Argonics is one of the country's largest producers of wear-resistant polyurethane products, providing high-performance urethane solutions at its state-of-the-art production facility. Whether you're producing concrete, manufacturing aggregate products, processing grain or mining precious metal, Argonics has built its reputation for providing cost-effective solutions for some of the most demanding applications.

Argonics formulates Kryptane polyurethane products to meet your industrial applications.

Installation after installation, Argonics' high performance polyurethane materials have proven effective, with easy installation, reduced maintenance costs and reduced downtimes. Argonics products save customers thousands of dollars in lost production and man-hours. Our success is measured by our customers' satisfaction.

## ARGONICS ENGINEERED POLYURETHANE

### PERFORMANCE POLYURETHANES

#### KRYPTANE<sup>®</sup> URETHANE PRODUCTS

Argonics formulates unique proprietary Kryptane urethane materials tailored to meet the demands of your wear application, whether it be sliding or impact abrasion, sticking or corrosion.

#### **TYPICAL APPLICATIONS:**

- Conveyor belt cleaners
- Skirting systems
- Distributor and launder liners
- Chute, bin and hopper liners
- Impact- and abrasion-resistant plates
- Salt, sand and chemical spreaders
- Down hold plugs and discharge sleeves
- Pipe, fitting and valve liners
- Vibration pads, seals and gaskets
- Chain and cable guides
- Blasting curtains and screens
- Truck bed liners, wheel chocks and crossover pads
- Snowplow blades, shoes and deflectors



#### **KRYPTANE<sup>®</sup> POLYURETHANES**

- KRYPTANE 80A RED Used for fine particle, shallow angle, sliding abrasion. Excellent for grain handling, sand blast curtains and liners for aggregate wash plant equipment.
- KRYPTANE 90A RED Used for fine particle abrasion associated with sticking and hang-up problems. This material has the lowest coefficient of friction of any of the typical Kryptane products. Typical applications are classifier shoes and pipe elbows.
- KRYPTANE 83A GREEN Used for coarser particle, higher angle of impingement wear problems with 2" minus materials. This formulation has excellent cut and tear resistance. Common uses are belt scrapers, chute liners and mixer liners.
- 4. KRYPTANE 93A BLACK Used for the toughest applications handling up to 12" minus materials. This material has the highest tensile and tear strengths of the standard Kryptane products. Typical applications include drag line bucket liners, grizzlies and layered belt scrapers.

The above list references our standard materials. We aggressively pursue development of application-specific formulations. Please consult your Argonics Representative for further information on our other performance-based polyurethane materials.

#### Product: Liners

"I have used Argonics Kryptane lining material at our grain export terminal for over ten years. I installed Kryptane liners in many high flow problem areas where other products have failed, due to premature wear of the lining material. Generally I would replace the old liner each year, but after installing Kyptane, the maintenance schedule has decreased substantially. I have not had to replace any of these liners installed over the last ten years. We export about 43 million bushels of grain through the system each year and the Kryptane liners show little sign of wear."

#### Product: Redi-Liner

"Before we installed the 12x12 [Redi-Liner] squares we were using 1/2" steel AR plate. The steel plate would last a season, about 200,000 ton across the screen deck. Since we installed your product, we've run over 385,000 ton through the decks and they show very little wear! Not only are we getting more life and wear than the steel AR plate, the installation of this product is a piece of cake!

"Thanks for a great product!"

- Steve E., Kokosing Material Inc.

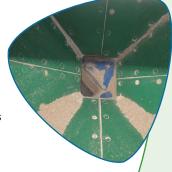
#### **LINER OPTIONS**

Kryptane urethane sheets are available in standard  $4' \times 8'$ ,  $4' \times 10'$ ,  $5' \times 8'$  and  $5' \times 10'$  sizes from 1/8'' to 1'' thick. Sheets can be made in plain, fabric backed, expanded metal backed and weldable configurations. Options for installation include adhesive, welding and a variety of common fasteners. Argonics also offers Kryptane urethane-capped bolts used in conjunction with our universal counter bore tool.

Custom liners are available for quotation. The biggest advantage of a custom liner is that it is made to the dimensions of your chute, bin or hopper, saving you hours of labor for cutting and fitting sheets in the field.

