GROUP OF COMPANIES

RUSCOMPOZIT

PRODUCTS AND SOLUTIONS OF COMPOSITE MATERIALS

CONTENT

ABOUT THE COMPANY

The RUSCOMPOZIT Group is one of the leaders of the Russian composite-producing industry with its core operations being focused on development and introduction of innovative state-of-the-art solutions in various manufacturing sectors.

The Company comprises two production sites: Open Joint-Stock Company Tverstekloplastik (located in Tver) and Open Joint-Stock STEKLONiT (located in Ufa), the Composite Solution Engineering Center for development and simulation of composite designs and solutions based there upon, the Steklonit Management Trading House, and the Russintek with its core operations focused on implementing innovation solutions in developing design and detail engineering documentation and performing construction and installation works using composite materials.

Nowadays, RUSCOMPOZIT employs more than 1,500 highly qualified specialists capable of meeting challenges in developing and implementing innovative composite-based solutions for professional markets.

To develop integrated polymer-composite solutions for various applications, a highly effective Research & Development Department has been created in the Company. The Department comprises a numerical simulation unit, design, technology and test sections, a material properties research laboratory and a prototype production facility. The Department's activity provides for a minimum time between development and manufacturing application of new products.

RUSCOMPOZIT key products are designed for construction of transport infrastructure as well a soil & gas production and transport facilities. RUSCOMPOZIT aims at developing and delivering complete integrated polymer composite-based solutions.

MOBILE ROAD PAVEMENTS «MOBISTEK»

Applications and advantages

Mobile Road Pavements (MRP-MOBISTEK) represent composite slabs allowing a prompt lay up of temporary roads and construction sites on land plots featuring complex soil and geological conditions, in particular, on swamps of different types. Those slabs provide for access of heavy caterpillar and wheeled vehicles featuring a weight of up to 80 tons.

MRP-MOBISTEK advantages:

- prompt system deployment
- positive buoyancy
- multiple repeated application (cash savings)
- modular design (sites of any dimensions whatsoever may be constructed)
- preservation of vegetation cover and reduction of natural resources consumption
- slab surface structure prevents sliding
- according to Gazprom VNIIGAZ feasibility study, investments in MRP-MOBISTEK are returned when applied 8 times, as compared to plank roads
- weather resistance

Applications:

- provision of prompt access and delivery of equipment in cross-country conditions, including swamps of different types
- construction of temporary passages and sites to protect the topsoil
- arrangement of access passages and sites while construction and installation works on main pipelines
- construction of temporary crossings over various ways of communication
- elimination of emergencies

Examples of application

Construction of the «South European» gas pipeline. Plot «Pisarevka-Anapa», diameter 1420 mm, the slabs MRP-MOBISTEK in the construction «UGS Expansion» for providing the gas supply to the gas pipeline «South Stream» 692.9-768.5 km». Column of ten Pipelayer Komatsu D – 355 – C was used. Works were carried out on a plot of rice irrigation system (waterlogged soils)

OJSC «JSC «Transneft» Pipeline System «Arctic-Purpe»

ALL-COMPOSITES UPPER STRUCTURES FOR ABOVE-GROUND PEDESTRIAN OVER PASSES OVER HIGHWAYS AND RAILROADS

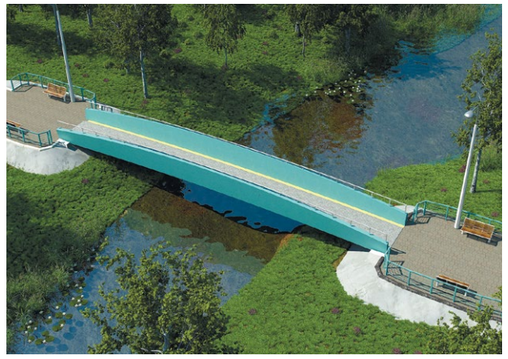
Nowadays, about 70% of the total number of bridges in Russia represents reinforced concrete structures. Such structures feature an essential fault due to routine maintenance and expensive repair works required. To increase the service life of bridge work and reduce operational costs the RUSCOMPOZIT Group offers, relying on rich European experience, a simple and efficient solution: application of durable bridge superstructures made of polymer composite materials.

