



IMPROVE PATIENT CARE WITH OUR NEW HIGHLY BREATHABLE PRODUCTS

NEW AND IMPROVED HOVERMATT SPU

The HoverMatt® Single-Patient Use (SPU) Air Assisted Transfer Device is constructed of non-woven polypropylene fiber on the top and nylon fabric on the bottom.

Breathable top layer: wicks away moisture from patient's skin



New nylon has higher MVTR: quicker moisture evaporation

Q2ROLLER®

Breathable Q2Roller fabric :

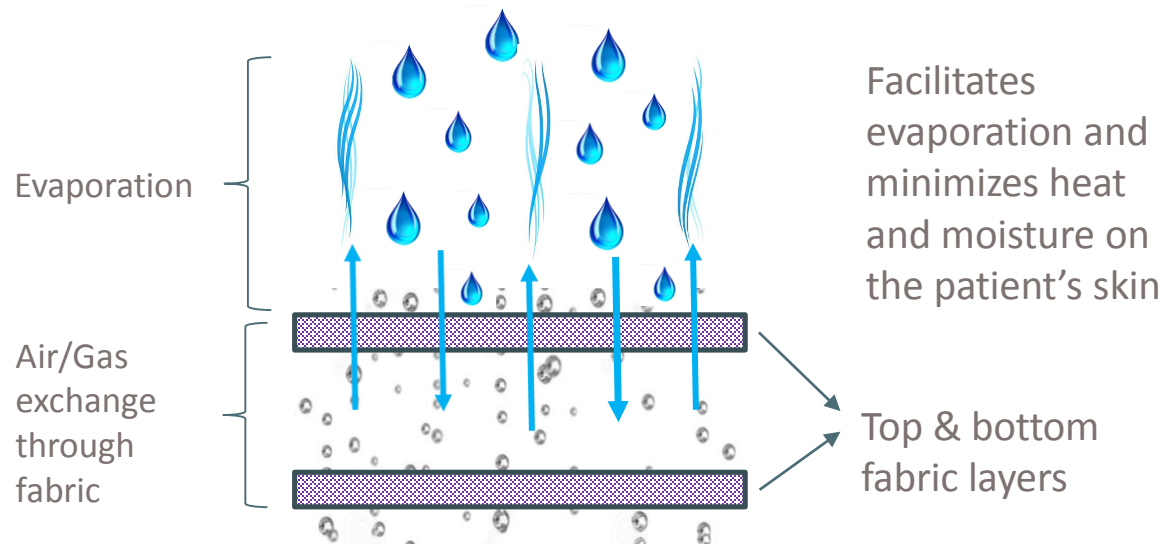
- Increases air circulation and evaporation under the patient.
- Evaporation reduces heat and moisture on the patient's skin which greatly decreases the potential for pressure injuries.



The dual chamber design and immersive properties allow for pressure reduction on both sides of the patient.

- Inflation causes a single layer.
- During patient repositioning, ambient air is added to the device. This air exchange creates an optimal microclimate.

