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MMEC Forward Focus

# Northwest Factory Finishes Applies Center Expertise for Bold Growth Move

Key Points

- Business evolution may take you where you've never gone before.
- Reaching out for needed expertise helps build business muscle.
- With every challenge comes opportunity.

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Conveyors are moving product once again inside the plywood plant at Bonner, Mont. where the historic Stimson Lumber Co. closed one of its millsites more than two years ago. This time, instead of plywood, the products are freshly painted LP Smart Side<sup>®</sup>, a Louisiana Pacific building product, and Certainteed<sup>®</sup> fiber cement siding. Conveyors move these products into large drying ovens as they are readied for shipment to customers by the new tenant, Northwest Factory Finishes (NWFF), a division of Missoula-based Northwest Paint, Inc.

NWFF took up residence in 80,000 sq. ft of the 17-acre plywood facility after securing a long term lease from Stimson in March and some fast turnaround on a production needs and capacity analysis and facility layout from the Montana Manufacturing Extension Center (MMEC).



Britt Fred, Founder and President, outside Bonner facility.

NWFF emerged as a leader in the field of pre-finishing building materials in Montana, Idaho, and Eastern Washington in just seven years. That leadership position and evolution from a service business to manufacturing is the result of combining specialized equipment and exclusive processes to develop matchless custom finishes on a variety of substrates, according to company founder and President Britt Fred. In addition to its anchor composite siding products, the company also paints wood siding, decking and fencing, composite trims, soffit and fascia. It now beautifies and protects over five million feet of building products every year.

## Evolution of a Manufacturer

Looking back 18 years to when he had earned a small business management degree from the University of Montana, Fred said he never envisioned that he would run a business in the manufacturing environment. Parent company Northwest Paint was started in 1992 as a service business providing on-site painting for new and re-paint projects. It grew from a sole proprietorship with three employees to a corporation employing as many as thirty-six at the peak of the region's building boom several years ago.

The manufacturing angle evolved as an experimental small enterprise to support the field business in 1995. It then progressed to serve a niche in the new construction industry when Fred recognized the importance to the construction industry of pre-painted doors and trim

after researching other markets. He also realized an off-site facility could improve quality and efficiency both for the painters and for efficiency of other job-site tradesmen. That realization was the inception of shop painting, a cost effective alternative to on-site finishing that would save time and still provide a quality finish.

"We started in a crude space with a roof and no heat, finishing products there and delivering to the job site," Fred said. The gain was the ability to maintain quality and efficiency in controlled conditions with no interference from other trades that need to access the site; it also protected other tradesmen from odors, wet paint, and scheduling of their work.

In 2003, he incubated Factory Finishes in 6,000 square feet on Missoula's Latimer Street. Just a year and a half later, feeling confident of having a successful commercial shop, Fred combined the two businesses in 20,000 sq. ft. at Commerce Street.

Trying to stay ahead of the growth curve, the company began exploring ways to maximize space at that location several years ago. Fred looked to manufacturing expertise from then MMEC Field Engineer Kreg Worrest to explore improvements. "But anything we would have done was a band-aid when we would have needed a transplant," Fred said. They determined that the company first needed a growth strategy and would then re-contact MMEC.

## New Strategy Emerges



Production expedited by large drying ovens and conveyors inside Bonner facility.

The company sales force focused on expanding markets beyond western Montana, Great Falls and Spokane and were able to open new markets in eastern Montana, the Dakotas and Wyoming. The new sales strategy focused on wholesale distribution which protects Northwest's customers by not competing for sales to the direct user but rather employing the services of lumberyards and wholesalers and their sales people to reach retail customers in exchange for NWFF providing the best service and product to the yards.

"It meant foregoing margin and educating the building industry," Fred said, but it clinched the retail and wholesale customers in the broader region. Stronger wholesale relationships in Montana, Washington and Idaho cemented the need for more space as pressure mounted to fulfill commitments to a large customer in time for the peak 2010 spring/summer building season. That customer would also supply product by rail and which narrowed the search options for a property, and last fall Fred began negotiations with Stimson on a portion of the plywood plant that had rail access. He worked with Don Moody, who was handling real estate holdings for Stimson.