Glass-composite materials may be applied in super structures design of highway and pedestrian bridges, road pavement plating and for external reinforcement.

Superstructure installation is very easy and takes barely several hours. Assembly speed is an important factor, especially for big cities, where traffic limitation either is not allowed, or has severe time constraints. Application of light weight composite superstructures reduces economic losses, pollution and noise intensity.

In total, more than 300 bridges with polymer-composite bearing structures have been constructed all around the world. Among them there are about 200 pedestrian bridges and about 100 highway bridges.

Pedestrian bridge over a river in Starobaltachevo village, Republic of Bashkortostan



Pedestrian bridge, 250 km of M-1 Belarus highway

Advantages:

Reduction of construction period

- production that uses vacuum infusion method allows producing a superstructure within one single manufacturing operation without subsequent assembly
- the entire span is manufactured of composite material without screwed joints, which enhances reliability of the whole structure

Reduction of construction costs

- saving bearing members costs owing to insignificant thermal elongations and small superstructures' mass fraction. Ease of installation

Reduction of operational costs, increase of periods between repairs

- corrosion stability and resistance to hostile environment
- no protective paint-and-lacquer coating is required. Product painting is embedded in the material structure
- ease of repair in case of structure damage due to external mechanical impact

Enhanced performance properties

- no additional waterproofing layer
- no electrical conductivity
- considerably less handling required, ease of maintenance
- increased service life of products

Implementation of various design ideas

- customized manufacture of superstructures is possible

Composite bridge structures allow reducing construction, maintenance and repair costs, and increasing service life.

Comparison table of reduced costs for bridge construction and maintenance*

Technical and economic efficiency	Bridge structures using reinforced concrete and metal	Bridge structures made of composite materials
Durability	35-50 years	> 100 years
Construction costs, including materials	100%	70-75%
Maintenance and repair within the first 35-40 years of operation	35-50% of the original value	15% of the original value
Final value with account to operational costs for a period of 25 years	135-150%	80-90%

**This table shows technical and economic efficiency of composite bridges application. Construction costs of a reinforced-concrete bridge are taken as 100%. The reinforced-concrete bridge costs for the whole life cycle exceed twofold the composite bridge costs for the same period. The economic effect equals to 50-65%.*

The economic efficiency of composite superstructures' application has been calculated in accordance with the Guidance for Evaluation of Economic Efficiency of Innovations and Scientific and Technological Advances Used in Road Facilities, approved by the order of the Russia's Ministry of Transport dated December 10, 2002 NoOS-1109-r.

Comparison has been made in two stages:

1. Determination of capital costs (budget investments)

Variant 1 – pedestrian overpass with a metal beam superstructure (20+18+18+20) m

Variant 2 –pedestrian overpass with a composite superstructure (20+18+18+20) m

2. Determination of current operational costs

Metal superstructure:

Pavement service life equals to 15 years as per STO 001-2006

According to the order of the Russia's Ministry of Transportdated November 1, 2007 No 157, the minimum period between repairs equals to 30 years, for the climatic zone 2 and 3

Composite superstructure:

According to the manufacturer's materials, superstructures do not require any operational or repair costs over 50 years, there fore operational and repair costs in the calculation given equal to zero within the calculation period (30 years).

Conceptual solution of a composite superstructure design with glazing:

Over all dimensions:

- the span length 25 m, at most
- the width should not be in excess of 3 m

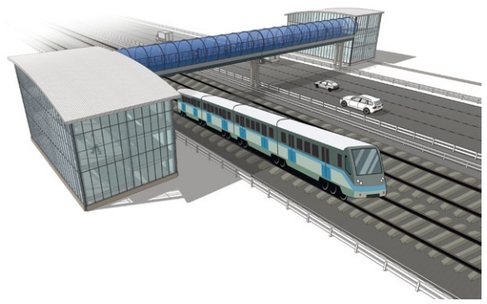
The camber is determined by the radius and depends directly on the span length. E.g. for a 24 m long span the camber may be 30 cm. At the customer's request, a different camber value may be taken.

