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# SwimEx: Advancement in Hydrotherapy Technology

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# SwimEx: Advancement in Hydrotherapy Technology



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## What is the SwimEx?

The SwimEx is a revolutionary, aquatic, multifunctional pool that can be used for physical therapy, rehabilitation and sports conditioning, among other applications. The SwimEx is a fiber glass swimming pool that utilizes motors and paddles to draw in water from the surface and send it back into the pool. This helps to create a steady, deep current.

## Brief History

- Created by fiber glass pioneer Everett Pearson
- Combined patented paddle wheel motor with years of fiber glass experience

## What are the different types of Equipment?

• Used to help increase cardiovascular fitness, muscular strength and muscular endurance

### Aqua Bike

- Useful for patients with injuries to:
  - Hamstrings
  - Quadriceps
  - Gastrocnemius



### Aquatic Ellipse

- Useful for patients with injuries to:
  - Gluteus Muscle Group
  - Gastrocnemius
  - Hamstrings
  - Quadriceps



### Aquatic Recliner

- Benefits to using this equipment:
  - Complete immersion causes whole body to work in unison
  - Low impact forces generated
- Useful for patients coming back from knee surgery
- Helps to precondition the knee ligament



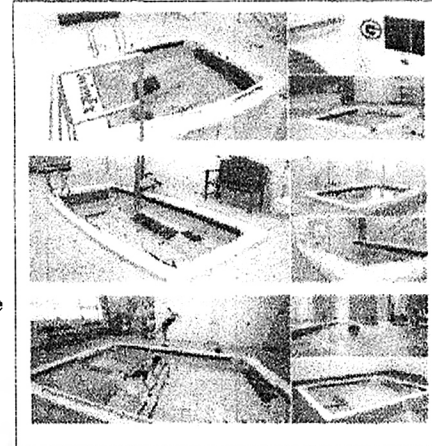
### SPT Underwater Treadmill

- Benefits to using this equipment:
  - Low impact forces generated
  - Low weight being exerted to injured limb
- Useful for patients with injuries to:
  - Knee ligaments
  - Ankle ligaments



## What are some advantages to using the SwimEx?

- Allows athletes to begin rehabilitation faster
  - Allows for a quicker recovery and return to participation rate
- Athletes can perform wide variety of rehabilitation exercises
  - Non-weight bearing exercises
  - Gate corrective exercises
  - Resistance exercises
- Variable sizes for different locations
  - Compact size (7'7" x 13'7" x 5'10")
    - Utilized in a limited area of space
    - Athletic training setting
  - Standard size (7'8" 17'6" x 5')
  - Physical therapy setting
- Largest size (11'5" x 21' x 7')
- Utilized in a very large area of space
  - Large hospital setting
  - Large physical therapy setting
- Low maintenance
  - Reliable motor equipment
  - Durable fiber glass hull



## What are some disadvantages to using the SwimEx?

- Costly investment
  - \$37,000 to \$45,000
  - Top of the line model costing up to \$95,000
- Setting necessities
  - Water lines in and out
  - Electrical lines with a GFCI (Grounded Fault Circuit Interrupter)
  - Available space for equipment

## What types of programs can be conducted in the SwimEx?

- Rehabilitation Programs
  - Aid in proprioception, balance, little weight-bearing movements
- Resistance Training
  - Foam dumbbells
  - Working against different water currents (short to moderate amount of time)
- Endurance Training
  - Working against different water currents (elongated amount of time)
  - Utilizing stationary equipment
- Assisted living center
  - Helps get elderly up and moving without exerting too much pressure on joints
- Veterinary Hospitals
  - Teaching rescue animals to swim against variable currents
  - Keeping up animals cardiovascular fitness while injured

