
- Sports and recreational (for sports activities of citizens) - intended for the realization of sports and recreational purposes and active recreation of citizens.
- Educational and training - intended for the implementation of educational and training activities, for example, sports facilities of educational institutions (schools, higher educational institutions, etc.).





# EXHIBITION SPACE

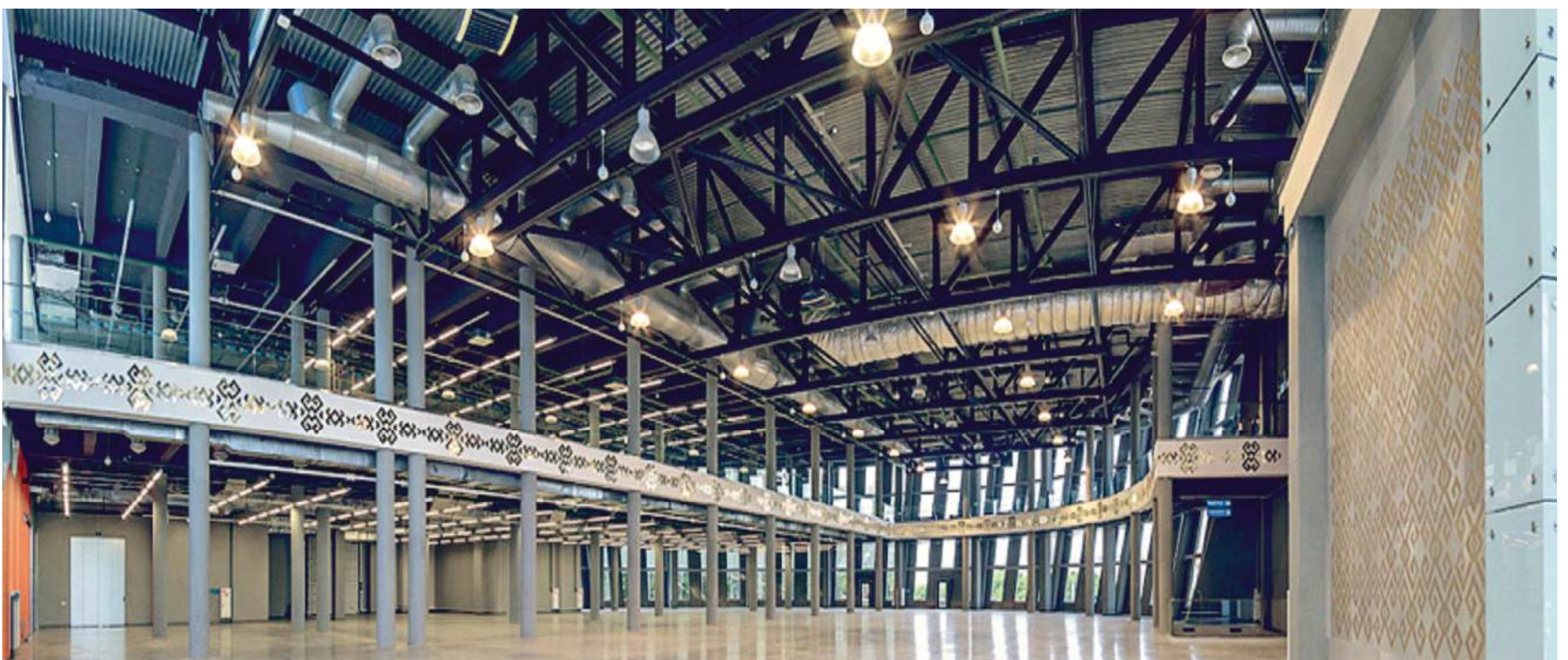
The organization of the exhibition space should meet the following requirements:

- The exposition should be aesthetically pleasing and have a coherent look.
- The exhibition space should not contradict the corporate style of the company.
- The exhibition should be visually convenient for visitors, as well as comfortable for moving through it.



The exhibition can be located in several ways:

1. In the classic variant stands are arranged, forming corridors and intersections.
2. Stands can be arranged on the perimeter of a rhombus. In this case access to the exhibits and their overview becomes easier.
3. Circular arrangement (relevant for small exhibition spaces).





# MEDICAL CENTER

THERE ARE GENERAL, REPUBLICAN, REGIONAL, PROVINCIAL, KRAI, CITY, DISTRICT AND RURAL HOSPITALS, WHICH ARE LOCATED MORE OFTEN IN THE CENTER OF THE AREA SERVED. SPECIALIZED HOSPITALS (ONCOLOGICAL, TUBERCULOSIS) ARE LOCATED MORE OFTEN ON THE OUTSKIRTS OR OUTSIDE THE CITY, IN A GREEN AREA. THERE ARE THREE MAIN TYPES OF HOSPITAL CONSTRUCTION: PAVILION (CORPS), CENTRALIZED AND MIXED

A hospital consists of the following units:

Pavilion (corps), centralized and mixed



A hospital consists of the following units:

Buildings, a utility yard area and a protective green area. The treatment and utility areas should have separate entrances.

1. Inpatient unit with specialized departments and wards.
2. Auxiliary departments (X-ray, laboratory, pathology).
3. Pharmacy.
4. Polyclinic.
5. Nutrition center.
6. Laundry room.
7. Administrative buildings.





# BUSINESS CENTER

ALL BUSINESS CENTERS ARE CONDITIONALLY DIVIDED INTO SEVERAL CATEGORIES. CLASSES ARE ASSIGNED TO THEM DEPENDING ON THE CONDITIONS FOR DOING BUSINESS, THE HIGHEST OF WHICH IS A AND THE LOWEST IS D. DEPENDING ON THE CATEGORY OF THE BUILDING, OFFICE SPACE RENTAL RATES LARGELY DEPEND.

## Category A

This includes the most modern buildings located in the central part of the city. Such office buildings, the project of which initially provides all the necessary infrastructure.



## Category B

This class is assigned to centers located in new or reconstructed buildings of old construction.

## Category C

This group includes buildings of old, often Soviet construction.

## Category D

This lowest category includes outdated premises that have not been renovated even cosmetically for a long time.





# CONSTRUCTION OF STADIUMS AND SPORTS ARENAS

OUR COMPANY OFFERS SERVICES IN COMPLEX CONSTRUCTION OF SPORTS STADIUMS OF ANY LEVEL AND PURPOSE: AMATEUR, PUBLIC, SCHOOL, STUDENT, TRAINING, PROFESSIONAL AND OTHERS.

We build sports facilities on a turnkey basis and realize all stages of works: construction of the base, heating system, automatic irrigation system, laying of natural and artificial turf, installation of lighting and fencing. All stages are carried out according to individually created projects taking into account the Customer's wishes.





## QUICKLY ERECTED LOGISTIC COMPLEXES

TEPLOSTROYPROYEKT-S PERFORMS CONSTRUCTION OF LOGISTICS COMPLEXES MADE OF LMC AND LSTK. WE OFFER SOLUTIONS TO REDUCE COMPANY COSTS AND OPTIMIZE BUSINESS. WE PERFORM TURNKEY WORKS, FROM DESIGN TO AFTER-SALES SERVICE. WE USE STATE-OF-THE-ART TECHNOLOGIES AND GIVE GUARANTEES ON BVZ. WE DELIVER PRODUCTS ANYWHERE IN THE WORLD.



