



Mobile Pump Drive with Diesel Engine

WGDP Series Dry Priming Pumps Drive With Diesel Engine

New-generation mechanical/electrical mobile pump drive with diesel engine from **Wings Pumps** provides high reliability, reduced installation and maintenance costs, with a longer lifetime.

CERTIFIED
ISO 9001
ISO 14001
ISO 45001
ISO 50001



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APPLICATIONS



Storm Water Drainage

Supports structures, channels and pipes that carry stormwater (rain water) to ponds, lakes, streams and rivers.



Irrigation and Aquaculture

Used for irrigation and aquaculture ecosystems. Environmentally-friendly.



Raw Water and Processed Water

Supports raw water intakes and applicable intakes for water treatment plants.



Sewage and Recirculation Sludge

Designed to move the thickest mixtures and pass large pieces of debris without damage or wear on the pump.



Municipality

Well-Integrated with municipality work and projects with high requirements.



Renewable Energy

can be used with solar cells for sustainable energy with smart device that properly manage the process and prevent pump damage.

KEY BENEFITS



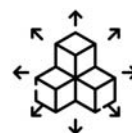
Better Power Consumption

Save more power with Premium Efficiency Motors.



Stability and Reliability

Wings Pumps' advanced engineering provides better stability and reliability.



Wide Range of Operations

Wings Pumps are more versatile and can be used in a wide variety of operations.



High Flexibility in Installations

Wings Pumps can be installed perfectly in various situations and setups.



Flexibility in Material

Customize pumps with various material and composites to better suit your operations.



Internet of things

Through the cloud network system, the system organizes data and keeps tabs on the pump's operational state. User can be real-time observation possible.

Product Introduction

Diesel Engine

- Equipped with high-quality engine and high-performance pump body, strong power, high torque, easy maintenance, easy start
- A high-strength cardan coupling is adopted between the engine and the pump body to make the operation more stable
- All movable devices are effectively fixed to further improve the shock absorption
- The radiator and rotating parts of the unit are equipped with protective covers to avoid damage caused by direct contact between man and machine.

Pump

- Customized drainage functions for different flow and head requirements
- With Dry-priming function, suction lift 6–8.5m.
- Pump body disassembly structure: easy to maintain and troubleshoot. Only ordinary tools are needed to quickly complete daily maintenance, saving time and effort
- Open impeller structure non-clogging design, strong passing performance
- Easy to use, just put the suction tube deep below the liquid level to work (Fill with water for the first start).

Trailer

- Equipped with Australia-specific trailer chassis and torsion bridge structure alloy steel rim, automobile vacuum tires
- Equipped with vehicle control connectors it can trailer brake, steering and tail light control when towing the trailer



WGDP Series Dry Priming Trash Pump

Design Features

WGDP Pumps presents a range of Dry-Priming Centrifugal. These pumps are economical & offer trouble-free operation in handling solids laden liquids and slurries. Pump features a large volume design which allows them to re-prime automatically in a completely open system without the need of suction or discharge check valves. And this is workable with the pump only partially filled with liquid and completely dry suction line. Pump can handle up to 3"(76.2mm) spherical solids, depending on pump models. In case pump shafts or bearings need service, the entire rotating assembly can be removed without disturbing pump casing or pipelines.

Key Advantages

- Superior Solid Handling
- Self Priming
- Easy Maintenance

Material Options

- Cast Iron, Ductile Cast Iron, Bronze, SUS304, SUS316,

Available Discharge Sizes

- 2", 3", 4", 6", 8", 10"

Impeller Options

- Two-vane, ductile iron, semi-open solids-handling impeller handles up to 75 mm (3") diameter solids, depending on pump model. Pump out vanes on the impeller shroud reduce foreign material buildup behind the impeller and reduce pressure on seal and bearings.



Cartridge Seal

- Available in Tc/Tc/Viton mechanical seal to handle abrasive liquid and sewage, Industrial waste etc.. Custom designed seal to handle corrosive chemical like Keton, Xylene, Tolulene

Trash Design

- Trash cover for easy maintenance without disturbing pipeline

Dual Bearing Protection

- An atmospheric barrier along with two lip seals provide additional protection of the pump bearings. This unique design also allows for quick and easy external monitoring of the bearing cavity (not available on 2" models).

