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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 recondition 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'
    • Utilized in a moderate area of space
    • 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