Lamsun Fluid

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Flood Control Board Manufacturing Base

How to reasonably prevent floods and control floods has always been one of the important topics for countries to protect people's property and safety.Conventional flood prevention equipment and facilities include:

Sandbags

In past flood control efforts,sandbags have still been the mainstay.However,sandbags are heavy,difficult to use and transport,making it impossible to deploy them quickly when flash floods occur.Additionally,they take up a lot of storage space.For flood issues,time is of the essence—delaying even for a second can be dangerous

Concrete Flood Walls

Concrete flood walls can effectively prevent flooding,but their construction is costly,and the construction period is long.During dry seasons,they become large,unused structures,occupying significant space and obstructing the design of urban waterfront areas and landscapes.

As a result,convenient flood prevention equipment has emerged

Lamsun Fluid has been dedicated to the production and research of flood control and drainage equipment,as well as providing professional and feasible flood control solutions to customers.The company has introduced advanced German technology and made improvements through research and development.After years of production practice,the company has produced aluminum alloy mobile flood barriers,landscape-style flood walls,and composite material movable flood barriers that can quickly and effectively block large amounts of water caused by urban heavy rainfall,reducing flood damage.

Main Forms of Aluminum Alloy Flood Barriers

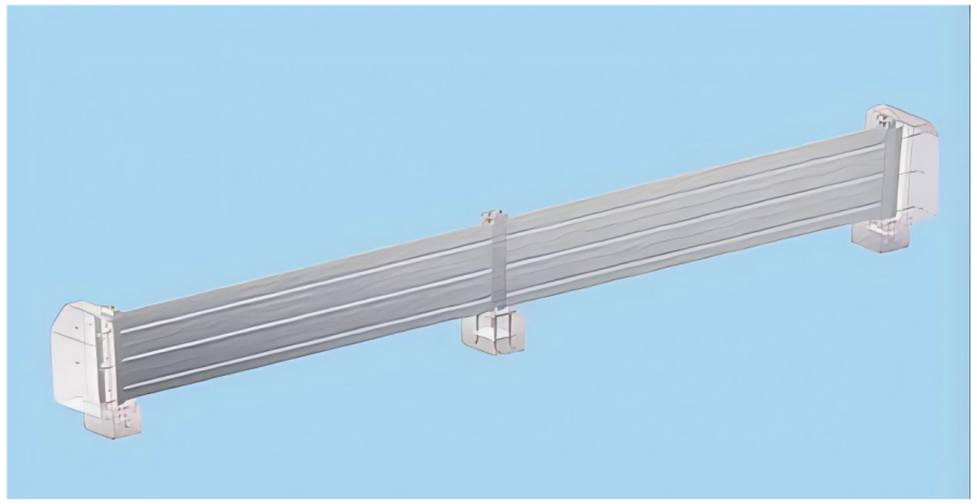
1 RF 40 Series Flood Control Barrier

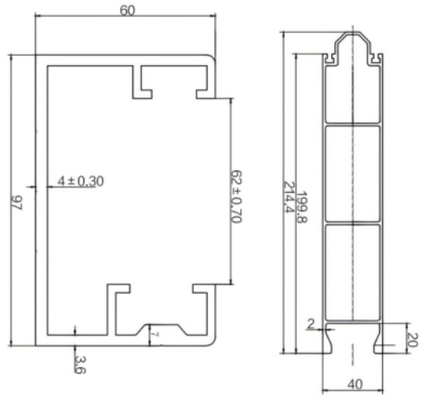
The barrier and fixed column are made of aluminum alloy 6063-T6,the waterproof sealing strips are made of EPDM,and the embedded parts are made of stainless steel.

Panel Thickness:40mm Single Panel Height:200mm Panel Wall Thickness:1.8mm

Maximum Column Spacing:5000mm Maximum Flood Blocking Height:800mm

Applicable Range:Underground parking lots,factory warehouses,ground-floor shops, underground spaces,shopping malls,hotels,and other places for flood prevention and emergency flood control during the flood season.





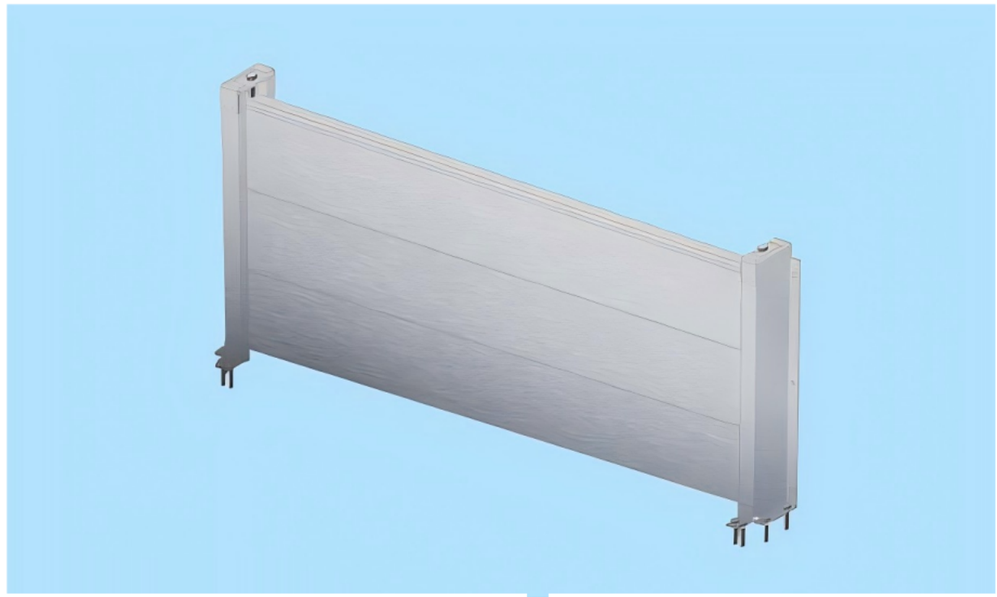
2 RF 50 Series Flood Control Barrier

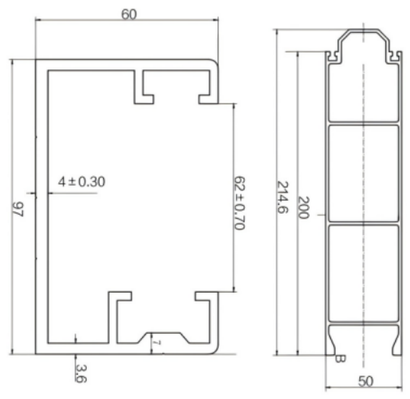
The barrier and fixed column are made of aluminum alloy 6063-T6,the waterproof sealing strips are made of EPDM,and the embedded parts are made of stainless steel.