Removable Rotating Assembly

- The entire rotating assembly can be removed without disturbing the pump volute or piping. Pusher bolt holes are provided to assist with removal. This allows for quick and easy installation of a spare rotating assembly, resulting in less downtime.

Drive Options

- Can be coupled with standard NEMA & IEC motors. No special motor required. Also can be coupled with diesel engine.

Coupling Options

- Direct Coupled
- Belt – Pulley Driven

Model Code

WGDP- 4

Inlet and outlet: 4"(100mm)

Dry-priming pump drive with diesel engine



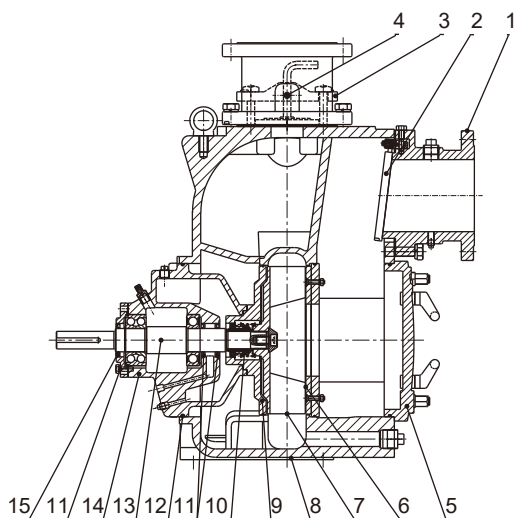
Material

Standard material list for main components

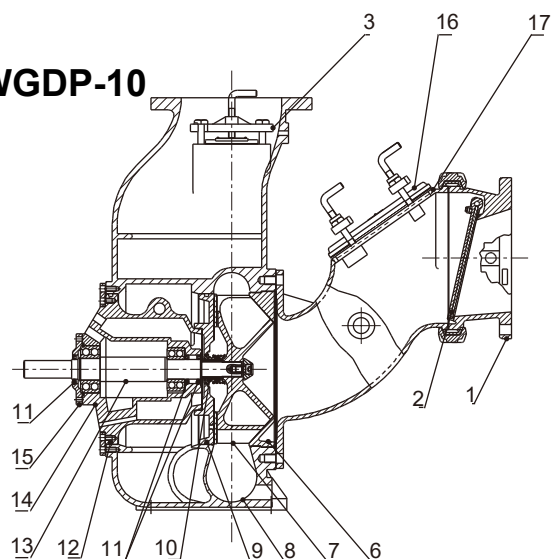
Component	Material	Specification	Component	Material	Specification
Stainless steel	Grey cast iron	FC250	Impeller Suction ring	Grey cast iron	FC250
	Ductile cast	FCD400-18		Ductile cast	FCD400-18
		FCD450-10			FCD450-10
		FCD500-7			FCD500-7
	Cast steel	ZG230-450		Cast steel	ZG230-450
		ZG270-500			ZG270-500
	Cast steel	CF8(304)		Cast steel	CF8(304)
		CF3(304L)			CF3(304L)
		CF8M(316)			CF8M(316)
		CF3M(316L)			CF3M(316L)
		2205、2507			2205、2507
	Cast copper	ZCuAl10Fe3		Cast copper	ZCuAl10Fe3
		ZCuSn5Pb5Zn5			ZCuSn5Pb5Zn5
Shaft	Carbon steel	Alloy steek 45 40Cr	Shaft sleeve Mechanical Seal location base	Stainless steel	SUS 420
	Stainless steel	SUS 420			SUS 431
		SUS 431			SUS 304
		SUS 304			SUS 304L
		SUS 304L			SUS 316
		SUS 316			SUS 316L
		SUS 316L			S31803
		S 31803			S32750
		S 32750			

