



WAVES

WHITEWATER®
Waterparks



PATENTED WAVE-GENERATING TECHNOLOGY

Lotte Gimhae Waterpark, Busan, South Korea



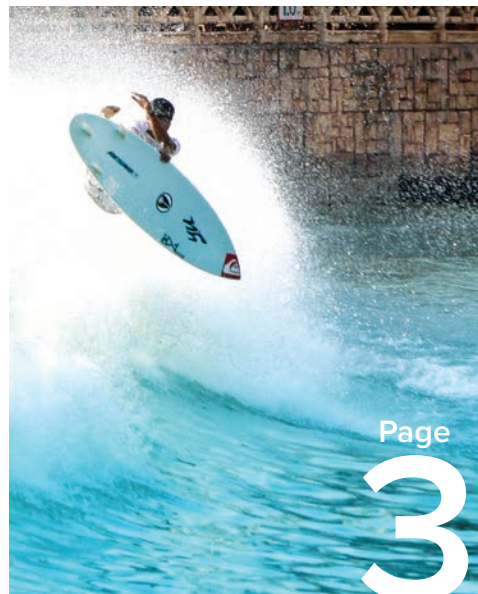
We are the Waves experts. No one understands wave-generating technology better than we do, because we invented it! With over 30 years of experience and more than 200 global installations, WhiteWater's in-house team of experts is ready to build your legendary waves.

Patented Technology The most advanced wave-generating technology that is safe, versatile, and reliable.

Ultimate Customization Waves are designed to meet your unique facility programming requirements fitting any budget, site and schedule.

Concept to Completion First-class service is offered through every step of your project with a dedicated team of professional designers, engineers, project managers, manufacturing and after sales staff.

Efficient Operations Generate impressive waves and have flexible operations with 8 wave patterns, highly efficient equipment, controllable power consumption and a water recycling system.



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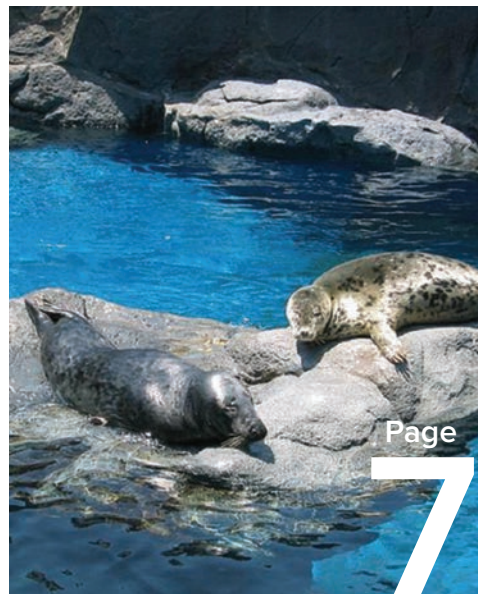
Hydraulic Systems



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Technical Specifications

Front Cover: Vivaldi Park Ocean World, Gangwon-do, South Korea

"Walt Disney Imagineering was fortunate to have found WhiteWater. Their efforts in response to an extraordinary technical and production challenge have provided the Typhoon Lagoon project with an incomparable wave machine, far superior to what presently exists in the industry and an incomparable wave!"



EXTREME RIVER

HYDRAULIC SYSTEMS

Ideal for creating crashing waves!

Attract thrill seekers to the largest wave pools in the world. Hang ten on waves reaching up to 3.5m (11.5ft) high with WhiteWater's patented hydraulic wave-generating equipment. Our waves are second to none, creating the perfect surge to surf or boogie board every 60 seconds. With the ability to generate 5 unique wave patterns, you will offer guests a memorable experience they will come back for again and again.



