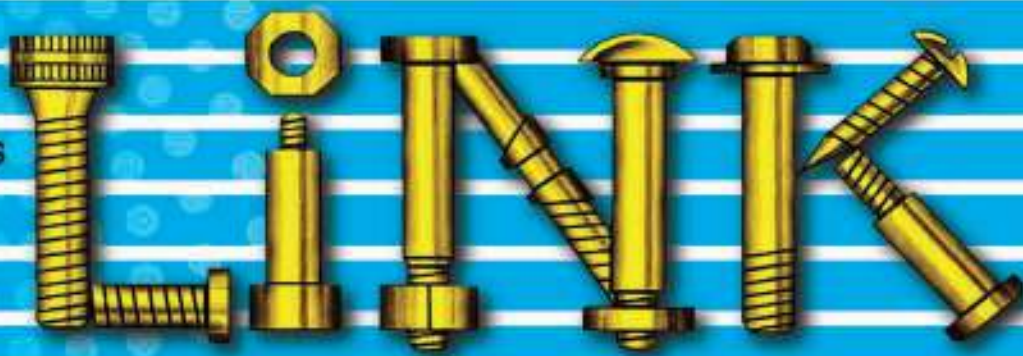


THE
DISTRIBUTOR'S



THE NATIONAL MAGAZINE FOR FASTENER DISTRIBUTORS

R&R
ENGINEERING CO.

*R&R Engineering to mark
50 years of Innovation*



The Journey Begins on Page 16



R&R Engineering to mark 50 years of Innovation

When Ralph Amos and Roy Grant pooled their savings to launch R&R Engineering in 1969, they received plenty of advice from friends and family in East Central Indiana. "We were told that it didn't matter the type of work we planned to do," recalls Amos, president of the company. "What was important was becoming the very best at whatever we did. Success can be hard to measure, but superior performance should always be the goal."

Fifty years later, that goal hasn't changed and success has been the result. Many of Amos and Grant's initial business principles remain intact and have contributed to R&R's phenomenal growth. Among them: Keep overhead low; stress productivity; encourage employees to share in the decision-making; deliver unmatched quality and service; and plow earnings back into the

company in the form of equipment and raw materials.

"Money was so tight in the beginning that Roy and I didn't draw a salary for our first six weeks in business," says Amos. The partners, who are also brothers-in-law, got a welcome break when the Chamber of Commerce in nearby Summitville, Indiana, offered them three months of free rent if they would locate their new business in a vacant downtown storefront. This allowed the partners to tap into their modest cash reserves - each had contributed \$2,000 - and underwrite their first manufacturing job. "The contract was to supply 2,000 UHF wire antennas per week for RCA, based in Bloomington, Indiana," says Amos. This required them to purchase several homemade machines from the now defunct American Wire Products, the company that once had employed them.



The Need to Diversify

Buoyed by the success with RCA, the company made sales calls to other television manufacturers and soon had secured orders for antennas from Philco Television Corp., Warwick Electronics (Sear's Television), Zenith Corp., Magnavox and several smaller companies. At its peak, R&R's production of antennas reached 80,000 a week. Then, within a few months, the bottom fell out of the domestic market. American television manufacturers moved their operations overseas to remain competitive, and "we lost all of our customers in about six months," says Amos. Although R&R products were priced competitively, the additional cost of international shipping and handling nudged them out of contention for lucrative orders.

"Fortunately we began hearing from several customers that they needed a wire with threads on one or both ends," says Amos. "Everyone seemed to say the same thing: 'If you could make larger than 1/4-20 threads, we'd give you some work.'" In response, R&R bought a small #10 Waterbury Flat Die Thread Roller, vintage 1929, for \$75 at auction. The purchase was both a bargain and a lifeline because it gave the company the capability to pursue roll-threading contracts.

As a result: "New customers came onboard and orders started pouring in."

continued on page 18



"R&R Engineering is committed to being the most efficient and competitive manufacturer of bent bolts and threaded rods in the United States"





"it would be difficult to find another proprietor who is more committed to producing high quality parts while offering the most competitive prices in our industry"

The Need to Diversify

Amos's eye for innovation soon identified yet another market. On a weekend visit to northern Indiana he met Jack Pease, who was experimenting with a design for a planetary thread-rolling machine. The technology was starting to make inroads in the fastener industry and although Pease's model hadn't been perfected yet, "I could tell it had enormous potential to easily increase production rates up to five times faster than flat die thread rollers," says Amos. The chance encounter with Pease evolved into a warm friendship and valuable collaboration. As Pease refined his machine design, Amos provided real-time feedback on the changes. "We spoke frequently, exchanging ideas about how to correct the various problems that came up. The new machines were difficult to operate, but we were at an advantage because we were among the first companies to learn the secrets to successful operation."