Panel Thickness:50mm Single Panel Height:200mm Panel Wall Thickness:2mm

Maximum Column Spacing:6000mm Maximum Flood Blocking Height:1200mm

Applicable Range:Underground parking lots,factory warehouses,ground-floor shops, underground spaces,shopping malls,hotels,and other places for flood prevention and emergency flood control during the flood season.





3 RF 70 Series Flood Control Barrier

The barrier and fixed column are made of aluminum alloy 6063-T6, the waterproof sealing strips are made of EPDM,and the embedded parts are made of stainless steel.

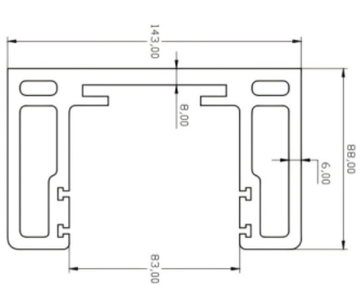
Panel Thickness:70mm Single Panel Height:200mm

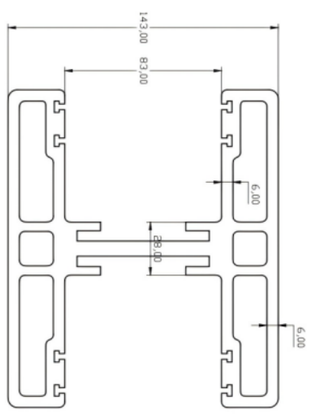
Panel Wall Thickness:2.5mm

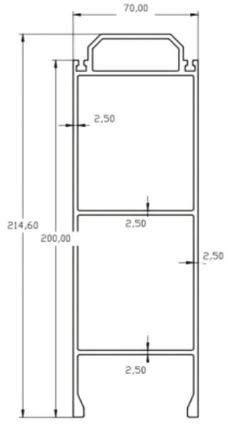
Maximum Column Spacing:6000mm

Maximum Flood Blocking Height:1800mm

Applicable Range:Underground parking lots,factory warehouses，ground-floor shops,underground spaces,shopping malls,hotels,and other places for flood prevention and emergency flood control during the flood season.







4 RF 100 Series Flood Control Barrier

The barrier and fixed column are made of aluminum alloy 6063-T6, the waterproof sealing strips are made of EPDM,and the embedded parts are made of stainless steel.

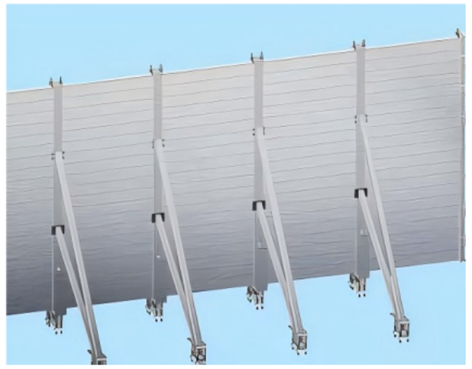
Panel Thickness:100mm Single Panel Height:200mm

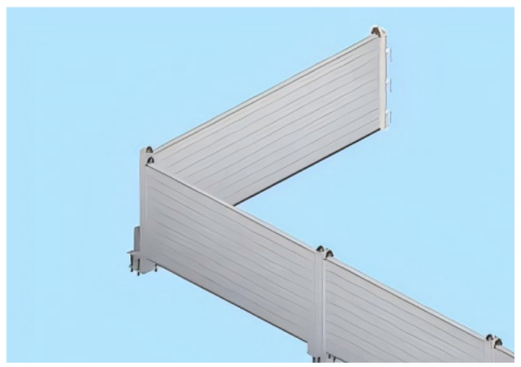
Panel Wall Thickness:2mm

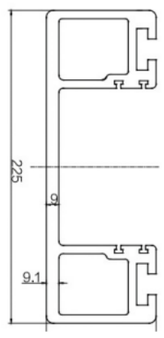
Maximum Column Spacing:6000mm

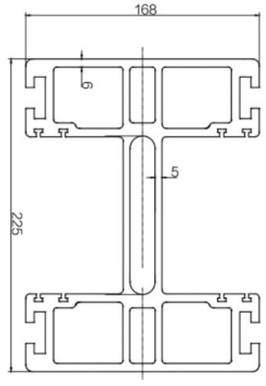
Maximum Flood Blocking Height:4000mm

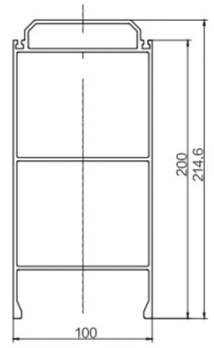
Applicable Range:Underground parking lots,factory warehouses，ground-floor shops,underground spaces,shopping malls,hotels,and other places for flood prevention and emergency flood control during the flood season.











Landscape Flood Barrier

The landscape flood barrier can be made of glass or aluminum alloy,depending on the requirements,and designed to complement the landscape design to achieve the desired aesthetic effect.

1 Glass Flood Barrier

The glass flood barrier series uses multi-layer composite safety glass.The outer layer of glass protects the inner layer,absorbing impact to prevent damage to the entire structure.Based on different needs,two or more layers of single-layer tempered glass are used to form the "load-bearing layer,"which makes up the main structure of the wall.

1.The overall thickness of the glass wall is 35-45mm,with a maximum flood-blocking height of 1500mm.

2.The design is aesthetically pleasing,suitable for landscape flood control,and can be equipped with LED light sources to enhance the night-time landscape.

