

Hal Wing and Wing Enterprises¹

Wing Enterprises

Wing Enterprises has been in existence since 1972, when Hal Wing first started importing ladders from Germany. When supply problems arose and exchange rate fluctuations made it difficult to maintain steady pricing, Hal Wing decided he could improve quality and avoid supply problems if he fabricated the ladders himself. Wing Enterprises was started in a carport, because Hal Wing didn't own a garage.

Wing Enterprises started with no capital, and there was no cash flow for financing equipment. As Hal explained, "We had to poor-boy it all the way...(we) had to become creative to keep alive." Hal Wing taught himself to weld, and Wing Enterprises still uses some of the fixtures he made in their current manufacturing processes. Hal modified inexpensive tools to meet his needs, and bought used manufacturing equipment and personally refurbished it.

Much of the equipment in use at Wing Enterprises is "worn-out" equipment purchased at 5-10% of new cost from the steel fabrication industry. Wing Enterprises' ladders are made from aluminum, which is softer than steel and easier to process, thus allowing them to use metal working equipment that is worn and no longer suitable for use with steel. Much of the equipment has been modified or adapted to suit specific operations. As an example of the magnitude of savings, Wing Enterprises purchased a punch press for \$12,500 versus the new cost of \$245,000, and then spent \$3000 and a few days labor refurbishing the press.

Products

Wing Enterprise's core products are high-end aluminum ladders. While other manufacturers saw this industry as a mature, high-volume, low margin market, Wing scrutinized the existing designs and asked, "How can we make this better, safer and stronger?" The result is the Little Giant, an aluminum ladder that converts from a 4 ft. folded length to an 8-foot A-frame step ladder, and to a 16 foot straight lean-to ladder. The Little Giant now comes in several sizes and is designed to exceed all regulatory safety requirements, provide a more stable base that is less prone to tipping or sliding, and is stronger than any ordinary commercial ladder. Yet the Little Giant is small enough to fit into an elevator, a truck bed, or even a car trunk. Optional attachments include a plank that can be used for scaffolding by separating the ladder into two 4-foot A-frames and a bucket-holder shelf that is strong enough to stand on. The Little Giant is priced 3-4 times higher than an ordinary ladder, but the adaptable design eliminates the need for contractors to carry multiple types of ladders. Government agencies, utility companies, hotel chains, and military organizations are some of the largest customers.

Wing Enterprises also manufactures foldable snowshoes made of tubular aluminum. The outer ring of the snowshoe is made of short pieces of strong aluminum tubing that link together, with a shock cord that runs through the middle of the tubing to keep the pieces in order and allow rapid assembly. The snowshoes are compact enough to fit into a hip-sack, or the storage box of a snowmobile. They are perfect for winter back-country enthusiasts including skiers, snow-mobilers, climbers, and park rangers and military personnel who need to carry snowshoes in case of emergencies.

Wing Enterprises recently introduced its latest product: an adjustable, easily adjusted trailer hitch with multiple hitch sizes that folds under the vehicle for storage. In the past, Wing Enterprises has also manufactured motorcycle trailers and a rivet gun, just two examples of many innovative product designs.

Hal Wing

Hal Wing is never an idle man. In addition to running a multi-million dollar manufacturing business he has been the Mayor of Springville, Utah, since 1997. Some of Hal Wing's recent accomplishments include recording a CD of himself yodeling and starting his own online newspaper. Hal Wing keeps a collection of

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a half-dozen or so old cars, and often drives to work in a black Model A Ford pickup. Hal is an avid motorcycle racer, and has a standing offer of \$1,000 to anyone who can pass him on a motorcycle in the desert. Hal Wing is always doing something – even when he is sitting still, he will often pull a yo-yo from his pocket and practice some tricks. He also farms 63 acres, “on the side,” for relaxation and balance.

Business Philosophy

Everywhere around Hal Wing and Wing Enterprises there are quotes that describe Hal Wing’s approach to doing business. In the front lobby of Wing Enterprises, under a portrait of Hal Wing, is the following:

“...We must recognize that excellence and quality are a reflection of how we feel about ourselves and about life and about God. If we don’t care much about these things, then such not caring carries over into the work we do, and our work becomes shabby and shoddy. Real craftsmanship, regardless of the skill involved, reflects real caring, and real caring reflects our attitude about ourselves, about our fellowmen and then about life.” -- Spencer W. Kimball, 1977

Hal Wing is often heard repeating the following two phrases:

“We tend to judge people at the finish line and forget about where they started.”

“Until you understand where someone came from (i.e. what they have been through in life), you can’t understand who they are.”

