

ALLIANCE HOLDING YOUR WORLD TOGETHER

The roaring 20's may be long gone, but there is one device from that era that has flourished with the test of time - the Alliance Rubber Band. Since the arrival of the Alliance Rubber Band in 1923, these simple stretchy loops of rubber have become a ubiquitous mainstay in offices, homes, schools and everywhere in between. The list of endless uses and versatile applications for Alliance Products continues to grow with our forward-thinking team.

A true American success story, Alliance Rubber Company owes its beginning to the ingenuity of one man - our father - William H. Spencer, who left his Franklin, Kentucky home in 1904 at the age of 13. Traveling by rail to seek adventure, he found himself in Alliance, Ohio in 1917 with less than \$3, and began working for the Pennsylvania Railroad. Six years later on March 7, 1923, he obtained a few Goodyear inner tubes and cut the bands by hand in his basement where he founded Alliance Rubber Company. In those days, newspapers were blocked and thrown in the general direction of the porch. After seeing the Akron Beacon Journal blowing across lawns, he persuaded Tulsa World to try wrapping them with a band. He went on to pioneer other new markets for bands, agricultural and industrial applications as well as a myriad of other uses.

After almost a century, Alliance is still a family owned business with a rich and distinctive American heritage. What started as a simple, practical, and reliable solution for everyday life has been transformed by our 150 Alliance Rubber Company team members into a multi-faceted collection of more than 2,000 products and tools designed for "Holding Your World Together." Our associates make the difference in our brand. Their attitude and passion for quality of customer service shines. Over 60% of the Alliance Rubber Company team has been with the company for over five years, enabling us to make some of the world's best banding products at our manufacturing facility in Hot Springs, Arkansas.

Today, Alliance Products are sold in more than 28 countries in a vast array of fun and functional colors, styles and sizes, including Brites®, Advantage®, Corner-to-Corner™, Cable & Gear Wrapz™, Gear Strapz™, Big Bands™, Can Bands™, SuperSize Bands™, Slip-On Grip™, Whiffers™, Eraselets®, ProTape® and applying machines, Mail/Ship line and more. Advancements such as our FotoFlex™ Wristbands, developed to provide the world's first stretchable wristband that uses

four-color imprinting of digital graphics, have extended the Alliance brand's reach far beyond the home and office and into another new territory that allows customers to turn an ordinary rubber wristband into a mini-billboard for maximum promotional effect.

From industrial facilities to the big screen, art museums and encircle the globe 23 times. We were recently honored to be one of two recipients of the Excellence in Innovation Award of Standards and Technology and Manufacturing Extension

YouTube, office desks and workshops, Alliance Products have become ingrained in the way people organize and express themselves around the globe. Alliance produces 13 million pounds of bands annually, and assuming an average band length of 3.5" and an average count-per-pound of 800, these bands could be laid end-to-end and easily from the U.S. Department of Commerce, National Institute Partnership.

Bonnie Swayze - President







GREAT in MOMENTS RUBBER BAND HISTORY

Andy Rooney once named Rubber Bands as "one of the ten greatest inventions of the twentieth century." Rubber bands are used by numerous individuals and industries for a wide variety of purposes. However, few people know that a complex combination of miracles had to come together in order to produce the Alliance Rubber Band. Add to these miracles the creative configuration of human energies.....and you get a classic example of innovation at its finest.

1 Rubber was first discovered by European explorers in the Americas in 1496, where Christopher Columbus encountered Mayan Indians using water-proof shoes and bottles made from the substance. Intrigued, he carried several Mayan rubber items on his return voyage to Europe.

The word rubber was born in 1770, when an English chemist named Joseph Priestley discovered that hardened pieces of rubber would rub out pencil marks.

3 Natural rubber presents several technical challenges. It rapidly becomes dry and brittle when cold, and soft and sticky when warm. One day in 1839, the American inventor Charles Goodyear, stumbled upon a way to overcome these problems. Over the next five years, he perfected the process which he dubbed vulcanization after the Roman god of fire, and enabled the modern rubber industry to develop.