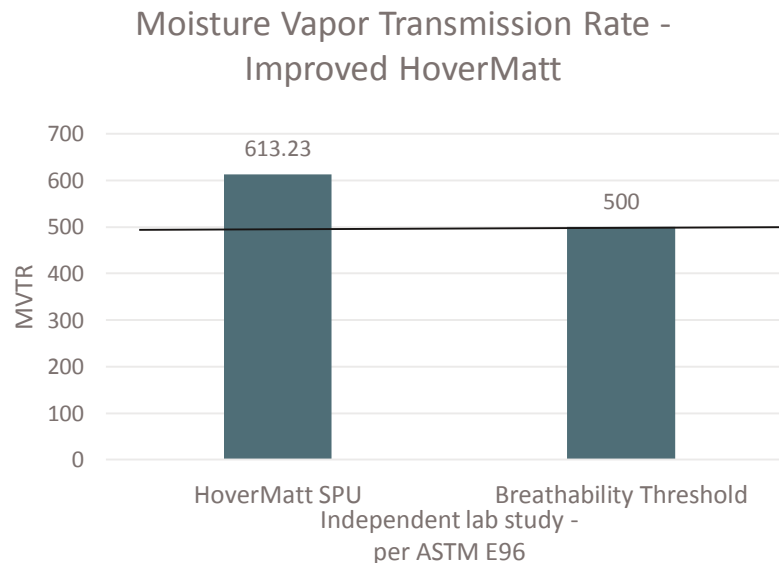
A BREATHABLE DEVICE CREATES OPTIMAL MICROCLIMATE



Breathable fabric allows air to circulate under the patient and evaporation to take place. These highly evaporative properties will help facilitate the reduction of heat and moisture on the patient's skin, greatly reducing the potential for pressure injuries.

BREATHABILITY

- Breathability: the ability of a fabric to allow moisture vapor to be transmitted through the material = Moisture Vapor Transmission Rate (MVTR). The higher the MVTR, the more breathable the fabric.
- The improved nylon on the HoverMatt SPU has been tested by an independent lab using the B method* per ASTM E96, and has one of the highest MVTR currently available on the market. The entry threshold for breathable applications is 500 g/m²/day.
- The new HoverMatt SPU MVTR is 613.23 g/m²/day.



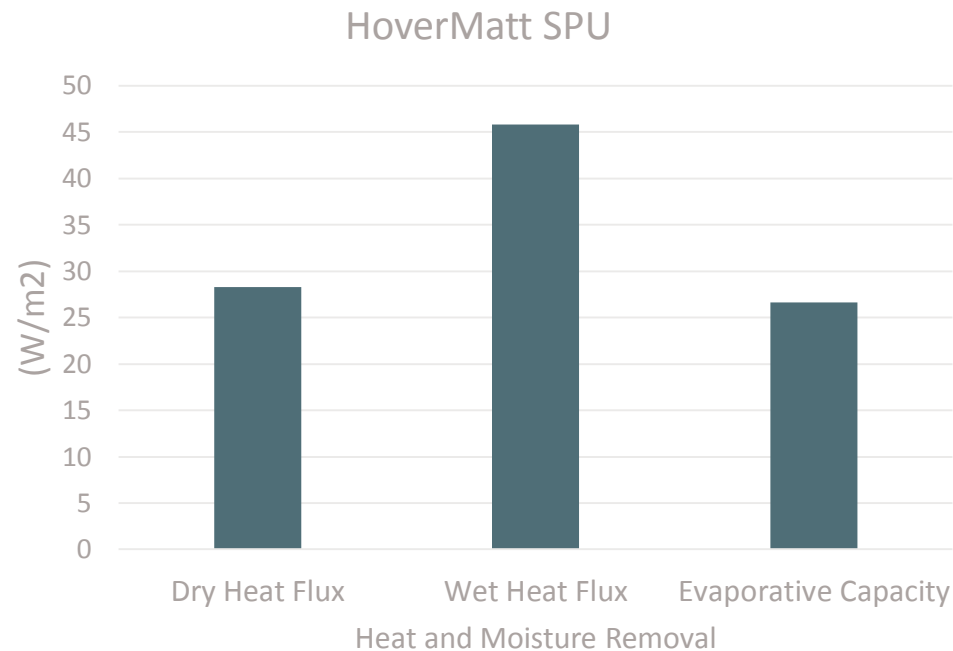
The improved HoverMatt SPU material is 23% above the entry threshold for breathability.

*B method (open cup) is the chosen testing method that best replicates a patient lying in bed with normal perspiration/MVT.

WHAT IS MICROCLIMATE?

- The local tissue temperature and moisture (relative humidity) at the body/support surface interface
- Breathable fabric means that the outermost layer that is touching the patient allows for evaporation
- Evaporation disperses the heat and moisture on the patient's skin

MICROCLIMATE RESULTS



Dry Heat Flux = heat dissipates through convection and conduction

Wet Heat Flux = moisture transferred from skin to environment

Evaporative Capacity = heat transferred from skin to environment

HOVERTECH USES INDEPENDENT LAB, EC SERVICES, TO CONDUCT LATEST INDUSTRY STANDARD TESTING

SELECT EC LAB CLIENTS

Ehob	Molnlycke
Getinge Group	Recover Care
Hill Rom	Sage Products
Huntleigh Healthcare	Stryker Medical
Inteli Bed	Gaymar Industries
Invacare	Sunrise Medical
Joerns	TempurPedic
The Roho Group	AliMed, Inc.