### Types of logistics complexes

Logistics complexes differ in their use:

1. Refrigerated warehouses - designed for storage of fruits, vegetables, other products and materials.
2. Warm warehouses - used to store products that are not suitable for long term refrigeration.
3. Multipurpose, specialized warehouses.
4. Fully/partially enclosed, tanks, bins.

### Stages of construction

The construction of a transport and logistics complex is a labor-intensive process. It includes several stages:

1. Design.
2. Production of structures at the plant «TEPLOSTROYPROYEKT-S».
3. Transportation to the site.
4. Installation of metal frame.
5. Cladding of the building with sandwich panels.
6. Installation of doors, gates, windows, fencing structures.
7. Installation of engineering systems.



Upon completion of the work, the building is fully ready for operation. Erection takes on average up to 3 months. «TEPLOSTROYPROYEKT-S» performs a full range of works from design to commissioning and warranty service. The structures are made of high-quality materials using modern technologies. This guarantees their strength and durability.



# HOTEL

## ENTERPRISE FORMAT

There are the following types of hotel accommodation:

There are the following types of hotel accommodation:  
Hotel - relevant for a large city, there is its own staff, a relatively wide list of services is available.

Deluxe hotel - located in the historic city center, the service is at a very high level, different services are available to clients, there is a professional staff.



Business hotel - is located in the business center of the city. Clients are mainly businessmen, business travelers.

Motel - designed mainly for tourists who need somewhere to stay 1-2 nights. They are located along major roads, at major train stations and airports.

Hostel - accommodation for a short period of time.

Mini-hotel - rooms not more than 40, there is a reception and kitchen.

Boarding house - a small house in which the owner lives. Clients live in such an institution for a long time.

Apart-hotels - a mini-apartment with all amenities. The client is given the opportunity to cook independently.

Hotel courtyard - inexpensive and cozy rooms located in a two or three-story building.

Bungalow - a secluded one-story house. It can be located on the bank of a river or lake.





## ROADSIDE COMPLEX

A business format that can be opened next to the road:

- Catering enterprise.
- Motels, mini-hotels and hotels by the highway.
- Sauna by the road.
- Auto parts store.
- Food store.





# GAS STATION

## TYPES OF GAS STATIONS



In accordance with fire safety requirements, gas stations are divided into separate groups:

- Multi-fuel gas stations.
- Fuel filling stations.
- Traditional gas stations.
- Block gas stations.
- Container gas stations.
- Modular gas stations.
- Mobile gas stations.
- Automobile gas filling compressor stations (AGCS).
- Automobile gas filling stations (AGFS).
- Mobile automobile gas filling stations.
- Mobile vehicle gas filling station;
- Cryogenic refueling station (CryoAZS);
- Mobile CryoAZS. The most widespread are traditional multi-fuel refueling stations, which allow most vehicles to be refueled with different types of gasoline or gas.





# HEALTH COMPLEX

## There are two types of health complexes:

1. Specialized – provide only medical and preventive procedures.
2. General-purpose complexes – in addition to basic services, provide clients with comfortable living conditions.

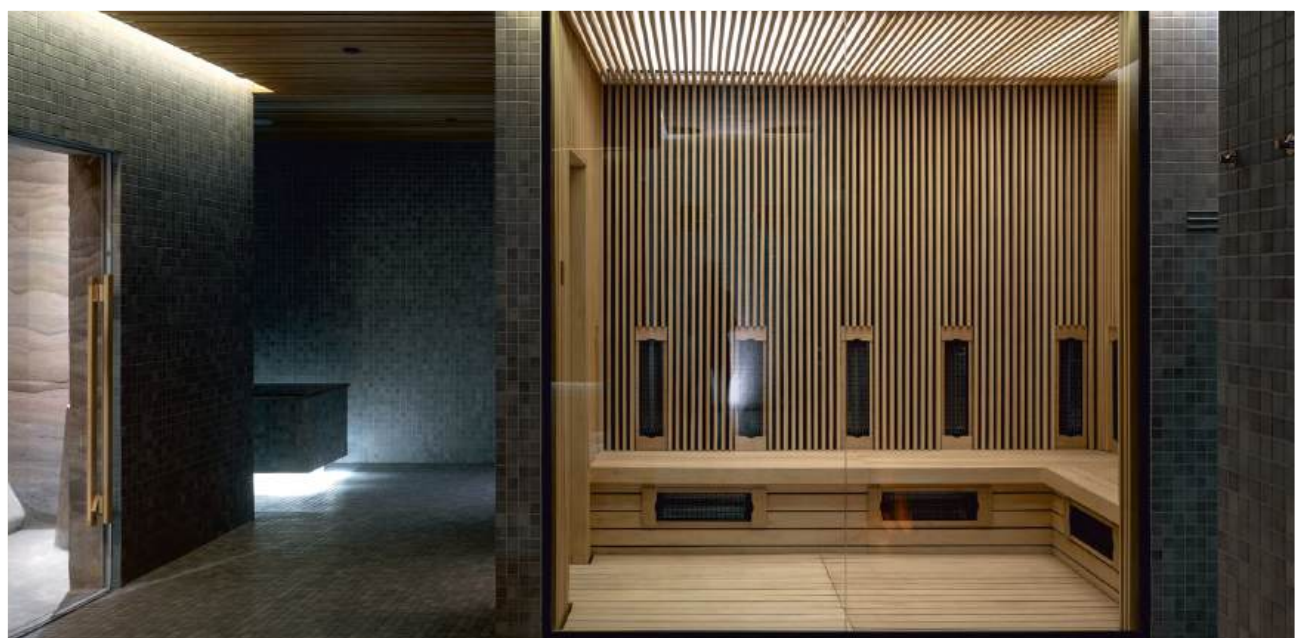


## Areas for medical, preventive, and relaxing services may include:

- Aqua zone.
- Hall for therapeutic gymnastics, yoga, etc.
- Massage room.
- Phytobar.
- Sauna/bathhouse.

## The health complex building includes:

- A lobby.
- A reception area.
- A cloakroom.
- Showers and toilets.
- Several rooms for medical staff and separate rooms for service and administrative staff.
- Small hotel rooms, if provided.





# COMMERCIAL ACTIVITIES

## GOODS AND SERVICES



### INDUSTRIAL FACILITIES



### CIVIL FACILITIES



### AGRICULTURAL FACILITIES



### RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH CONVERSION FROM OLD TO NEW “SMART” SYSTEMS



### PRODUCTION PROCESS

PRODUCTION AND TECHNICAL DEPARTMENT (PTD) , DESIGN INSTITUTE (DI) ,  
FACTORY, CONSTRUCTION AND INSTALLATION DEPARTMENT (CID), WARRANTY  
AND POST-WARRANTY MAINTENANCE SERVICE



### COMPLETED PROJECTS PORTFOLIO - 30 YEARS OF EXCELLENCE



# ELEVATOR

## Elevator construction

When choosing equipment for grain storage, you should pay attention to elevators. These structures are key in the logistics chains of the agro-industrial sector, providing opportunities not only for storing crops, but also for their subsequent preparation for sale or processing. The efficient operation of an elevator allows you to maintain the high quality of your grain.

## Types:

There are various types of elevators on the market, each with its own characteristics and designed for specific purposes.

