

WATER MOVEMENT







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Water Movement

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Our locations

North America South Africa **GWS USA** Middle East & Turkey Latin America India **United Kingdom** China Luxembourg Taiwan Italy Korea Manufacturing Offices and distribution Manufacturing, offices and distribution

About Global Water Solutions

About us

Global Water Solutions Ltd (GWS) is one of the world's largest pressure tank and water treatment product manufacturers. As well as being manufactured from the highest quality materials, all GWS products are rigorously tested and come with extensive warranties. GWS products are purchased, sold and serviced by some of the most reputable large pump specialty wholesalers and Original Equipment Manufacturers in over 100 countries. A strong commitment to customer service is at the heart of the GWS offering, its team of highly experienced technical sales and engineering staff deliver exceptional after sales service and field support for customers.

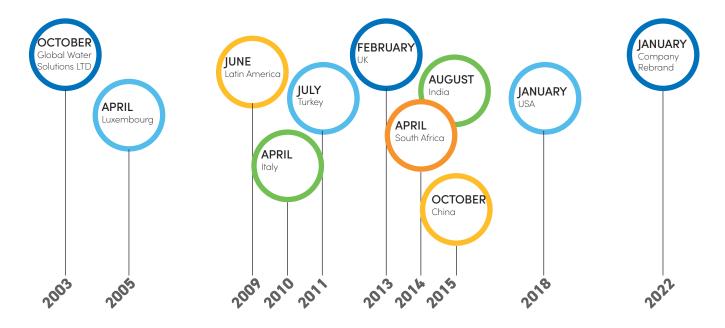
A broad product offering, and innovative product development has secured GWS' place in the market as the most comprehensive supplier of pressure tanks and water treatment products. Its core values include providing long-term benefits to all as well as taking care of the environment while remaining socially conscious when partnering with all communities the company serves. The creation of adaptable, affordable solutions which meet the increasing need for safe and abundant drinking water enables GWS to focus on providing cutting-edge technologies for the movement and processing of water.

Our vision

Global Water Solutions aims to be a leading solutions provider for the worldwide need of accessing, processing, and delivering potable, clean water to improve people's lives.

Our mission

Global Water Solutions mission is to develop and deliver innovative products and cutting-edge technologies for the movement and processing of water. We strive to provide the highest quality products, world-class service, efficient supply channels, and superior value to our customers.



Product

Certifications

TUV certification website





As well as being manufactured from the highest quality materials, all GWS products are rigorously tested and come with extensive warranties

GWS products are purchased, sold and serviced by some of the most reputable large pump specialty wholesalers and Original Equipment Manufacturers (OEM) in over 100 countries.

A strong commitment to customer service is at the heart of the GWS offering, its team of highly experienced technical sales and engineering staff deliver exceptional after sales service and field support for customers.

We are the industry leader in approvals and certifications for our products.

Certifications may vary by product series and/or model. Check with your GWS sales representative for more detailed information





















PressureWave™

Multi-purpose pressure tanks





The PressureWaveTM series is constructed of a virgin polypropylene liner combined with an FDA compliant high-grade butyl diaphragm. This is held against the wall of the tank with a steel clench ring. The brass air valve, sealed by a threaded O-ring valve cap, prevents air leaks. Water enters the tank through a patented stainless-steel water connection.

The diaphragm and liner are both reinforced in specific wear areas for longer life. All internal parts including the air valve are rounded to prevent piercing of the diaphragm in extreme conditions. The water connection uniquely provides a dual water/air seal ensuring a complete leak-free and maintenance-free pressure tank.

Available in horizontal, vertical and inline, ranging from $2-150\ L/0.5-39.6\ G.$

- 10 bar pressure rating.
- Leak-free, O-ring sealed air valve cap.
- High-grade butyl diaphragm design.
- Dual-layer polyurethane paint finish.
- Reinforced engineered thermoplastic pump stand and feet.
- Virgin polypropylene liner.
- Patented stainless steel water connection.
- Carbon steel shell.





PressureWave[™] is suitable for

- Booster systems
- ⊘ Thermal expansion
- ✓ Irrigation systems
- Hydraulic hammer arresting







Max™ & UltraMax™

Toughest high-pressure applications





MaxTM and UltraMaxTM tanks are built with thicker gauge steel to handle the toughest high-pressure applications. From high-rise commercial and residential properties, to large-scale irrigation and industrial systems, Max and UltraMax tanks are the #1 choice of engineers, designers, consultants and specifiers the world over.