Golden Ticket Award
Mt. Olympus Water & Theme Park
Wisconsin Dells, Wisconsin
2007



Sunway Lagoon, Petaling Jaya, Malaysia

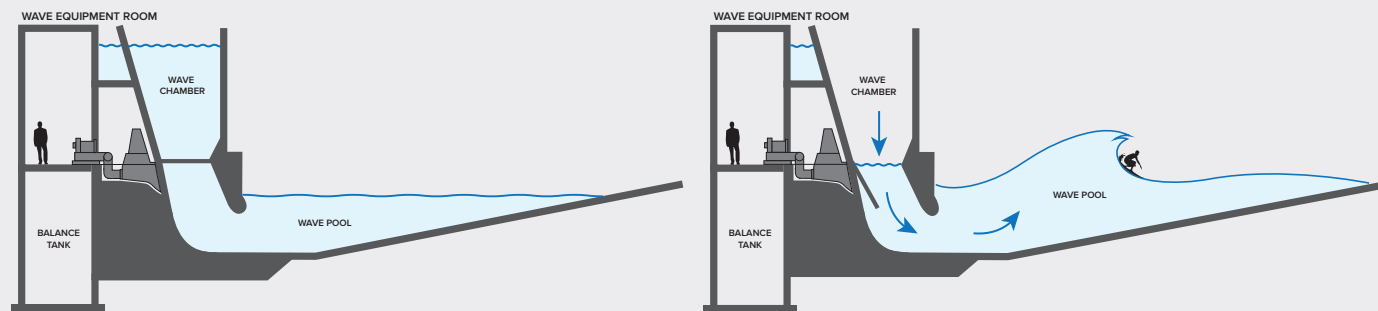
SURF WAVES

HOW DOES IT WORK?

Surf Waves
Instantaneous Capacity
3,200 - 5,900 guests

Extreme River
Hourly Throughput
12,000 guests

Enormous holding tanks 9m (30ft) above the deep end of the pool are filled with water. When the gates in the bottom of the tanks are opened, gravity pushes the water down into the pool creating a massive wave.



EXTREME RIVER

Vivaldi Park Ocean World, Gangwon-do, South Korea



SURF WAVES

Atlantis Paradise Island, Paradise Island, The Bahamas

Patented Technology
US4999860



KEY FEATURES

- Up to 3.5 m (11.5 ft) waves
- Pools up to 13,000 m² (140,000 ft²)
- 5 hydraulic wave patterns

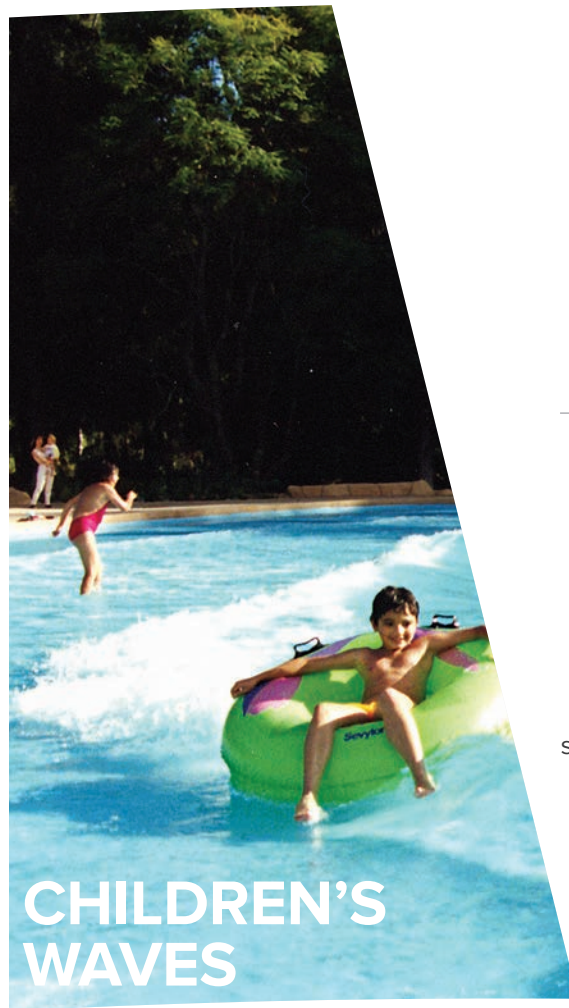
- Surging waves every 60 seconds
- Stand-up surfing compatible
- Multi-functional with pneumatic options

20+ Year Lifespan with our Proven Technology

PNEUMATIC SYSTEMS

Simple, cost effective and low maintenance!

