

# Aquari<sup>™</sup>

Immersion Simulation System





# Pressure Injury Prevention with Immersion Simulation

**Aquari™** Immersion Simulation is a support surface system that engages surgical patients in an immersive and 3-dimensional manner to maintain tissue symmetry, perfusion and minimize pressure injury risk.

## Adjusts to individual anthropometric profile

Aquari analyzes the pressure waveform generated by the patient when sinking into the surface, then precisely adjusts the air density in the pad to simulate immersion in a fluid medium.

As a result, the Aquari technology not only delivers better outcomes\* for patients undergoing surgery, but also addresses broader challenges associated with pressure injuries such as readmission rates and extended length of stay.\*\*

\*Mass General Quality Improvement Project

\*\*NPIAP PI Fact Sheet



Real-time analysis precisely adjusts the surface for each patient's unique 3D anatomical features



- Normalizes tissue symmetry and perfusion
- 3-dimensional envelopment
- Proven clinical pressure injury reduction



# Delivering Better Outcomes

Perioperative pressure injury prevalence rates for certain high risk surgery such as orthopedics are as high as an astonishing 55%. The true cost of a pressure injury is measured in patient suffering, litigation, increased length of hospital stay and the associated cost.

The Aquari is a successful approach because it is based on a simple notion: Rather than the body being forced to conform to a surface, the surface conforms to the body.



## How It Works

Aquari dynamically changes the molecular density of the air in the surface in response to patient load. This creates true 3-dimensional envelopment to maintain blood flow and tissue perfusion by evenly redistributing pressure. The result? Minimize high pressure points, reducing tissue deformation and contribute to pressure injury reduction.



3-Dimensional  
Envelopment



Neutral Buoyancy  
Simulation

# Surface Conforms To The Body

Aquari combination of immersion and envelopment benefits the patient by:

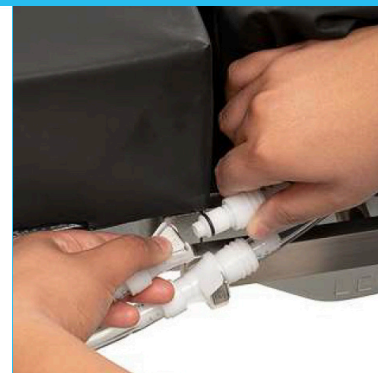
- Minimizing vascular occlusion, maintaining near normal blood flow
- Decreasing tissue ischemia
- Reducing soft tissue distortion from pressure and shear
- Maintaining near normal tissue symmetry
- Compatible with most positioning and warming devices
- Improving patient comfort



# Features

With a variety of unique features the Aquari Immersion Simulation System is an optimal solution for patients with high risk for pressure injuries.

- Integrated battery backup allows a procedure to be completed in the event of a power failure
- Integrated brackets on the back of the controller and 9' (274 cm) tubing length offers convenient positioning anywhere on the side rail or on the floor
- Intuitive controls allow for simple selection to match patient's body habitus
- Simple and intuitive click in place connectors make set-up of surface pads and controller a snap
- Visual display confirms optimal immersion of the patient
- Aquari automatically adjusts to immerse and envelop the patient



# Specifications & Components



## Specifications

### Immersion Controller

Weight	10 lbs. (5 kg)
Dimensions	11.5" (29 cm) W x 12.5" (32 cm) H x 6" (15 cm) D
Display	LED backlit 10-point multi-touch
Battery Life	Minimum: ~ 30 minutes (without AC power) Maximum: ~ 6 hours (without AC power) Recharge Time: ~ 15 hours (from fully depleted)

### Hose/Tubing

Length	9 ft. (274 cm) two-line hookup
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### Surface Pads

Designed for various general surgical tables.  
Available for most table models including:

Skytron®  
Steris®  
Stryker®/Berchtold®  
HillRom®/Trumpf  
Maquet/Getinge

## Supported Procedures

Aquari may be used for any surgical procedure performed on a general surgical table. Best suited for long procedures and for patients at risk for pressure injuries.

Cardiovascular, vascular, plastics, urology, bariatrics, transplant, neurosurgery, general and gastrointestinal.

## Ordering Information

**REF** 246AQI      Aquari Immersion Controller

### Aquari Surface 3-Piece Pad Sets

Includes: Head, Torso and Foot sections unless otherwise noted and Aquari Tubing Set.

#### Steris

246-3080	3080 and 3085
246-4085	4085 and 5085
246-5085SRT	5085 SRT

#### Skytron

246-3502	3501B, 3501C, 3502, 3602 and 3600B
246-3603	3603
246-6702	6700, 6700B, 6700 and 6702
246-3500	3500
246-6302	6300 and 6302
246-6500	6002, 6500, 6500HD, 6600 and 6600B

#### Stryker/Berchtold Operon

246-D850S	D820, D830, D750, D850 and D860 (Short Foot 21")
246-D850R	D820, D830, D750, D850 and D860 (Long Foot 24")
246-B810SF	B810 (Short Foot 21")

#### Trumpf

246-7000	7000
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#### Pediatric

246-PEDIHEART	One-piece (29.5" x 16" x 3.5")
246-INFANT	One-piece (30" x 12" x 3.5")

**Don't see your general surgery table model listed here?  
Mizuho OSI is continually updating and adding models.**

mizuhosi.com

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Note: Mizuho OSI is constantly improving its products. All specifications are subject to change without notice. Mizuho OSI is a Delaware Corporation.

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