### Vertical silos

Vertical silos are designed for long-term storage of large volumes of grain. They can vary in capacity from several hundred to 100,000 tons, ensuring product safety thanks to humidity and temperature control systems.



### Flat-bottom silos

Flat warehouses are often used for temporary storage of crops during preparation for transport or sale. These structures are easier to adapt to different volumes and are usually cheaper, but require more land for installation.



### Feed mills

Feed mills are enterprises specializing in the production of compound feed, which are mixtures of various feed components (grain, oilcake, meal, vitamins, mineral additives, etc.), balanced in nutrients to provide a complete diet for farm animals, poultry, and fish. The products of such factories are used in animal husbandry to improve animal productivity and health.



### Specialized grain storage facilities

Specialized grain storage facilities for certain types of grain, such as rice elevators or oilseed elevators, are designed to meet the specific storage requirements of each type of product.





## Elevator selection criteria

When deciding whether to purchase or build an elevator, it is important to carefully consider a number of important factors to ensure that your investment is effective and that your choice is tailored to the specific needs of your business.

### Capacity and storage volumes

Capacity and storage volumes are among the key parameters when constructing grain elevators. Elevators vary in capacity from several hundred tons to hundreds of thousands of tons. The capacity should be selected taking into account both the current and projected volumes of your grain production. For example, an elevator with a capacity of 5,000-10,000 tons may be suitable for medium-sized farms, while large agro-industrial complexes may require facilities with a capacity of 50,000 tons or more.

### Grain type

Grain type — grain crops have different storage requirements. For example, wheat and rye require different conditions than corn and sunflowers. It is important that the elevator design provides for the necessary ventilation, temperature, and humidity parameters.

### Storage conditions

Storage conditions — modern elevators are equipped with climate control systems that maintain optimal conditions for each type of grain. The systems must be adapted to prevent mold and rot, as well as to protect against pests.

### Budget

Budget — the construction of an elevator requires significant capital investment. However, it is not worth skimping on quality, as this will affect the safety of your harvest and, consequently, the profitability of your business. It is important to consider not only the initial costs of turnkey elevator construction, but also the long-term costs of operation and maintenance.

### Technology and equipment

A modern elevator is a high-tech complex that includes automation, accounting, grain quality control, and safety systems. The choice of technology should be tailored to the specifics of your operations and aimed at improving the efficiency of grain storage and handling.

### Location

Location — the distance to major logistics hubs and roads also plays an important role. The elevator should be conveniently located in relation to the fields where the grain is grown, as well as to points of sale or processing.

### Supplier reliability

Supplier reliability — when choosing a company to build your elevator, pay attention to its reputation, experience in the field, and reviews from other customers. It is important that the equipment supplier provides a full range of services, from design to installation and maintenance.



## Choosing an elevator

Choosing an elevator is a big deal that needs a lot of thought and consideration. The right equipment will not only keep your harvest safe and sound, but also make your whole agribusiness more efficient.

## Steps in building an elevator

Elevator construction is a multi-stage process that requires detailed planning and consistent execution. The initial stage includes design, which is based on an analysis of the customer's needs, the location where the elevator will be located, and technical capabilities. Many factors are taken into account, from the estimated capacity and type of grain to be stored to the logistics routes for grain delivery and shipment. Once the design has been approved, the construction site preparation stage begins. At this stage, earthworks are carried out, the foundation is laid, and utilities are installed. This is followed by the construction of the elevator itself: silos for grain storage, mechanisms for lifting and transporting grain, ventilation and drying systems.

## Elevator installation

The installation of elevators is a significant stage. It is important that all elements of the system work as a single unit, ensuring reliable and uninterrupted operation. At this stage, training is also provided for the personnel who will be working on the elevator.

## Final stage

The final stage is the commissioning of the facility, which includes obtaining all necessary permits and certificates confirming the elevator's compliance with applicable norms and standards. After that, the elevator can begin full operation.

## The technical equipment

The technical equipment of the elevator must meet modern efficiency and safety requirements. The main elements are loading systems, which may include conveyors and bucket elevators designed to lift grain to the required height.

## Grain drying system

The grain drying system is a critical component that prepares the harvest for long-term storage by reducing its moisture content to a safe level. Modern dryers are equipped with sensors and automation that control the drying process and prevent overheating or overdrying of the grain.

## Grain cleaning systems

Grain cleaning systems remove impurities from the crop, improving its quality and value. They can be equipped with vibrating screens, magnetic separators, and other devices for effective cleaning.



## Grain storage

Grain storage requires special silos or containers with temperature and humidity control systems to prevent product spoilage. Automated accounting and monitoring systems allow you to track the condition of grain in real time and respond quickly to any deviations from the norm.

## Service and maintenance

The quality of service and timely maintenance of elevator equipment play a decisive role in ensuring its durability and reliability. Our service specialists have in-depth knowledge and practical experience, which allows them to carry out not only scheduled technical inspections and regular maintenance, but also urgent repairs in case of emergencies. It is important that maintenance is carried out in accordance with international and domestic safety and quality standards.

The range of services includes diagnostics of control systems, inspection of load-bearing structures, testing of ventilation and drying systems, as well as calibration of weighing equipment. This allows us to prevent possible malfunctions and minimize the risk of downtime.

## Why choose us?

We offer some of the best prices for elevators and a personalized approach to each customer, taking into account the specifics of their business and regional conditions.

## Our advantages:

### Experience and professionalism

Our team consists of qualified engineers and builders with in-depth knowledge in the field of elevator construction.

### Innovative solutions

We use advanced technologies and materials to increase storage efficiency and reduce operating costs.

### Comprehensive approach

From design to commissioning and subsequent maintenance, we take care of every aspect to ensure that your elevator works flawlessly. You will be pleasantly surprised by our elevator prices.

### Financial benefits

Our goal is not only to build high-quality elevators, but also to optimize customer costs, which ultimately leads to increased business profitability.

### 24/7 support

We are always available to quickly resolve any issues that arise and ensure the reliable operation of your elevator.



# GREENHOUSE COMPLEXES

**GREENHOUSE COMPLEXES ARE BUILT ACCORDING TO INDIVIDUAL DESIGNS THAT TAKE INTO ACCOUNT NUMEROUS FACTORS: CONSTRUCTION, WORKING AREA, REGION AND SOIL, NECESSARY EQUIPMENT, TECHNOLOGIES TO BE USED FOR GROWING PRODUCTS, AND SOME OTHER PARAMETERS.**

**The process of constructing and operating a greenhouse complex can be divided into three main stages:**

- Selection of a construction site.
- Development of a greenhouse enterprise development strategy, approval of space planning solutions.
- Development of a business plan (Investor).
- Selection of a financing organization (bank, leasing company), agreement on deferral conditions.
- Development of a regional program for the development of the protected ground industry (Ministry of Agriculture).
- Selection of partners (general design and contracting organizations).
- Collection of initial permits, including obtaining technical specifications and permits from the competent authorities.
- Development of a project in accordance with Government Resolution No. 87 and its defense before the State Expert Review bodies (if the Investor plans to receive subsidies from the state).
- Obtaining a construction permit.
- Opening a credit line (start of financing).