No matter the application, whether it's high-pressure water supply, high-pressure flushing, pressure regulation in fire pump and sprinkler systems or protection against pressure surges caused by hydraulic shock and water hammer, industry experts agree that Max and UltraMax tanks are the best solution whenever high-pressure tanks are required.

Often high pressure is required to deliver to large capacity potable water systems. High rise buildings will require high pressure expansion tanks. Long water supply runs will sometimes require high pressure equipment including expansion tanks.

Available vertical and inline, ranging from 2 - 100 L / 0.5 - 26.4 G.



- 16 | 25 bar pressure ratings.
- Leak-free, O-ring sealed air valve cap.
- High-grade butyl diaphragm design.
- Dual layer polyurethane paint finish.
- Virgin polypropylene liner.
- Patented stainless steel water connection.



Max[™] and Ultra Max[™] are suitable for

- O Deep private water supplies
- Hotels
- Hospitals
- Schools and universities
- High rise buildings





Challenger™

Maintenance-free pressure tanks





Efficient and cost effective, Challenger tanks are designed with a patented controlled action CAD-2 diaphragm assembly. It features a chlorine resistant 100% butyl diaphragm with a precision molded copolymer polypropylene liner for superior air and water separation.

The CAD-2 diaphragm assembly is clenched together with a positive lock internal clench ring which contains drawdown water in a pre-charged air atmosphere, thus providing separation between the diaphragm and tank wall. This "air buffer" design means zero problems with condensation.

Constructed with an FDA compliant high-grade butyl, the diaphragm assembly seals water in a true non-corrosive chamber. The air chamber is sealed with a fixed O-ring and closed cell foam and will provide many years of leak free and service free life.

Available in vertical, ranging from $60 - 450 \, \text{L} / 15.8 - 118.9 \, \text{G}$.

- BSP models rated to 10 bar
- NPT models rated to 8.6 bar
- Stainless steel water connection.
- Dual layer polyurethane paint finish.
- Leak-free air valve cap, sealed and closed cell foam.
- Replaceable tank base.
- Maintenance-free.
- Carbon steel shell.

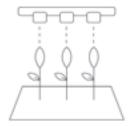




Challenger[™] is suitable for

- Booster systems
- Thermal expansion
- Heating expansion
- Irrigation systems







SuperFlow™

Pressure tanks with replaceable membrane





SuperFlowTM series tanks are ideally suited for applications where high-volumes and/or high-pressure ratings are required. These applications may include pressure booster systems, hot water circulation systems as well as water hammer arresting in high-rise and multistory buildings such as hotels, hospitals or business centers.

The interchangeable membrane design allows the end user to replace the membrane as required, and the built-in pressure gauge (available on 100 L /26.4 G models and above) allows for easy and efficient pressure monitoring.

SuperFlow series tanks are designed to the EN13831:2007 technical standard and produced in accordance with the Pressure Equipment Directive 2014/68/EU.

SuperFlow series tank volumes range 50 - 10,000 L / 60 - 2,640 G making SuperFlow one of the most comprehensive pressure tank lines globally.

- 10 | 16 | 25 bar pressure ratings.
- Built-in pressure gauge.
- Stainless steel water connection.
- Lifting lugs for easy on-site movement.
- Replaceable membrane design.
- ISO9001, ISO14001, ISO45001 approved facility
- Carbon steel shell.
- Fix indentation grade butyl membrane.





SuperFlow[™] is suitable for

- High rise buildings
- Water utility supplies
- High pressure applications
- District heating water circulation





ASME Series

Heavy duty pressure vessels





GWS is the leading manufacturer of pressure vessels built to the world's most rigorous and demanding quality standard - the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code.

With design, fabrication, assembly, and inspection all carried out in our own ASME-accredited facility, our pressure vessels ensure the safety, reliability and peace of mind that our customers demand for their most challenging applications.

In addition to our standard range, GWS also offers a complete suite of ASME pressure vessel design and fabrication services for custom sizes and pressure ratings to suit any application, and we supply these with U-stamp to ensure regulatory compliance in the strictest jurisdictions.

