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Edmonds Medical Device Firm Gaining a Leg Up on Competition



Forward Mobility Owners, Joel and Patty Smith, with their winning check

Providence Everett Continuing Their Innovative Path

Providence Regional Medical Center Everett has recently created an innovative, less-painful way to conduct chest surgery. Video-assisted thoracic surgery (VATS) is a reasonably new procedure that presents a doctor with access to a patient's chest cavity through very small incisions. VATS is typically utilized when looking at a patient's chest to diagnose an illness whether its cancer, pneumonia, or other disease-related symptoms. Also, it is relatively common to use this to remove small masses outside the lungs.

During a VATS surgery, a few small incisions are made in the chest. A tiny fiber-optic camera, along with surgical instruments if needed, is inserted inside the chest cavity. The camera transmits images onto a video monitor to allow the surgeon to view the potentially affected areas. Prior to the VATS surgery, when a doctor needed to access a patient's chest, they often had to cut a large incision, and perhaps even spread or remove ribs. It was not uncommon that the patient was not strong or healthy enough to go through with the tumultuous damage that was caused and if they were, the recovery was much longer and the pain was much more severe. When VATS can be used instead of open surgery, patients tend to have fewer post-operative complications. They are less likely to require a blood transfusion during surgery and VATS often requires a shorter hospital stay than open surgery. Patients who have a VATS procedure tend to report less pain and higher satisfaction with their treatment.

VATS is not always the best approach for every patient. For example, while VATS is very effective for removing small amounts of lung tissue, removing large nodules may require a larger incision which is not possible with VATS. "Having VATS at Providence Regional is an excellent advancement for our program. It's best to use the most minimally invasive approach possible, because this almost always means less trauma for the patient," says Kimberly Costas, MD, a board certified thoracic (chest) surgeon. Dr. Costas has a special interest in lung cancer treatment and leads a multi-disciplinary thoracic medicine team at Providence Regional."

To learn more about VATS and other surgical procedures at Providence Regional, visit providence.org/everett.

Forward Mobility, an Edmonds firm, has recently received an uptick of publicity for winning an online Newpreneur contest on Alibaba.com, earning them \$50,000 in development grants. Joel Smith, the owner, described his big day as "just not an ordinary day" as he walked on the Seattle bound plane with a large "fake check" with a face full of makeup after spending over six-hours with media.

Joel and his wife, Patty Smith, started Forward Mobility just a year ago after years of manufacturing bicycles. Joel started his career at Boeing as an engineer and left to work at a local bike shop where he learned a lot about manufacturing and global exporting. After working there for a few years, he started his own bicycle manufacturing company, working out of a large warehouse in Mountlake Terrace. Their company, Vision, was one of the last standing fully American made bicycles. As successful as his business did become, he realized he had a hard time competing with the Chinese manufacturing boom. "The Made in U.S.A. sticker wasn't getting us the extra couple hundred dollars we needed," he said. That is when he realized that outsourcing the manufacturing was crucial to his success. "I couldn't just send these jobs to China," he said. "It just didn't feel like right thing." This is when he decided that the end was nearing for his bicycle company.

Around this time he was working with a rural, war-ridden town in Vietnam to bring mobility to much of the disabled. "Instead of buying 1,000 wheelchairs from China and shipping them to Vietnam, why wouldn't we just transfer our technology and create the jobs in this village?" he asks. That's exactly what he did. A 10,000 sq. ft. building was built in the rural village and wheelchairs were being manufactured and given to the disabled in surrounding areas. "We needed to come up with a lucrative product to earn the revenue to continue our efforts in Vietnam," Smith said. "That's when my wife had her knee surgery. When a person has an injury from the waist down, your choices are a cane, walker, crutches, or a wheelchair. We're creating other options." His wife had a hard time getting around with crutches and continuing her vigorous life as a gymnastic coach. So, Joel created two new mobility devices which helped her get around, not realizing that these were going to be the future of his new company, Forward Mobility.