Materials:

- glass fiber and epoxy vinyl ester resin

Technical-and-economic indexes

Lay out of bridge	Concrete supports, m^3	Superstructure			Polycarbonate glazing, m^2	Relative value, %
		Metal, m	Composite, long meters	Sika covering, m^2		
Continuous superstructure with standard metal beams, down pass	84	75	-	242	724	106
Continuous superstructure with metal frames, down pass	78	89	-	242	834	114
Composite superstructure	42	-	77	-	702	100



Composite railings

Glass-reinforced plastic (GRP) railings are intended to provide enclosure between pedestrian or transport areas and elevations differences adjacent there to, or other construction objects.

Major applications:

- pedestrian bridges
- highway bridges
- enclosed structural rising gradients
- stadiums and sports centers

Advantages of GRP railings:

- no corrosion
- high mechanical stability along with product's light weight
- any color painting possible
- no repeated painting required
- ease of installationon site
- long-life performance

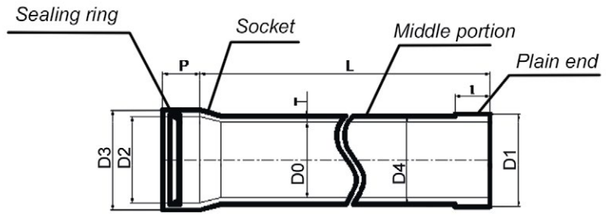
Composite railings

GRP water-flow tube

Water-flow tubes represent engineering structures designed to let permanently or periodically active water flows pass under earth fills of highways and railroads.

Geometrical values

D0 – inner diameter (straight run)
D1 – outer diameter (inset portion)
D2 – inner diameter (socket)
D3 – outer diameter (socket)
D4 – outer diameter (straight run)
L – effective length of tube section
P – socket length
l – plain end length
T – tube wall thickness



Inner diameter DN, mm	D0	D1	D2	D3	P	l
500	500	523	532	560	200	200
600	600	627	636	670	200	200
700	700	731	740	780	200	200
800	800	835	844	888	220	220
90	900	939	948	998	220	220
100	1000	1043	1053	1109	220	220
1200	1200	1251	1261	1321	220	220
1400	1400	1460	1470	1534	220	220
1500	1500	1564	1575	1641	235	235
1600	1600	1668	1680	1748	250	250
1800	1800	1877	1889	1961	300	300
2000	2000	2085	2097	2173	330	330

Application

GRP water-flow tubes are applied to construct new water-flow facilities and repair the existing ones in moderate and cold climate, at an ambient temperature between -50°C and +60°C.

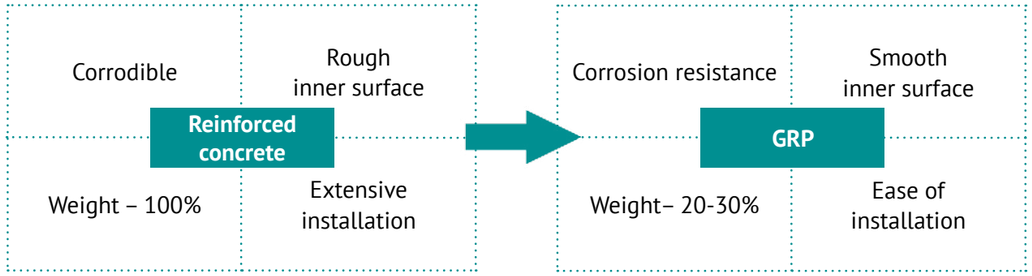
Water-flow tubes are used for:

- construction of new water-flow facilities under earth fills of highways and railroads
- elongation of existing concrete and reinforced-concrete tubes in case of roadway widening and road renovation
- repair of existing tubes using the pipe-in-pipe (PIP) method

Advantages of GRP water-flow tubes:

