TURN-KEY READY WATER TREATMENT PLANTS
INFRASTRUCTURE PROJECTS IN WATER SUPPLY AND SEWERAGE
PRODUCTION OF WATER TREATMENT EQUIPMENT

PRESENTATION

Company profile
DEAR PARTNERS!

Our team of professionals is engaged in the practical implementation of water treatment technologies and wastewater treatment, designing, manufacturing, supplying and commissioning of water treatment plants for customers all over the Russian Federation and near-abroad countries for over 15 years.

Along with the growth of the level and quality of engineering and technological advances our business has been developed ("NPP Bi-TEC" that is well known among the leaders of the oil and gas, energy and mining industries, of the municipal sector by its individual approach to each project and to each customer).

A new stage of the relationship with customers and the company development starts in 2013.

PLANA Engineering Group, combining the experience of the European colleagues to implement large-scale infrastructure projects, the ability of the Ural partners who are the manufacturers of unique metalwork and modern modular equipment, meets the needs of a wide range of design institutes, contractors and customers on the construction of water treatment facilities. "PLANA" deals with contractors at each level – starting from the supply department up to the EPCM contractor, from the designer of WSS to the specialist of the operating wastewater treatment plants group.

However our greatest value is the trust of our customers and partners.

“PLANA Engineering Group”
Chairman of the Board of Directors
Andrey Chastoukhin

The proven solutions that are developed in compliance with the unfavorable conditions of Russia, the European approach to the quality of implementation - is a key benefit that allows the LLC “PLANA Engineering Group” not only to compete with the largest Russian manufacturers and suppliers of water treatment facilities, but also to carry out "turnkey" tasks for large business accounts.

We hope for our achievements in problem solutions of European Union infrastructure facilities modernization will be in demand in Russia.

LAKALME, SIA
Director of the European Office
Imants Argalis
PLANA Engineering Group

THE CORE BUSINESS

INFRASTRUCTURE PROJECTS IN WATER SUPPLY AND SEWERAGE

“TURN-KEY READY” WATER TREATMENT PLANTS

BLOCK-MODULAR FACILITIES AND TECHNOLOGICAL STEELWORKS

BENEFITS

- 15 years’ work experience with corporate and municipal customers
- Own chief process engineers office and design-construction design office
- The production sites in the Urals industrial area
- Disclosure and transparency for designers, clients and contractors
- The performance of contractual work for turn-key type project
- Rendering of services of WWTP/WTP full life cycle

MISSION

PLANA, being solid team, tackling tasks the customers put to and providing prosperity to its employees, conducts entrepreneurial activity in infrastructure, manufacturing and ecological projects implementation. PLANA aims at strengthen its condition at the Russian market, taking forward positions at the engineering decision level and quality management, providing stable business growth. PLANA stands for comfortable habitat preservation of human beings, safe living conditions, and nature and ecosystems protection.

TARGETS AND PRIORITIES

- Providing a sustainable business growth according to chosen branch of activities
- Strengthening PLANAs condition at the Russian market as leading water treating facilities manufacturer
- Increasing the technological product level and services rendered outcome
- Widening the scopes and geography of operations to meet the markets increasing demands
- Company and customers partnerships formation as a basis for long-term projects

The key ingredients of success in achieving the goals, set by the company, are the project control system, skilled personnel, efficient cooperation with partners, the usage of advanced European and Russian experience, individual approach to each customer. PLANA will invoke all available options, being conscious of social and environmental responsibility, to achieve the objectives.
BUSINESS GEOGRAPHY

OUR CUSTOMERS

- TNK-BP
- TRANSNEFT
- KINEF
- GASPRM
- EVRAZ
- SIBUR
- ROSNEFT
- ENEL OGK-5
- Niznie Sergi Steel Works
- LUKOIL
- MMK
- IES Holding
- Russian Railways
- MECHEL
- Sakhalin Energy
- CPC
- SOYUZ Corporation
- UMMC
- MOD RF
- E.ON Russia
- Foreign Office Germany
- GAZPROM
- Transgaz Belarus
- OGK-2
- Montazhspetsstroy (Kazakhstan)
INFRASTRUCTURE PROJECTS IN WATER SUPPLY AND SEWERAGE

PRODUCTION INFRASTRUCTURE

Rainwater and industrial wastewater treatment plants of the heat power industry - regional power stations:
- Surgutskaya GRES-2
- Sredneuralskaya GRES
- Reftinskaya GRES
- Kirovskaya CHP
- Permskaya CHP-6
- Novogor’kovskaya CHP
- Tom-Usinskaya GRES
- Shaturskaya GRES
- Noyabr’skaya CCPP
- Troitskaya GRES