## Investment stage (from 1 year)

Preparatory period:

- preparation of the construction site (levelling the site, construction of temporary roads, buildings and networks);
  - purchase of materials and equipment (2-4 months);
- Main construction period:
- connection of external utilities (gas, electricity, water);
  - construction of foundations and basement;
  - installation of frame and glazing;
  - installation of technological equipment and internal utilities;

### Commissioning:

- start-up and adjustment (automation, boiler room, central heating);
- comprehensive testing, commissioning (signing of the acceptance certificate for the completed facility).

### Commissioning:

Warranty period - 1 year, unless otherwise specified in the contract.

## Industrial greenhouses — high efficiency and quality

For a large complex of industrial greenhouses with heating, a boiler room, substation, warehouses, garages, cold rooms, an administration building, and other facilities are being built. All this allows for continuous operation and constant monitoring of the condition of the greenhouses in one place. Therefore, when creating such a complex, it is necessary to carefully consider the logistics of all the necessary processes, which will save time and avoid mistakes in the future.

### Tunnel and block industrial greenhouses

Tunnel structures are ideal for agricultural enterprises and farms growing crops in closed ground. Block structures are suitable for use on flat sites in different climatic zones. This greenhouse can be operated all year round with heating.





# COMMERCIAL ACTIVITIES

## GOODS AND SERVICES



### INDUSTRIAL FACILITIES



### CIVIL FACILITIES



### AGRICULTURAL FACILITIES



### RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH CONVERSION FROM OLD TO NEW “SMART” SYSTEMS



### PRODUCTION PROCESS

PRODUCTION AND TECHNICAL DEPARTMENT (PTD) , DESIGN INSTITUTE (DI) ,  
FACTORY, CONSTRUCTION AND INSTALLATION DEPARTMENT (CID), WARRANTY  
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### COMPLETED PROJECTS PORTFOLIO - 30 YEARS OF EXCELLENCE



# RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH CONVERSION FROM OLD TO NEW “SMART” SYSTEMS

## RESIDENTIAL BUILDINGS

### BEFORE



### AFTER



Renovation of engineering systems, outdated structures, and materials improves energy efficiency through insulation and replacement of windows and doors. If necessary, the usable area of the house is expanded: extension, superstructure, attic construction. The facilities are also converted to turnkey smart solutions. Smart Building engineering systems management is a centralized automated system for controlling heating, ventilation, air conditioning, lighting, etc. It monitors the functioning of all systems in real time and provides timely notifications of emergencies.



## COMMERCIAL BUILDINGS

### BEFORE



### AFTER



Comprehensive renovation of commercial buildings includes replacement of engineering systems, renovation of structures and finishing materials, insulation of facades, and installation of modern windows and doors. If necessary, the usable area is expanded by means of extensions, superstructures, and attics. To improve convenience and optimize costs, intelligent Smart Building systems are implemented. Automated control of heating, ventilation, lighting, and other systems, as well as real-time monitoring, reduce operating costs and increase the safety of the facility.



## SCHOOL

### BEFORE



### AFTER



The quality of school education largely depends on the conditions created in the educational institution. As part of this initiative, RIM GROUP offers to organize a space for the harmonious development of the younger generation. Reconstruction and modernization with a transition to smart solutions will optimize the learning process.

As part of these changes, we propose to introduce interactive panels and digital laboratories to improve the quality of lessons, equip classrooms with an automated microclimate control system to create a comfortable environment, and organize modern recreation and coworking areas for students.



## KINDERGARTEN

### BEFORE



### AFTER



Preschool education facilities are places where children undergo their initial socialization, and it is important that this process takes place in comfortable and safe conditions. RIM GROUP renovates and modernizes kindergartens, creating a comfortable and functional environment. The work includes replacing utilities, insulating facades, and installing energy-efficient windows and doors. We also modernize the premises: we renovate play and sleeping areas, equip buildings with smart ventilation, lighting, and security systems, and expand the building area if necessary.



## SPORT COMPLEXES

### BEFORE



### AFTER



Sports are the foundation of a healthy nation, and modern sports facilities are essential for motivating people to exercise. RIM GROUP offers turnkey projects that can transform even abandoned buildings into comfortable and functional sports complexes that meet current standards.

We renovate and modernize facilities with the implementation of smart solutions: automated lighting, heating, and ventilation control, video surveillance and access control systems for user safety, as well as intelligent management systems to improve energy efficiency and comfort.



## MUSEUM

### BEFORE



### AFTER



The renovation and modernization of museums not only improves the conditions for storing and displaying exhibits, but also increases the security of valuable objects. As a result of the renovation, the building becomes more functional and accessible to a wide range of visitors. During the work, smart solutions are implemented, such as automated temperature and humidity control systems, video surveillance systems to protect exhibits, and modern technologies for interactive exhibitions. These updates create a comfortable and attractive environment for quality leisure time, making museum objects relevant to a new generation of visitors.



## CULTURAL CENTER

BEFORE



AFTER



The cultural center building, with its convenient layout and intelligent control system, creates conditions for a comfortable and enjoyable stay. During the renovation, advanced technologies are being implemented, including automated lighting, heating, and ventilation systems, which significantly improve comfort and energy efficiency. Smart solutions for event organization, security, and resource management are also being implemented, making cultural centers more attractive and convenient for visitors.



## FACTORIES

### BEFORE



### AFTER



The reconstruction and modernization of factories significantly increases production capacity and improves working conditions. The renewal of engineering systems, modernization of equipment, and introduction of modern technologies increase efficiency and safety. As part of the modernization, smart solutions are implemented: automated production process control systems, intelligent monitoring and control systems to improve safety and prevent accidents. If necessary, the facility's area is expanded.



# PRODUCTION PROCESS



## INDUSTRIAL FACILITIES



## CIVIL FACILITIES



## AGRICULTURAL FACILITIES



## RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH CONVERSION FROM OLD TO NEW “SMART” SYSTEMS



## PRODUCTION PROCESS

PRODUCTION AND TECHNICAL DEPARTMENT (PTD)

DESIGN INSTITUTE (DI)

FACTORY

CONSTRUCTION AND INSTALLATION DEPARTMENT (CID)

WARRANTY AND POST-WARRANTY MAINTENANCE SERVICE



## COMPLETED PROJECTS PORTFOLIO - 30 YEARS OF EXCELLENCE



# HOW WE PRODUCE

## CONTRACT IMPLEMENTATION SCHEME

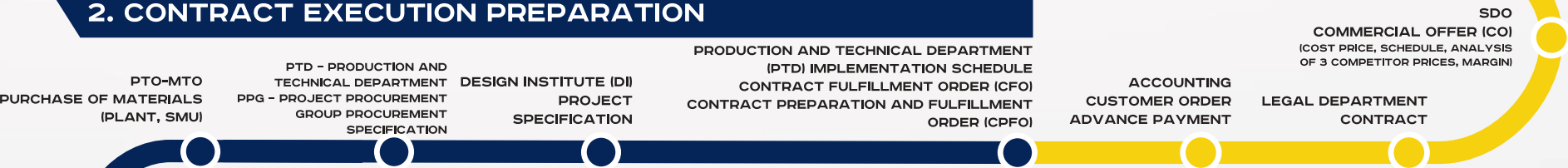
ROADMAP FOR ACHIEVING THE GOAL THROUGH TASK SOLUTIONS IN THE BUSINESS PROCESS "FROM INCOMING REQUEST TO CONTRACT IMPLEMENTATION»

