

Polymeric containers

«UralActiv»

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Introduction

The company OOO «UralAktiv» manufactures different polymeric vessels and reservoirs from chemical-resistant plastic materials (PP, PE, PVC, PVDF etc.).

We produce plastic containers of any form and with different dimensions. On your request the containers from plastic materials can have cylindrical and rectangular form, can be of vertical and horizontal design, and also can be completed with hatches, branch pipes, bends, fittings, pumps and other special equipment.

Process container is a leakproof vessel made by welding of plastic sheets (e.g. polypropylene or polyethylene). All vessels are manufactured in accordance with technical specification [TY 2291-001-95801889-2015](#).

PP and PE reservoirs and containers can be used for storing of any products – liquids, hard and granular materials. We can manufacture cylindrical and rectangular containers of all dimensions and according to customer's special request and based on customer's drawings or technical specifications.

Polypropylene doesn't absorb smells and doesn't pass them to the liquids; it is easy to wash and has almost no incrustations. PP is an excellent dielectric material. As PP material conducts heat hardly the polypropylene reservoirs are good to keep temperature of liquids without using heat insulation. PP material has Sanitary-Epidemiological Conclusion Certificate, therefore any containers made from it can be also successfully used in food industry. Containers from PP sheets have lighter weight as the metallic containers with the same capacity. It is a good advantage if you need to transport containers. The shelf-life of polypropylene containers is in several times greater than the shelf-life of containers from metal.

Products are widely used for individual, industrial purposes, in food and chemical industries.

The main characteristics of PP are low density, high temperature resistance, high tensile strength, chemical resistance, excellent water resistance, low friction resistance and simply processing. Due to the low weight of polypropylene and its good properties in aggressive medium the PP material is widely used and becomes an optimal solution for many different branches.

The wall's thickness and color spectrum can be changed as prior agreed.

Vertical cylindrical containers

Containers with flat bottom

Cylindrical flat-bottom containers of vertical type are made from plastic and are intended for stationary storage both of drinking water and aggressive chemical substances.

The containers are made from material which is suitable to contact with food and chemical mediums. The main material for containers, vessels and reservoirs is grey polypropylene RAL7032 and black polyethylene. On your request other materials and their colors are available. Available types of plastic: PP – polypropylene; PPs – flame-resistant polypropylene; PP-EL-s – electrically conductive, flame-resistant polypropylene; PE – polyethylene; PVC – polyvinyl chloride; PVDF – polyvinylidene fluoride.

We can manufacture on your request the product with other dimensions. If necessary we also can equip it additionally with level sensor, pump, agitator, heaters etc.



Technical characteristics

№	The capacity of container	Overall dimensions	
	m ³	Diameter, mm	Height, mm
1	0.1	500	600
2	0.25	700	750
3	0.5	950	800
4	0.75	1000	1000
5	1	950	1500
6	1.5	1150	1500
7	2	1250	1800
8	3	1500	1750
9	4	1500	2300

Containers with conical bottom

We produce conic-bottom containers from polymeric materials. They all can be made from strong chemical resistant plastic, for example from polypropylene sheet or polyethylene sheet. Their bottoms have conical form; drain opening is in the lower part of reservoirs. Due to such construction it is possible to use all content of container and sediments are not collecting on the bottom.



Technical characteristics

№	The capacity of container	Overall dimensions	
	m ³	Diameter, mm	Height, mm
1	0.1	500	600
2	0.25	700	750
3	0.5	950	800
4	0.75	1000	1000
5	1	950	1500
6	1.5	1150	1500
7	2	1250	1800
8	3	1500	1750
9	4	1500	2300

Containers with conical cover

We produce cylindrical flat-bottom containers with conical cover which are made from PP and PE. Such kind of cover enables to manufacture containers of big capacity.

Polymeric containers with conical cover are convenient in use in many process operations for example in metal, chemical or food industries, also they can be used in power or mechanical engineering, in everyday purposes such as storage of water.

On your request the containers can be equipped additionally with level sensors, taps, branch pipes etc.



Technical characteristics

№	The capacity of container	Overall dimensions	
	m ³	Diameter, mm	Height, mm
1	5	1800	2000
2	6	1900	2200
3	8	2000	2600
4	10	2300	2500
5	12	2300	3000
6	15	2300	3650

Containers with conical bottom and conical cover

Our company can also calculate, design and produce more complicated containers, for example with conical bottom, with conical cover, on supports. It is provided with bracing rings for extra stability.

All containers, vessels and reservoirs from PP, PE can be equipped with agitators, pumps, level sensors, isolation valves, electric heaters, control and measuring instruments and many others.