3.It can also serve as a noise barrier and wind resistance.

2 Aluminum Alloy Landscape Flood Barrier

Along the riverbanks,an aluminum alloy railing is designed,and during the flood season,the railing is replaced with aluminum alloy flood control panels to meet urban landscape requirements.LED light sources can be added to enhance the night-time lighting effects

Flood Control Board Manufacturing Base

Raising and Lowering Flood Prevention Device

The automatic flood prevention equipment for underground spaces is designed to address flood prevention in places like subways or underground parking lots during the flood season.It operates based on a principle similar to that of a roller shutter door,offering a flexible opening and closing mechanism.This equipment does not occupy space and has an aesthetically pleasing appearance,making it an ideal flood control solution.

Features

The automatic flood prevention equipment adopts a stacked installation method.

The automatic flood prevention equipment is installed alongside security roller shutters using double guide rails.The guide rails are reliably connected to the retaining wall,and the seams are sealed to prevent water seepage.The waterproof barrier is made of 6063-T6 aluminum alloy,with a corresponding strength of no less than 215MPa.Strength calculations are performed during the design phase,and samples are subjected to water-blocking tests.The material's strength is reliable,and for waterproof barriers exceeding 9 meters in width,additional reinforcement is added in the center.The electric roller door opener complies with the standard JGT411-2013,with a service life of no fewer than 7,500 cycles

Control Requirements

The automatic flood prevention equipment is equipped with water level sensing control,manual control, on-site electric control,and remote control functions.

The water level sensing system for the automatic flood prevention equipment is installed on both sides of the entrance and exit.It is positioned to effectively sense the relevant water levels and promptly transmit the information to the control system,ensuring that the automatic flood prevention barrier lowers as instructed.Water level sensors should be regularly cleaned and checked to ensure normal operation.The automatic flood prevention equipment is also equipped with fall protection measures,with clear voice prompts during descent,and includes a manual activation function.Its control system is not integrated into the fire alarm linkage system.

Installation Requirements

Regularly check the overall operational status of the equipment to meet flood prevention requirements.The ground beneath the automatic flood prevention barrier should be flat and firm to ensure the barrier can be properly compressed against the ground.There should be no blind pathways beneath the flood prevention equipment to avoid the risk of water leakage.The gaps between disconnected sections of the travel blind pathway should be large,and both ends of the disconnection should be marked with warning signs.Set up security roller shutters at entrances and exits,with measures to prevent the shutters from accidentally falling,and ensure that the shutters can be manually operated.The control system should not be integrated into the fire alarm system.During operation,the shutters should remain in the rolled-up state to meet evacuation requirements.

Hydraulic Floating Barrier

Principle

The Hydraulic Floating Barrier is a water-driven flood control device that automatically opens using the buoyancy of water.The barrier consists of a ground frame,a floating flip barrier,a waterproof rubber soft board,and embedded parts.In the dry season,the barrier is embedded in the ground frame;during the rainy season,when the barrier comes into contact with water,it floats and automatically flips to a certain angle.As the water level rises,it eventually flips into an upright position,blocking the floodwater

Features

The flood control process does not require electrical power,ensuring there is no electric shock risk,making it safe and reliable.

Driven by water buoyancy,small water flows will not cause the barrier to rise automatically.No personnel are required for monitoring,and once installed,pedestrians and vehicles can pass normally.

Pedestrian entrances use light-duty specifications with aluminum alloy panels,vehicles entrances use heavy-duty specifications with stainless steel panels,featuring anti-slip and protective measures on the surface.The interior of the Hydraulic Floating Barrier uses polyurethane foam,and the ground frame is made of stainless steel.

Modular design allows the barriers to be assembled to fit any gate opening width.The maximum width of a single barrier is limited to 10 meters.The barrier comes in standard heights of 600mm,800mm,1000mm,and 1200mm(custom sizes available).

It offers both embedded and surface-mounted installation options.When installed in the

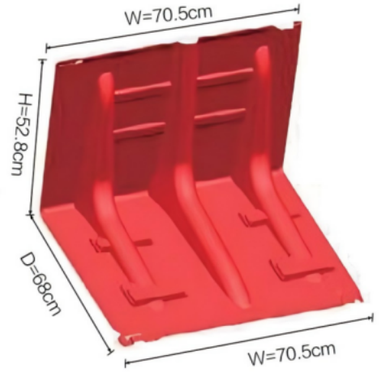
embedded mode,drainage pipes should be set at the bottom of the trench.During the dry season,the barriers can support the passage of medium-sized vehicles

Applicable Locations

It is suitable for civil defense areas,underground parking lots,subway station entrances and exits,tunnel entrances and exits,and other similar locations.

Composite Material Removable Flood Barrier

The composite material removable flood barrier is a device designed to block and protect cities from sudden storm water floods and urban water logging.It is a movable flood barrier that can stand independently as a temporary flood control measure.



Comparison of Advantages

The composite material removable flood barrier effectively blocks floods up to 52,75,or 120 cm in height.Each flood barrier weighs only 3.8 kg,and just 8 barriers along with 2 end pieces can protect a 5-meter-wide garage entrance.Compared to sandbags,this flood barrier is easier and faster to install,and much lighter,quickly diverting floodwater downstream!

The key features are its ease of transport and storage.It requires minimal space a 140x90 cm pallet can store 100 barriers and can construct a60-meter-long flood defense barrier.

The flood barrier's water-blocking height is equivalent to 15 sandbags;each barrier weighs only about 3.8kg.	15 sandbags weigh approximately 225 kg.
To block a 10-meter-wide flow,only about 15-16 barriers are needed.	Blocking a 10-meter-wide flow requires about 120 sandbags.
A 140x90 cm pallet can store 100 barriers,requiring much less storage space.	Sandbags are bulky,take up more space,and incur sandbags.higher transport costs.
One person can connect 10 meters of 50 cm high flood barrier per minute.	A10-meter-wide,50cm high flood defense embankment requires 5people around 30 minutes to set up.

To quickly build a flood embankment,simply connect the flood barriers one by one.Each barrier is equipped with a buckle and connection structure.