## Move Criteria

In planning for the move, Fred said he had two specifications besides rail access: room for future expansion; and a move-in timeframe to make good on a production and delivery promise. He was also looking for long-term quarters.

"After seven progressive years of growth, I also knew I did not want to move again as it is expensive and disruptive," he said.

The Bonner plant had infrastructure in place to meet NWFF needs and growth plans; it is zoned for industrial and manufacturing, eliminating potential zoning conflicts or subsequent loss of lease at the historic lumber company, one of the largest millsites in the world at 170 acres. Fred worked with the Bonner city council and Missoula Area Economic Development Corp. during negotiations. First Montana Bank is helping the company invest in the future. NWFF now employs 25 employees.

Negotiations took more time than expected and put the project three months behind for a new "stocking program" where customer product would be held on site, Fred said. He needed a customized facility but needed it fast. "All of this quick changeover put us into periods of 24-hour production in the former shop to keep up with current customers and new in same small space."

Although the goal to be up and running in the new facility was pushed out to March it was April 12, 2010 before the lease agreement was signed which gave only a 6-week window for placing equipment and some yet to come crucial drying ovens – where previously product was dried overnight on racks. Fred again reached out to MMEC.

With Worrest transitioning to a new position with MMEC's MilTech program last spring, MMEC field engineers Todd Daniels, Helena, and Bill Nicholson, Kalispell, stepped up to lend a hand.

"Todd and Bill recognized that manufacturing was not my strength and provided the needed experience, knowledge and expertise to lend support to a business owner transitioning into manufacturing and a future of valued-added service to the building industry," Fred said.

### Facility Design Plan

The first objective of the MMEC project was to identify and observe processes, collect data on equipment size, length of manufacturing lines, cycle times, set-up times, materials and other inputs and to measure equipment still in storage because of space constraints at Commerce Street.

The second objective was to report on the impact of the data and review it with staff, address any new developments and sketch a footprint of the new layout on template and spreadsheet. The Moniker "Yo, Adam" Has Stuck

Nearly a year after Britt Fred and Adam Pitt, the company's go-to guy, attended MMEC's Lean Manufacturing workshop, the call "Yo, Adam" has stuck. Adam played the "materials handler" in the lively factory simulation, where participants got his attention by calling out to him. "Yo, Adam" can still be heard at NWFF when the pair continue improvements at the new factory. "I enjoy hearing that moniker," says Todd Daniels, Field Engineer at MMEC. "It's the teaching-a-man-to-fish theory; you know they are still carrying forward what they learned about Lean."

Nicholson calls it "a paper doll experiment" where things go on paper, can be moved around and visualized before final decisions are made. For discussion with the group, MMEC put the drawings on a laptop and showed them on an overhead screen, popping in changes as they were discussed to demonstrate the impacts, Fred said.

"We were in new uncharted territory trying to accomplish what we've never done and shooting for 80 percent efficiency," he said. It came with many challenges.

Training and experience were brought to bear. Key NWFF staff attended MMEC's Lean Manufacturing 101 workshop to gain concepts on best practices. MMEC met with management teams about what each responsibility center did, what they would like in a new facility and more. One of the outcomes of the analysis was that two ovens, not just one, would be needed to meet production goals.

Fred acknowledges that the collaborative discovery process used by MMEC first met with some resistance. "Some people thought, 'You are the experts – tell us what to do here.' But that would not have been as effective," he said.

Everyone came to the design planning meetings with their own ideas on operations and utilization, as they should for ownership of space and buy in to changes. Todd mostly listened and allowed the management team to take ownership, not trying to change their input. His role was to evaluate, observe and facilitate, bringing the ideas together, Fred said. "The exercises we went through were very, very valuable."

The collaboration resulted in having well placed equipment, designating expansion areas and special "danger" zones for material handling near spray booths. MMEC examined handling of scrap and ensuring rotation of stock. They thought it through completely for the best layout, according to Fred, then came and taped the floor to give a framework to begin the move-in in just four weeks.