- corrosion-resistant
- wear resistance
- increase of periods between repairs and total life
- no combined foundations (segment blocks) required
- construction without culvert heads possible
- light weight (10 times lighter than reinforced-concrete tubes), convenience of transportation and installation
- reduced total value of property

Comparison of GRP to reinforced-concrete water-flow tubes



Standard characteristics of GRP water-flow tubes

Rated inner diameter, DN, mm	D4 at least, mm		Stiffness class				D4 at least, mm	Stiffness class	
			SN 5 000		SN 10 000			SN 15 000	
	SN 5 000	SN 10 000	Wall thickness, at least, mm	Design weight*, kg/6 m	Wall thickness, at least, mm	Design weight*, kg/6 m	SN 15 000	Wall thickness, at least, mm	Design weight*, kg/6 m
500	520,3	520,3	10,2	203	10,2	203	521,2	10,6	212
600	620,3	622,9	10,2	247	11,5	278	626,5	13,3	322
700	723,9	725,8	12	242	12,9	369	729,3	14,7	419
800	824	829,8	12	242	12,9	369	729,3	14,7	419
900	926,5	933,4	13,3	501	16,7	626	936,6	18,3	684
1000	1030	1038	15,1	620	19	779	1041,8	20,9	855
1200	1237	1247	18,5	917	23,5	1162	1249,7	24,9	1225
1400	1443	1452	21,4	1248	26	1506	1459,2	29,6	1710
1500	1546	1557	22,7	1423,5	28,4	1774	1563,1	31,6	1965
1600	1648	1661	23,9	1599	30,7	2041	1667	33,5	2220
1800	1855	1872	27,7	2115	35,8	2700	1875,4	37,7	2837
2000	2061	2080	30,5	2604	39,9	3364	2083,7	41,99	3519
500	520,3	520,3	10,2	203	10,2	203	521,3	10,6	212

* Reference value for tubesis 6 m

Certification, permits and approvals:

- organization standard (STO 59589554-005-2012)
- technical certificate
- technical instruction for application (NII Mostov – Bridges R&D Institute)
- certificate of Conformity GOSTR
- certificate of Conformity NOSTROI
- opinionon test results (Research Institute of bridges)

Examples of application

Storm water treatment facilities

STEKON storm-water treatment facility may be delivered both in one single body and as a modular type facility, in separate bodies.

Water use legislation of the Russian Federation prohibits discharging into watershed areas rain and melting waters untreated according to prescribed standards, which waters are drained in an orderly manner from territories intended for building and from production sites. Surface water treatment facilities provide for effluents being treated according to necessary discharge standards and preventing pollution caused by various foreign matters of natural and production induced origin.

Standard objects

Storm sewer systems of bridges, roads, passages, streets, refueling stations, parking places, trade, office, warehouse centers, and production enterprises.

Systems are selected according to the following criteria:

- pollution load at the system's inlet
- treatment capacity
- degree of treatment: according to standards of discharge into water bodies or municipal sewerage
- depth of sewer manifold

Description of systems:

- treatment facilities featuring maximum operational compatibility
- bodies made of glass-reinforced plastic (GRP), alight-weight durable non-corrodible material
- underground plant
- treatment facility's capacity is 10 to 150 l/s. High-capacity systems consist of several lines of treatment facilities
- independence. Power consumption is 0 kW

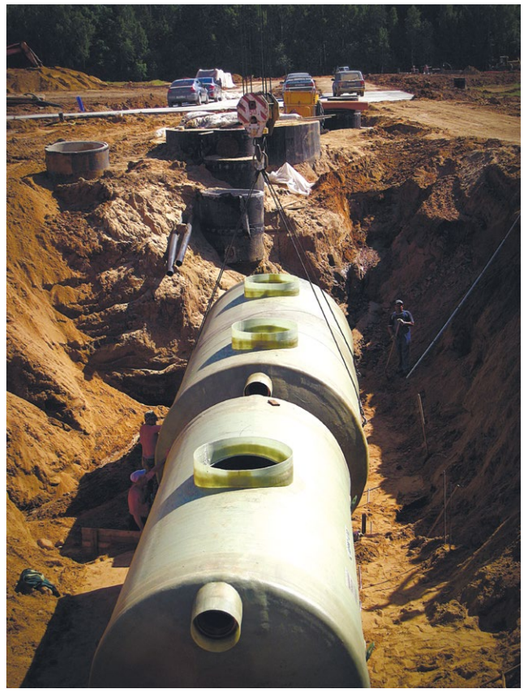
Treatment of effluents discharged from various territories.
Pollution concentration at inlet:

- in terms of suspended matters up to 4000 mg/l
- in terms of petroleum products up to 500 mg/l
- in terms of BPK_5 up to 70 mg/l

Degree of effluents treatment complies with the standards of discharge into water basins of intended for commercial fishing:

- in terms of suspended matters up to 3 mg/l
- in terms of petroleum products 0.05 mg/l
- in terms of BPK_5 up to 3 mg/l

Examples of application



Technical characteristics

Flow rate,l/s	Diameter, mm	Length, mm	Influent tube elevation, mm	Effluent tube elevation, mm	Influent/ effluent tube diameter	Weight, kg
10	1600	5000	1400	1350	160	510
15	1800	5800	1600	1550	200	740
20	2000	6200	1800	1750	200	974
25	2000	7600	1750	1700	250	1190
30	2500	6100	2150	2100	250	1820
40	2500	7800	2150	2100	315	1910
50	2500	9700	2150	2100	315	2300
60	2500	11500	2150	2750	315	2820
70	3200	8800	2800	2750	315	3530
80	3200	9900	2800	2750	400	3980
90	3200	11000	2800	2750	400	4400
100	3200	12100	2800	2750	400	4840
110	3200	10600	3100	2750	500	5390
120	3600	11500	3100	3050	500	5850
130	3600	12500	3100	3050	500	6370
140	3600	13300	3100	3050	500	6780
150	4200	10700	3700	3650	500	7400

MODULARIZED TREATMENT SYSTEMS

SAND MASTER UNIT

The sand master unitis a GRP capacity in which mechanical treatment of effluents takes place due top recipitation of non-dissolved matters featuring a density over 1,500 kg/m^3, with subsequent disposal via a discharge connection. Particles of lighter weigh are separated only at coalescing module. Fluid is pumped off via a service well. While pumping off the use of acess pool age truck is allowed.

Product innovation:

There is a possibility to manufacture a sand master unit of a new generation – a cyclone separator, which allows reducing its over all dimensions.

Pollution concentration at the inlet in to sand master unit equals to:

- in terms of suspended matters up to 4000 mg/l
- in terms of petroleum products up to 500 mg/l
- in terms of BPK$_5$ up to 70 mg/l

OIL-AND-GASOLINE SEPARATOR

The oil-and-gasoline separatoris a GRP capacity for mechanical treatment of surface effluents designed to removen on-dissolved coarsely dispersed mixtures from effluents containing petroleum, oils and fuel combustion products. By means of coalescing insertion plates the efficiency of space application can be enhanced, which allows reducing the dimensions of the oil-and-gas oline separator. The coalescing module provides for separation of floatable petroleum product particles featuring a size of over 0.2 mm and separation of suspended matters lighter than 1,500 kg/m^3. In the oil separator, from effluents are separated free as well as partiallymechanically emulsified petroleum products. In the oil separatorare installed coalescing modules. The modules represent thin-layer corrugated PVC plates bonded with each other. Thanks to their design, the modules favor aggregation of oil particles and speed up their floating. Oil forms a single layer on the water surface in the container. The use of the coalescing module allows increasing the oil separator's capacity as compared to its counterparts by a factor of 1.4 (due to a larger area of the modules' surface).