Technical characteristics

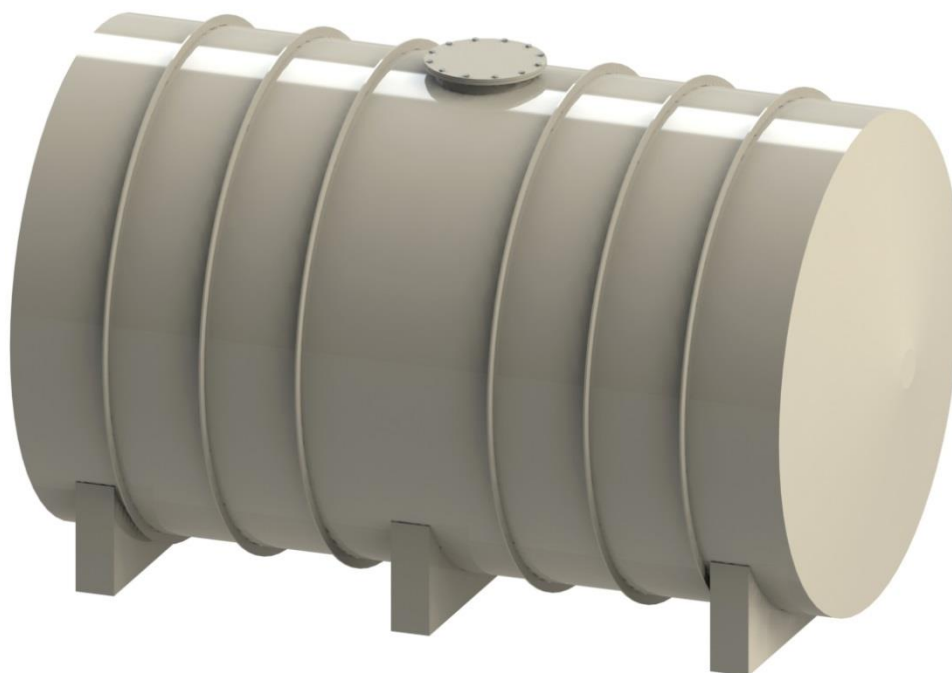
№	The capacity of container	Overall dimensions	
	m ³	Diameter, mm	Height, mm
1	5	1800	2000
2	6	1900	2200
3	8	2000	2600
4	10	2300	2500
5	12	2300	3000
6	15	2300	3650

Horizontal cylindrical containers

Cylindrical containers of horizontal ground-based type are made on supports for their convenient montage. Horizontal containers from chemical resistant plastic materials (PP, PE) are intended for storage both of drinking water, food and aggressive chemical substances and alkali.

The temperature limit is -40+90 C° for storage of liquids in plastic containers

According to the custom's request the specification can be different: fittings, bends, level sensors and other equipment.



Technical characteristics

№	The capacity of container	Overall dimensions	
	m ³	Diameter, mm	Length, mm
1	0.5	800	1000
2	1	1000	1500
3	1.5	1150	1500
4	2	1300	1500
5	3	1400	1950
6	4	1400	2600
7	5	1450	3000
8	6	1600	3000
9	8	1900	2850
10	10	1900	3550
11	12	1900	4250
12	15	2300	3700

