

Pressure injuries affect majority of users

Each year, up to 120,000 SCI patients that use a wheelchair in the US are diagnosed with a pressure injury.¹ In fact, pressure injuries are so prevalent in the complex rehab technology space that approximately 95% of SCI patients will develop a pressure injury over their lifetime.¹ JAY Clinical Seating's top priority is to mitigate risk factors attributable to seating that leads to these debilitating and costly injuries.

What causes pressure injuries?

Research has shown that a multitude of factors increase the risk of a pressure injury, four risk factors have been identified that are directly correlated to wheelchair seating: pressure, shear, temperature, and moisture. Historically, seating products have focused on reducing the risk of pressure and shear on the seating surface. Increasingly, researchers are finding that temperature plays a significant role in skin breakdown.^{2,3,4,5,6} Charles Lachenbruch found that, "...modest skin cooling (eg, 5°C) might provide the same protective effect as use of a high-end support surface."³

Cryo[®] Fluid technology provides one of the highest degrees of skin protection on the market.



Introducing Cryo[®] Fluid

The Cryo Fluid is a patented revolutionary wheelchair cushion material that actively cools a patient's seated skin surface for up to 8 hours* while evenly distributing pressure, reducing shear, and lowering the risk of moisture. With traditional cushions on the market today, seated skin surface temperatures can rise to 37°C, leading to an increased risk in skin breakdown.^{2,3,4,5,6}

Lowering the skin's temperature as little as 1°C can reduce the risk of skin breakdown significantly.⁶ The Cryo Fluid was engineered to mildly cool the skin within a therapeutic temperature range of 28°C - 35°C, effectively lowering the risk of skin breakdown.^{2,3,6} The cooler skin surface temperature has the added benefit of reducing the likelihood of moisture associated with localised perspiration.

It's time for a cushion that addresses all 4 risks at once

- 1. Pressure** – Cryo Fluid evenly distributes pressure across the seating surface.
- 2. Shear** – 4-way stretch Lycra[®] cover reduces shear forces between the cushion cover and Cryo Fluid insert.
- 3. Temperature** – Cryo Fluid lowers the seated skin temperature into the therapeutic temperature range for up to 8 hours.
- 4. Moisture** – Cooler skin temperatures reduce the likelihood of perspiration on the seated surface.

How Cryo[®] Fluid Works



Heat leaves skin surface, cooling the skin

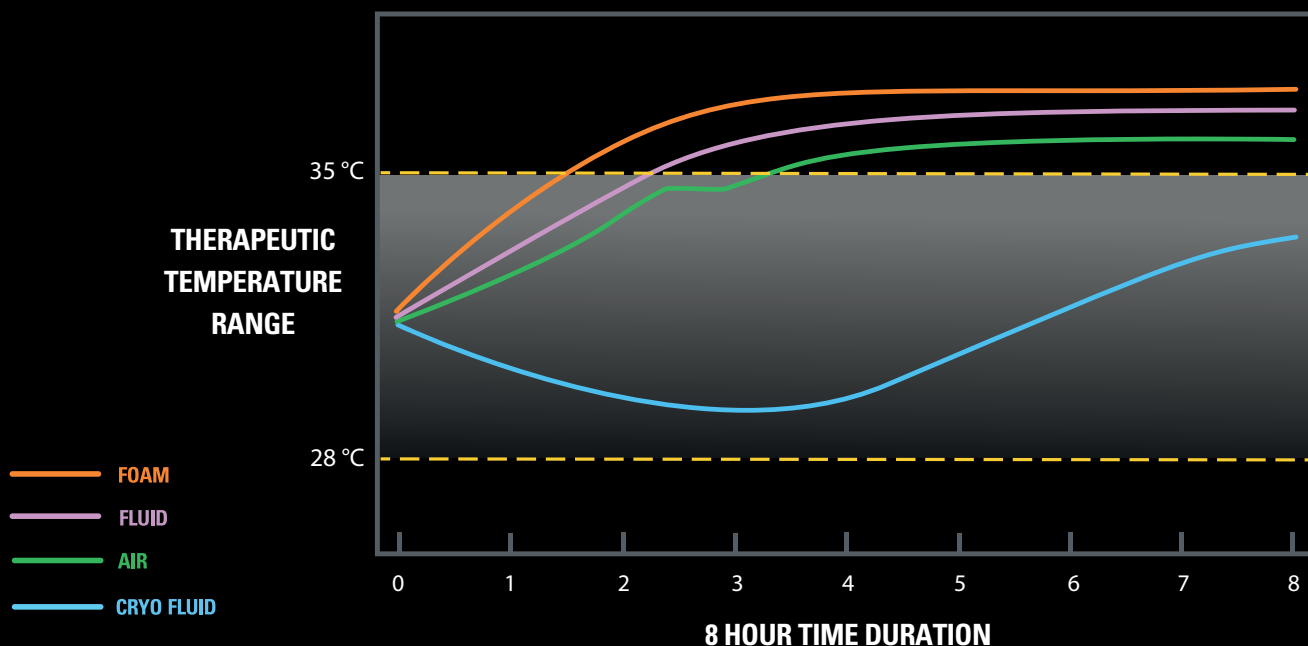
Cryo Fluid features millions of microbeads filled with paraffin wax which melts at a set temperature. Because skin temperature is warmer than the ambient temperature of the Cryo Fluid, heat from the skin is actively transferred into the fluid. This results in a lowering of the seated skin temperature within therapeutic range.



A long lasting effect

In addition to the millions of microbeads, Cryo Fluid also utilises graphite due to its high capacity to effectively disperse heat throughout the fluid. This heat dispersion continues to pull heat from the skin until all microbeads have melted, resulting in a therapeutic cooling effect which can last up to 8 hours*. The Cryo Fluid microbeads will naturally re-solidify after the fluid returns to ambient temperature.

CUSHION COMPARISON ANALYSIS OF SKIN TEMPERATURE



* Internal testing data at 25°C. Results may vary.

JAY Balance with CRYO[®] Fluid



The proven design of the JAY Balance cushion is now also available with the revolutionary Cryo Fluid. Create your own Balance cushion which fits your needs. Choose between different inserts, positioning components & covers and get the highest skin protection level with the maximum stability and comfort.

Inserts

The insert is the central piece of the cushion as it envelops the prominent bony areas of the pelvic, maximising pressure distribution and maintaining skin integrity. The JAY Balance is available with Cryo Fluid, JAY Flow Fluid or air insert.

Positioning Components

With the optional positioning components the pelvic and thighs can be properly positioned for many clinical applications.

Dual-Cover System

For convenience and protection, the JAY Balance features a dual-cover system. The innovative cover technology of an inner and outer cover balances the requirements of a good microclimate and an effective incontinence management. There are three different covers available: microclimatic, incontinence and stretch.



JAY Balance with Cryo Fluid

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 **JAY**[®]

CRYO[®] FLUID