IMMERSION TESTING

Immersion Testing: measures pressure at the interface using an indenter, rather than a pressure map. It is a more detailed and uniform way to test products when compared to pressure mapping studies.

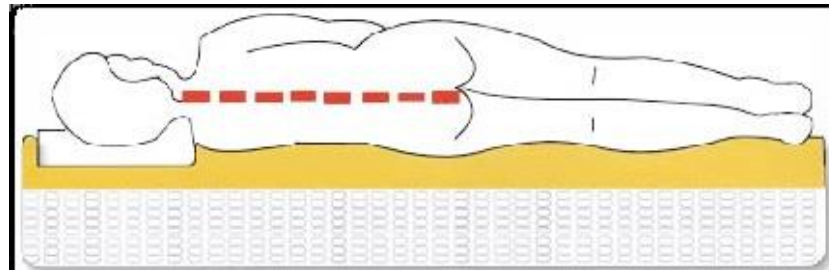
Currently, there are no standards for pressure mapping. Pressure maps fail to deliver validatable results between laboratories (too easy to manipulate the data).

The following products have been independently tested:

- HoverMatt® Single-Patient Use (SPU)
- HoverMatt® SPU with Positioning Wedges
- Q2Roller® Lateral Turning Device

IMMERSION

Immersion testing characterizes the immersive properties of full body support surfaces. The immersive properties of support surfaces defines the potential for pressure redistribution and patient safety.



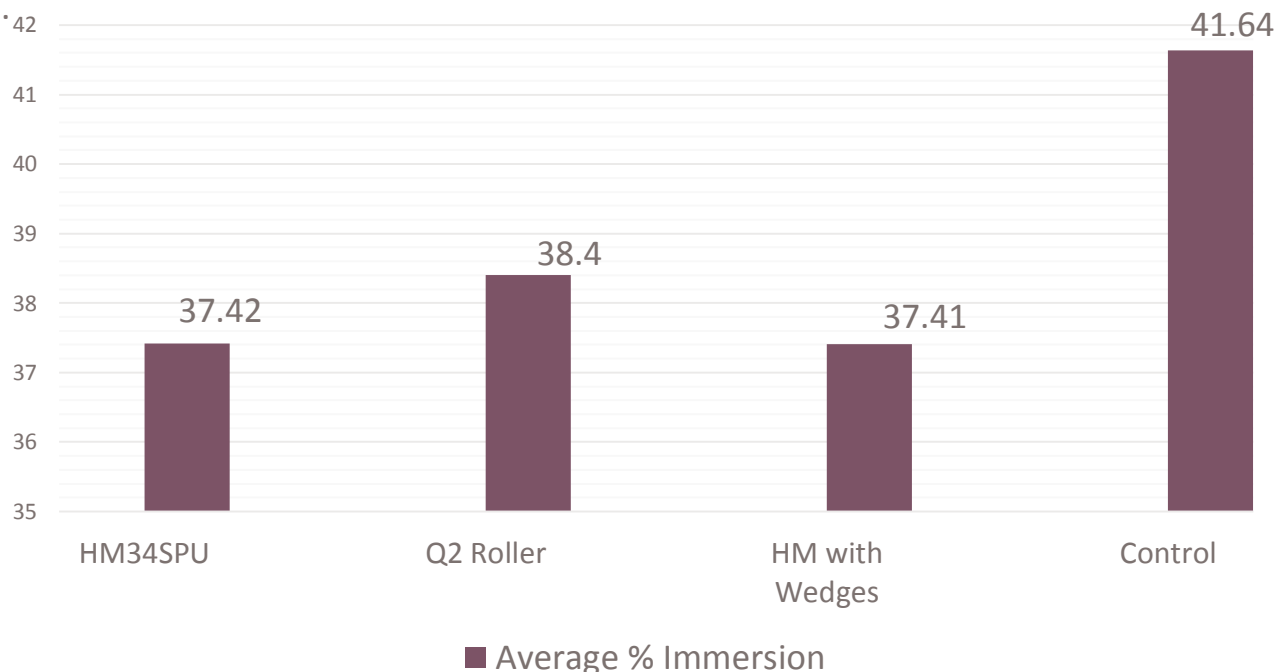
- Maximum immersion reduces pressure injury risk
- Using the HoverMatt with a low impact or LAL surface does not affect the efficacy
- The HoverMatt facilitates egress from a highly immersive surface