From 60 - 3,000 L / 15.9 - 792.5 G.

- 10 bar pressure rating.
- Replaceable membrane design.
- ISO9001, ISO14001, ISO45001 approved facility.
- Radiographically tested (RT) weld joints.
- Manufacturer's Data Report (MDR).
- Permanent data record maintained for each vessel.





ASME Series are suitable for

- Government projects
- Mining, oil and gas
- Marine applications
- Heavily regulated installation sites
- Municipal and industrial applications







InoxFlow™



Stainless steel pressure tanks with replaceable membrane



InoxFlowTM series tanks are ideally suited for applications where high-volumes and/or high-pressure ratings are required. These applications may include pressure booster systems, hot water circulation systems as well as water hammer arresting in high-rise and multistory buildings such as hotels, hospitals or business centers.

The interchangeable membrane design allows the end user to replace the membrane as required, and the built-in pressure gauge allows for easy and efficient pressure monitoring.

InoxFlow series tanks are designed to the EN13831:2007 technical standard and produced in accordance with the Pressure Equipment Directive 2014/68/EU.

InoxFlow series tank volumes range from 100 - 3,000 L / 26.4 - 792.5 G making InoxFlow one of the most comprehensive pressure tank lines globally.

- 10 / 16 / 25 bar pressure ratings.
- Built-in pressure gauge.
- Stainless steel water connection.
- ISO9001, ISO14001, ISO45001 approved facility.
- With lifting lugs for easy on-site handling.
- Replaceable membrane design.





InoxFlow[™] is suitable for

- Booster systems
- ✓ Water hammer arresting in high rises





M-Inox™

Maintenance-free stainless steel tanks





M-InoxTM stainless steel tanks are ideally suited for special demands and environments. The M-Inox series is constructed with a virgin polypropylene liner combined with a high-grade butyl diaphragm. This is held against the wall of the tank with a steel clench ring. The brass air valve, sealed by a threaded O-Ring valve cap, prevents air leaks. Water enters the tank through a patented stainless steel water connection. The diaphragm and liner are both reinforced in specific wear areas for longer life. All internal parts including the air valve are rounded to prevent piercing of the diaphragm in extreme conditions. The water connection uniquely provides a dual water/air seal ensuring a complete leak-free and maintenance-free pressure tank.

M-Inox tanks represent the best value for the investment and are the highest quality stainless steel pressure vessels available today.

Tanks are available as inline models from 8 - 24 L / 2.1 - 6.3 G and 18 L / 4.7 G in horizontal.

- 10 bar pressure rating.
- High-grade stainless steel tank construction.
- High-grade butyl diaphragm design.
- Virgin polypropylene liner.
- Replaceable pump stand / replaceable tank feet.
- Comprehensive testing.
- Maintenance-free.





M-Inox[™] is suitable for

- Aggressive environments
- Hazardous environments
- Applications requiring all stainless steel equipment
- Clean environments







C2-Lite CAD™

Lightweight composite pressure tanks





If you are looking for the proven performance of a GWS steel tank in a lightweight composite design, C2-Lite CAD $^{\text{TM}}$ series is the answer. Efficient and cost effective, C2-Lite CAD tanks are designed with the patented controlled action diaphragm design of GWS Challenger $^{\text{TM}}$ tanks.

Unlike other composite tanks that hide tired old bag technology in a plastic shell, the patented CAD-2 diaphragm design is stronger and will not crease and wear out. It features a 100% butyl diaphragm with a precision molded copolymer polypropylene liner for superior air and water separation.

This patented design allows each size tank to have a properly sized water chamber matched to the drawdown performance of that tank. C2-Lite CAD tanks are easy to install, weather-resistant, and engineered to withstand even extreme environmental conditions. When it comes to performance and durability, the GWS C2-Lite CAD design cannot be beat.

Ranging from 60 - 450 L / 15.9 - 118.9 G.

- 8.6 bar pressure rating.
- Precision injection molded domes.
- High-tech spin welding process.
- Patented CAD-2 controlled action diaphragm design.
- Virgin polypropylene liner.
- Reinforced plastic connection.
- Maintenance free.