The Freedom Leg, the company's innovative claim to fame, has gained its notoriety among military, handicapped, as well as companies from 30 different countries inquiring about device distribution. "We recently received a video from Iraq of an injured soldier that was finally able to leave his barracks because the

COMPANY PROFILE: Royal Window and Door Profiles

Everett-based Royal Window and Door Profiles has some great news walking into 2010. After years of gradual growth, they recently announced that a consolidation with their Reno plant has grown their Everett facility from 78 employees to 100. They've also grown from 29 lines to 40. Royal has transferred employees from their former Reno manufacturing facility but also opened up positions for hiring locally.

The Everett plant specializes in vinyl window and door extrusions in conjunction with the Royal Group of companies that manufacture everything from PVC compound, PVC pipe, PVC siding, cellular PVC moldings and outdoor products such as PVS fence and decking. They have been creating custom profile extrusions since 1989 out of a 42,000 sq. ft. warehouse, initially from a warehouse in Woodinville, WA. In 1998, they built their existing 122,000 sq. ft manufacturing facility on Hardsen Road in Everett. The innovative aspect of Royal is the niche market that they have found. "When a window or door manufacturer wants to purchase extrusions, they have two choices; mass made extrusions off the shelf or custom extrusions," said Aimee Barrett, Plant Manager of Royal's Plant 14. "Royal is capitalizing on creating custom extrusions," she adds.

Barrett attributed much of their recent successes to the priority that they've placed on safety since 2008. "We've made good strides in safety and have been able to take advantage of local resources to get help," she said. She went on to explain that more emphasis on safety has formed a much more efficient workplace, cutting down on L&I costs including worker's compensation. "Everyone is healthy and working hard. That helps more than anything," she added.

Plastics News, an industry publication, noted that Georgia Gulf Corp., Royal Group Inc. division, was second in sales for pipe, profile, and tubing extrusion products. They reported annual sales of \$915 million. "We're extremely positive about 2010 and look to continue to cut costs and increase efficiencies," Barrett concludes.

PUD Moves Ahead on Smart Grid Project

Bolstered by a \$15.8 million federal stimulus grant, Snohomish County PUD has embarked on an aggressive multi-year plan to build a "smart grid" electrical distribution system. It will create a stronger, more efficient and reliable electrical system for the utility and its customers. The project will upgrade 62 substations and install 168 miles of fiber optic cable to connect them, enabling the utility to more efficiently harness renewable power, fix outages and manage demand.

"The smart grid technology will help the PUD lay the foundation for a modernized grid system that will enable greater efficiencies and the integration of a diversified portfolio of

Freedom Leg freed his hands to carry his sidearm and helmet. That meant the world to us," Smith said. The company has two other products; a seated scooter and a 24-pound collapsible wheelchair specifically designed for developing countries. Forward Mobility uses the non-profit manufacturer in Central Vietnam known as Kids First Enterprise, employing about 25 workers, many of them handicapped.

Smith explained that the \$50,000 award allowed them to get much of the production underway for the Freedom Leg. With as much attention as they've received since winning the competition, Smith is confident that the first delivery of Freedom Legs will go fast and sales will exponentially as they continue working with doctors and distributors. "We're really going into 2010 with confidence," Smith said. "We feel really great about our work in Vietnam and we're currently building another 10,000 sq. ft. building to grow our production over there," he added.

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If you are a new, innovative company with a cutting edge, newsworthy story or an existing company with an innovative and upcoming idea please send it to Ryan Crowther at rcrowther@snoedc.org.

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clean new renewable energy sources," said PUD General Manager Steve Klein.

The upgrade will allow for future smart grid technologies, such as smart meters, which will help the utility and its customers better manage power consumption, plan their energy use and ultimately reduce green house gases.

The PUD has emerged as an innovator in the region, particularly in the development of renewable energy and energy-efficiency programs, which the smart grid modernization supports. The utility has secured more than \$5 million in federal funds for its tidal and geothermal energy research and for local energy efficiency projects.



The PUD is installing 168 miles of fiber optic cable and upgrading 62 substations as part of a major "smart grid" system upgrade.