| PTD  | DI   | FACTORY  | CID   | SERVICE   |
|--|--|--|---|---|
| <div>1. COLLECTION OF INITIAL PERMITS AND DOCUMENTATION</div> <div>2. DEVELOPMENT OF IMPLEMENTATION SCHEDULES AND WORK PRODUCTION PLAN</div> <div>3. MARKET ANALYSIS, PROCUREMENT OF MATERIALS ACCORDING TO SPECIFICATIONS, COST ESTIMATION OF THE PROJECT</div> <div>4. PREPARATION OF THE DOCUMENT PACKAGE FOR PROJECT CLOSURE</div> | <div>1. CONDUCTING ENGINEERING SURVEYS</div> <div>2. DEVELOPMENT AND APPROVAL OF DESIGN AND ESTIMATE DOCUMENTATION</div> <div>3. PREPARATION OF PROJECT IMPLEMENTATION DOCUMENTATION (DRAWINGS, DETAILED METAL STRUCTURE DRAWINGS, CUTTING LAYOUT)</div> | <div>1. MANUFACTURING OF STRUCTURES AND ELEMENTS ACCORDING TO THE PROJECT</div> <div>2. QUALITY INSPECTION AND ASSEMBLY OF STRUCTURES</div> <div>3. TRANSFER OF THE MANUFACTURED PRODUCTS TO THE WAREHOUSE</div> | <div>1. SITE PREPARATION FOR INSTALLATION (CONSTRUCTION)</div> <div>2. EXECUTION OF CONSTRUCTION AND INSTALLATION WORKS</div> <div>3. COMMISSIONING OF THE FACILITY AND HANDOVER TO THE CLIENT</div> <div>4. WARRANTY AND POST-WARRANTY SERVICE</div> | <div>1. WARRANTY SERVICE</div> <div>2. POST-WARRANTY TECHNICAL MAINTENANCE</div> <div>3. TRAINING AND INSTRUCTION OF THE CLIENT'S PERSONNEL</div> |

### 1. PRE-CONTRACT WORK



### 2. CONTRACT EXECUTION PREPARATION





# PTD

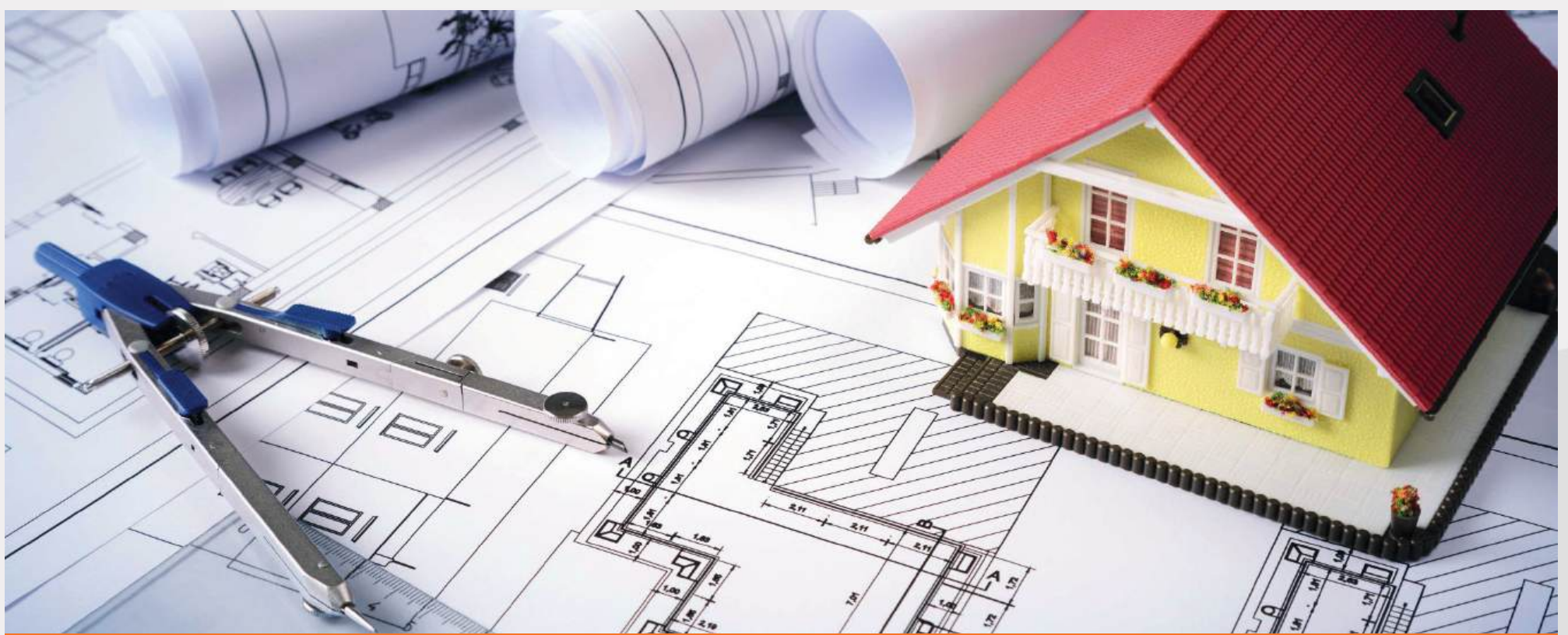
**1** COLLECTS  
INITIAL PERMIT  
DOCUMENTATION

**2** FORMS SCHEDULES AND  
SPECIFICATIONS

**3** CALCULATES THE COST OF  
THE PROJECT

**4** PREPARES THE PROJECT  
FOR PRODUCTION WORK

**5** PREPARES PERMIT  
DOCUMENTATION:  
• TECHNICAL DOCUMENTATION  
• AS-BUILT DOCUMENTATION





# PROJECT INSTITUTE

**1** CONDUCTS ENGINEERING SURVEYS DEVELOP



**2** DESIGN AND ESTIMATE DOCUMENTATION PREPARES ALL NECESSARY



**3** DOCUMENTATION FOR THE MANUFACTURE OF STRUCTURES (DRAWINGS, KMD, CUTTING DIAGRAM).



## READY-MADE SOLUTIONS FOR BUSINESS





## FACTORY

«Teplostroyproyekt-S» is the company that carries out all production processes of the Group of Companies. It occupies 70,000 square meters of production space. More than 100 units of advanced equipment are involved in the manufacturing of products: shot blasting machines for steel cleaning, band saws, plasma cutting machines, rolling machines, automated welding robots. The company provides full engineering support of projects - from the application acceptance stage to post-warranty service of the realized products.





FACTORY.  
MANUFACTURING EQUIPMENT USED  
AT THE FACTORY

QHT6910B SHOT BLASTING MACHINE



Used for cleaning steel from rust and corrosion.  
TWO IRON-CUT S610R  
BAND SAW MACHINES

KESMAK KMY DG450 BAND SAW MACHINE.