C2-Lite CAD™ is suitable for

- Coastal applications
- ❷ Beach resorts & golf courses
- Booster systems
- Water wells
- Irrigation systems





All-Weather™

The perfect tank for harsh environments





All-Weather™ series pressure tanks are suitable for a variety of applications where the tank requires more protection from harsh environments.

The patented PLASTEEL shell ensures an impenetrable protective shielding against the harshest elements. The All-Weather series is capable of resisting all weather conditions such as wind, rain, snow and sun, and is the perfect solution for marine or mining applications.

Tanks are available in 18 and 24 L / 4.8 and 6.3 G.

- 10 bar pressure rating.
- Rugged polypropylene outer shell.
- Carbon steel inner shell.
- High-grade butyl diaphragm design.
- Leak-free O-ring sealed air valve.
- Virgin polypropylene liner.





All-Weather™ is suitable for

- Marine applications
- Mining applications
- Offshore wind farms
- Outdoor booster systems







Flow-Thru™ Tanks

Recirculation device for the freshest water





Global Water Solutions guarantees the freshest water quality possible with the revolutionary Flow-ThruTM series design, available in both composite and steel models. All Flow-Thru tanks feature GWS's exclusive patented Flow-Thru technology which assures that your system will provide the freshest water quality possible by simply eliminating stagnation! The Flow-Thru connection diverts system water into, and more importantly out of the tank. Flow-Thru will work with pumped supply or direct connection to the water supply without any pump. This constant flushing action assures that the water in the tank remains as fresh as possible and eliminates the possibility of stagnant water during normal system operation.

Both our steel and composite Flow-Thru tanks incorporate our proven patented controlled action diaphragm (CAD-2). CAD-2's steel clench ring regulates movement and prevents the diaphragm from rubbing against the tank wall. Flow-Thru is also the ideal solution for constant pressure water system installers seeking to store water without the risk of stagnation.

Available in vertical, ranging from 60 - 325 L / 15.8 - 85.9 G.

- 8.6 bar pressure rating.
- The system ensures colonization cannot take place as fresh water is always being forced into the water chamber.
- Available in composite and steel.
- Patented CAD-2 diaphragm technology.
- · No stagnation.
- Patented water vane, total recirculation of the water.
- Leak-free air valve cap sealed with closed cell foam.





Flow-Thru[™] tank is suitable for

- ◊ VFD/VSD controlled pressure boosting system
- Heating, ventilation, and air conditioning
- Swimming pools and spas
- Wet cooling towers
- Evaporative cooling

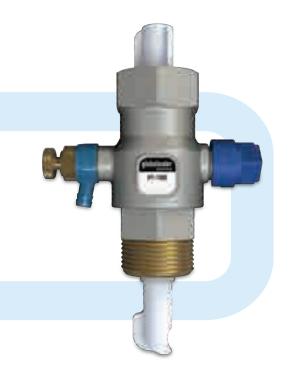




Flow-Thru™ Plus Adapters

Anti-legionella solutions





Global Water Solutions' Flow-ThruTM Plus inline adapters are ideally suited for continuous pressure systems where there is a risk of stagnant water in the tank. The Flow-Thru Plus inline adapter diverts the water through the tank while the water is running, eliminating the risk of stagnant water and reducing the risk of waterborne bacteria such as legionella. This constant flushing ensures the freshest water in the tank.

Flow-Thru Plus inline adapters are 1" full bore recirculation devices that offer superior flow rates compared to other 3/4" devices. Their unique design provides maximum circulation in the tank whilst assuring minimal pressure drop in the main pipe.

- Self-orientating design eliminates the risk of leaking or overtightened connections.
- Isolation valve allows for easy expansion tank servicing.
- Built in drain valve to allow full service and maintenance of the expansion tank without disruption to water supply.
- Prevents stagnant water on booster sets.
- Built in sample point.