The first rubber band was developed in 1843, when an Englishman named Thomas Hancock sliced up a rubber bottle. Their usefulness was limited because they were unvulcanized. In 1845, Hancock's countryman, Thomas Perry, patented the rubber band and opened the first rubber-band factory.

5 In 1923, William H. Spencer founded Alliance Rubber Company in Alliance, Ohio by obtaining a few Goodyear inner tubes and cutting them into bands by hand in his basement.

6 Later, as business blossomed, and the products gained further refinement, William opened a new Production Plant in 1944 in Hot Springs, Arkansas.

The open ring design was patented by Alliance Rubber Company in 1957. The open ring style allows bands to be easily opened with one hand. With this new design, the speed of application could be increased 50 percent over the standard flat band.

In 1969, Alliance Rubber Company installed the world's first Continuous Cure Band Production Line. The process has extremely high production volumes and efficiencies as continuous lengths are produced for tube profiles.

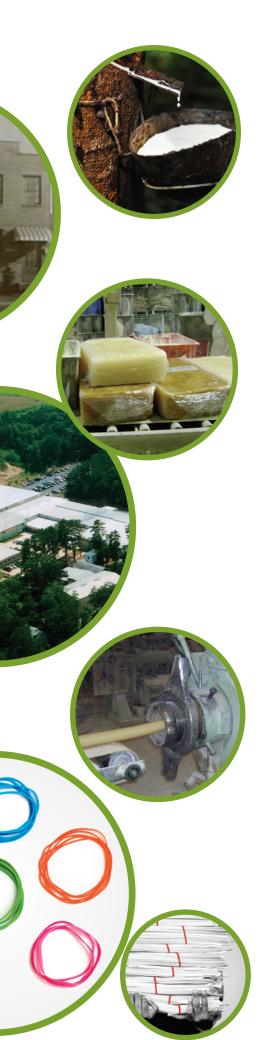
Ad Bands® were created in 1986 as the "Original Printed Rubber Band." The multiple functions and ability to create custom imprints made Ad Bands® the perfect ad specialty product whether as a way to promote messages, as hand-outs, wrist bands, or on-pack/in-pack premiums.

10 In 1997, Alliance perfected its ability to create bright neon colors in rubber bands and launched the Brites* line which is color coded and made specifically for the organization of the home and office.

11 By tweaking the rubber band formulas to create bands geared toward specific uses, Alliance was able to create three very distinctive rubber band lines (Xtreme File Bands, Anti-Microbial Rubber Bands, and Latex Free Rubber Bands) in 2007.

The latest in a long-line of product innovations in Alliance ability to create FotoFlex™ bands with a digital imprint with four color process.





SECRET of a LIFE RUBBER BAND

1 Like most rubber band manufacturers, Alliance Rubber Company obtains its natural rubber from the Southeast Asian countries of Malaysia, Thailand, Vietnam, and Indonesia. The rubber tree can only thrive in hot, damp regions near the equator, so 90% of true rubber production today occurs in these areas.

Within the rubber tree, latex is found. Distinct from the sap, latex serves as a protective agent, seeping out of and sealing over wounds in the tree's bark. To "tap" the substance, rubber harvesters cut a wedge in the bark. They must reach the latex without cutting into the sap vessels. After workers make a cut, latex oozes out and collects in a container attached to the tree. Tapping takes place every other day, and each tapping yields about 2 ounces (56 grams) of the substance. After tapping, the cut dries, and latex stops flowing in an hour or two. An average rubber tree yields 19 pounds of rubber latex annually, and it requires 700,000 rubber trees to supply Alliance each year with natural rubber. Trees are six years old before tapping for rubber begins and they may be tapped for up to 28 years.

The initial stage of manufacturing the harvested latex takes place on the rubber plantation, prior to packing and shipping. The first step in processing the latex is purification, which entails straining it to remove impurities such as tree sap and debris.