Section Drawing

WGDP-2,3,4,6,8



WGDP-10

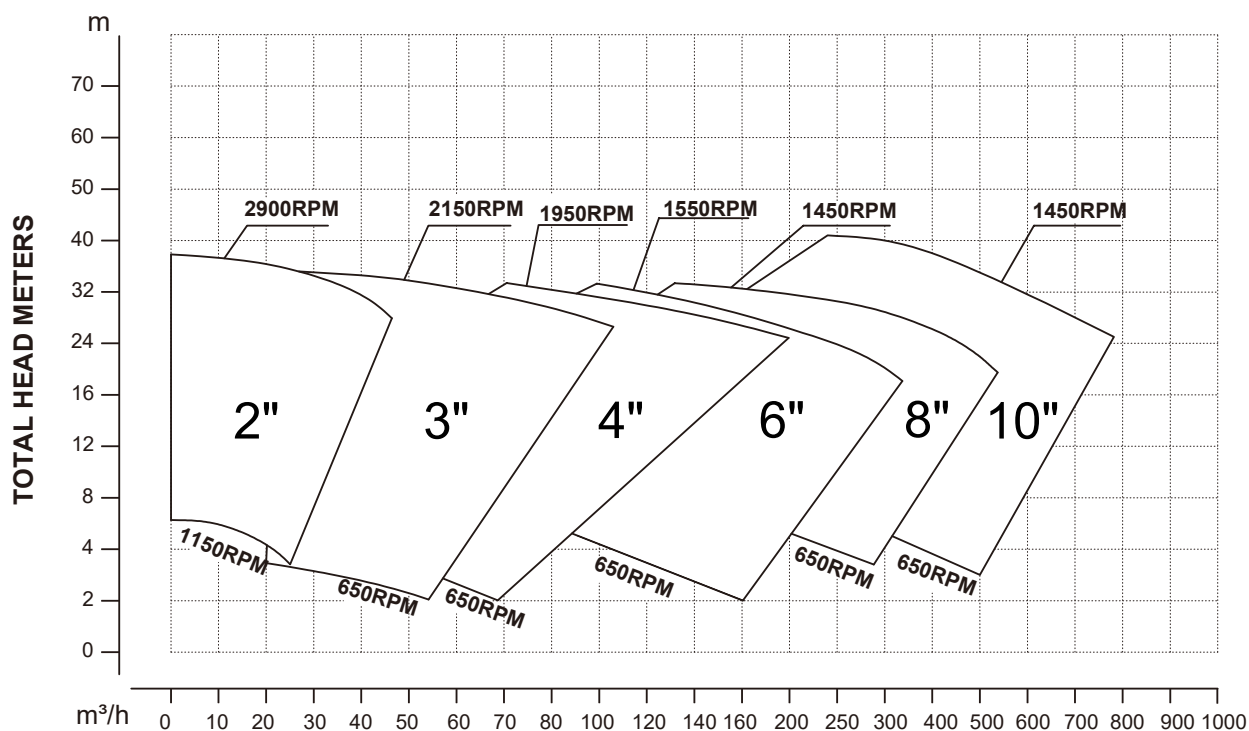


NO	Parts name	Material
1	Suction Inlet	FC 250
2	Flap Valve	NBR+Carbon steel
3	Infusion cover	FC 250
4	Discharge Outlet	FC 250
5	End Cover	FC 250
6	Wear Plate	ASTM 1045
7	Impeller	FC 250 SUS304/SUS316
8	Volute	FC 250
9	Seal Plate	FC 250
10	Cartridge Seal	TC/TC/Viton
11	Lip Seal	NBR
12	O-Ring	NBR
13	Shaft	ASTM 420
14	Bearing Body	FC 250
15	Bearing Cover	FC 250
16	Inlet Cover	FC 250
17	Inlet	FC 250

Performance Table

Model	Speed (rpm)	Max Q (m³/h)	Max H (m)	NPSHr (m)	Power (HP)	Max Solids (mm)
WGDP-2	1150~2900	46	35	7.3~7.6	1~10	44.45
WGDP-3	650~2150	110	35	1.5~7.6	1~20	63.5
WGDP-4	650~1950	160	36	1.5~7.6	1~30	76.2
WGDP-6	650~1550	350	32	2.4~7.6	2~40	76.2
WGDP-8	650~1450	600	36.5	2.7~7.0	7.5~75	76.2
WGDP-10	650~1450	750	39	2.7~6.7	10~120	76.2

