

Article from "*The Manufacturer*" August 2003

By : Bernie Sheehan

**SPORT IS WHERE DJ ORTHOPEDICS' BEGINNINGS LIE AND IT EPITOMIZES THE COMPANY'S ATTITUDE TOWARDS EVERYDAY BUSINESS, WHERE TEAM WORK IS THE KEY**

Now a global orthopedic sports medicine company, dj Orthopedics started out in 1978 from the garage of Mark Nordquist, a Philadelphia Eagles football player. Nordquist had been using an old inner tube around his unstable knee for support but, teaming up with two friends, he started to explore the possibilities of fashioning joint supports from surfing wetsuits. The first products for the company (then named simply DonJoy after two of the men's wives, Donna and Joy) were "knee sleeves" constructed from old neoprene wetsuits. This innovative concept, attracted interest and the company soon embarked on a research and engineering program that would advance the world of bracing.

Today, dj Orthopedics is a multi-million dollar international manufacturer of key segments of sports and orthopedic bracing. Headquartered in Vista, California, the company offers a state-of-the-art research facility and an extensive international distribution network serving more than 44 countries worldwide. It specializes in the design, manufacture, and marketing of surgical and non-surgical products and services for repairing, regenerating, and rehabilitating soft tissue and bone, helping to protect against injury, and treating osteoarthritis of the knee. With its beginnings tied to professional sports, dj Orthopedics has a history of outfitting world-class athletes, and it is the official medical supplier and exclusive knee-brace provider for the US ski and snowboard teams.

In 1987, DonJoy was purchased by Smith & Nephew Inc., and ProCare was acquired in 1995. The unification of the two product lines brought about a concentration of research energies and turned 1998 into a banner year. Then known as the Bracing and Support Systems division of Smith & Nephew, the company launched four key products: Defiance, the number-one selling functional knee brace, was further improved with increased durability and a wide range of new colors and unique patterns; Opal catered to the functional and aesthetic needs of the osteoarthritis patient; Trom, with its total range of motion, was designed exclusively for rehabilitative purposes; and the Drytex product line was extended to include four new wraparound products and a sized ankle sleeve.

In the meantime, dj Orthopedics' Office Care soft goods inventory and billing system began assisting orthopedic practitioners by handling all paper work, stock monitoring, order fulfillment, and billing for a variety of orthopedic products from top manufacturers.

In 1999, Chase Capital Partners (CCP), Fairfield Chase Medical Partners, and senior management acquired the company, which changed its name to dj Orthopedics. It was the first of many steps designed to aggressively expand and reposition the company within the sports medicine industry.

In July 2000, dj Orthopedics acquired DePuy Orthopaedic Technology Inc., a division of Johnson & Johnson. The purchase was directly in line with dj Orthopedics' objectives for developing the core business, broadening market reach, and expanding the business platform. This strategic transaction strengthened the company's leadership role in the orthopedic recovery products industry by extending its reach to include national and international markets.

dj Orthopedics maintains a total quality approach to manufacturing to achieve the highest level of customer satisfaction. A key component of this approach is lean manufacturing, and there is a successful team environment on the production floor (a concept which has spread to all areas of the company, from product creation in engineering to customer care).

"The company began its lean journey in 2000 with the installation of its first sewing and assembly team cells. The cells now numbering over 70 u-shaped cells in Mexico and the US, build over 9,500 stock keeping units (SKUs) to daily customer demand. Our manufacturing operations have reduced cost of goods sold by over 20 percent and slashed inventory levels by over 50 percent since it began its lean conversions in 2000," explained Luke Faulstick, vice president of operations. "All material replenishments are done using kanban visual reorder systems, and many suppliers now replenish inventory using kanbans at point of use within the plants," he added.

Through well-practiced lean manufacturing actions and ongoing process optimization at its manufacturing plants in the US and Mexico, dj Orthopedics has eliminated much of the waste from its operations. As a result, the company has reduced its cycle time to daily builds to accurately reflect what customers buy. Furthermore, the company has lowered its inventory levels and cost structure, and elevated the quality of its products to world class levels. In fact, this year dj Orthopedics was honored with a prestigious top-25 finish in Industry Week's 200 Best Plants Award.

The lean initiatives have also paid off on wall street where the company has seen its stock price soar by almost 200 percent since the beginning of the year.

For future products, dj Orthopedics oversees a Biomechanics Research Laboratory for conducting extensive testing and continuous product enhancement. The company is dedicated to advancing the industry and is heavily involved in clinical studies that further the understanding of the biomechanics of bracing. The company's motto is "Never Stop Getting Better," a message it's certainly taking to heart.