After the latex has been harvested and purified, it is processed into 75 lb blocks. The rubber is then shipped to the Alliance Rubber Factory in Hot Springs, Arkansas.

5 The slabs are machine cut into small pieces and mixed in a Banbury mixer with other ingredients to vulcanize it, pigments to color it, and other chemicals to increase or diminish the elasticity of the resulting rubber bands.

6 Milling, the next phase of production, entails heating the rubber and squeezing it flat in a milling machine.

After the heated, flattened rubber leaves the milling machine, it is cut into strips. The strips are then fed into an extruding machine which forces the rubber out in long, hollow tubes (much as a meat grinder produces long strings of meat).

Sample rubber bands from each batch are subjected to a variety of quality tests. One such test measures modulus, or how hard a band snaps back: a tight band should snap back forcefully when pulled, while a band made to secure fragile objects should snap back more gently. Another test, for elongation, determines how far a band will stretch, which depends upon the percentage of rubber in a band: the more rubber, the further it should stretch. A third trait commonly tested is break strength, or whether a rubber band is strong enough to withstand normal strain.

9 Users of rubber bands range from large to small with everyone from the U.S. Post Office to home offices. All in all, more than 30 million pounds of rubber bands are sold in the United States alone each year.

10 Many companies who import their rubber bands from overseas lose a critical edge. Long lead times on overseas supply chains complicate planning and inventory investment. Domestic products are often more flexible with quicker response times. Alliance quality and variety are known worldwide and we have distributors in 28 countries.

BANDOLOGY 101

Other than holding together bundles of pens or creating a miniature catapult for a science project, rubber bands have many other surprisingly practical uses in the kitchen, office, for do-it-yourself home projects and more.

1 BASEBALL BAT - Simply place the rubber bands onto the barrel of the bat about 3 inches apart centered on the sweet spot. The rubber bands will serve as a visual cue to help the hitter keep the sweet spot in the hitting zone. Be sure your hands are ahead of the barrel of the bat and that the sweet spot (as marked by the rubber bands) is on the ball.

- 2 CUTTING BOARD Wrap two rubber bands on either end of a cutting board to prevent the board slipping on the counter.
- JAR OPENER Place a band around the lid and/or around the body of the jar. The band around the lid will improve your grip and help you open the jar easily. The band around the jar body helps you keep a grip on the jar, especially when your hands are wet.
- **TRASH CAN LINERS** Place a large rubber band around your trash can liner to keep it from slipping down into the can. Stuff it full and not have to worry about having to clean up a mess.
- **WALLET** Secure valuables with a rubber band. It's neat, keeps everything you need together, and fits nicely in a pocket.
- **BOX FLAPS** Secure box flaps with a rubber band. Enjoy the easy access for loading, unloading, or just seeing what is in the box.
- PAINT CAN Stretch a rubber band around a paint can so that part of the rubber band runs across the center of the opening. Then, skim your brush across the rubber band back and forth to remove any excess paint. This helps prevent paint build up and keeps the rim clean. It is also makes it easier to put the lid back on when it is time to wrap up the project.
- **WAIST EXTENDER** Whether you've got one on the way or just want to breathe easy while you sit, simply pull a rubber band through the buttonhole on your pants. Then, put that loop around the button. It's that simple! This will also prevent a muffin top when you have jeans that fit everywhere, but the belly.
- **9 FRENCH-RUBBER MEMORY BOARD** It's easy to make one. First, measure a section of foam board to the desired dimensions and trim to specifications. Do the same for the fabric, making sure fabric is about four inches wider and longer than the foam board. Smooth away any creases and center fabric on top of board. With your fingers, gently wrap the fabric around the memory board and secure it with duct tape. Be sure to pull the fabric tight before taping. Measure the memory board across, from corner to corner. Then, grab a handful of rubber bands to secure across the space.