Performance Charts



Design Features/Advantages

Casing

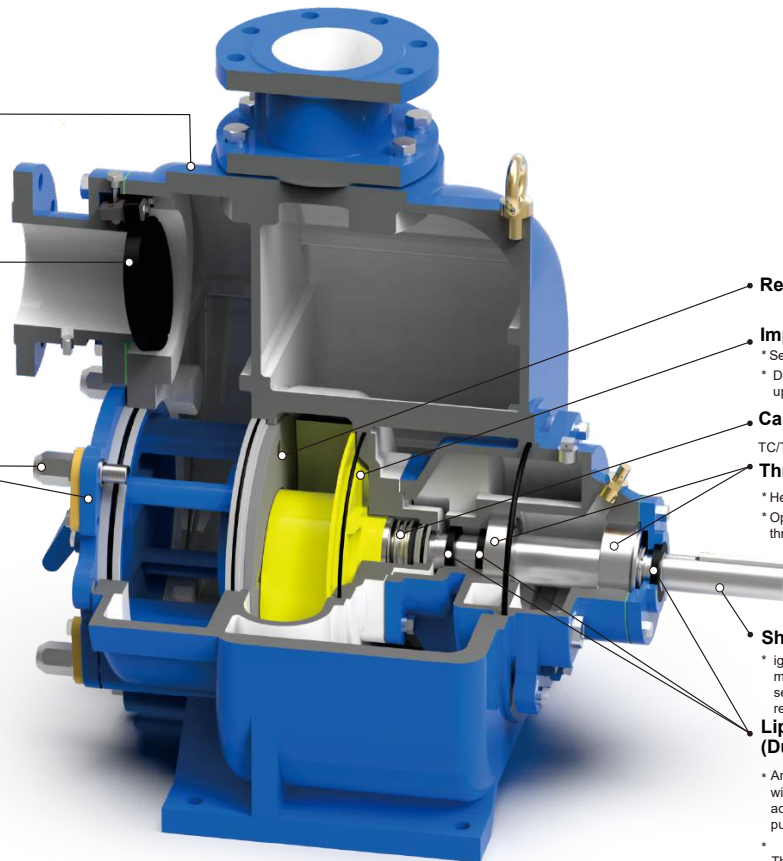
Full line of corrosive resistant materials

- * self venting, centerline mounted discharge flange
- * Various connection options: Threaded, Flanged
- * Increased casing thickness for extended casing life

Flapper Valve

*Automatically closes once pump is stopped to avoid losing priming

Removable Adhustable Cover Plate



Replaceable Wear Plate

Impeller

- * Semi-open impeller
- * Designed to pump solids up to 3"(76mm)

Cartridge Mechanical Seal

TC/TC/Viton

Thrust Bearing

- * Heavy duty double row standard
- * Optional duplex angular contact thrust bearing

Shaft

- * rigid heavy duty design for minimum shaft deflection at seal area and increased reliability

Lip seal (Dual bearing protection)

- * An atmospheric barrier along with two lip seal provide additional protection of the pump bearings,

* This unique design also allows for quick and easy external monitoring of the bearing cavity

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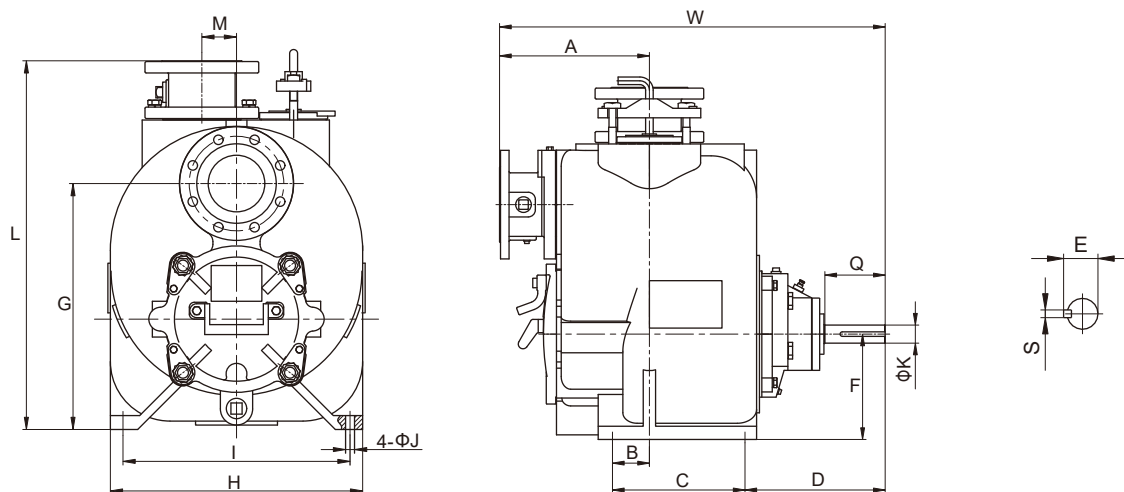