The most common indoor and outdoor wave-generating equipment uses pneumatic technology to create waves up to 1.5m (5ft) high every 1.2 seconds. WhiteWater's unique wave chamber system generates up to 8 wave patterns and allows guests to experience multiple sensations. Pneumatic equipment can be used in pools or in rivers, producing waves of fun for any age.



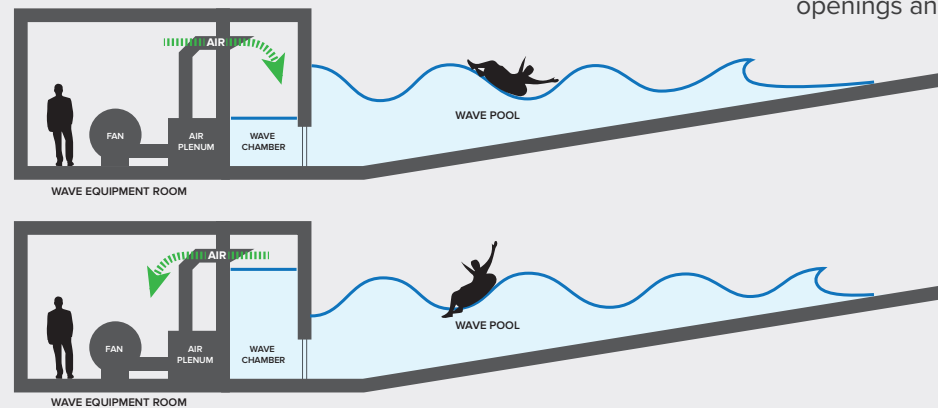
CHILDREN'S WAVES



FAMILY WAVES

HOW DOES IT WORK?

Air from the wave fan is blown into chambers at the deep end of the wave pool. The water is forced down through underwater openings and a surge is created in the wave pool.



Instantaneous Capacity

Children's Waves
50 - 200 guests

Family Waves
100 - 2500 guests

Dual Waves
1800 - 3200 guests

Wave River
Hourly throughput varies on length



DUAL WAVES

Chimelong Waterpark, Guangzhou, China



WAVE RIVER

Chimelong Waterpark, Guangzhou, China

Patented Technology
US4999860



KEY FEATURES

- Up to 1.5 m (5 ft) waves
- Pools up to 4,650 m² (50,000 ft²)
- 8 pneumatic wave patterns

- Continuous waves every 1.2 seconds
- Ideal for indoor and outdoor installations
- Dual waves provides simultaneous experiences

CUSTOM DESIGN

Unique water features!

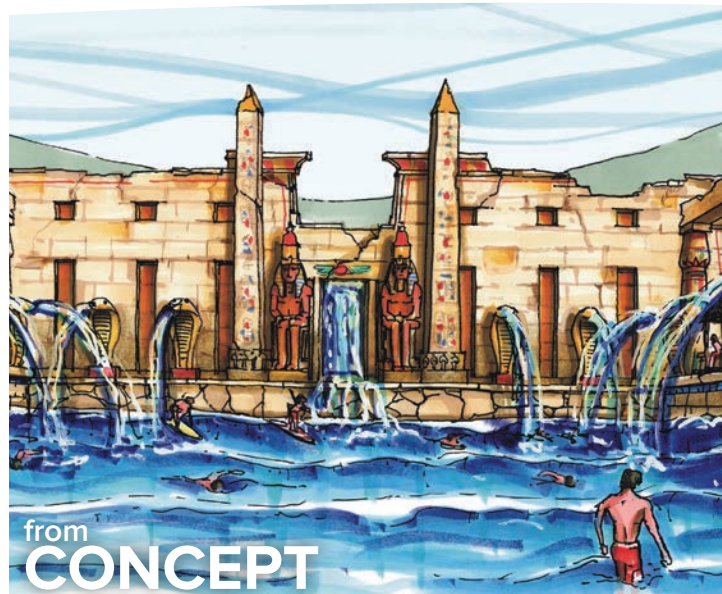
Waves aren't just for waterparks! WhiteWater offers unique wave applications for a variety of facilities. From small ripples to ocean swells, we can turn your idea into a reality.



