

WAVES



SURF-AIR MOBILE ATTRACTION

TECHNICAL SPECIFICATION



Prepared For

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INTRODUCTION

Murphys Waves Ltd are world leaders in all aspects of wave generation for the leisure industry, from small pneumatic wave pools, to mega surf pools and our growing range of standing wave rides, which includes our Stingray, Manta Ray, and Boardrider products.

As this market sector becomes more established, clients' expectations are growing in terms of performance and safety. Our existing products have all been engineered with safety being paramount and all have soft padded ride surfaces and adjustable flow to ensure safety for all users.

Looking ahead to the future, we wanted to develop a range of smaller standing wave rides, more suitable for young children and felt that existing technology could be restrictive. As a result, we have developed and applied for patents for a new range of standing wave products that use low pressure inflatable technology where the actual ride surface, wave, and surrounding areas utilise a low impact inflatable structure. Not only does this offer performance benefits but it also means that assembly time for the ride is dramatically reduced and in most cases there will be no need for civil works; at the very most only a simple concrete slab may be required, no excavation or concrete tanks below ground.

The unit comes complete with its own ISO rated custom converted shipping container equipment room that houses the pumps, nozzles, electrical control panels and even the filtration equipment! The ride area is fixed to the plant room and is then quickly inflated to provide not only the ride, but also the water reservoir below; the system really is "plug & play".

As with all of our products, we have the clients' best interests at heart with regards to ongoing maintenance, so again we have designed a ride that has no submersible pumps with their associated high maintenance costs. We use conventional pumps within our dry plant room and these require minimal servicing. Any work that does need to be done can be carried out by the in-house engineer.

We also offer accessories to the Surf-Air range, such as inflatable access structures should these be required, special low impact surf & body boards, and the ride can be customised to include customer or sponsor logos.

Note

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The Stingray name and logo is a registered trade mark of Murphy's Waves Ltd and may not be reproduced without explicit consent of the owner.



SURF-AIR BENEFITS

- Surf-Air is a world first, the first truly turnkey self-contained surfing ride!! **NO EXPENSIVE CONSTRUCTIONS WORKS**, no additional filtration equipment. Just Plug and Play!!
- Surf-Air is mobile! The quick and easy setup means that operators can take surfing on-the-road and off-road...taking the surf to the people for the first time!
- Riders can carve, ride, & turn on a thin flow of water in complete safety and are able to improve their skills as they enjoy graduating through the various flow settings.
- Surf-Air has been designed to appeal to the maximum range of users
- Both the velocity and flow are adjustable throughout a very wide range meaning that the ride is suitable for all ages and skill levels.
- The new and adjustable nature of Surf-Air means that riders will continue to come back and use the ride so that they can improve their skills – unlike water slides or other attractions where it is impossible to improve on the ride experience.
- Surf-Air has high capacity and a high spectator factor.
- Surf-Air has been specifically designed for younger children with safety of paramount important.
- Surf-Air allows branded retail and food & beverage to enjoy increased sales due to its high usage and spectator capacity.
- Surf-Air is manufactured from very high quality & proven materials throughout and as such it is suitable for a long unprotected life in a swimming pool environment with low maintenance
- Conventional “dry” plantroom and pumps.....**NO EXPENSIVE MAINTENANCE PROGRAM !!**
- The pumps are controlled by inverters allowing the power consumption to be tuned to suit operating conditions
- Murphys Waves Buy & Operate Policy...No crazy contracts, no special licenses !!



Portable Surf Air – 20ft Container



EQUIPMENT PACKAGE INCLUDES

- 4 Off 45kW (60/50Hz) Grundfos pumps
- 4 Off Danfoss Inverter Variable Speed Drives
- 4 Off “Waves” Flow direction nozzles
- 1 Off Main control panel with manual & auto functions
- 1 Off Remote panel with adjustable flow control
- 1 Off “Waves” Custom Low Pressure “Drop Thread” Ride Structure
- 1 Off “Waves” Custom 20ft ISO Converted Shipping Container Plantroom
- 1 Off “Waves” Custom Dewatering matting
- 2 Off Air Blower with automatic pressure sensor
- 1 Off AstralPool Atlas Sand Filter
- 1 Off AstralPool Filtration Pump – 0.61kW
- 1 Off AstralPool Dosing Unit
- 1 Off AstralPool Electric Heater – 18kW
- 1 Off Set of uPVC filtration pipework & fittings
- 1 Off Set of fixings required for the Stingray installation & assembly
- 3 Off Detailed operating and maintenance manuals

Also Included Are: ~

Packing: Sea Worthy Packaging & Shipping Containers

Shipping: DDU shipping direct to the project site

Hotel & Flight Costs: No extra fees to pay for our staff

Installation supervision: Our staff for up to 10 days

Training: Full training for the operational staff

Two Years Warranty: Complete piece of mind

FREE Murphys Waves Starter Pack: 10 x StingRay Boards, t-shirts & protective gear



Surf-Air Technical Equipment & Container



DRAWINGS & DESIGN

We will assist in the design development of the project by providing any technical information and drawings that may be required by the design team or client. We will supply the following drawings: ~

- Overall dimensions of the Surf-Air, including any civil works that may be required.
- Pump drawings
- Equipment layout
- Electrical connections – available on manufacture of the Surf-Air

INSTALLATION & COMMISSIONING

The Surf-Air will come complete with a step-by-step installation guide to allow quick and easy assembly by your own team.

As the first truly “Plug & Play” ride on the market, we will also provide remote guidance on commissioning and start up.

MANUALS & GENERATOR SERVICE

We will supply three copies of our operating and maintenance manuals (in English) to the client on completion of the commissioning. The manual will also detail the routine maintenance that should be carried out to the wave generator.

As part of our after care service we are pleased to offer an annual service contract. This is normally undertaken at the start of the season to ensure the smooth operation of the generator, and that the Stingray is tuned to peak performance.



Surf- Air Inflatable Ride Surface



CUSTOMER SATISFACTION **AND GUARANTEE**

At Murphy's Waves Ltd all of our attractions come complete with a comprehensive guarantee for complete peace of mind. The warranty period will last for a period of two years from the 'hand over' date (subject to all payments having been received) and covers the replacement of all faulty components supplied by us as part of the contract.

In the unlikely event of a mechanical failure, Murphy's Waves Ltd will replace any faulty parts within a maximum period of 72hrs from notification (larger items may take longer). This may include parts being sourced locally and sent directly to site or a replacement part being sent from our factory by over night express courier. In the event that a failure cannot be repaired, Murphy's Waves Ltd will dispatch an engineer to action repair work.

Customer care is extremely important to us and we take great pride in having a 100% customer satisfaction policy. Should any customer be unhappy with the quality of equipment or service received then we would kindly request that the complaint is brought to our attention immediately in order that we can effect the appropriate action. As part of our ongoing Quality Control Audit each client will be asked to complete a Customer Satisfaction Questionnaire at the end of the warranty period. We would be grateful if you could spend a few moments to complete the questionnaire and return it to our head office.



"Thank you for choosing Murphy's Waves Ltd"