Industrial oily waste storm water treatment facilities of companies of oil and gas extraction/ oil refining/ transportation:
- VCNG (TNK-BP)
- Rosneft (Vankor Oilfield)
- Vyngapurovsky GPP
- CPC
- Novy Urengoy GPP
- Novy Urengoy CCPP
- Sakhalin-2 SEIC
- Samotlorneftegaz

Installation of water treatment, industrial and domestic effluents and storm water treatment plants for the companies:
- Kimkano-Sutarsky GOK
- Korbalikhinsky Rudnik
- Coal-mine «Zarechnaya»
- Chinarevskoye field (MSS)
- Gaspromneft-Hantos
- SALYM PETROLEUM
- Orenburgenergo
- Rosneft-Burenie
- Sakhalimorneftegaz
- Alibekmola field (Kazakhstan)
- Gazpromneft-Vostok
- UMMC - SUMZ

Designing, manufacturing and assembling of water treatment plants is carried out under Technical regulations for fire safety requirements (Federal Law №123), technical regulations for safety of buildings and installations (Federal Law №384), industry and proprietary standards.
MUNICIPAL INFRASTRUCTURE

Sewage treatment facilities of urban areas and other objects of Russian Federation:
- WWTP at 30,000 cub. m/day in Shadrinsk MBR project
- WWTP at 3500 cub. m/day in ZATO Svobodniy - designing, delivery and assembling
- WWTP at 1000 cub. m/day in Naryan-Mar SBR project – designing
- WWTP at 400 cub. m/day in Kytlyn, Sverdlovsk Oblast – MOD of the Russian Federation - “turn-key”
- WWTP at 405 cub. m/day in semiurban center Azovo of Omskaya Oblast, Ministry of Internal Affairs FRG project “turn-key”
- WWTP at 200 cub. m/day in Nizhni Tagil MBR project “turn-key”
- WWTP at 180 cub. m/day in Bezenchuk, Samarskaya oblast
- Local waste treatment plants of storm water runoffs in Tyumen

The development of waterworks in Latvia river basins urban areas, engineering works supervision:
- Rebuilding and extension of networks routing of water supply lines and sewage in 18 cities (21 Conditions of Contract)
- Reconstruction and Treatment Engineering (14 Design and Conditions of Contract)
- Water treatment plants (14 Design and Conditions of Contract)

Engineering, construction and technical supervision in Riga, Jurmala, Ventspils, Pinki:
- Water treatment plants 2x6000, 3900 cub. m/day
- Water supply lines and sewage reconstruction, pump stations
- Waste treatment facilities 920, 1200, 1470, 2650 cub. m/day
THE “TURN-KEY” READY WATER TREATMENT PLANTS

PROCESS ENGINEERING
The own processing services, the personal approach to each planner and customer, the budget and technical quotation specification - all these are the advantages of cooperation with LLC “PLANA Engineering Group”. The integrated surveys and the development of solutions on the reconstruction of waste treatment facilities allow the customer to achieve the better result while saving its capital funds.

IMPLEMENTATION ENGINEERING OF WASTE TREATMENT FACILITIES
Design and engineering office of the enterprise elaborates documentation for the equipment and the waste treatment facilities site. The usage of modern methods and 3D modeling tools that are based on Autodesk® Inventor® and AutoCAD® SW allows bringing out the high quality detail documentation quicker. The project development is carried out under Regulations on Composition of Design Documentation Sections and Requirements to Their Contents (87 RF Government Regulation, 16.02.2008) with industry and proprietary standards.

PRODUCTION, MANNING AND DELIVERY
PLANAs partner companies produce and deliver self-engineered product units for waste treatment facilities. Plana is not a factoring company but it works straight to customers and components suppliers. That protects the company’s contractors from engineering and commercial risks. For economic viability manufacturing orders for block constructions may be posted on different regions of Russia, when the routine inspection of manufacturing and assembly process by PLANA is constant.

CONSTRUCTION AND INSTALLATION WORK
Urban areas and manufacturing company’s water treatment facilities are pure water producing “factories”, the construction of which start from foundation work and end with equipment installation and land improvement. PLANA do the construction and installation works on package and master contract terms with commissioning of the turnover documentation “in hands” and “turnkey” object to the customer.

COMMISSIONING AND PROCESS START-UP OF WWTP AND WTP
With the growth of engineering and technological awareness of the customers, demands on work of WWTP and WTP efficiency also grow. Engineers of PLANA process start-up of WWTP and WTP (including the third-party suppliers’ constructions) on effort and with production staff training at the same time.