Engineering the ultimate experiences!

WhiteWater's wave-generating technology has been featured in top waterparks globally.

LEGENDARY WAVES



Original Concept Rendering



Vivaldi Park Ocean World, Gangwon-do, South Korea



WhiteWater's custom waves can be found in:

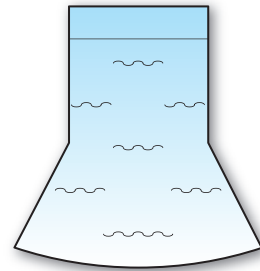
- Aquariums
- Training Pools
- Personal Residences
- Airports
- Casinos
- Museums

World-renowned clients trust WhiteWater as their preferred supplier:

- Falls View Waterpark, Canada
- Valley of the Waves, South Africa
- Jade Gardens Waterpark, India
- Aqua Sferra Waterpark, Ukraine
- Ibom Tropicana, Nigeria
- Yas Waterworld, UAE
- Waterbom Jakarta, Indonesia
- Chimelong Waterpark, China
- Lotte Gimhae Kimhae Waterpark, Korea
- Sunway Lagoon, Malaysia
- Discovery World Waterpark, Taiwan
- Disney's Typhoon Lagoon, USA
- Six Flags, USA
- Saad Group of Companies, Saudi Arabia
- Schlitterbahn, USA
- Atlantis The Palm, Dubai
- Vivaldi Park Ocean World, Korea
- Mt. Olympus Water & Theme Park, USA
- Space World, Japan
- Paradise Island Waterpark, China
- Aqualand Waterpark, Greece
- Bali Waterpark, China
- Samsung Everland Caribbean Bay, S.Korea
- ...and many, many more.

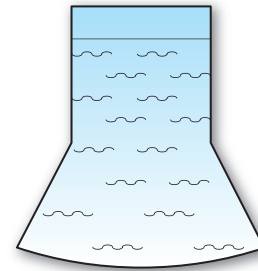
WAVE PATTERNS

Never a dull moment! Change the wave pattern with the touch of a button for a different wave experience within seconds. Each wave pattern has a different intensity depending on the wave's path, delivering the ultimate operational flexibility.



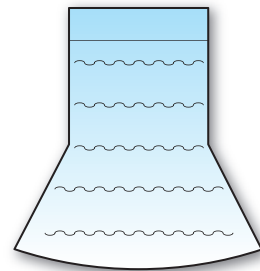
DIAMOND 1

Wave Intensity: Moderate to High
Surges of water push floating guests around on a bumpy sea.



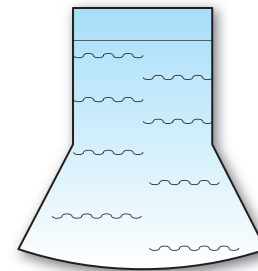
DIAMOND 2

Wave Intensity: High
Waves build on each other, creating large ocean-like swells.
The Diamond 2 pattern creates sloshing waves that feel unpredictable.



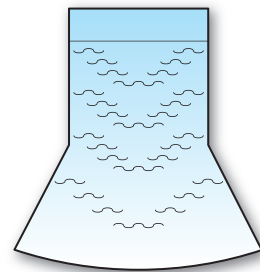
PARALLEL

Wave Intensity: Low
Constant and steady flowing waves, the Parallel pattern creates a continuous stream of breaking waves.



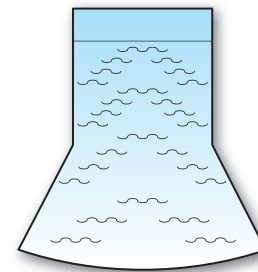
HALF PARALLEL

Wave Intensity: Moderate
Add unpredictability to the waves, as the two sides of the pool are slightly off sync.