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WGDP Series Self Priming Trash Pump

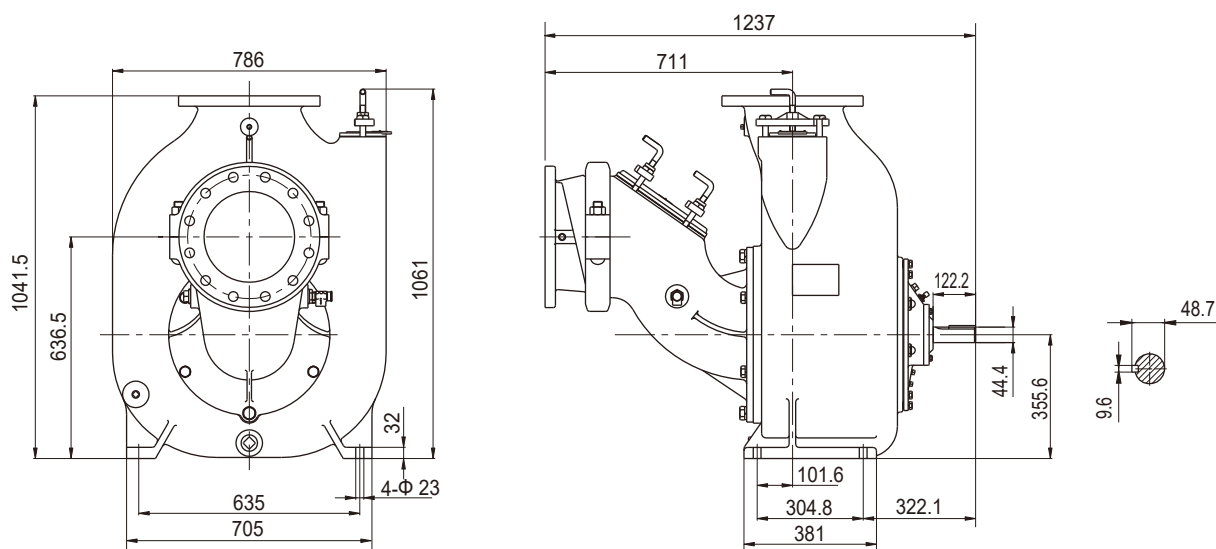
WGDP 2~8 Outline Dimensions (Unit: mm)



Pump Model	Pump Dimension						Foot Dimension						Shaft Dimension				Net Wight (kgs)
	L	G	F	M	W	A	J	I	H	B	C	D	K	Q	S	E	
WGDP-2	526.5	318	151.5	69.9	621.8	242	14	281	308	61	170.2	270.6	38.1	101.6	9.6	42.3	112
WGDP-3	687.5	431.8	190.5	69.9	735.3	295.5	18	393.7	431.8	76.2	228.6	287.4	38.1	101.9	9.6	42.3	198
WGDP-4	742.5	495.3	222.3	69.8	813.1	316	18	457.2	508	77.9	279.4	295.6	38.1	127.1	9.6	42.3	315
WGDP-6	896.5	568.2	257.2	69.8	899.9	403	18	527	577.8	77.7	279.4	295.3	38.1	127	9.6	42.3	478
WGDP-8	1068.5	723.9	330.2	-	1025	411.7	23	635	705	101.6	304.8	410.1	44.4	171.4	9.6	48.7	720

WGDP-10 Outline Dimensions (Unit: mm)