Pollution concentration at the inlet of the oil-and-gasoline separator equals to:

- in terms of suspended matters up to 3 000 mg/l
- in terms of petroleum products up to 100 mg/l
- in terms of BPK$_5$ up to 30 mg/l

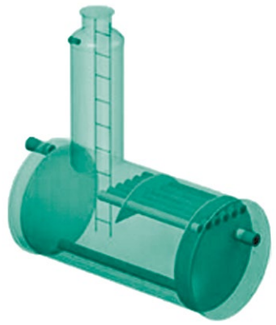
Degree of effluents treatment after the oil-and-gasoline separator equals to:

- in terms of suspended matters up to 10 mg/l
- in terms of petroleum products up to 0.3 mg/l
- in terms of BPK_5 up to 15 mg/l

Technical characteristics

Flow rate, l/s	Diameter, mm	Length, mm	Influent tube elevation, mm	Effluent tube elevation, mm	Influent/ effluent tube diameter	Weight, kg
10	1600	2700	1400	1370	160	340
15	1800	3100	1600	1530	200	470
20	2000	3300	1800	1730	200	620
25	2000	4000	1750	1680	250	750
30	2000	4600	1750	1680	250	870
40	2500	6000	2150	2070	315	1130
50	2500	5000	2150	2070	315	1470
60	2500	6000	2150	2070	315	1750
70	3200	4800	2800	2730	315	2300
80	3200	5300	2800	2730	400	2540
90	3200	5900	2800	2730	400	2540
100	3200	6400	2800	2730	400	3070
110	3200	6900	3100	3030	500	3300
120	3200	7500	3100	3030	500	3600
130	3600	6500	3100	3030	500	3980
140	3600	7000	3100	3030	500	4280
150	3600	7500	3100	3030	500	4590

SORPTION FILTER



Effluents come into the sorption filter via the inlet duct. Water moves from the top downward. Water runs through a network of distribution devices and comes to S-VERAD sorbent. Sorbent granules feature afine-pored, mesoporous and layered lamellar macropore structure. The sorbent's surface is covered with a hydrophobic carbonfilm. The sorbent features a high dynamic capacity in terms of petroleum products as compared to other sorbents, as well as a longer service life.

Then, passing through activated carbon that provides for sorption of remaining dissolved petroleum product sand increases the sorption capacity of S-VERAD sorbent, water comes to the natural stone shungite.

Shungite is intended to prevent the sorbent's carry over from the sorption filter and enhance the efficiency of the activated carbon's action.

Treated water is collected into a network of watershed pipelines and carried off via the discharge-duct.

Pollution concentration at the inlet of the sorption filter equals to:

- in terms of suspended matters up to 10 mg/l
- in terms of petroleum products up to 0,3 mg/l
- in terms of BPK_5 10 to 15 mg/l

Degree of effluents treatment after the sorption filter equals to:

- in terms of suspended matters up to 3 mg/l
- in terms of petroleum products up to 0,05 mg/l
- in terms of BPK_5 10 to 15 mg/l

Technical characteristics

Flow rate, l/s	Diameter, mm	Length, mm	Influent tube elevation, mm	Effluent tube elevation, mm	Influent/ effluent tube diameter	Weight, kg
10	1600	2800	1400	1370	160	450
15	1800	3500	1600	1530	200	710
20	2000	4100	1800	1730	200	1020
25	2000	5000	1750	1680	250	1250
30	2500	5900	1750	1680	250	1480
40	2500	7700	2150	2070	315	1930
50	2500	7800	2150	2070	315	3050
60	2500	9200	2150	2070	315	3600
70	3200	8900	2800	2730	315	4490
80	3200	10000	2800	2730	400	5590
90	3200	11200	2800	2730	400	6860
100	3200	12250	2800	2730	400	7100
110	3600	12000	3100	3030	500	8560
120	3600	13000	3100	3030	500	9280
130	4200	12200	3100	3030	500	11780
140	4200	13000	3100	3030	500	12560
150	4200	13600	3100	3030	500	13140

CHECKING AND DISTRIBUTION SUMPS (additional equipment)

The distribution sump is designed to separate the flow of storm water coming to treatment.