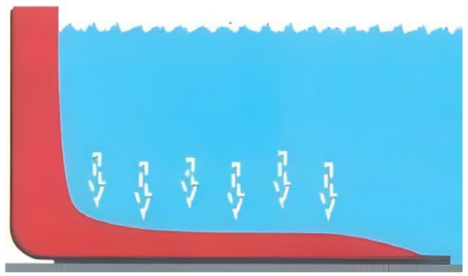
When two barriers are connected,they form a maximum angle of 3 degrees,allowing the flood embankment to have a curved shape during construction.

Technical Principle

The principle behind the L-shaped bookend.The composite material movable flood barrier/water barrier does not require external force or anchoring to independently block water.It operates on the "L-shaped bookend principle"used on desks.The weight of the water flow presses on the bottom of the flood barrier,stabilizing the barrier.Even when the water level reaches the top of the barrier,it will not tip over but will instead overflow over the top or be diverted along the sides.

The bottom of the barrier uses memory material rubber to prevent water infiltration.

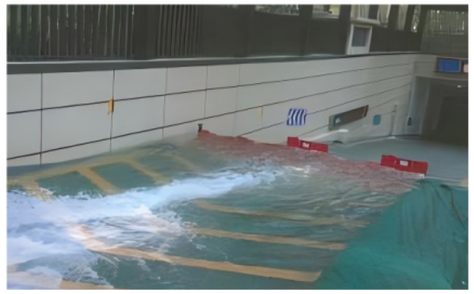
Each layer of the water barrier is sealed with waterproof rubber,ensuring excellent flood control performance.



Application Scenarios

This system is suitable for urban waterlogging, sudden flood diversion operations,emergency water pools for environmental accidents,etc.

1.Applied in urban river backflow or seawater backflow
2.Property garages and parking lots
3.Logistics warehouses and factories
4.Urban buildings and facilities
5.Rail transport
6.Energy power grids
7.Environmental pollution disposal and transportation routes.



It can divert sudden floods,guiding the water away from important entrances or areas that need protection,or delaying flood damage to crucial areas.The intelligently designed movable flood barriers can quickly and effectively block large amounts of water caused by urban storms!

The company offers design,installation,maintenance,and operation of flood barriers,while also providing emergency material storage services for emergency response departments

Lamsun Fluid makes flood prevention safer,faster,and simpler!

Product Overview

The mobile pump truck is developed based on the needs of emergency rescue equipment,considering factors such as long-term storage,lack of maintenance,harsh working environments,and special operational requirements.Compared to traditional pump trucks,the new generation mobile pump truck integrates multiple modern concepts,offering stronger functionality.This type of pump truck is generally powered by a diesel engine,with the pump set driven by the diesel engine through an elastic coupling.It features an advanced and reasonable structure,high efficiency,good cavitation performance,low vibration,ow noise,smooth and reliable operation,and easy installation and disassembly.

Product Mode:RCMP(L)

Simple Description:Flow rate:800-3500m³/h;Head:7-42m

Structure Type: Mobile and Fixed

Execution Standards: Water Pump:GB/T 5657-2013"Centrifugal Pump Technical Conditions (Class Ⅲ)"

Engine:GB/T 1147.1-2017 "Small and Medium Power Internal Combustion Engines Part 1:General Technical Conditions"

Diesel Engine Brands: Wei chai Power,Shanghai Diesel,Dongfeng Cummins,Deutz,Fiat Lien,Wei fang Kefan,etc.

APPLICATION FIELD

Municipal

Flood prevention and drainage, drought relief,well drainage, sewage and sludge drainage, emergency drainage,and drainage without power supply.

Military

Field water supply systems,island freshwater collection systems.

Agricultural

Irrigation and drainage systems, dam dewatering,alternative rainwater pumping stations,temporary water regulation,areas without fixed pumping stations or power supply.

Tailored Solutions

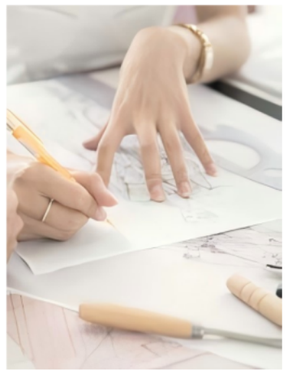
Lamsun Fluid can customize the most suitable product types for you based on your industry,the specific site where the product will be used,and other special requirements.

Patent Protection

Lamsun Fluid boasts a team of professor-level experts in equipment research and development,focusing on efficiency and service life.To date,our equipment has received dozens of invention patents.

Professional Manufacturing

With a strong design,production,sales,and service team,we have a long production history,a complete quality system,comprehensive testing methods,and advanced manufacturing processes.Our product quality is guaranteed,ensuring peace of mind for our customers.



Comprehensive Service

We provide free equipment installation drawings,debugging,maintenance,and follow-up services according to customer needs.We offer 24-hour on-site service within the province to address any service requirements.All equipment comes with a one-year warranty period.

RCMP Series Vacuum-Assisted Trailer-Mounted Mobile Pump Station

Based on extensive research of domestic and international technologies,this product has been successfully developed with a novel structure.The pump unit combines large-flow self-priming and clog-free sewage discharge in one system,driven by a diesel engine.The unique design of the pump body and impeller flow path enables the large-flow pump to handle liquids containing large solid particles and long-fiber impurities.This pump unit is widely applicable to municipal sewage and flood control projects,agricultural irrigation,and more.It features a simple structure,strong sewage discharge capacity,high efficiency,energy savings,and ease of use and maintenance.

Operating Conditions

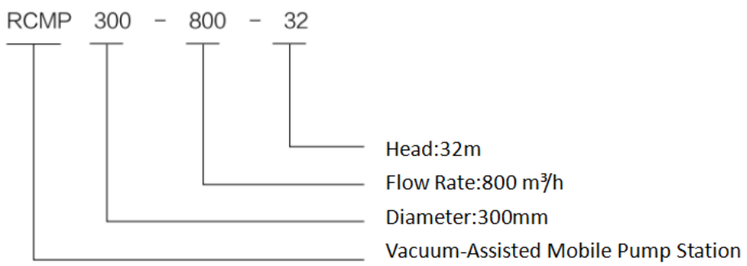
1.Ambient temperature≤50℃,medium temperature≤80℃;

2.PH value of the medium for cast iron material:6-9;

3.Medium density does not exceed 1240 kg/m³;

4.The self-priming height should not exceed 5.5 meters,continuous suction height≤6 meters,and suction pipe length≤12 meters.