Net Weight: 700 kgs





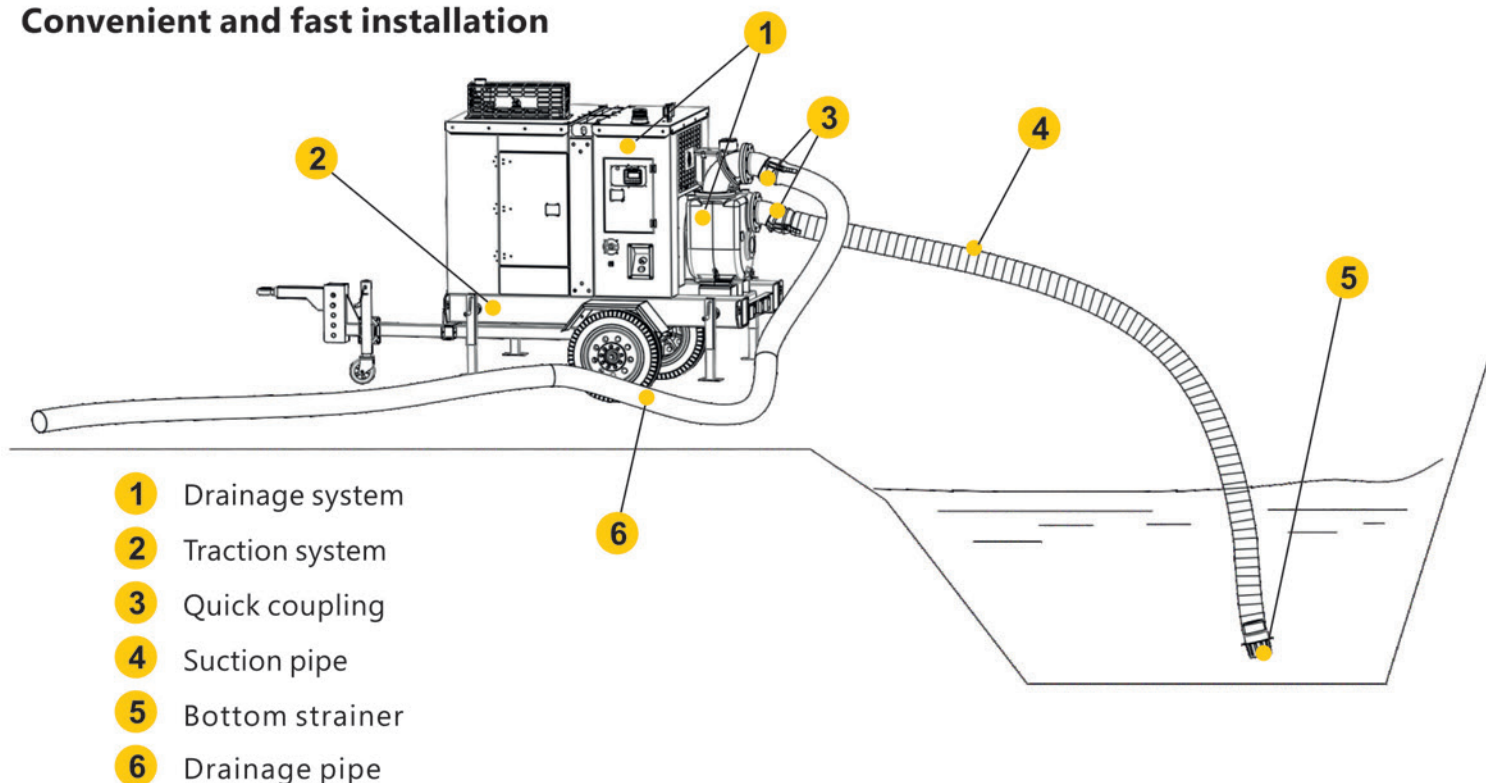
Product package

Provide you with drainage system special supporting product package, can guarantee the drainage work immediately.



The above are conventional accessories, which are equipped differently according to different equipment types. The purchase contract shall prevail.

Convenient and fast installation



Features of trailer-type units

Safe and reliable
Easy to obtain drainage output



- Has all the advantages of silent type unit.
- Suitable for field work.
- The wheeled chassis has a towing device that adjusts the balance of the vehicle at any time.
- Equipped with alarm lights, side lights, anti-fog lights, etc., in line with transportation safety standards.
- Single- or dual-axle trailers are available, with mechanical or automatic braking options to meet a wide range of requirements.
- Convenient refueling system with lockable filler ports.