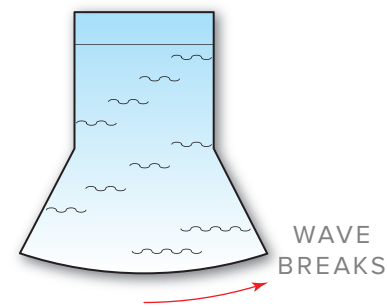
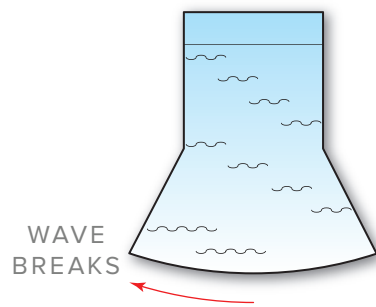
VEE

Wave Intensity: Moderate
A steady formation of waves that build from the outer edges to the centre. Larger wave crests form in the middle of the pool.



INVERTED VEE

Wave Intensity: Moderate
A steady formation of waves that build from the centre to the outer edges of the pool. Larger wave crests form along the side walls of the pool.



LEFT OR RIGHT DIAGONAL

Wave Intensity: High
Waves build along the wall where they break creating high waves. Can be used for beginner surf training.
Use directional waves to avoid high impact onto an AquaPlay™ or other pool features, if incorporated.



	Instantaneous Capacity	Hourly Throughput	Pool Size	Wave Height	Wave Frequency	Wave System	Cost
Surf Waves	3200 - 5900	N/A	Up to 13,000 m ² (140,000 ft ²)	Up to 3.5 m (11.5 ft)	20 - 90 seconds	Hydraulic Pneumatic Combo	\$\$\$\$
Family Waves	100 - 2500	N/A	Up to 4,650 m ² (50,000 ft ²)	Up to 1.5 m (5 ft)	2.8 seconds	Pneumatic	\$\$\$
Dual Waves	1800 - 3200	N/A	Up to 6,000 m ² (64,000 ft ²)	Up to 3.5 m (11.5 ft)	2 - 60 seconds	Pneumatic	\$\$\$\$
Children's Waves	50 - 200	N/A	Up to 230 m ² (2444 ft ²)	Up to 1.5 m (5 ft)	2 seconds	Pneumatic	\$\$
Extreme River	N/A	12,000	Varies on river path	Up to 1 m (3 ft)	15-20 seconds	Hydraulic	\$\$\$\$
Wave River	N/A	Varies on length	Varies on river path	Up to 0.6 m (2 ft)	2.8 seconds	Pneumatic	\$\$

What is the usual power consumption of a wave pool?

The power consumption of a wave pool depends on the size of the pool. Typical power consumption can range from 25 kW to 600 kW.