According to Construction Standards and Regulations SNiP 2.04.03-85, in the storm water drainage system must be provided treatment of the most polluted part of the surface water flow that-develops during the period of storm events, snow melting and road pavement washing. In the areas intended for building and on production sites featuring similar pollution must be treated not less than 70% of annual flow, while on production sites, the territory of which may be polluted by specific matters with toxic properties or by a considerable quantity of organic matters, treatment of the entire volume of the annual flow must be provided.

The checking sump is designed to take samples of the treated water flow.

These sumps are applied in sewerage systems and have the following variants: watershed, distribution, reversible, inspection and access sumps, pressure absorbers, technical sumps and sampling sumps.

Technical characteristics of distribution sump

(Q), l/s	Body diameter (D), mm	Influent tube diameter (Dinf1), mm	Bypass diameter(Dinf2), mm	Effluent tube diameter (Deff.), mm	Influent tube elevation (A), mm	Bypass elevation (B), mm	Effluent tube elevation (C), mm
10/30	1400	160	250	250	670	580	330
15/45	1400	200	315	315	740	625	310
20/60	1400	200	315	315	740	625	310
30/60	1400	250	315	315	740	675	360
40/120	1400	315	400	400	820	735	335
50/150	1400	315	400	400	820	735	335
80/225	2000	400	500	500	920	820	320
100/300	2000	400	500	500	920	820	320
120/360	2000	500	600	600	920	820	320

Technical characteristics of checking sump

(Q), l/s	Body diameter (D), mm	Influent tube diameter (Dinf), mm	Bypass diameter (Deff1), mm	Effluent tube diameter (Deff2), mm	Tube elevation (A), mm	Tube elevation (B), mm
10/30	1400	250	250	160	100	260
15/45	1400	315	315	200	100	300
20/60	1400	315	315	200	100	300
30/60	1400	315	315	250	100	250
40/120	1400	400	400	315	100	415
50/150	1400	400	400	315	100	415
80/225	2000	500	500	400	100	500
100/300	2000	500	500	400	100	500
120/360	2000	600	600	500	100	600

PACKAGED TREATMENT SYSTEMS

The packaged treatment facilities are designed to treatsurface flows and intended for territories with a highly developed living environment. The treatment facilities are delivered with maximum operational compatibility. The body is made of glass fibre reinforced plastic (GRP), a light-weight durable non-corrodible material. The major advantage is the product's compactness combined with its high capacity of 1.5 to 70 l/s. The high-capacity systems consists of several lines of treatment facilities. The system does not consume any electric power and is independent.

Pollution concentration at the inlet of the packaged treatment equals to:

- in terms of suspended matters up to 650 mg/l
- in terms of petroleum products up to 100 mg/l
- in terms of BPK_5up to 60 mg/l

Degree of effluents treatment after the packaged treatment facility equals to:

- in terms of suspended matters up to 3 mg/l
- in terms of petroleum products up to 0,05 mg/l
- in terms of BPK_5up to 3 mg/l

Technical characteristics

Flow rate, l/s	Diameter, mm	Length, mm	Influent pipe elevation, mm	Effluent pipe elevation, mm	Influent/ effluent pipe diameter	Weight, kg
1,5	1200	3200	1000	800	110	470
3	1200	4500	1000	800	110	730
6	1600	5800	1400	1200	160	1300
8	1800	6200	1600	1400	160	1700
10	2000	5400	1800	1600	160	2200
15	2000	7400	1800	1600	200	2900
20	2000	9000	1800	1600	200	3450
25	2000	10000	1800	1600	200	3970
30	2000	11500	1750	1500	250	4500
40	2500	11000	2150	1900	315	5200
50	2500	12200	2150	1900	315	5900
60	2500	13000	2150	1900	315	6800
70	3200	13500	2750	2500	400	7900

SEWERAGE PUMP STATIONS

Sewerage pump stations (SPS) in a GRP body are designed to pump waste and storm-water effluents, where there is no possibility to transfer the same to discharge point by gravity. Application of SPS also allows avoiding deep burial depth of gravity sewers.