Ovens and Rail and More Productivity



Rail access now comes right to southwest facing overhead door.

With ovens and conveyors now in place, drying takes 4.5 minutes where it required overnight drying time on space-consuming racks before. This immediately freed up space to allow the crating and bundling of units for delivery. Planned space for materials has reduced the distance traveled for moving products and materials in and out.

Another learning curve for Fred as NWFF transitioned to a full-fledged manufacturing facility was the conversion to using rail, Fred said. The Bonner facility had a side pit for indoor boxcar access along a northwest wall; in its day this allowed for floor level access to the inside of the cars. Initially, Fred thought this was a positive feature.

"I was unacquainted with intricacies of rail handling and excited at first that rail access was in the building," he said. But rail cars and loading procedures have changed. Today the type of product he receives comes on center beam cars, with cargo on both sides; access to one side of the car while unloading would be impossible and unloading only one side at a time would create a potential for tipping, a significant safety hazard. In the end, NWFF removed the inside bay using asphalt fill and reworked the rail access. Rail now comes right up to a big overhead door, one of several that were added on the south end of the building during the renovation. NWFF intends to do more exterior work for "curb appeal" and is currently installing an outside entryway with concrete steps and an overhang for easy customer access.

## Remodel Includes Conservation Efforts

The move also required much remodeling, and an \$800,000 budget was set. The company added separation walls, improved lighting using very conservation-minded motion-triggered lighting fixtures throughout the plant; insulated the entire area which also brightened the interior; and added gas line piping, a new septic system, and a settling pond for the non-toxic wash water used in its processes. NWFF also had to remove 150,000 pounds of concrete piers and old materials. In November renovations and painting of mezzanine offices that overlook the production floor were completed and are now in use.

Fred expects the remodels to come in under budget but is pleased with the how well the move has worked out so far, "pretty true to initial placement using the 'major rocks' of the layout MMEC put together. He noted that working in too small a space creates safety and quality issues, but too much space creates the challenge to use it wisely.

"We are learning more about management of product, handling job lot items; you can see that we are using more tiered shelving now for storage," he told visiting MMEC staff. The company has also reconfigured its method of rotating stock.

Having space to incorporate the drying ovens has provided a significant productivity gain enabling NWFF to quadruple output. "What we're doing today is equivalent to painting ten houses in a day rather than one or two in a week," Fred said.

Manufactured Product – What's In It For Me?



NWFF employee tests for correct mil spec on newly painted siding.

For customers using pre-painted siding, the manufacturing process means lower cost than field application, uniform coating and better quality, no environmental damage contamination, no weather delays, no overspray problems, no clean-up, improved subcontractor scheduling and instant curb appeal. Wholesale buyers know that application standards have been met for using the correct coating for each type of substrate, proper mil thickness, priming on four sides and that production records are kept, as well as having an assurance of the condition of a finishing job before it's shipped and installed.

Fred is not daunted by the large jump in facility size and growth, calling it "exhilarating every day." Asked how he manages the stress of such fast paced growth, Fred tapped his sports training (he is a former defensive end for the University of Montana Grizzlies football team). "Stress can be positive or negative," he said. "You leverage stress to your advantage – allow the stress of growth to build your business muscle much like you stress your body with a workout to build muscle.

"I'm in it for the long haul. In every challenge is opportunity; I instill it in my managers and customers," Fred said. The NWFF move has been a coordinated effort by every person in the shop, management, trades people, and vendors. "Everyone has partnered in our success."

He reported that the MMEC crew "has been great; they obviously love the manufacturing environment and are always eager and willing to help in any way." He especially valued the great sense of humor each one brought forth every day, adding levity to what could otherwise be tense sessions grappling with change.

Fred anticipates a double digit increase in gross revenue and increased efficiency with the resources they have after the MMEC help.

"We're still a painting business, but in a whole different way now," with large drying ovens, rail access, and room for the growth he envisions. The parent company completed a move shortly after this late October interview to join Northwest Factory Finishes at the Bonner location.

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