Not only did the planetary thread rolling system boost production, it also improved quality and drove down costs. Seeing the benefits, R&R stepped up its investment and in the next several years bought new and used planetary rolling machines from around the world. Frequently these were purchased sight unseen because R&R employees had a hands-on understanding of the equipment and could anticipate the adjustments they would need to make to ensure trouble-free performance.

continued on page 20





R&R's Equipment List

- *89 high-speed planetary thread rolling machines with 2 in development*
- *11 fully automated U-bolt machines with capabilities from 5/8" to 1" in diameter*
- *28 U-bolt machines for products from 1/4" to 1/2" diameter*
- *49 single- and double-end threading machines with the capacity to thread up to 8" per second*
- *Keyence IM7000 digital optical comparator that provides the utmost precision in measurement accuracy*

R&R's Capabilities

- *Diameters from 10-24 to 1"*
- *Carbon Steel - C1018 and C1541*
- *Quench and Temper to Grades 5, 7, 8, 8.8 and 10.9*
- *Stainless Steel - 304 and 316*
- *Silicon Bronze 651*

Growth and Change

If there was a downside to R&R's success, it was the fact that the storefront on Summitville's main street quickly became congested with the addition of manufacturing equipment, raw materials, finished goods and an expanding workforce. Not wanting to uproot his employees, Amos purchased 28 acres just outside of the town's boundaries to build a modern 30,000 square foot facility. Forever loyal to the town that had given him and his former partner—Roy by now had retired—their start, Amos devised a creative way to say thank you. He attended a meeting of the Summitville Town Council and requested that R&R's new parcel of land be incorporated within the town limits. That meant Summitville could continue to receive tax revenue from the area's most successful business venture.

Today R&R Engineering occupies a state-of-the-art headquarters totaling 235,000 square feet on the town's outskirts. The company has constructed 11 pre-engineered steel buildings to provide a cost-effective solution to its growing need for space. Customers who visit the sprawling campus see highly skilled employees fulfilling high-volume orders with the help of high-tech machinery.

continued on page 22



"Ralph makes sure R&R has excess capacity to meet both new and emergency needs. This thinking is what completely separates R&R from the rest of the crowd"

Production capacity is impressive at 200,000 threads per hour, with enough equipment to designate one machine for every standard inch and metric thread. Because the company maintains an inventory of 3.5 million pounds of raw material, orders are shipped complete and on time. Some 150,000 square feet of warehouse space is available to hold finished inventory in stock for up to six months. Prices are locked in on all stock orders and same-day shipping is the norm.

Striving for Improvement

As successful as R&R has been in its 50-year history, it recognizes the importance of keeping pace with developing products and processes. Sometimes a customer provides just the push needed for the company to consider new ways to streamline its operations. Such was the case when a longtime customer based in Chicago alerted Amos that it had decided to send its fastener business to China. The company had been pleased with the quality and quick turnaround of R&R products but had heard that China could do better. Whereas R&R had been producing 12 parts per minute

at a cost very close to China's, the customer expected more for less. Amos, who works closely with his son Scott, quickly went back to the drawing board to identify areas of the manufacturing process that could be faster and more efficient without jeopardizing quality.

"We rolled up our sleeves and designed a newer and better machine that was capable of producing an amazing 100 parts per minute, and we reduced our price by about 15 percent," says Scott Amos. "The customer was thrilled, and as soon as his contract in China expired, he sent all of his business back to our shop. Our renewed relationship became one of our most profitable, proving that bad news can be good news if it incentivizes you to improve!"

continued on page 132





R&R ENGINEERING COMPANY INC

801 S Main Street, Summitville, IN 46070

TOLL-FREE 800-979-1921 FAX 800-345-9583

EMAIL sales@randengineering.com

www.randengineering.com

Building a Corporate Culture

Scott and his sisters, Carey and Janet, have been involved in the family business for most of their adult lives. They know the entire 42-member workforce—many are neighbors—and have helped establish a unique corporate culture. Employees have the authority as well as the responsibility to make decisions on the factory floor. They are committed to R&R Engineering's quality management system that has been continuously ISO 9001-certified since 2008. To maintain this certification, a full-time Quality Engineer is onsite. The production area of the company is divided into small departments with similar operations grouped together. The oldest or most experienced employee is the designated group leader and assigns two to four colleagues with set-up, quality and inspection duties. Written work instructions are produced for each order. As employees complete their assignments, they deliver the order to the next designated location.

"We allow employees to schedule their own work with the exception of priority orders that are expedited," says Ralph Amos. "Our employees have flexible starting hours and, in many ways, are their own boss." Optional

overtime is available, and bonuses are based on years of service, attendance, safety record and contributions to the company. Regardless of the workload, operations are closed on the weekend so employees can spend time with their families. Such consideration for team members was evident when R&R was a start-up company in 1969 and is still very much in place today.

"I remember hearing a story about R&R when it was a much smaller business but was growing rapidly," says Ted Baker, executive director of Innovation Connector, an Indiana-based business development service. "After a strong week of production and shipments, Ralph knew his team had given extra effort to meet customer expectations. Before the end of the business day on Friday, he personally met employees at their work stations, thanked them and handed each a bonus. I'm pretty sure that as grateful as the people were for the unexpected gift, they were particularly pleased at being recognized and appreciated.

That is the kind of story that continues today at R&R Engineering. **R&R**