Model Description



Working Principle

This type of pump is mainly composed of a trailer,diesel engine,coupling,pump head,impeller,rear cover,mechanical seal,pump shaft,bearing seat,gas-liquid separator pipe,inlet and outlet pipes,rainproof cover,vacuum-assisted pump,and other components,as shown in the diagram above.

The working principle of the pump:The pump adopts a middle-opening centrifugal pump for water pumping operations.It has high suction lift,wide head,wide flow range,and the ability to automatically adjust head and flow.Within the rated power range,it can automatically adapt to the working environment and requirements,enabling long-distance water suction,long-distance water delivery,and high-flow drainage.Additionally,the same equipment can be used for different operations such as drainage,water supply,and firefighting.

Outbound Components

Equipment Name	Quantity	Remarks
Diesel Engine	1	Matched with pump end
Pump	1	
High Elastic Pin Coupling	1	
Common Channel Steel Base for Pump Unit	1	
Dedicated Fuel Tank for Diesel Engine	1	
Maintenance-Free Battery	2	
Exhaust Silencer	1	Included as standard
Start Switch	1	Instrument display,Key switch,Ignition start
Yellow Rainproof Cabinet	1	Enclosure for engine,Two-door gullwing design
Four-Wheel Mobile Trailer	1	Inflatable automotive tires,Towing hitch,Steering mechanism
Optional components		
Each unit is equipped with:one steel wire reinforced hose for the inlet pipe,one set of Bauer quick couplings.		
Each unit is equipped with:one roll of blue water belt for the outlet pipe,one set of Bauer quick couplings.		
One suction filter head,one set of suction debris grating.		

Model Description

Model	Diameter (mm)	Flow Rate (m3/h)	Head (m)	Shaft Power(kW)
RCMP300-800-32	300	800	32	2010-4
RCMP300-800-37	300	800	37	2032-4
RCMP300-800-42	300	800	42	160-4
RCMP300-1000-8	300	1000	18	37-6
RCMP300-1000-10	300	1000	10	45-4
RCMP300-1000-12	300	1000	12	55-4
RCMP300-1000-16	300	1000	16	75-4
RCMP300-1000-20	300	1000	20	90-4
RCMP300-1000-25	300	1000	25	2010-4
RCMP300-1000-30	300	1000	30	2032-4
RCMP300-1000-35	300	1000	35	160-4
RCMP350-1200-7	350	1200	7	37-6
RCMP350-1200-9	350	1200	9	45-6
RCMP350-1200-11	350	1200	11	55-4

Model	Diameter (mm)	Flow Rate (m3/h)	Head (m)	Shaft Power(kW)
RCMP350-1200-13	350	1200	13	75-4
RCMP350-1200-17	350	1200	17	90-4
RCMP350-1200-22	350	1200	22	2010-4
RCMP350-1200-26	350	1200	26	2032-4
RCMP400-1800-26	400	1800	26	220-6
RCMP350-1200-30	350	1200	30	160-4
RCMP350-1200-35	350	1200	35	200-4
RCMP350-1500-5.5	350	1500	5.5	37-6
RCMP350-1500-7	350	1500	7	45-6
RCMP350-1500-9	350	1500	9	55-4
RCMP350-1500-11	350	1500	11	75-4
RCMP350-1500-14	**350**	1500	14	90-4
RCMP350-1500-17	**350**	1500	17	2010-4
RCMP350-1500-20	350	1500	20	2032-4
RCMP350-1500-25	350	1500	25	160-4
RCMP350-1500-30	350	1500	30	200-4
RCMP350-1500-35	350	1500	35	220-4
RCMP400-1800-10	400	1800	10	90-4
RCMP400-1800-12	400	1800	12	2010-4
RCMP400-1800-15	400	1800	15	2032-4
RCMP400-1800-18	400	1800	18	160-4
RCMP400-1800-24	400	1800	24	200-6
RCMP400-1800-30	400	1800	30	250-6
RCMP400-1800-32	400	1800	32	280-4
RCMP400-1800-35	400	1800	35	315-4
RCMP400-2000-9	400	2000	9	90-4
RCMP400-2000-11	400	2000	11	2010-4
RCMP400-2000-14	400	2000	14	2032-4
RCMP400-2000-17	400	2000	17	160-4
RCMP400-2000-22	400	2000	22	200-4
RCMP400-2000-24	400	2000	24	220-4
RCMP400-2000-28	400	2000	28	250-4
RCMP400-2000-30	400	2000	30	280-4
RCMP400-2000-32	400	2000	32	315-4
RCMP500-2200-8	500	2200	8	90-4
RCMP500-2200-10	500	2200	10	2010-4

Flood Control Board Manufacturing Base

Model	Diameter (mm)	Flow Rate (m3/h)	Head (m)	Shaft Power(kW)
RCMP500-2200-12	500	2200	12	2032-4
RCMP500-2200-15	500	2200	15	160-4
RCMP500-2200-20	500	2200	20	200-4
RCMP500-2200-22	500	2200	22	220-4
RCMP500-2200-28	500	2200	28	250-4
RCMP500-2200-32	500	2200	32	280-4
RCMP500-2200-35	500	2200	35	315-4
RCMP500-3000-8	500	3000	8	2010-4
RCMP500-3000-10	500	3000	10	2032-4
RCMP500-3000-12	500	3000	12	160-4
RCMP500-3000-15	500	3000	15	200-4
RCMP500-3000-18	500	3000	18	220-4
RCMP500-3000-22	500	3000	22	250-4
RCMP500-3000-25	500	3000	25	280-4
RCMP500-3000-30	500	3000	30	315-4
RCMP600-3500-10	600	3500	10	160-4
RCMP600-3500-13	600	3500	13	200-4
RCMP600-3500-15	600	3500	15	250-4
RCMP600-3500-20	600	3500	20	280-4
RCMP600-3500-25	600	3500	25	315-4

RCMPO Series Strong Self-Priming Trailer-mounted Mobile Pump Station

Based on extensive research of domestic and international technologies,this product has been developed with a novel structure.The pump unit integrates self-priming and clog-free sewage discharge into one system It is driven by a diesel engine with an axial flow mixed-flow pump,and through unique design of the pump body and impeller flow passage,it achieves strong self-priming and large displacement The pump unit is capable of suction and discharge of liquids containing large solid particles and long fiber impurities,making it widely applicable in municipal sewage discharge and flood prevention projects,as well as agricultural irrigation The pump unit features a simple structure,excellent self-priming performance,strong sewage discharge capacity,high efficiency energy-saving and ease of use and maintenance.