Capacity at 90°: Round: 450 mm  
Square: 450 x 450 mm  
Plate: 450 x 680 mm  
Capacity at 60°: Round: 450 mm  
Square: 450 x 450 mm  
Plate: 450 x 570 mm  
Capacity at 45°: Round: 450 mm  
Square: 420 x 420 mm  
Plate: 350 x 480 mm  
Capacity at 30°: Round: 350 mm  
Square: 330 x 330 mm  
Plate: 240 x 450 mm

TWO BAND SAW MACHINES IRON-CUT S610R



Cutting parameters:  
Round: 450 mm,  
Rectangle: 610x420 mm.

BAND SAW MACHINE IRON-CUT CH5085



These machines are designed for cutting large workpieces with a round cross-section up to 500 mm and square cross-section up to 850x500 mm.

BAND SAW IRON-CUT S440R



Cutting capacity of the processed part At 90°:  
Round: 480 mm  
Square: 480 x 480 mm / Square: 650 x 480 mm  
At 45°: Round: 450 mm  
Square: 440 x 440 mm / Square: 510 x 300 mm  
At -45°: Round: 420 mm  
Square: 400 x 400 mm / Square: 440 x 300 mm  
At 60°: Round: 350 mm  
Square: 330 x 330 mm / Square: 290 x 480 mm  
At -60°: Round: 340 mm  
Square: 330 x 330 mm / Square: 280 x 480 mm

ONE PLASMA CUTTING MACHINE HPR260



With a cutting capacity of sheet steel up to 60 mm thick.

TWO PLASMA CUTTING MACHINES WITH FRAMES  
12X3M HPR260XD.



With a cutting capacity of sheet steel up to 60 mm.

PIPE BENDING MACHINE



With a bending capacity for pipes from Ø42 mm to Ø108 mm.

SMALL ROLLING MACHINE ASM-S-170-20



With sheet steel rolling capacity up to 6 mm thick and 2100 mm wide.

MEDIUM ROLLING MACHINE AKYAPAK AHS 30-10



With sheet steel rolling capacity from 4 mm to 12 mm thick and up to 3100 mm wide.



# FACTORY. MANUFACTURING EQUIPMENT USED AT THE FACTORY

LARGE ROLLING MACHINE 4R HSS 30-400  
SAHINLER



With a cutting capacity of sheet steel up to 6 mm thick and up to 3100 mm wide.

SMALL GUILLOTINE HGL 3100X6



With a cutting capacity for sheet metal up to 6 mm thick and up to 3100 mm wide.

LARGE GUILLOTINE MGH 3100X13



With a cutting capacity of sheet steel up to 6 mm thick and up to 3100 mm wide.

PRESS BRAKE APH 3106X120



With a cutting capacity for sheet metal up to 13 mm thick and up to 3100 mm wide.

OVER 70 MIG 5000 SEMI-AUTOMATIC WELDING  
MACHINES (SVAROG)



Industrial welding inverter designed for connection to a three-phase 380V power supply, allowing operation with a welding current range from 20 to 500 amps.

WELDING TRACTOR (AUTOMATIC)



A self-propelled device that moves along the weld seam on a workpiece or guide rail, feeding electrode wire and flux into the welding zone.

WELDING ROBOT



A robotic system designed for welding large steel components with thicknesses up to 90 mm.





# FACTORY. PRODUCTION STAGES

## STAGE 1

### CLEANING OF SHEET AND PROFILED METAL

Before being launched into production, the metal undergoes cleaning in a pass-through shot blasting unit (GHT6910B), which prepares the product for corrosion protection (CP) application and ensures high-quality welding, cutting, and drilling.



SHOT BLASTING MACHINE





# FACTORY. PRODUCTION STAGES

## STAGE 2

### STEEL CUTTING

Shaped cutting of sheet and rolled steel, pipes, etc. is performed on three plasma cutting machines. For working with steel of various profiles, the work is performed on a Chinese-made Iron-Cut S-610R band saw machine, and sheet steel is cut on a Turkish-made guillotine.

**6X3M HPR260 PLASMA CUTTING MACHINE**



**12X3M HPR260XD PLASMA CUTTING MACHINE**



**IRON-CUTS440R BAND SAW MACHINE**





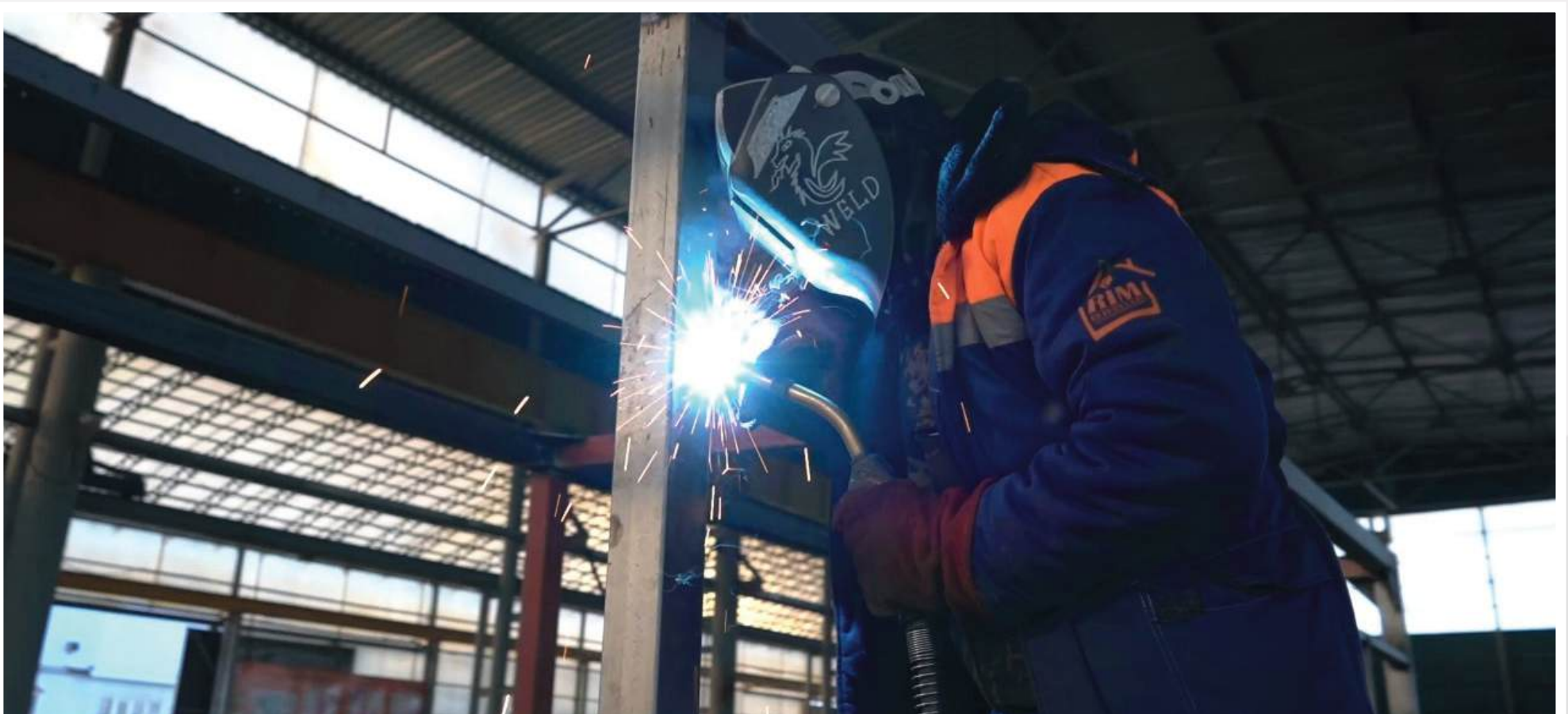
# FACTORY. PRODUCTION STAGES

## STAGE 3

### PRELIMINARY ASSEMBLY OF STRUCTURES

The assembly and welding shops are capable of manufacturing structures of the widest range. These include structures for general-purpose civil and industrial buildings, structures for metallurgical workshops, and much more.