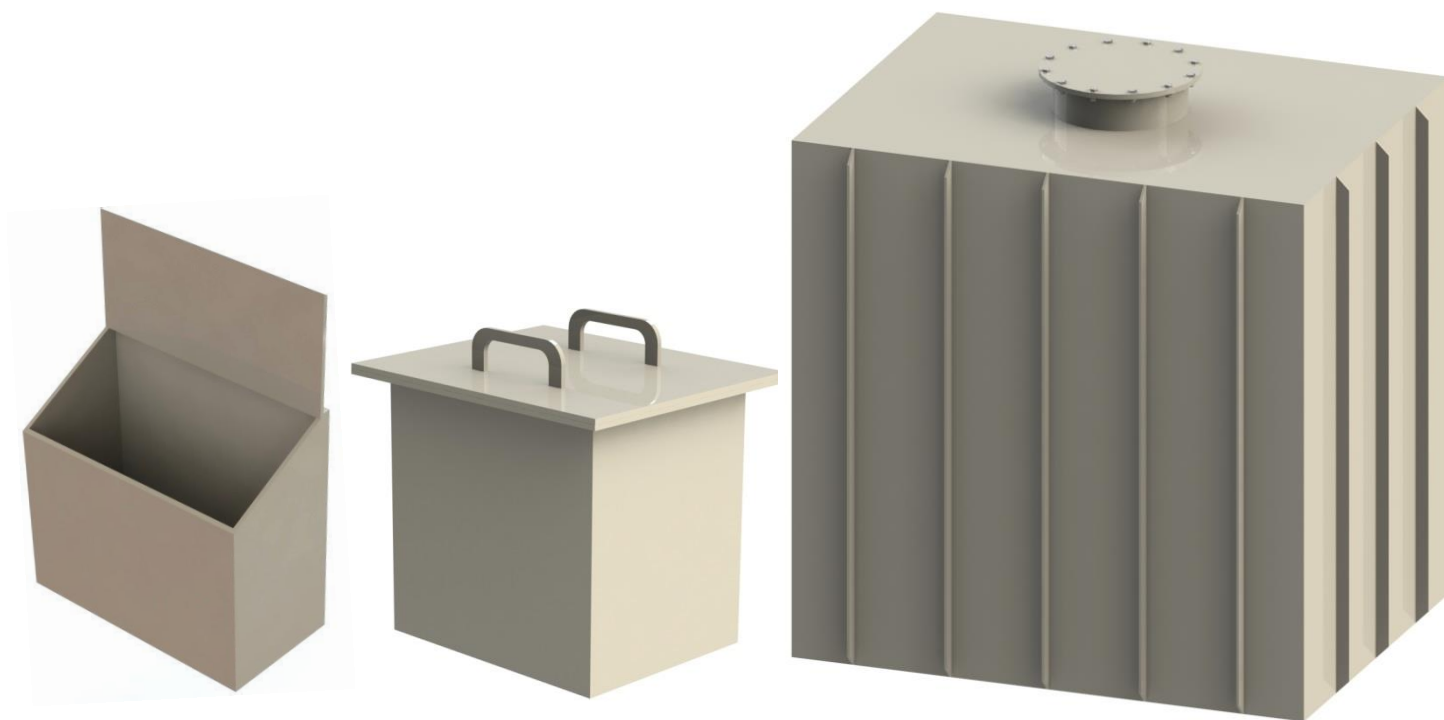
Rectangular containers

We produce rectangular reservoirs, vessels for any processing purposes, intended for prescribed temperature limit, medium, equipment and occurring loads. They are made from thermoplastic sheet material (PP, PE, PVC, PVDF etc.). Plastic containers of rectangular form made from polypropylene or polyethylene sheet are widely used these days both to storage aggressive substances in industries and to storage drinking or industrial water, food in everyday life.

Containers from PP have no such disadvantages as metallic vessels. Polypropylene with the thickness 8-15 mm has the same strength characteristics as steel. But PP is more flexible than steel, is more stable regarding repeated bending and has high resistance to impact.

The thickness of the wall (5-20 mm) is chosen according to the capacity. It is provided bracing rings for extra stability. The specification of plastic container can be different: fittings, sensors, agitators, heaters and other equipment.

If you want to buy container from plastic or if you concern with prices you are welcome to contact our company OOO «UralAktiv».





Technical characteristics

№	The capacity of container	Overall dimensions		
	m ³	Length, mm	Width, mm	Height, mm
1	0.125	500	500	500
2	0.185	500	500	750
3	0.185	750	500	500
4	0.25	1000	500	500
5	0.28	750	500	750
6	0.375	1000	500	750
7	0.375	1500	500	500
8	0.5	1500	600	550
9	0.6	1500	650	650
10	0.8	1500	750	750
11	1	1500	900	750
12	1.5	1500	1500	700
13	2	1700	1500	800
14	2.5	2200	1500	800
15	3	3000	1000	1000
16	3.5	3000	1500	800
17	4	3000	1500	900
18	4.5	3000	1500	1000
19	5	2500	2000	1000
20	6	3000	2000	1000
21	8	3200	1700	1500
22	10	3400	2000	1500
23	12	3000	2000	2000
24	15	3800	2000	2000

Pallets

We produce plastic pallets based on your dimensions. Plastic pallets from polyethylene or polypropylene are excellent solution for collecting water, condensed moisture or other liquids as well as chemical aggressive liquids. The intended use of pallets from polymers is very wide. Such kind of pallets is strong, has light weight, is esistant to temperature and chemicals, leakproof. Plastic pallets don't hurt if it gets wet, they can be used outdoors, they are easy to maintain and to clean. Pallets are equipped with special frames, wheels, legs.

Pallets are intended for use:

- to transport indoors and to storage vessels and other containers with dangerous liquids.
- to collect spilled liquids into the waterproof container for the purposes of industrial safety.
- for possible further usage of collected liquids.
- to ensure the cleanness of working place, to observe labor protection, industrial health and environmental safety.

There are no limits in dimensions by the production. Plastic pallet are made to order in any sizes and forms (rectangle, circle), with elongate or round shape.



Reactors

Chemical reactor is a device to carry out chemical reactions. The mixing of liquids is an important stage of many successful working operations in chemical and other sectors of production. For these purposes special equipment is used: vertical device with mechanical agitator, or reactor.

Our company produces chemical reactors from plastic materials (PP, PE, PVC, PVDF) of different forms and constructions.