Flow-Thru™ Plus adapter is suitable for

- Showers
- Pressure boosting
- Heating, ventilation and air conditioning
- Swimming pools and spas
- Wet cooling towers
- Evaporative cooling

Compatibility

Compatible with Global Water Solutions inline tanks with 1" BSP connection including:

- All-Weather™ 18 and 24 liter inline tanks



SolarWave™

Indirect solar heating expansion tanks

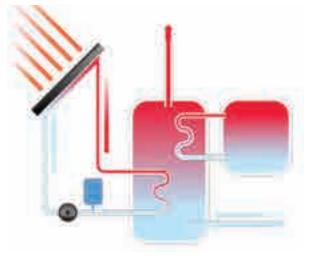




If you are looking for the proven performance of a GWS tank, SolarWaveTM expansion tanks are the quality solution for your solar system. SolarWave expansion tanks are designed to control the expansion and contraction of solar thermal transfer fluids in solar heating systems. The SolarWave series is intended for use on the solar liquid loop of indirect thermal transfer systems.

A properly sized SolarWave tank will eliminate the need for recharging the system after periods of no use or in cases of extreme temperature buildup. It will eliminate relief valve release of system liquid and maintain minimum operating pressures throughout the system.

Available in vertical and inline, ranging from 2 – 150 L / 0.5 – 39.6 G.







SolarWave[™] is suitable for

- Solar closed loop circuits
- Hydronic heating circuits





HeatWave™

Non-potable hydronic heating expansion tanks



- 6 bar pressure rating.
- Leak-free O-ring sealed air valve.
- Dual layer polyurethane paint finish.
- High-grade butyl diaphragm design.
- Patented chromed steel water connection.
- Maintenance free.

HeatWave tanks are designed for use in closed-loop hydronic heating systems and should never be installed in open loop or potable water systems. They are the ideal solution for fluid expansion in radiant heating systems and can be used with systems running glycol with a water to glycol mixture of up to 50%. The air chamber is sealed with a brass air valve and O-ring sealed air valve cap providing many years of leak-free and maintenance-free life. Its two-part polyurethane, primed paint finish will withstand the harshest indoor and outdoor environments. HeatWave inline models feature a welded hex nut connection and can be installed on system piping and supported by the GWS universal wall-mounting bracket. Freestanding vertical and horizontal models are constructed with a rigid base designed to support the weight of the tank during operation The expansion tank must be connected to the closed loop circuit and should only be used in close loop circuits with corrosion inhibitor. Do not connect to an open-loop circuit or any system where fresh water is used for regular top up.

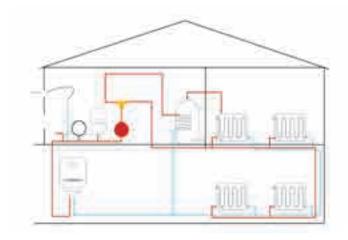
Available vertical and inline, ranging from 2 - 150 L / 0.5 - 39.6 G.





HeatWave™ is suitable for

- Closed loop heating circuits
- Hydronic heating circuits





ThermoWave™

Potable hot water expansion tanks





ThermoWave™ expansion tanks are specially designed for use in potable water heating applications. Many homes and buildings have potable water heating systems to provide hot water for washing, cooking, showering, etc. As the water is heated it also expands. This expansion leads to increased system pressure and can cause serious damage. In most systems a relief valve is installed to vent the expanded water volume and prevent the system from exceeding maximum operating pressure. Unfortunately, this creates wasted energy as hot water is vented and additional water must be filled and heated again. In order to safely accommodate the natural expansion of water without venting from a relief valve, a ThermoWave expansion tank is used. ThermoWave expansion tanks conserve water and energy while safely maintaining system operating pressures. They do so by temporarily absorbing the expanded water volume instead of allowing it to be vented out of a relief valve.

Available in vertical, horizontal and online, ranging from $2-60\ \text{L}/0.53-15.9\ \text{G}.$

- 10 bar pressure rating.
- Leak-free O-ring sealed air valve.
- Dual layer polyurethane paint finish.
- High-grade butyl diaphragm design.
- Virgin polypropylene liner.
- Patented stainless steel water connection.
- Maintenance free.





ThermoWave[™] is suitable for

- Stored hot water
- Open loop potable hot water circuits
- Potable hot water systems





HydroGuard[™]

Water hammer & hydraulic shock arrestors





HydroGuard™ shock arrestors are specially built with the latest diaphragm technology designed to reduce and eliminate hydraulic shock. The internal diaphragm divides the arrestor into separate air and water chambers. The sealed air chamber acts as a cushion that compresses when the water pressure suddenly increases or surges due to hydraulic shock.