Operating Conditions

1.Ambient temperature≤50℃,medium temperature≤80℃

2.PH value of the medium for cast iron material:6-9;

3.Medium density does not exceed 1240 kg/m³;

4.The self-priming height should not exceed 5.5 meters,continuous suction height≤6 meters,and suction pipe length≤12 meters.

Model Description

RCMPQ 250 - 600 - 20

- 20 — Head:20m
- 600 — Flow Rate:600 m³/h
- 250 — Diameter:250mm
- RCMPQ — Strong self-priming mobile pump station

Working Principle

The pump is mainly composed of a trailer,diesel engine,coupling,self-priming pump,impeller,rear cover,mechanical seal,pump shaft,bearing seat,inlet valve,air-liquid separation pipe,water inlet valve,inlet and outlet pipes,rain cover,vacuum auxiliary pump,etc.The pump structure is shown in the figure above.

Working principle of the pump:The pump body is equipped with a liquid storage chamber,which communicates with the pump working chamber through the upper return hole and the lower circulation hole,forming the axial reflue external mixed system.After the pump stops working,a certain volume of liquid is stored in the pump cavity.When the pump starts,the liquid in the pump cavity,under the action of the impeller,is thrown upwards along with the air.The liquid flows back into the working chamber through the mesh of the air-liquid separation pipe,and the gas is expelled from the pump,creating a certain vacuum inside the pump,achieving self-priming.

Precautions:Before the first use,fill the pump cavity with water.In winter,drain the water from the pump cavity to prevent freezing and cracking of the pump casing.

RCMPL Cam pump trailer-mounted mobile pump station

The RCMPL series trailer-mounted diesel cam pumps are products with novel structures that have been successfully developed based on repeated research on similar technologies at home and abroad. This pump is a positive displacement self-priming rotary piston pump, and its working principle is as follows: When the power drives the transmission shaft to transmit torque, a pair of synchronous gears in the main auxiliary drive gearbox and two rotors fixed on the pump shaft move relative to each other. This creates a vacuum at the suction end of the pump and a load pressure at the discharge end, achieving the purpose of transporting liquid media. When the pump rotates continuously, under the relative action of the rotors, six full loads of liquid media are discharged with each revolution of the pump shaft. The rotation direction of the power unit determines the direction in which the pump transports the media. There is no distinction between forward and reverse rotation. Within the specified speed range, the flow rate of the pump is directly proportional to its rotational speed. It can be widely used in municipal sewage disposal and flood prevention projects, agricultural irrigation, etc. This pump set features a simple structure, good self-priming performance, strong sewage disposal ability, high efficiency and energy conservation, and is convenient to use and maintain. It is equipped with a multi-functional mobile trailer.

Operating Conditions

1.Ambient temperature≤50℃,medium temperature≤80℃

2.PH value of the medium for cast iron material:6-9;

3.Medium density does not exceed 1240 kg/m³;

4.The self-priming height should not exceed 5.5 meters,continuous suction height≤6meters,and suction pipe length≤120 meters.

Model Description

PCMPL 500

Flow Rate:500 m³/h

Cam mobile pump truck

Working Principle

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Design and Material Selection of Key Components

Equipment Name	Remarks
Pump casing	Overall cast steel one-piece molding,surface hardened treatment
Wear-resistant liner	Wear-resistant alloy steel
Bearing	Single-side dual bearing;submerged in lubrication oil within the cast cavity，with oil drainage holes on the side.
Shaft	Carbon steel material;completely isolated from the medium;lubricated with oil
Shaft Seal	Mechanical seal
Rotor	The rotor blades of the rotor pump are designed with a three-blade,non-pulsating spiral design, made from high-quality nitrile rubber(NBR),molded in one piece with a press-molded manufacturing process,ensuring longer lifespan and good sealing.Inner rotor core:ductile iron The fully rubber-coated rotor pump ensures the rotor operates with rigid support at both ends,and mechanical seals are installed at both ends to ensure the bearings do not come into contact with the conveyed material.This ensures the shaft does not shift,reducing wear on the rotor and related parts.The intermediate isolation cavity is filled with lubrication oil.The pump adopts online maintenance(MIP),requiring only the removal of the pump cover sealed with O-rings.The pump is directly coupled with the diesel engine.
Note:All wear parts (including the axial wear plates)can be replaced within the pump chamber without the need to disassemble the pump body or piping.	

Performance and Structural Features of Cam Pumps

Rotary lobe pumps can handle various viscous fluids and fluids containing particles without clogging, tangling, or pulsation. They offer a wide flow rate range, from 1 to 1800 cubic meters per hour, and feature a compact design with a small footprint. Various types of rotors are available, enabling low-pulsation and high-efficiency conveying.

Rotary lobe pumps can operate in both directions, allowing for reverse conveying, forward suction, and even cleaning of tank bottoms or silos by simply reversing the rotation. The pump shaft does not come into contact with the fluid medium, and the rotors exhibit excellent wear resistance. The pump chamber clearance is adjustable, eliminating the need for immediate replacement of parts after wear. Simply adjusting the clearance restores pump performance, reducing spare parts costs by over 50%.