SERVICE MAINTENANCE
One-time and regular after-sales service is carried out by PLANAs experts on contract terms.
SEWAGE TREATMENT PLANTS
Capacity from 400 to 30,000 cubic meters per day and more

DOMESTIC, INDUSTRIAL AND STORM WATER EFFLUENTS TREATMENT PLANTS AND FACILITIES
Modular-packaged, block-modular, mounted in industrial building

WATER TREATMENT PLANT (WTP), WATER TREATMENT PACKAGE
Domestic potable water purification to RF requirements SanPiN 2.1.4.1074-01
DESIGNING, MANUFACTURE AND INSTALLATION OF BLOCK-MODULAR FACILITIES AND CONSTRUCTIONS OF TECHNOLOGICAL USE

PRODUCT LINEUP *)
- Block-modular water treatment facilities and tools
- Capacitance and tank equipment
- Block-modular constructions of industrial use
- Welded steel works for oil and gas industry enterprises
- Nonstandard equipment for metal, petrochemical, chemical and electric utility industries
- Pre-fabricated and relocatable buildings
- Construction metal structures
- “Sandwich” type panels and shaped elements

PRODUCTION CAPACITIES
- Production facilities of the group are located in Zarechniy and Polevskoy, Sverdlovsk Oblast.
- Production centers 6000sqm and 4625sqm
- Steel works and nonstandard equipment fabrication section 2000sqm in area
- “Sandwich” type panels operating space capacity 3000sqm/month
- Steel works production space capacity 60 tn/month
- Industrial relocatable buildings production space capacity
- Administration and amenity buildings operating space capacity 1250sqm
- Depot acreage with the territory of 1300sqm
- Steel works and nonstandard equipment fabrication sections are equipped with all the necessary tools, such as turning lathe, hoisting machines, autogenous and plasma arc cutting, modern hand, semiautomatic and argon-arc welding equipment.
- Engineering and operating personnel of the group’s manufacturing companies (more than 160 persons) attend refresher courses and professional skills certification.

TYPES OF WORK PERFORMED *)
- Detailed design documentation for steel works and constructions.
- Construction and installation works on buildings, constructions and utility services including:
  - Industrial engineering (assembly and disassembly)
  - Construction of utility services (assembly and disassembly): heat pipelines, water pipelines
  - Assembly (disassembly) of production equipment
  - Adjustment work and service activities

Installation and construction contract, performing prime contractor functions, include:
- Construction planning, work execution design development, design, technology, quality and construction characteristics optimization
- Execution of certain kinds of construction and installation works by own means
- Competitive admission of subcontractors and suppliers
- Development of construction budgeting system in accordance with approved estimate
- Physical and technical resources support
- Labor and environmental protection, ensuring the fire safety during building and assembly works
- Work progress monitoring under the construction contract, to meet obligations owed to the customer.
- Commissioning of a facility to state acceptance commission

*) Goods and Services supplied by LLC “Engineering Group Plana” and its partners
BLOCK-MODULAR PRODUCTION WORKS MANUFACTURING

STEELWORKS PRODUCTION AND ASSEMBLY

ONSITE EQUIPMENT AND CONSTRUCTION INSTALLATION
PRODUCTION PROGRAM (TYPICAL FACILITIES)

1 DOMESTIC AND INDUSTRIAL SEWAGE BIOLOGICAL TREATMENT

Complete biological activated sludge WWTP plants 500... 1500 cub. m/day and more
SBR, MBR, BB technological series. Fish farm wastewater compliance treatment. Appliance: Administrative-Territorial Entities, railway settlements, little towns, housing communities and residential areas, cultural and business complexes. Designed for the northern areas and warm/mild climate. Modular construction with rapidly erected building and engineering system.

Modular-packaged biological activated sludge WWTP plants 15... 400 cub. m/day
SBR, MBR, BB technological series. Fish farm wastewater compliance or reuse of treated effluents regulations treatment. Appliance: housing communities and residential areas. Designed for the northern areas and the areas with warm/mild climate. Easy onsite assembly. PlanaBLOCK design.

Block-modular biological activated sludge WWTP plants 15... 150 cub. m/day
SBR, MBR, BB technological series. Fish farm wastewater compliance or reuse of treated effluents regulations treatment. Appliance: gas-condensate and oil field's rotational camps and housing complexes, mining companies. Special designs for the Northern and permafrost Areas. Disassembly and relocation. PlanaMODUL design.

2 WATER CONDITIONING, POTABLE WATER TREATMENT

Complete water treatment plants 400... 2000 cub. m/day and more

Block-modular pure water treatment plants 1... 400 cub. m/day
R, F, FI, FOS, FM technological series. Turnkey installations of pure water treatment and conditioning plants. Groundwater springs and overground water sources treatment to RF 2.1.4.1074-01 requirements. Implementation in mild climate areas and appliance in areas with unfavorable weather conditions, such as regions of the Far North. PlanaMODUL design.