Chemical reactors can be equipped with agitators, level sensors, isolation valves, chemical resistant pipelines, heating elements, control and measuring instruments, inspection hole, pumps and others.

Chemical reactors can have cylindrical or rectangular form, can have different capacity and can be vertical or horizontal. The capacity and sizes are specified according to the special technical requirements and drawings provided by the client. This equipment including capacity vessel is used for preparation and/or storage of neutral and chemical aggressive liquids.



Lining of containers by polypropylene sheet

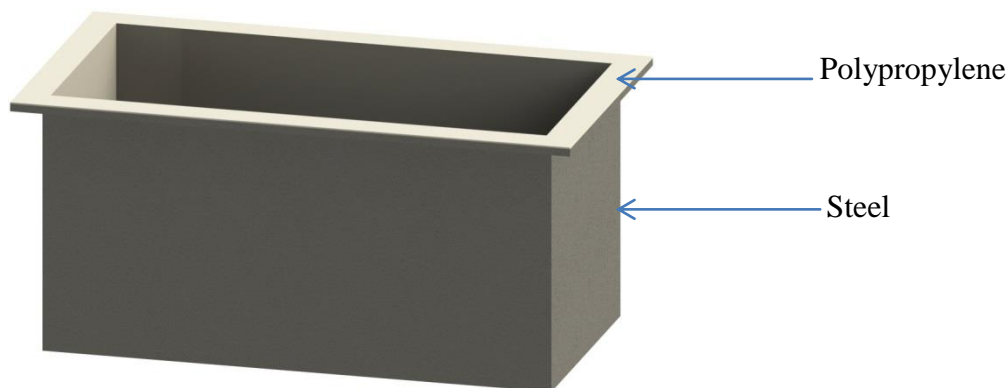
The company OOO «UralAktiv» can also line the inner and outer surfaces of containers, reservoirs and baths by polymeric materials.

Lining by polymers is a coating of any containers, baths, silos and bins which surfaces are exposed to damage effect. Lining by polymers prolongs service life of your containers and vessels in several times. Corrosion, decomposition and other processes of surface damages can cause the complete breakage of container and big costs to replace it. Meanwhile polymeric sheets and chemical resistant plastic materials are the simple and high-quality solution of this problem.

Why is lining by plastic needed?

Every production having metallic containers for working solutions is under the threat of failure. Corrosion of containers with metallic surfaces (baths, vessels, reservoirs, bins) is a continuous process without weekends, operational downtime and smoke breaks. To prevent this danger it is needed to order lining of surfaces by PE or PP promptly. The chemical resistant plastic sheets are lined in container; the welding of PP sheets is carried out manually. This ensures the good sealing of surface.

The lining by polypropylene material has 2 functions: it protects the surface of bath (container or reservoir) from exposure of working solutions and provides good conditions for chemical reactions, which are carried out without mixture of metal oxides of bath's inner surface.



Vessel before lining by PP



Vessel after lining by PP



Chemical resistant PVC coatings of metal

Protective polymeric coatings of metal:

We can make PVC (polyvinylchloride) coating for metal. The PVC coating of metal ensures chemical and corrosion resistance of the whole product.

For electroplating industry we can offer coating from plastisol as a corrosion-preventing and chemical resistant covering. The coatings are used for stable insulation in electrolytes, to protect from extra metal deposits on the suspensions of galvanic baths, drums, etching baskets and for other purposes in engineering industry.

Chemically-stable coatings from PVC are resistant to all organic solvents, hot and cold solutions and to many acids and alkalis.

The characteristics of corrosion protective coatings for metals:

1. Size of a part to be coated is max. 1500*850*1500mm.
2. Operating temperature: +5°...+40°; for a short time: to 80°.
3. Color: Orange.

Index name	Standard according Technical Specification
Appearance	The sample is an orange film; spots and spongy defects are excluded
Tensile stress at break MPa (kgf/cm ²), min.:	75
Stretch ratio, %, min:	250
Tearing resistance, kgf/cm, min.:	3.5

Types of protective coatings for metals are PVC coatings and PVC plastisols.

Examples of protective coating on metal:





MANUFACTURER OF PRODUCTS FROM POLYPROPYLENE.

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Report form for production of polymeric containers

Company:

Contact person:

Phone/Fax:

E-mail:

Name of container			
Type of container: vertical or horizontal			
Ground-based or underground-mounted			
Characteristics of container (mm):	Lenght:	Width:	
	Height:	Diameter:	
Diameter of cover (mm):			
Chemical composition of medium: chemical formula, concentration and temperature of medium			
Temperature of operating place:			
Bracing rings for stability: (inside, outside):			
Inlet and outlet pipes:	Quantity:	Size:	
If it is known: Material:			
Thickness of material:			
Additional information			

Drawing of container (or freehand sketch)