Selection of an SPS is subject to:

- burial depth of supply sewers
- volume of effluents coming to pump station
- type of the liquid transferred
- hydrogeological conditions of construction
- type of pumping units installed and the method of their control

In terms of the type of liquid pumped, water-discharge pump stations are referred to four groups: those for transfer of household effluents, storm water, industrial waste water, and settlings in treatment facilities.

To weld pipelines, orbital welding is used in the SPS. This is a state-of-the-art, high-quality, rapid and technologically appropriate method that allows providing a high quality of the welding surface.

Water storage capacities and reservoirs

The unique properties of composite materials allow extending to the maximum the applications of composites in the highway and municipal infrastructure. The RUSKOMPOZIT Group proposes to replace conventional metal storage capacities and firewater tanks with state-of-the-art GRP products.

GRP storage capacities and firewater tanks are used:

- to store water reserves for firefighting purposes in proximity to filling stations, fuel and lubricants warehouses, warehouse complexes and other facilities
- to collect wastewater in an urban setting and in private country estates (cottages, weekend houses)
- as an accumulating (regulating) reservoir in treatment facilities

Storage capacity in treatment facilities

A GRP storage capacity is used to accumulate rainwater and transfer it subsequently to a treatment facility. The capacity should be used, where effluents flow by gravity through the storm water sewer to the accumulating (regulating) reservoir.

Advantages of GRP capacities:

- resistance to chemical attack (underground service life is over 50 years)
- weather resistance
- high mechanical stability along with the product's low specific weight

Technical characteristics

Capacity volume, m^3	Diameter, m					Height, m					Influent tube
	1	2	3	4	5	1	2	3	4	5	
1	1100					2100					110
3	1100	1500				3100	1750				110
4	1100	1500				4000	2300				110
5	1100	1500				5000	2900				110
6		1500				6000	3450				110
8		1500	2000				4600	2600			110
10		1500	2000				5700	3250			110
12		1500	2000				6900	3850			110
15		1500	2000				8600	4800			160
20			2000	2500				6400	4100		160
30			2000	2500				9600	6200		160
40			2000	2500	3200			12800	8200	5000	160
50				2500	3200				10200	6300	200
55				2500	3200				11300	6900	200
60				2500	3200				12250	7500	200
80					3200					10000	200
100					3200					12500	200

Examples of application

LARGE-DIAMETER CAPACITIES

The RUSCOMPOZIT Group of Companies offers vertical large-size capacities featuring a height up to 14.5 m, a diameter up to 30 m and a volume up to 10 000 m^3.

Vertical large-diameter capacities are used to store water reserves for firefighting purposes in proximity to filling stations and fuel and lubricants warehouses as well as an accumulating (regulating) reservoir in treatment facilities.

Advantages of large-diameter capacities:

- resistance to chemical attack (underground service life is over 50 years)
- weather resistance
- high mechanical stability along with the product's low specific weight
- economic efficiency (the capacity is manufactured on site)

Technical characteristics

Capacity volume, m^3	Diameter, m								Height, m							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
150	6								5,3							
300	6	8							10,6	6						
500		8	10						17,7	10	6,4					
750		8	10	12						15	9,5	6,6				
1000			10	12	15						12,5	8,8	5,7			
1500				12	15	17						13,2	8,5	6,6		
2000					15	17	20						11,3	8,8	6,4	
3000						17	20							13,2	9,5	
4000							20	30							12,7	5,7
5000								30							15,9	7
7000								30								10
8000								30								11,3
10000								30								14,5

Examples of application

Installation of surface flow treatment systems

To reduce the installation time, the surface flow treatment systems are delivered factory-assembled to construction site. While mounting GRP products, both of horizontal and vertical type, as a foundation is recommended the solid-cast reinforced-concrete plate to prevent displacement and floating of horizontal GRP products installed in the pit. Prior to back filling, it is necessary to install fixing ratchet straps made of synthetic non-elastic materials. Subsequently, the mounted horizontal and vertical capacities are back filled, layer by layer, with sandy soil.

NOTES

23, Profsoyuznaya st., Moscow, Russia, 117997
Tel.: +7 (495) 223-77-22
info@ruscompozit.com
www.ruscompozit.com