And a plaque on front of the Wing Enterprises building reads:

“If you concentrate on building a business and not the man, you will not achieve. But if you concentrate on building the man, you will achieve both.” --Hal Wing

Culture

Hal Wing has one overriding hiring philosophy: “Surround yourself with good people that don’t know what can’t be done – who don’t know their limitations. Gather good people, then treat them right.” Employees at Wing Enterprises are hired on a “three-month, bi-directional trial basis,” designed to allow Wing Enterprises to evaluate the new employee while the new employee decides whether or not they fit in and like the work environment. New employees are readily distinguishable as they wear ordinary T-shirts, while everyone else wears Wing Enterprises shirts. Employees “earn their wings” when they receive a company shirt if they are hired at the end of the three-month trial period.

Manufacturing employees do not have assigned work stations, but are regularly shifted to different tasks throughout the factory. Each morning as employees arrive for work, they find out where they will be working that day. Some more specialized operations, such as welding and sawing, have less mobility, but all of the manufacturing staff are regularly moved about to cross-train and learn more of the manufacturing process. Not only does this give the workforce greater flexibility, but it also ensures higher quality work because each employee understands how a particular operation affects subsequent steps in the manufacturing process. Employees express a strong sense of ownership over their work area, despite the constant rotation.

All Wing Enterprises employees are required to spend one 40-hour week per year on the factory floor making ladders. This is called “Hal’s week,” though some employees refer to it as “Hell’s week.” It is not uncommon to see a senior sales manager spending a day shift stacking newly manufactured ladders. Hal Wing feels this experience is vital to give all employees a better understanding of the product, and also to maintain a sense of equality and unity throughout the company. As Hal explained, “We have one level here...no one bows and scrapes.”

Safety is a top consideration in the manufacturing process, and all machinery is fitted with guards or multiple switches, so each operation is designed to prevent any possibility of hand injury. Wing Enterprises holds bi-weekly safety meetings, and on the off-weeks holds “good ideas” meetings. All employees are invited to submit ideas for improvement. Most of these ideas are implemented, and employees are rewarded with a bonus based on the cost-savings generated by the idea. These bonuses have

been as high as \$25,000. Through these “good ideas,” the manufacturing process has been improved to the point where each ladder takes less than 1.0 man-hour to manufacture. As Hal Wing explained, “The person doing the job knows it best, and best knows how to improve it.

The most striking thing about touring the factory with Hal Wing is how he interacts with his employees. He knows each one well, calls them by name, and talks with them about their children, their hobbies, new truck, etc. It is not uncommon for Hal Wing to greet his employees with a hug. Hal is quick to give credit for his success to his employees, “These people make me look like a hero everyday of my life.”

Growing Pains

In 1983, Wing Enterprises received its first large order from the US military, for over \$1 million worth of ladders. The order was huge, and would increase annual sales by over 30%. The only problem was that Wing Enterprises was operating near 100% capacity. Somehow, operations had to expand quickly to fill the order. Hal Wing felt he had 3 options: invest in new equipment, add a second shift, or outsource part of the manufacturing process.

Investing in equipment

Most of the equipment in the factory was operating near capacity, and there was little room on the factory floor to add new machinery or work-stations, so the only immediate option would be to purchase new equipment that could process parts more quickly. But new equipment required huge capital investment, and would likely take several weeks lead-time to arrive at the factory. In addition, existing equipment would have to be removed, and the new equipment set up, which could result in several days downtime. Hal Wing also knew that it would take time for employees to learn how to operate the new equipment, to make set-ups and adjustments so the parts would be made accurately, and even more time to optimize use of the equipment so that its speed was matched to the rest of the production in the factory. Perhaps the biggest problem was that more than one piece of equipment would need to be upgraded at the same time, which multiplied the probability that something would go wrong.

Adding a second shift

Many manufacturing facilities work around the clock in order to maximize return from their capital equipment. Hal Wing thought that perhaps it was time to add a swing shift. But adding a second shift meant hiring a large pool of new workers in a short amount of time, and splitting his experienced workers between the two shifts so they could train the new ones. Hal knew it would cause disruptions in the manufacturing process, causing reduced productivity and perhaps a temporary decrease in quality. But more than the productivity effects and labor costs, Hal Wing worried what effect the second shift would have on his employees, and on the culture he strived to maintain at his company.

Outsourcing

Outsourcing was the lowest cost option, and required no investment or increases in overhead costs. But Hal Wing constantly returned to the fact that he rejected outsourcing previously at Wing Enterprises because of quality problems. Outsourcing was an easy option to implement, but it put the core products of your company outside of your control. Wing Enterprises prized the security provided by in-house manufacturing, and actually maintained four separate aluminum suppliers (even though they would have greater discounts by only ordering from one) in order to ensure they always had access to a steady supply of high quality raw material. Outsourcing might cause problems with quality or delivery, but worse, it meant expertise would not be growing within the company. However, outsourcing at least a few of the operations was the fastest and simplest option.

As Hal Wing pondered this decision, he was cognizant that this was a critical decision point that might define the future direction and character of his growing company.