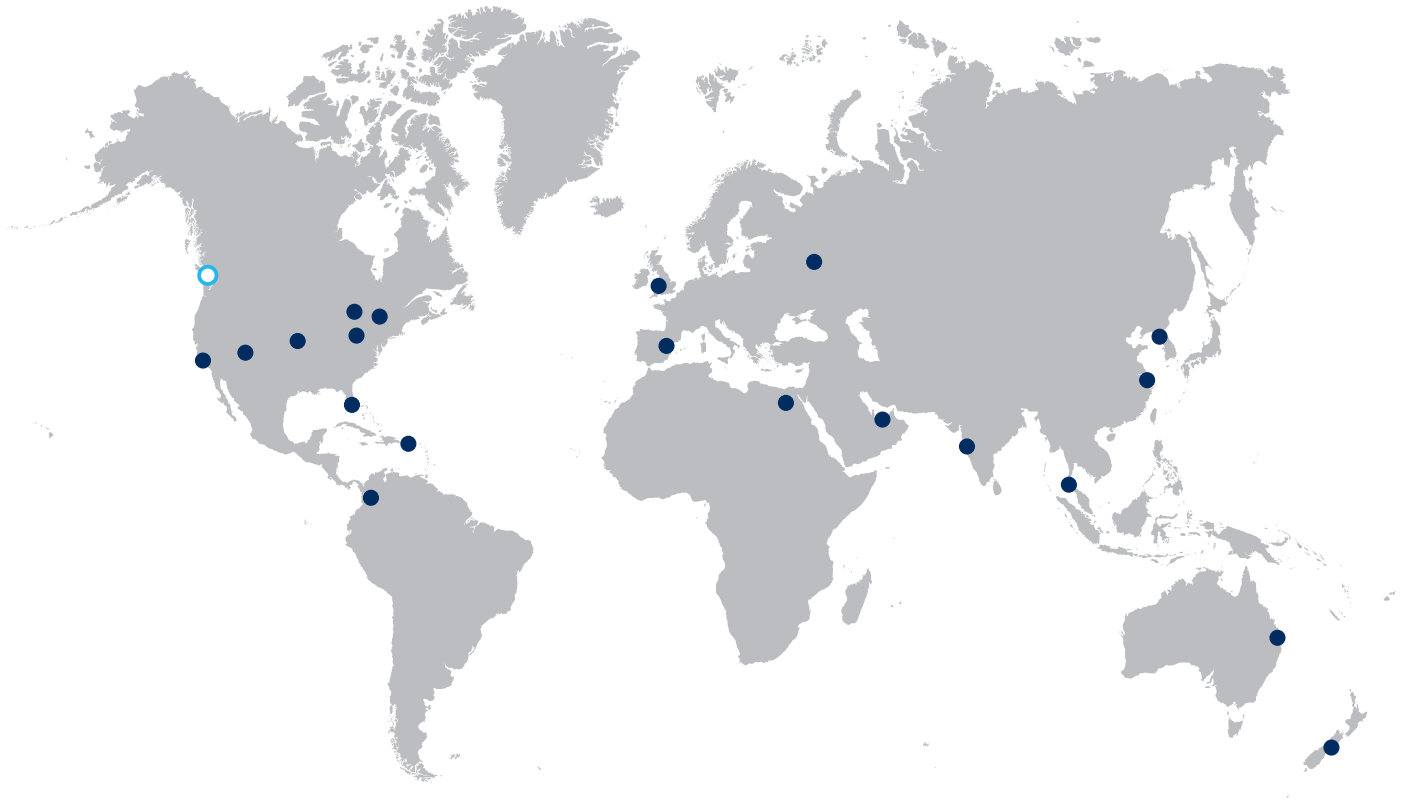
How do WhiteWater's waves use less power?

The patented system uses a common distribution channel so any combination of the four main pumps can supply water to all of the wave chambers that produce waves. Easily adjustable, parks can save money on power consumption by operating their pool with a single pump on a slow day or all four pumps on high capacity days.

How do WhiteWater's pools and rivers use less water?

Our pools are designed to minimize splash out and eliminate wasted water.

WhiteWater is the world's largest designer and manufacturer of a diverse range of ORIGINAL products for the waterpark and attractions industry. We specialize in high quality waterslides, multi-level water play structures, wave-generating equipment, FlowRider® stationary surfing machines, harnessed attractions, interactive play and water rides. With reliable customer service representatives dedicated to each stage of the project, WhiteWater is the industry leader in concept to completion project execution.



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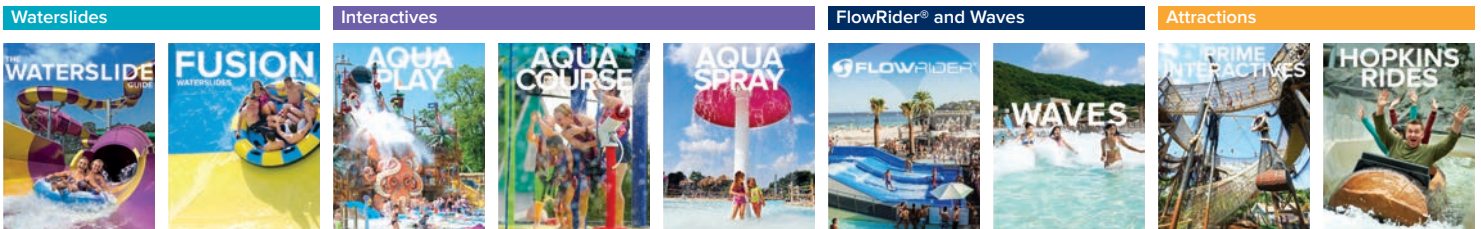
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