- Structures are assembled on assembly plates, racks, in special and universal jigs, using standard and customised technological equipment.
- The workshop is equipped with cranes with a lifting capacity of up to 50 tonnes.





# FACTORY. PRODUCTION STAGES

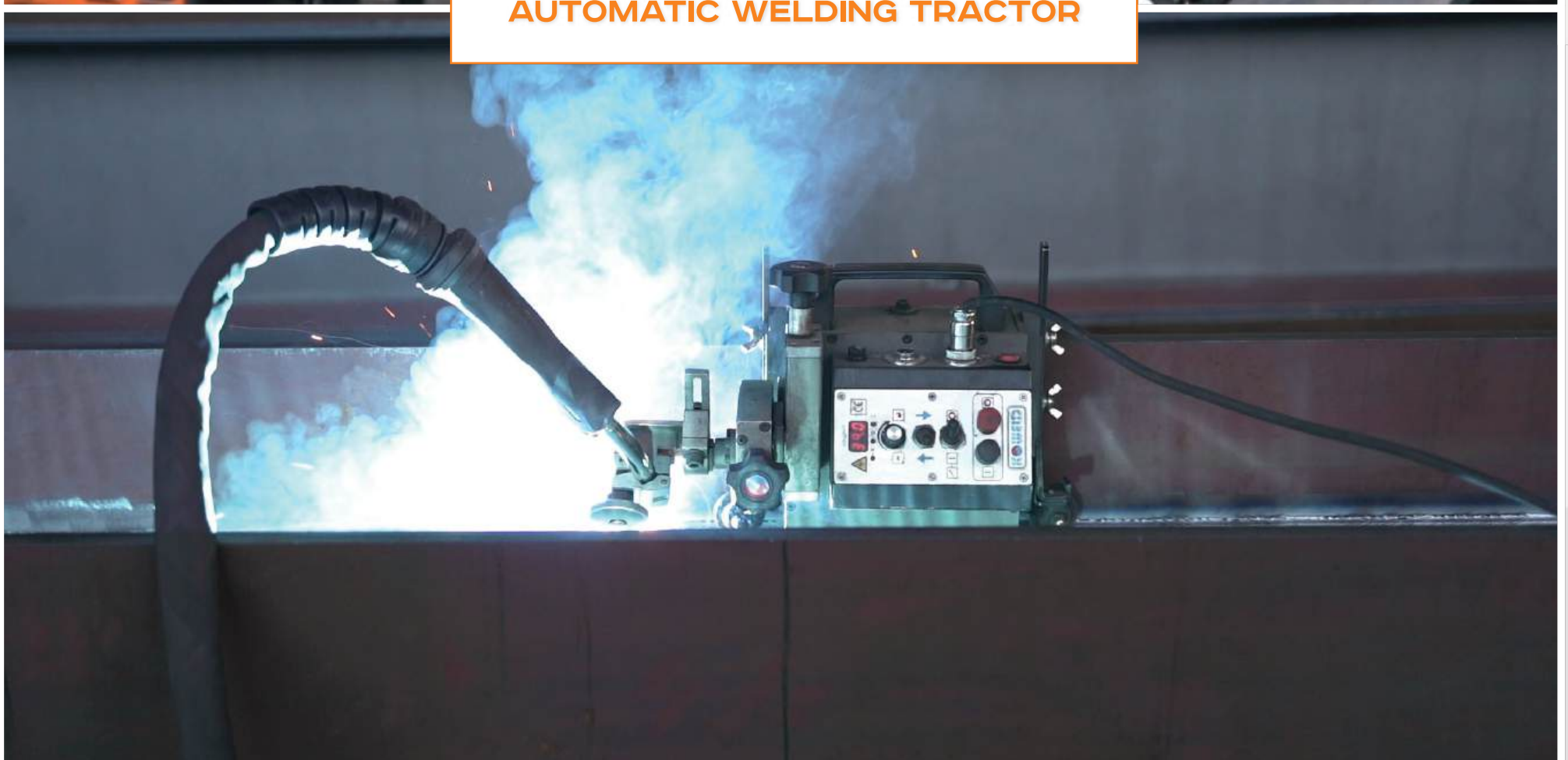
## STAGE 4

### AUTOMATED WELDING OF STEEL STRUCTURES

The workshop is equipped with an automatic welding tractor and 100 mechanized welding machines manufactured by world leaders in the welding industry. We employ highly qualified welders.



AUTOMATIC WELDING TRACTOR





# FACTORY. PRODUCTION STAGES

## STAGE 5

### TEST ASSEMBLY

Helps determine the design accuracy of parts manufacturing.

- In production: parts are adjusted in welded assemblies, holes are checked for alignment, fasteners are installed, and individual markings are applied.
- The parameters and dimensions of the equipment used allow for the manufacture and control assembly of large structures. This is a mandatory stage at which the correctness of the adjustment jigs and geometric dimensions are checked.





# FACTORY. PRODUCTION STAGES

## STAGE 6

### ENCLOSED SHOT BLAST ROOM FOR STRUCTURAL STEEL

Final cleaning is carried out in the painting and loading shop: degreasing of areas contaminated with oil and grease, followed by repeated shot blasting. The shop is equipped with:

- a manual shot blasting chamber;
- an automatic shot blasting machine.

This equipment allows for quick and high-quality preparation of steel surfaces.





# FACTORY. PRODUCTION STAGES

## STAGE 7

### QUALITY CONTROL

The application of paint and varnish materials is checked using thickness gauges and adhesion quality control systems.

- The plant is equipped with modern instruments: coating thickness gauges, profilometers, and adhesion meters.
- Quality control is carried out at all stages of production. For this purpose, there is a technical control department and an in-house laboratory.
- Welds are inspected using non-destructive methods ultrasonic (ultrasonic flaw detection, ultrasonic thickness measurement), radiation (X-ray), visual inspection, as well as destructive testing methods (on samples).





# FACTORY. PRODUCTION STAGES

## STAGE 8

### PAINT SHOP

After assembly and cleaning, the structures undergo anti-corrosion treatment, painting, and drying. The factory's technical equipment allows for air and airless spraying of paint and varnish materials. We use materials from leading manufacturers only.

- Painting and drying are carried out on racks and in drying chambers.
- The latest painting equipment is used for painting and priming.





# FACTORY. PRODUCTION STAGES

## STAGE 9

### PACKAGING OF FINISHED PRODUCTS

The factory has extensive experience in packaging structures with a finish coating and a well-established technology for assembling transport packages. This allows structures to be delivered undamaged and clearly identified. These packages are sufficiently rigid and provide long-term protection against the weather. The size of the factory gates allows cargo to be transported in accordance with the loading restrictions in force in the Russian Federation.





