

Hubbard Tank and Exercise Pool

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Hubbard Tank

Overview

- Named after the inventor.
- Large whirlpool for full-body immersion.
- Dimensions: ~8 ft length × 6 ft width × 4 ft depth.
- Equipped with turbines, stretcher, and hoist for patient handling.

Uses

- Debridement of burns covering large areas.
- Treatment of painful conditions affecting large body areas.
- Range of Motion (ROM) exercises and ambulation.
- Rules & Principles
- Water temperature: 36°C to 39°C for safety.
- Tanks must be cleaned between uses like other whirlpools.

Advantages

- Treats large or multiple areas of the body.
- Useful for heat transfer, wound cleaning, water exercises, and ambulation training.
- Disadvantages
- High cost and space requirements.
- Large amounts of warm water needed.
- Time-consuming setup and cleaning.

Risks: overheating (hypotension, fainting), and drowning.

Exercise Pool

Overview

Allows full-body immersion for exercises, enhancing cardiovascular, respiratory, renal, and psychological health.

Optimizes musculoskeletal benefits of hydrotherapy.

Typical pool dimensions: 100 ft length × 25 ft width, 8 ft maximum depth with a sloping bottom.

Purpose-designed hydrotherapy pools are smaller, sometimes equipped with underwater treadmills and adjustable water flow.

Temperature Guidelines

26°C to 28°C: Suitable for intense exercise, dissipates heat, reduces fatigue.

34°C to 36°C: Suitable for low-intensity activities (e.g., elderly or arthritis patients), conserving body heat.

Advantages

Free movement with reduced fall risk.

Decreases joint weight-bearing.

Buoyancy aids weak muscles for active exercises.

Precautions & Disadvantages

Precautions:

Slippery floors around the pool.

Risk of infection during group therapy.

Disadvantages:

Difficulty isolating body parts during exercises.

Risks of drowning and fear of immersion in some patients.

Safety Precautions and Infection Control

General Safety

Tanks should be grounded; turbines must have hospital-grade plugs.

Regular inspections for wiring/insulation issues.

Maintain room temperature (25°C to 30°C) and 50% relative humidity.

Non-slip surfaces and clear safety regulations in pool areas.

Infection Control

Add antimicrobials to water to reduce microorganism growth.

Adhere to cleaning protocols; wear protective gear during cleaning.

Clean, rinse, and scrub tanks after each use.

For more notes visit:

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