

# MERCER RUBBER COMPANY

*A Reputation for Quality that Stretches Around the World.*

## THE DESIGNERS - Smart, Creative Problem Solvers Take the Initiative.



Mercer has been manufacturing rubber expansion joints for over 60 years. The process has always started with the engineer. Effective construction relies on the designer's ability to create a plan geared to accept pipe motion in three planes while adapting to the thermal expansion and contraction of the system.

Geographic and climatic conditions play a vital role in the preliminary design decisions. Intelligent use of raw materials is also a key consideration. Expansion joints must also withstand pipeline shift variations caused by physical displacement during the manufacturing process, or through natural phenomenon such as earthquakes or severe weather. Construction must also resist pressure, vacuum, thermal and chemical reaction to internal fluids or gas, as well as external corrosive influences. Before our engineers touch pencil to paper, these factors are meticulously reviewed and evaluated.

As in all professions, there's no substitute for experience. Today's technology can only be addressed by professionals with full comprehension of steel reinforcement techniques and fabric selection. Do we employ Polyester, Nylon or Kevlar®? If rubber can't be utilized, is Neoprene the answer, or EPDM,

Butyl, Nitrile, Hypalon® or Viton®? Traditional designs had always been built on cotton duck reinforcement with natural rubber as the only elastomer. Mercer is proud to say that we are one of the few companies featuring an engineering team extensively trained in the computer technologies that can sort out the right materials to create the right products for the right application.

Mercer has a broad range of standard designs, but 70% of our work is customized to specific design requirements. If it can be made with rubber, we can do it.

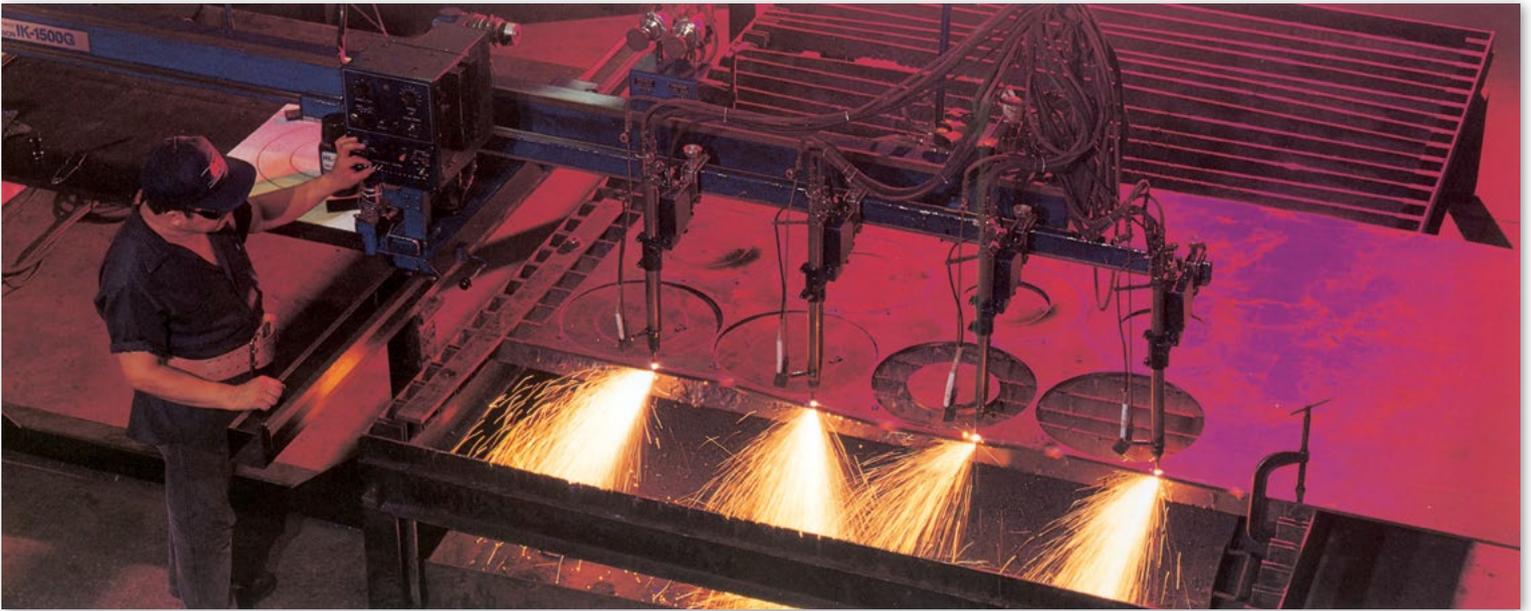


Our talented, in-house engineering team keeps a close eye on product specs through every phase of production.

Mason Industries founder Norm Mason drew on over 50 years of engineering experience to establish the high standard of design and production that we carry on today.



## THE CRAFTSMEN - Talented Hands and Sophisticated Tools Streamline the Process.



Steel fabrication is an integral part of production.