HydroGuard shock arrestors are best used at the point of shock and should be installed as close to the valve or piping where the shock originates. They are ideal for washing machine and dish washer installations, sinks and toilets, reverse osmosis systems and any other plumbing application where quick closing valves or fast acting solenoid valves are installed. HydroGuard shock arrestors are certified and approved for potable water systems and are drinking water safe.

Available from 0.16 - 4 L / 0.04 - 1.06 G.

- 10 bar pressure rating.
- High-grade butyl diaphragm.
- Adjustable pre-charged air pressure.
- Dual layer polyurethane paint finish.
- · Leak free O-ring sealed air valve.
- · Comprehensive testing.
- Maintenance-free.





HydroGuard™ is suitable for

- Dishwashers and washing machines
- Domestic plumbing and heating systems
- Booster pump water hammer arresting







PumpWave™ Plus

Electronic pump controller





PumpWave[™] Plus is an electronic pump controller that helps you save electricity and extends the life of your pump. Ideally suited for domestic water supply in and around the home, the PumpWave Plus offers complete automatic management of most electric pumps up to 2 HP (10A), eliminating the wear and tear caused by frequent small draw-off pump starts due to leaks and low-flow pumping applications.

PumpWave Plus is a compact solution that is ideal for applications where space is limited. Combining a pump controller with an integrated 3 L - 0.8 G pressure tank, the PumpWave Plus is easy to install as you simply connect it to the pump and your system is ready to go.

When small draw-off is detected, the PumpWave will first supply water from the integrated pressure tank. Once the adjustable start or cut-in pressure is achieved, the pump will then switch on and run until the system reaches maximum static pressure.

- Starting pressure adjustable from 1 to 2.5 bar.
- Eliminates frequent small draw-off pump starts.
- Ensures constant flow.
- Protects against pump dry run.
- LED status indicators: power on, pump on / pump off, dry run control.
- All-in-one compact device.

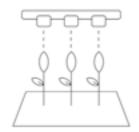




PumpWave™ Plus is suitable for

- Pump control for gardening and general use around the house
- Pressure boosting for small dwellings
- Agricultural and horticultural applications





PumpWave™ Press

Electronic pump controllers





PumpWaveTM Press Series automatic pump controllers are designed to provide automatic constant water pressure to one to two dwellings. The controllers are completely silent. The compact kits are comprised of a check valve, electronic circuit and reset button.

PumpWave Press controllers prevent pump dry running and help to eliminate water hammering. A small reservoir of water helps avoid small draw off pump starts caused by leaky plumbing and taps. The controller will let the pump operate continuously when water flowrate exceeds 1 liter per minute. When the pump reaches maximum pressure, the controller will automatically switch the pump off.

- Automatically controls most domestic pumps.
- Ensures constant flow.
- Protects against pump dry run.
- LED status indicators.
- All-in-one compact device.
- Eliminates small draw-off pump starts.
- IP65 rated.

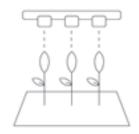




$\textbf{PumpWave}^{^{\text{\tiny{TM}}}} \ \textbf{Press is suitable for}$

Domestic and residential applications







PumpWave™ Classic

Electronic pump controllers





PumpWave™ Classic Series automatic pump controllers are designed to provide automatic constant water pressure to one to two dwellings.

The completely silent, compact kits are comprised of a check valve, electronic circuit and reset button. PumpWave Classic controllers prevent pump dry running and help to eliminate water hammering. A small reservoir of water helps to avoid small draw off pumps starts caused by leaking taps. The controller will allow the pump to operate continuously if the water flowrate exceeds 1 liter per minute. When the pump reaches maximum pressure, the controller will automatically switch the pump off.

- Automatically controls most domestic pumps.
- Ensures constant flow.
- Protects against pump dry run.
- All-in-one compact device.
- Integrated pressure gauge.
- Eliminates small draw-off pump starts.
- Starting pressure adjustable from 1 to 2.5 bar.