Rotary lobe pumps allow for online maintenance, making repairs simple and convenient. The pump chamber features an isolated cavity filled with lubricant, which not only lubricates the mechanical seal but also serves as a seal monitoring system. The large shaft diameter design prevents rotor wear caused by shaft deflection. The unique balanced cartridge mechanical seal is specifically designed for harsh operating conditions, offering an extended service life and reducing the frequency of downtime for maintenance. Utilizing the rotary lobe pump vacuum drainage technology, the pump can draw water without the need for priming or vacuum assistance, achieving a suction lift of 8.5 meters and a priming time of less than 10 seconds. It can handle gas, liquid, and solid three-phase mixed transport, with no minimum liquid level requirement, enabling complete drainage of bottom water (sludge).

Outbound Components

Equipment Name	Quantity	Remarks
Diesel Engine	1	Matched with pump end
Cam pump	1	
High Elastic Pin Coupling	1	
Common Channel Steel Base for Pump Unit	1	
Dedicated Fuel Tank for Diesel Engine	1	
Maintenance-Free Battery	2	
Exhaust Silencer	1	Included as standard
Diesel engine Monitoring Instrument Box	1	Oil pressure,Oil temperature,Speed display, Key switch,Button start
Yellow Rainproof Cabinet	1	Enclosure for engine,Two-door gullwing design
Four-Wheel Mobile Trailer	1	Inflatable automotive tires,towing hitch, Steering mechanism
Optional components		
Each unit is equipped with:1 set of Bauer quick coupling.		
Each unit is equipped with:1 set of Bauer quick coupling.		
1 suction filter head		

Model Description

Model	Flow Rate (m3/h)	Head (m)	Engine power (kW)	Pump Speed (r/min)	Suction Head (m)
RCMPL-150	200	20	41	400	8
RCMPL-200	300	20	56	550	8
RCMPL-500	500	20	92	680	8
RCMPL-650	650	20	92	550	7.5
RCMPL-800	800	20	106	550	7.5
RCMPL-1000	1000	20	120	550	7.5
RCMPL-1500	1500	20	220	600	7.5
RCMPL-2000	2000	20	240	600	7.5
RCMPL-2500	2500	20	280	600	7.5
RCMPL-3000	3000	20	320	600	7.5

Selection Principles

The mobile pump trucks automatic control panel is designed to withstand mechanical,electrical,vibration,Thermal stresses,as well as the effects of humidity that may occur under normal operating conditions.

Upon receiving the start command from the user(via a normally open,unpowered contact),the mobile pump trucks automatic control panel can automatically start the pump unit within 15 seconds and monitor,alert,and address any faults during the pump unit's operation.

The automatic control panel of the mobile pump truck is highly versatile,with a comprehensive set of features and reliable performance.It can be paired with various types of diesel engine pump units.There are two operation modes for the automatic control panel:one is the controller operation mode,and the other is the key switch operation mode.The key switch operation is typically used to start the unit in an emergency when the controller fails.

Portable Permanent Magnet Synchronous Flood Prevention Pump

The portable permanent magnet synchronous flood prevention pump has a compact structure,small size,light weight high efficiency,and is easy to carry.The pump does not require infrastructure construction,and can wok by directly submerging into the water or floating on the surface with the help of a flotation ring.It can be carried by a single person.The pump is lightweight making it easy for one person to carry,and features good corrosion resistance,airtightness,the ability to withstand higher load forces,as well as abrasion resistance and durability.

This electric pump is mainly used in flood prevention and emergency rescue,drought irrigation emergency drainage in mines temporary drainage in municipal projects,emergency water diversion in rivers and reservoirs,and emergency firefighting water pumping.

Features: Weight 20kg,height: 45cm;Flow rate:600m³h;Head :9m; Power:30 KW.

Performance Parameters

Specifications	Flow rate (m3/h)	Head (m)	Power (kW)	Diameter
450-7-15	450	7	18	8 inches 200mm
480-8-18.5	480	8	18.5	8 inches 200mm
500-9-22	500	9	22	8 inches 200mm
500-10-25	500	10	25	8 inches 200mm
600-8-30	600	8	30	8 inches 200mm
600-9-37	600	9	37	8 inches 200mm
Specifications	**Flow rate (m3/h)**	**Head (m)**	**Power(kW)**	**Diameter**
450-8-15	450	8	15	8 inches 200mm
480-9-18.5	480	9	18.5	8 inches 200mm
500-10-22	500	10	22	8 inches 200mm
600-8-25	600	8	25	8 inches 200mm
600-8-30	600	8	30	8 inches 200mm
600-10-30	600	10	30	8 inches 200mm
600-10-37	600	10	37	8 inches 200mm
600-13-37	600	13	37	8 inches 200mm
800-8-25	800	8	25	10 inches 250mm
800-9-30	800	9	30	10 inches 250mm
800-10-37	800	10	37	10 inches 250mm
Specifications	**Flow rate (m3/h)**	**Head (m)**	**Power(kW)**	**Diameter**
1000-10-55	1000	10	55	12 inches 300mm
850-13-60	80	13	60	12 inches 300mm
800-14.5-75	800	14.5	75	12 inches 300mm
2500-15-185	2500	15	185	12 inches 400mm
3000-12-215	3000	12	215	12 inches 400mm
3000-10-200	3000	10	200	12 inches 400mm
Specifications	**Flow rate (m3/h)**	**Head (m)**	**Power (kW)**	**Diameter**
150-35-22	150	35	20	6 inches 150mm
180-50-30	180	50	30	6 inches 150mm
100-100-37	100	100	37	4 inches 100mm
400-15-30	400	15	30	8 inches 200mm
500-15-37	500	15	37	8 inches 200mm
500-60-75	500	60	75	8 inches 200mm
700-30-70	700	30	70	8 inches 200mm

Emergency Mobile Power Station

The Emergency Mobile Power Station is a new generation of high-performance mobile power supply vehicle designed for military and emergency power users.It adopts a high-strength heavy-load design,with the overall frame constructed using high-strength mechanics and a fully suspended structure,available in two-wheel and our-wheel versions.The product design is safe and reasonable,complying with national standards.It is suitable for various users,including military,rapid emergency power supply for field construction,disaster relief,rescue operations,roads,railways water conservancy,exploration,oil depots,oil stations military forces communications,and more,and is highly favored by a wide range of users.