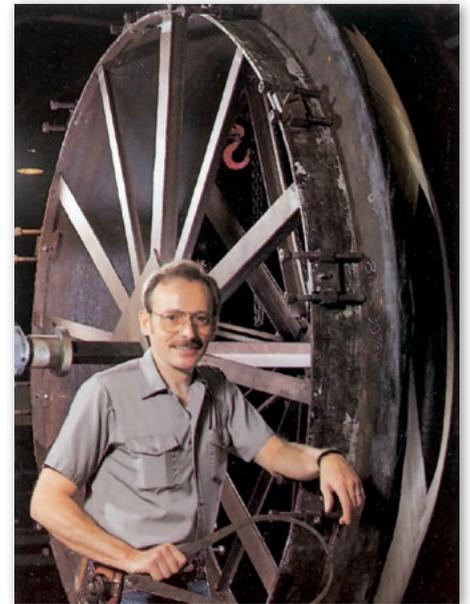
In today's economic climate, a specialized OEM must have three things going for them to compete successfully. First and foremost, a product that's in demand by a market that continues to grow and continually feeds that demand. Secondly, the facility and equipment to manufacture that product properly, efficiently and at a competitive price. And finally, and perhaps most importantly, a trained workforce that can handle the day-to-day requirements necessary to compete in an industry that demands quick response while maintaining strict guidelines for product safety and durability.



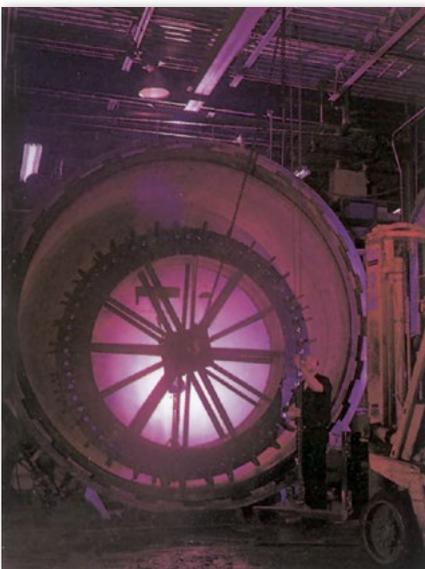
As you pass our assembly lines, you can see the focus and dedication of each technician as the elastomer is mixed, calendered and cut. We carefully friction our own fabrics as well. There's a special pride as each joint is wrapped and finished before it is meticulously cured and eventually outfitted for final product testing.

Every piece of equipment, from production line machinery to the boilers, is maintained daily to keep the operation running as smoothly and efficiently as possible.

From our President on down, Mercer's workforce really cares about the products we make. And it shows.



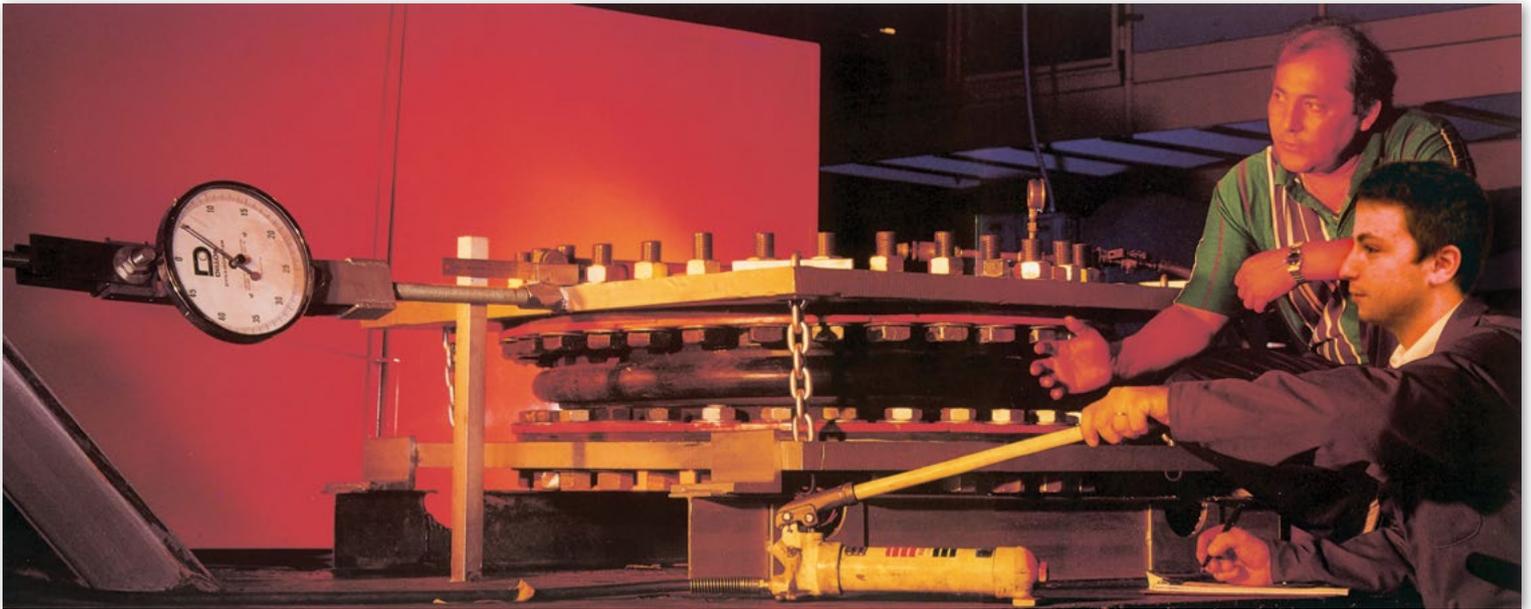
Experienced, caring technicians take pride in their efforts and the products they produce.