- Bill H., CHS Inc.

The most cost-effective type of lining system that we offer is our modular wear panels. Modular wear panels are available in a variety of standard sizes, thicknesses and attachment methods. Great savings because you only have to replace the panels that wear out.



#### **AGGREGATE PRODUCTS**

In addition to the variety of liner options available for your aggregate processing equipment, Argonics carries over 100 different styles of abrasion-resistant Kryptane urethane classifier shoes for more than 15 different types of screws in the field. A variety of wear parts for Eagle and Kolberg classifier tanks are available, as well as a growing selection of urethane screen deck parts like crown bar covers, spray deflectors, spray bar shields, shaft tube covers and urethanecoated deck tension rails. At Argonics, we pride ourselves on the superior performance of all of our urethane components designed and formulated for aggregate equipment.

#### **CONVEYOR PRODUCTS**

Argonics' conveyor product line has been developed with one basic principal in mind: keep conveyors running efficiently while minimizing costly carry-back. Argonics' conveyor products are designed to work in any type of environment, from wet clay to frozen coal.

- Most effective and reliable belt cleaning system available
- · Most economical, longest-wearing belt skirting in the world
- · Hardest working impact bar on the market
- Largest selection of replacement belt cleaner blades

#### **CONCRETE PRODUCTS**

Argonics is proud to offer the superior performance and reliability of the Kryptane Evolution mixer drum liner. The Evolution drum liner features Argonics' unique Kryptane formula with an entirely new manufacturing process and more weld plates to impede concrete migration behind the liners. It offers improved weld plate-to-urethane bonding, as well as outstanding wear resistance.

#### **Kryptane Evolution**

• Wet batch mixer drum and blade liners

#### **Kryptane Green**

• Agg batcher and agg bin liners

PERFORMAN

POLYURETHANES

- Weigh batcher liners
- Hopper liners
- Chute liners
- Collecting cone liners







ENGINEERED POLYURETHANE

# DEMAND THE EDGE PERFORMANCE PROVEN PRODUCTS

#### **CUSTOM MOLDED SOLUTIONS**

Argonics' core competency in urethane casting enables rapid progression through prototyping to production volumes. We're able to produce production-quality polyurethane parts without the large capital investments of an injection mold. This leads to tooling costs that are often one-tenth to one-quarter of the costs of injection molding tooling. Simple parts can often be at production volumes in four to six weeks. Argonics custom molding allows customers to receive and test product ideas quickly and at low risk.

Argonics offers two production facilities that will work with you from idea to delivery. This includes a complete machine shop run by experienced machinists. Argonics' Colorado plant, Kryptane Systems, has machining capable of building more than 80% of its molds in-house. This in-house capability yields better control over the project timeline and the best turn-around time for your needs. The short development time allows customers to test real production parts without committing to large production volumes.

Field testing of all Kryptane Systems products is essential to the success of the products. Kryptane Systems' years of urethane product development experience combined with your application expertise ensure that we create a product that meets or exceeds your requirements. Once the requirements and development process is complete, Kryptane Systems' molding department can produce the quantities and styles to satisfy any requirements. From 1 to 1 million, Kryptane Systems can do it all in-house in its 20,000 sq.ft. production facility.



#### We service all industrial applications:

- Agriculture
- Materials Handling
- Power
- Aggregate
  Mining
  - Pulp and Paper
  - Manufacturing

#### **AWARDS:**

- Honored as one of Michigan's 50 Companies to Watch
- Award for Entrepreneurial Excellence, Operation Action U.P.

Concrete

• Utility

- Award of Excellence, Operation Action U.P.
- Named one of Michigan's Best Small Businesses





The Argonics Nested Triangle logo and Kryptane are trademarks or registered trademarks of Argonics, Inc.

LIB-AR-CA-08-01 Rev.3

Patents: 6,547,062 • 6,913,138 • 5,979,638 • 6,056,112 • 7,441,647 • 7,484,617 • 7,284,658

520 9th Street Gwinn, MI 49841 906.226.9747 800.991.2746 fax: 906.226.9779 information@argonics.com