2015 National Pressure Ulcer Advisory Panel

IMMERSION* REPORT

The HoverMatt Single-Patient Use, Q2Roller, and HoverMatt SPU with Positioning Wedges were tested by an independent lab for compatibility with a Hill-Rom Synergy Air Elite Mattress with sheet (AKA low air loss surface).

Technical experts from the independent testing lab have concluded that the difference between the control and devices is clinically insignificant and should not interfere with the efficacy of the surface with regard to immersion.



*Immersion is measured by following the Mattress Immersion Test Protocol:

- Condition of the room per ISO standards for temperature and humidity
- U appropriate test apparatus for immersion testing, including the rigid version of the NPUAP 50th percentile test male mannequin
- Using the test bed fixture and pulley system, Adjusting the weight to achieve a mannequin weight of 179 pounds

**Prevalon™ AirTAP Patient Repositioning System is a product of Sage Products

SLIDING RESISTANCE TESTING

The sliding resistance test measures the force required to pull a 50th percentile male mannequin across a support surface. This data is comparable to the shear and bulk modulus forces applied to a bed-bound patient sliding down in bed.

The less work that is required, the less risk there is of skin shearing. Results show a <1% difference between the low air loss surface alone and the low air loss surface with the HoverMatt SPU on top.

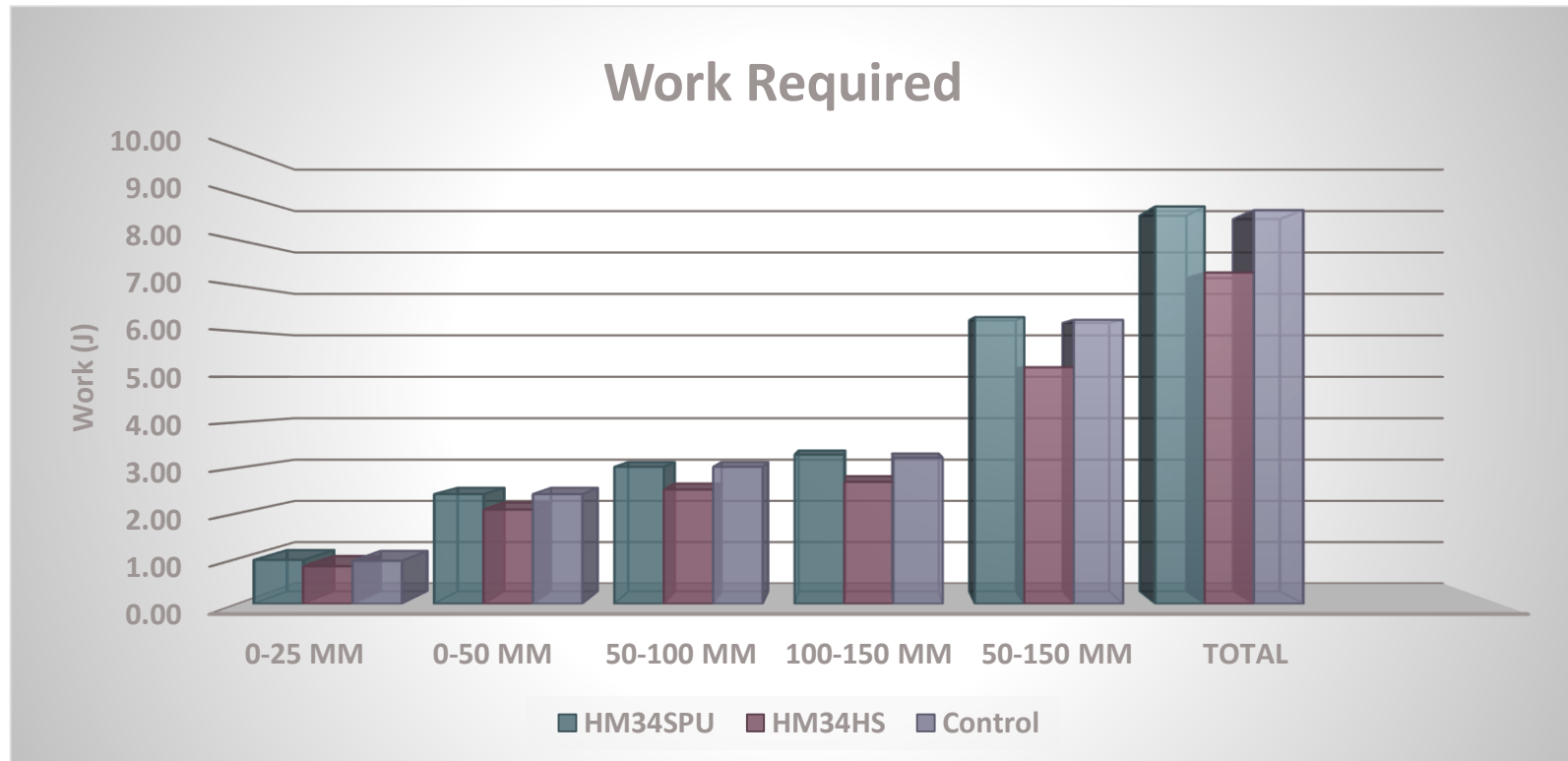
Position of Indenter on HM34SPU



Position of Indenter on HM34HS

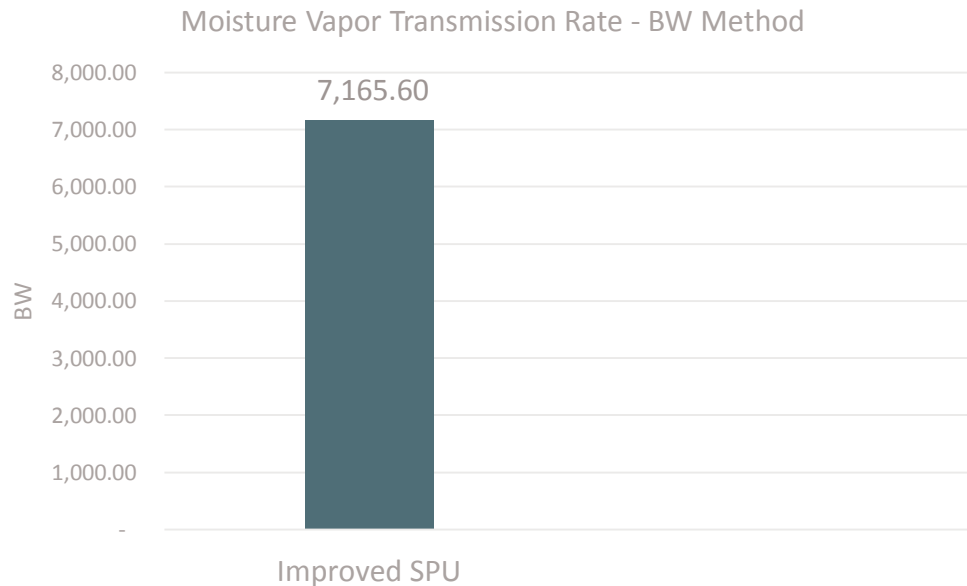


SLIDING RESISTANCE



The results of a <1% difference between the low air loss surface alone and the low air loss surface with the HoverMatt SPU on top proves compatibility.

MVTR – BW TEST METHOD



BW method is the inverted cup method and is used for replicating use under incontinent conditions

CITATIONS

<http://www.pcimag.com/articles/82796-novel-breathable-polyurethane-dispersions>