Custom built autoclaves make steam curing oversize expansion joints commonplace.

Our market is strong. Much of our equipment is customized and built to spec by our own engineers and tooling specialists. Our workforce is handpicked and meticulously trained in every detail of the manufacturing process.

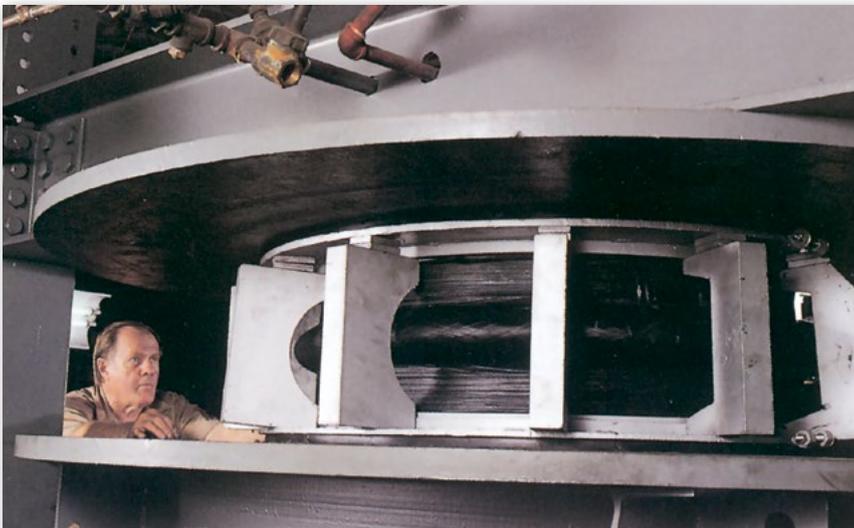
## THE GUARDIANS - Watchful Eyes Follow Strict Regimens for Product Integrity.



Testing horizontal stiffness.

At Mercer, we don't treat quality control as merely a final inspection before a product lands on the shipping platform. Our quality standards are exceedingly high. What's more, we build those standards into every product during each phase of the manufacturing process. It may be the exceptional raw materials we use or the demanding battery of product inspections at every stage that makes the difference. We'll do whatever it takes to make sure each expansion joint is consistently durable and ready to perform in the field... or it never reaches our shipping department.

A good product always starts with good raw material, and we buy from the best. Dupont™, Firestone®, and Goodyear™ are just some of our suppliers. We even maintain a facility in Thailand where master batches of natural rubber are processed and tested for quality and consistency. In our manufacturing facility here, mixing is closely supervised in our batcher. The curing chemicals are added on our 60" mill, the fabric frictioned through our 66" calender for maximum fabric strength, flexibility and uniformity. All of our large arch forms are molded in Mercer's in-plant hydraulic presses.



A quality control expert supervises stress and pressure testing on site.

During the assembly process we assign one supervisor for every six builders in an effort to keep close watch on each critical phase. Our engineers also keep tabs on the construction process, and actually visit the assembly line regularly.

Once assembled, the expansion joints are ready for curing in our large, totally automated autoclaves. We steam cure expansion joints of up to 16" in diameter. After curing, each piece is ready for testing. Mercer can run pressure and vacuum tests on joints of any diameter from 1" to 160". If necessary, we construct special jigs to determine stiffnesses in all directions. See Bulletin PB-MR11 for more detail of the expansion joint production process.

The end result? A hand built Mercer product is a more dependable product. We guarantee it!

## A HISTORY OF PRODUCT SUCCESS



There have been a lot of changes in 130 years. And Mercer has come a long way since we started manufacturing mason jar gaskets and other small molded products in 1866. After the turn of the century we moved on to conveyor belting, customized industrial hose, and ultimately, expansion joints.

Eventually, our association with our sister company, Mason Industries, showed us the advantages of working with an in-house engineering department, and a complete machine shop and steel fabricating facility. Through this partnership we saw the opportunities in customizing product design and upgrading equipment on a regular basis. Ultimately, this paved the way for Mercer's move to our present, ultra-modern manufacturing facility in Hauppauge, New York.

One thing that hasn't changed is our product line. We still produce expansion joints, duct connectors, and flanged or built-in nipped hose. It's how we manufacture that's made the difference. We often customize, design and build our own manufacturing equipment. We do most of our own tooling in-plant. And, our quality control testing capability is second to none.

High-pressure expansion joints are still Mercer's specialty. We design units for marine use; chemical and fertilizer plants; water and sewage treatment facilities; and fossil and nuclear power plants to name but a few applications. Those who know us understand that we have the capability to achieve any design requirement. That's why our reputation for product innovation and integrity has spread worldwide. As our exports have grown dramatically, so have our overall sales. Our outlook for the future is brighter than ever.