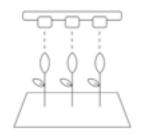


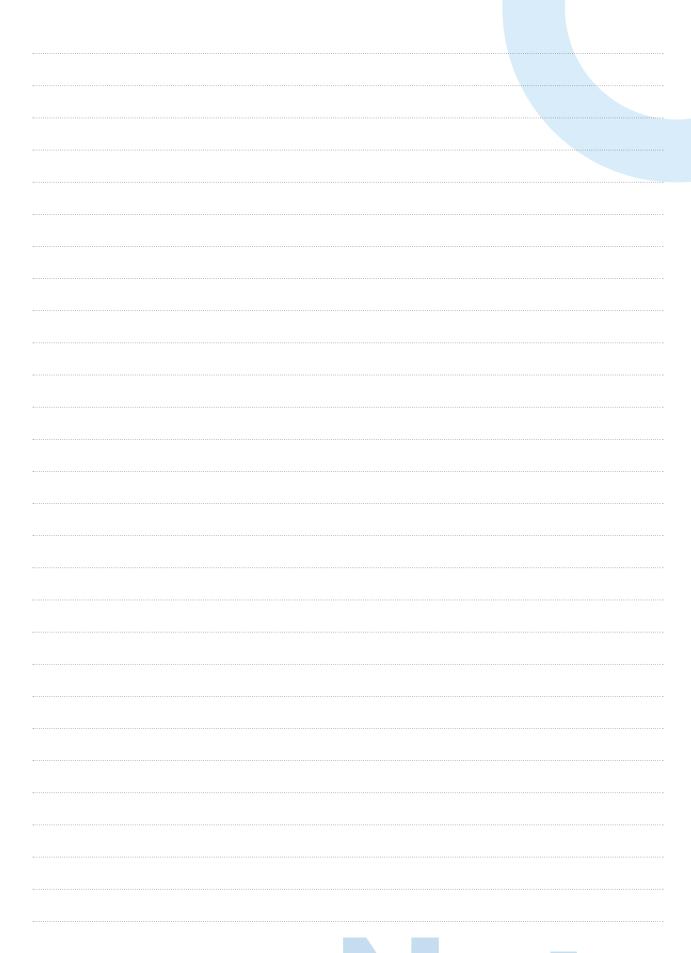


PumpWave™ Classic is suitable for

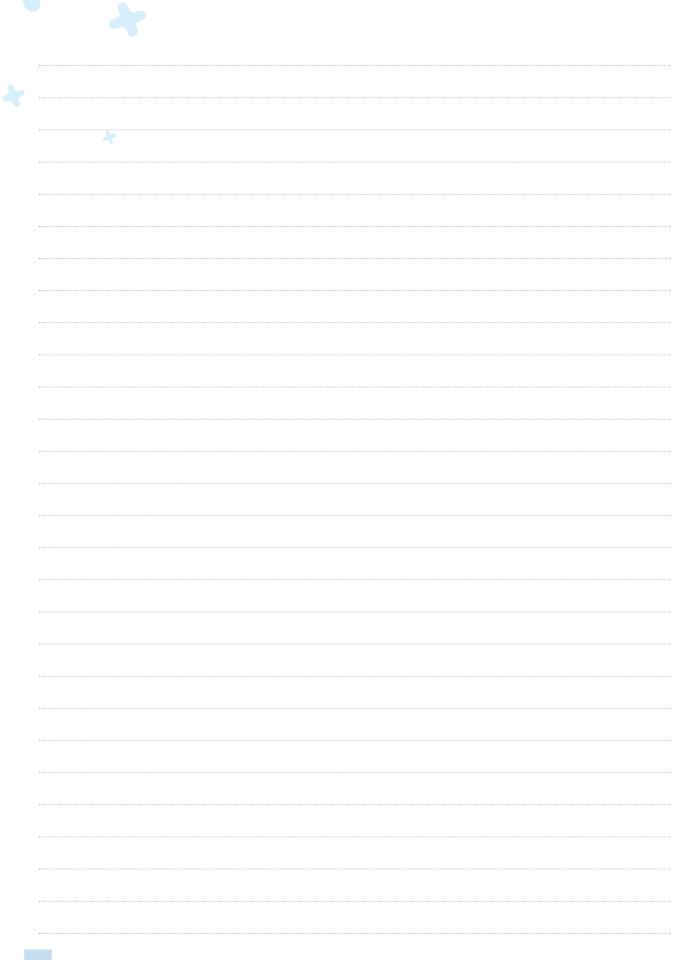
Domestic and residential applications











24 OTES

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