The system uses a full range of high-pressure common rail national III engines,permanent magnet generators,LCD intelligent control systems,heavy-duty mobile quiet trailers with high-strength overload protection,superior overall design,production,assembly,and full industry high-temperature radiators.The product offers better service and higher performance for industries with high-frequency usage.The internationally recognized brand provides better services continuously creating value for customers and contributing to the overall technological development and progress of the mobile power industry.

The mobile power station is equipped with a fuel tank,suspension system,towing device,walking and auxiliary support systems and can be customized with cable devices and other auxiliary equipment based on user requirements.The size of the vehicle box is determined according to the specifications,and the color can be customized by the owner to ensure aesthetic appeal.The design is innovative,offering high mobility,low center of gravity,excellent manufacturing,attractive appearance,compact structure,and reliable safety.

Structure

Hydraulic Support

The four-sided windows and doors are equipped with automatic hydraulic supports,making them easy to open.

Chassis

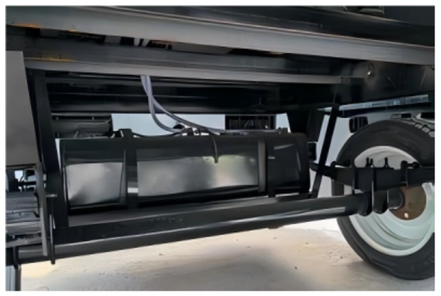
The chassis is equipped with mechanical support devices at all four corners,and the trailer has anti-slip operation platforms on three sides,making it convenient for users to perform maintenance and operations.

Tow Hook

The trailer is equipped with a height-adjustable pin-type tow hook,suitable for towing vehicles of various heights.It features a movable hitch with a 180°swivel,providing flexible steering.

Automobile Suspension System

The suspension system buffers the impact transmitted from the uneven surface to the vehicle body or the cushioning force of the body,reducing vibrations and enhancing performance.



Fuel Tank

The fuel tank is fixed to the chassis,ensuring convenience and safety.

Flood Control Board Manufacturing Base

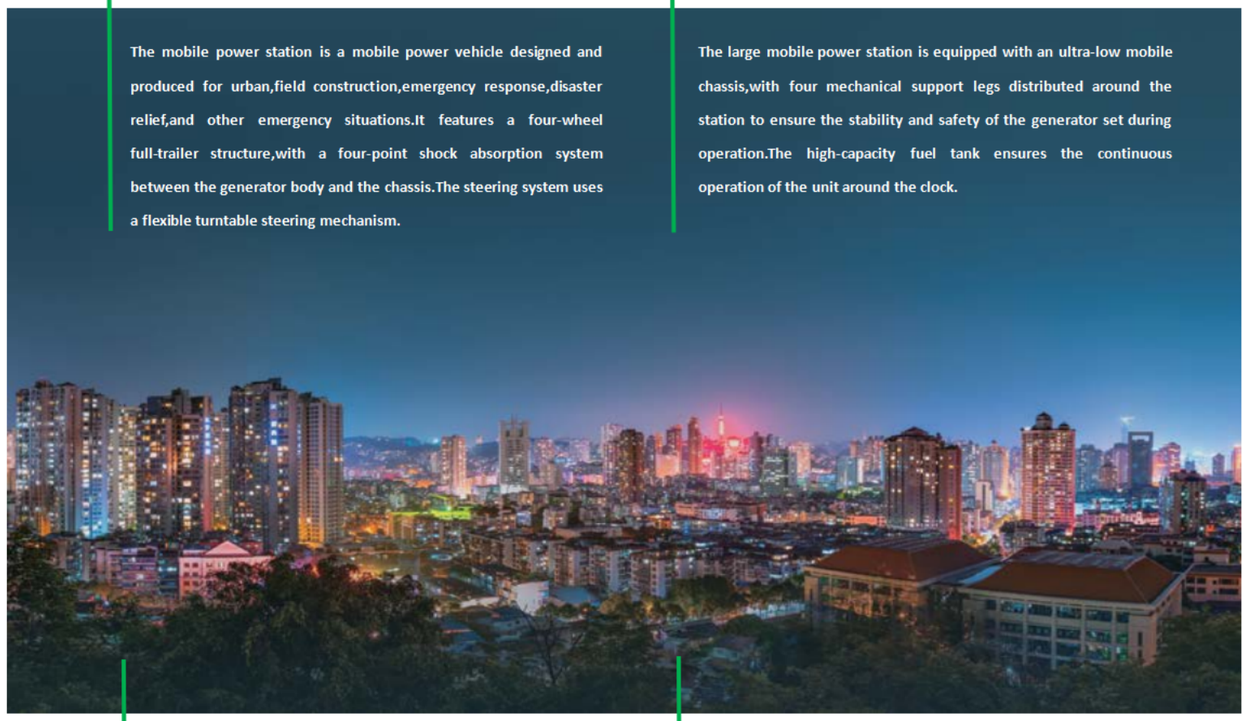
Performance

1

The mobile power station is a mobile power vehicle designed and produced for urban,field construction,emergency response,disaster relief,and other emergency situations.It features a four-wheel full-trailer structure,with a four-point shock absorption system between the generator body and the chassis.The steering system uses a flexible turntable steering mechanism.

2

The large mobile power station is equipped with an ultra-low mobile chassis,with four mechanical support legs distributed around the station to ensure the stability and safety of the generator set during operation.The high-capacity fuel tank ensures the continuous operation of the unit around the clock.



3

The silent mobile power station is environmentally friendly,aesthetically pleasing,safe,and has low noise levels.It is suitable for all-weather outdoor use,making it an ideal mobile power solution for users.

4

The rear end of the mobile power station can be optionally equipped with a cable reel to facilitate long-distance power supply.The reel is of a drum type and is made with thickened materials,allowing it to carry a relatively large amount of cable.Both ends are equipped with reinforced bearings and bearing shells,ensuring the durability of the reel.The reel is also fitted with a limiting width guard ring and fixed pull rods to effectively prevent the cables from loosening.