Excellent safety performance

Safe to control

- The radiator and rotating parts of the unit are equipped with protective covers to avoid damage caused by direct contact between man and machine.
- The control panel is equipped with a door lock and an emergency stop switch, and the emergency stop device is installed outside the box for easy use in an emergency.

High-quality sound-dampening materials and design

- The inner wall of the unit adopts a new special 50mm flame retardant silencer cotton, and the sealing plastic is used around the door, which can absorb and block a large amount of noise and heat emitted by the unit during operation.



Protective cover design to ensure man-machine safety



Noise reduction flame retardant new silencer cotton design

Easy to operate

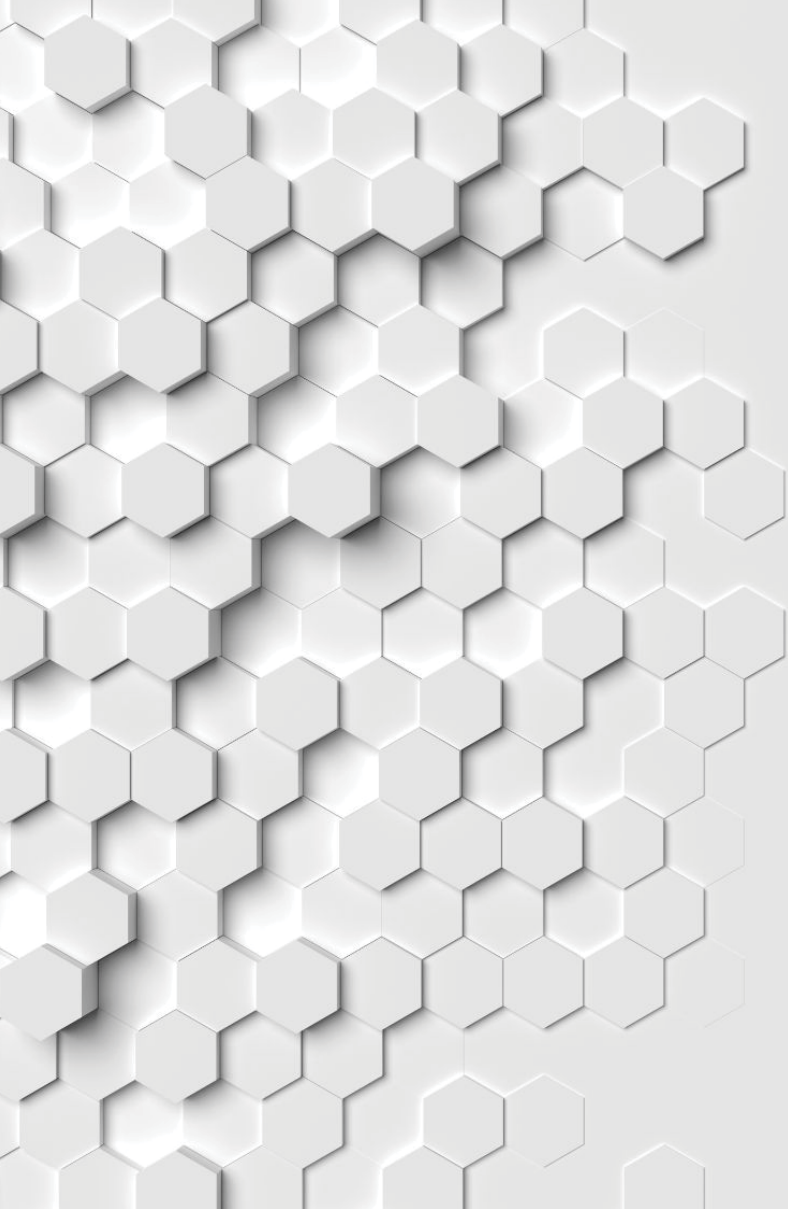
Convenient refueling and watering device

- Built-in bottom fuel tank;
- Externally equipped with a filler port;
- Fuel discharge port of the base;
- Water filler above the enclosure.

- With quick couplings, the work of piping connection is easier and faster.

Simpler maintenance

- All routine maintenance work can be operated on both sides of the unit, and wide access doors give you access to all parts of the unit.



wings
PUMPS

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