Block-assembling pure water treatment plants 0,5... 50 cub. m/day
R, F, FI, FOS, FM technological series. Production capability 0,5 – 50 cub. m/day. Packaged equipment for rapid erection in portable trailers and block-modules. The technologies applied provide water groundwater springs and overground water sources treatment to RF 2.1.4.1074-01 requirements. Serviceability.
PRODUCTION PROGRAM (TYPICAL FACILITIES)

3 RAIN AND OILY INDUSTRIAL WASTE WATER TREATMENT

Complete waste treatment facilities for large-scale enterprises

The turn-key solutions for oil tank farm areas, fuelling stations, TPP/SDPP, large manufacturing facilities. The complex includes package treating units, ground and inground storage tanks, WWPs, oil products trapping storages. Explosion safety level “A” “B”. Site area detailed design. PlanaBLOCK design.

Modular-packaged industrial waste water treatment plants 1...100 l/s

R, S, SC, FLO, FS technological series. Sewage treatment with high level of oil product pollution (up to 2000 mg/l). Oil-gas field areas and manufacturing facilities appliance. Special designs for the Northern and permafrost Areas. WWPs, subsidence dehydration and effluent neutralization units are built-in. Explosion safety level “A” “B”. Site area detailed design. PlanaModul design.

Modular and embed industrial and storm water effluents treatment plants


4 PUMPING STATIONS AND TANKS FOR WASTE WATER AND POTABLE WATER

Sewage pumping stations 1...300 cub. m/hour and more

Productivity: 1...300 cub. m/hour and more. Untreated and treated, industrial and domestic/storm water effluents transfer pumps. Ground or inground modular construction. Northern areas special designing with heat insulation and receiving tank heating system. Explosion safety level “A” “B”. Enhanced receiving balance tank (up to 100 cub. m). PlanaBLOCK, PlanaModul design.

Waste water storage tanks 5...100 cub. m, drain stations

Ground and inground storage tanks. External finning for tank corrosive attack reduces. The complete set of pumping equipment for effluent delivery under pressure, modular shelters for all year round servicing supplied. Steel casing with corrosion-resistant coat or fiberglass casing. 1 or 2 take-up reel tank-draining stations. The northern areas design with heat-insulation and heating system.

Pumping stations and domestic potable water supply

Productivity: 1 – 450 cub. m/hour and more. Domestic potable water delivery. Pumping stations and modular heated ground tanks supplied with complete set of heat-insulated shelters. Artesian water pumping stations. District pumping stations. The complete set of advanced treatment units and domestic potable water UV neutralization to SanRaN requirements 2.1.4.1074-01. PlanaModul design.
GROUP OF COMPANIES

PLANA is supported by enterprises that gained a reputation of large corporate customers, successfully acting in the market of designing, production and equipment installation and constructions of technological use. Also the enterprises have the experience of implementing infrastructure projects not only in Russian Federation but also abroad.

“Alternative solutions” Group of companies (PSK “Uralspecteploremont”) offer full service batching of industrial equipment in block and modular constructions. Business’s products - enclosing structures, pre-engineered buildings, production and plan support facilities, public constructions, containers and tanks, block-modular boilers, compressor and pumping equipment. Own production of sandwich panels and moulded members.

BIK group of companies consists of “Construction and production company “BIK”” LLC that products construction metal structures and nonstandard equipment; “Construction and mounting company “BIK”” LLC, has a great experience in mounting, construction and alteration work, commissioning and start-up of engineering services. The production facilities of the company are to 150 tons of nonstandard equipment per month, to 280 tons of construction metal structures.

“TyumenNIIgiproas” LLC – parent company of OAO «Gazprom» for designing, developing, equipping and operation of gas and gas condensate-oil fields in Western Siberia. The scientific and technological solutions of “TyumenNIIgiproas” LLC find use in enterprises of Western and Eastern Siberia, industrial equipment, fabricated at the Experimental Plant, is used all over the country.

LAKALME SIA (Latvia) do the complex of services in water and sewerage system maintenance and repair, with engineering, administrative and financial management in project preparation and implementation of EEC and neighboring countries. Work experience in EPC/EPCM as a contractor in foreign finance, design and engineering WTP and WCU construction FIDIC Red and Yellow book supervision projects. The company improved dozens of water treatment plants.
On LLC “PLANA Engineering Group” corporate website you will find out more about generic and industry water and sewage treatment solutions, also you may download catalogues, datasheets and licenses, to get the current information about the company’s activity.

More detailed information can be obtained from our website www.planagroup.ru