# SERVICES – HOW WE BUILD. DELIVERY

## LOADING OF STRUCTURES

The loading platforms under the roof allow for 24/7 shipment of products. The plant has a reliable network of truck carriers for transporting its structures.



**BOILER ROOM TRANSPORTATION**



**TRANSPORTATION OF STEEL STRUCTURES**



# CONSTRUCTION AND INSTALLATION MANAGEMENT

THE FACILITY IS READY AND IN OPERATION





# RIM SERVICE MAINTENANCE COMPANY

## CONNECTION TO CENTRAL SYSTEMS

In the case of a single-module design, 99% of the work is carried out at the factory, and two or more modules are installed directly on site. Power supply: installation of a switchboard, connection to the low-voltage distribution board, etc.



## START-UP AND ADJUSTMENT

System testing, troubleshooting, automation setup (“smart home,” sensors).





## WARRANTY AND POST-WARRANTY SERVICE

### LIST OF SERVICES PROVIDED BY THE SERVICE DEPARTMENT:

- Equipment repair during the warranty period
- Equipment repair after the warranty period
- Maintenance services
- Supervision



### RIM SERVICE WILL PROVIDE QUALIFIED PERFORMANCE OF THE FOLLOWING WORK:

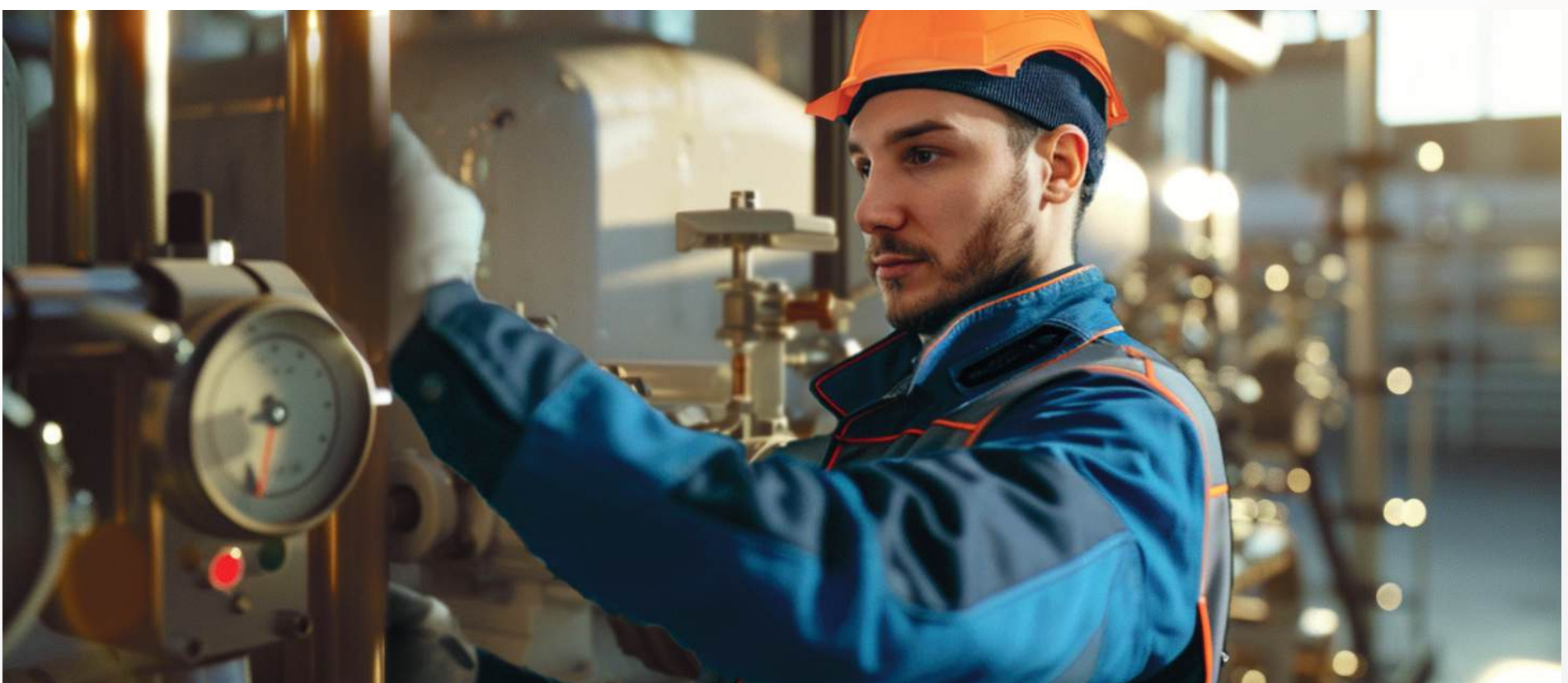
- Scheduled maintenance and servicing of equipment in operation
- Repair of faulty equipment, dismantling of equipment by our specialists.
- Repair of unique equipment





## TO ESTIMATE THE SCOPE OF WORK, PLEASE SEND A REQUEST ON THE COMPANY'S LETTERHEAD TO **"TEPLOSTROYPROYEKT-S"** WITH THE FOLLOWING INFORMATION:

- Specific equipment model;
- Equipment location;
- Equipment condition;
- Required completion date;
- Full name, position, and contact details of the Customer's representative;
- Customer's company details. After receiving the necessary information, the factory specialists will work with the Customer to develop technical specifications for the repair. The repair time depends on the complexity of the technical specifications.



### WARRANTY SERVICE

Our company provides a warranty for all equipment supplied. The service company is always ready to quickly begin troubleshooting after receiving a request from the customer. Equipment repairs are carried out using original spare parts and components.

### POST-WARRANTY TECHNICAL SERVICE

The service company provides diagnostic, technical, and preventive maintenance services for operating equipment, extending its service life.

### TRAINING AND INSTRUCTION OF THE CUSTOMER'S PERSONNEL

The company's specialists train the customer's service personnel on how to operate and maintain the equipment.



# COMPLETED PROJECTS PORTFOLIO - 30 YEARS OF EXCELLENCE



## INDUSTRIAL FACILITIES



## CIVIL FACILITIES



## AGRICULTURAL FACILITIES



## RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH CONVERSION FROM OLD TO NEW "SMART" SYSTEMS



## PRODUCTION PROCESS

PRODUCTION AND TECHNICAL DEPARTMENT (PTD) , DESIGN INSTITUTE (DI) ,  
FACTORY, CONSTRUCTION AND INSTALLATION DEPARTMENT (CID), WARRANTY  
AND POST-WARRANTY MAINTENANCE SERVICE



## COMPLETED PROJECTS PORTFOLIO - 30 YEARS OF EXCELLENCE



# 4

## READY-MADE BUSINESS SOLUTIONS

4.1. INDUSTRIAL FACILITIES

4.2. CIVIL FACILITIES

4.3. AGRICULTURAL FACILITIES

4.4. RENOVATION, RECONSTRUCTION, AND MODERNIZATION WITH CONVERSION FROM OLD TO NEW “SMART” SYSTEMS

### FACTORY «TEPLOSTROYPROYEKT-S»



### VALERIK VILLAGE, CHECHEN REPUBLIC





# PLANNED PROJECTS

## TVK 58 HA



## GROZNY





## TVK 13.5 HA



## KATYR-YURT





## REGIONAL REPRESENTATIVES OF RIM GROUP



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