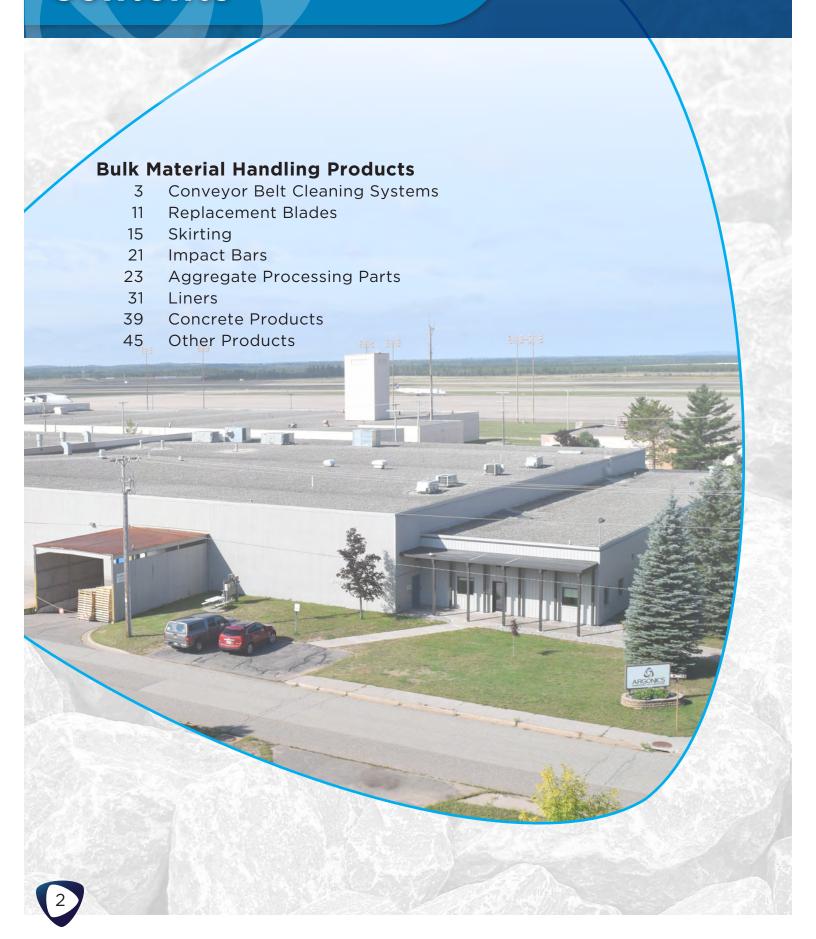


PRODUCTS



Table of Contents





Conveyor Belt Cleaning Systems



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 on providing cost-effective solutions for some of the most demanding applications.



BENEFITS:

- Reduces clean-up costs and creates a cleaner, safer work environment
- A variety of blade formulations are available to best fit your application, including tungsten carbide
- Design allows greater full-blade contact while easily deflecting belt splices
- · Removes excessive carryback while reducing belt wear
- · No rusty springs, hoses, cables or shocks to deal with
- · Quick blade change out with less downtime

INDUSTRIES SERVED:

- Aggregate
- Cement
- Concrete
- Coal mining
- Coal fired power plants
- Precious metal mining
- Pulp and paper



Micro Eraser™



The Micro Eraser is your answer for portable equipment with tight clearance issues. Designed with our 6" tall polyurethane blade, it works best on belts up to 48" wide with head pulleys of 28" diameter or less. This economical but powerful system uses our patented Perma-Torque™ tensioner.

Recommended Belt Speeds: 0 - 500 fpm (2.5 m/s)
Recommended Pulley Diameter (PD): 8" - 20" (200 mm - 500 mm)





The Eraser PQ (Pit and Quarry) system is an economical cleaner designed for performance and reliability. With a simple and effective spring tensioning unit, it uses our 6" tall polyurethane blade and requires little to no maintenance.

Recommended Belt Speeds: 0 - 450 fpm (2.3 m/s)
Recommended Pulley Diameter (PD): 8" - 20" (200 mm - 500 mm)





The Eraser RPQ system uses the same simple and effective spring tensioning unit as the Eraser PQ, with a 7" tall polyurethane blade, giving you more wear life and allowing for installation on systems with a larger diameter head pulley.

Eraser™



The Eraser system is our standard industrial workhorse. This rugged yet versatile cleaner is built around our exclusive patented Safe TorqueTM tensioning system. It is equipped with a 7.25'' tall polyurethane blade, and can handle most of your demanding applications with ease.

Recommended Belt Speeds: 0 - 750 fpm (3.8 m/s) Recommended Pulley Diameter (PD): 16" - 32" (400 mm - 800 mm)

S3Max™



The S3Max is an intermediate system between the Eraser and the Super Eraser that features a 10" tall polyurethane blade. It is ideally suited for more aggressive applications where a larger blade is required, or those systems with a larger head pulley.

Recommended Belt Speeds: 0 - 900 fpm (4.5 m/s) Recommended Pulley Diameter (PD): 24" - 48" (600 mm - 1200 mm)



Super Eraser™



The Super Eraser is a Mine Duty cleaner. It has a .25'' thick, 3.5'' x 3.5'' box steel mainframe and a massive 12" polyurethane blade. It will handle anything you throw at it. If you're dealing with high speed, high tonnage belts, the Super Eraser was built specifically for you.

Recommended Belt Speeds: 0 - 1000 fpm (5.0 m/s) Recommended Pulley Diameter (PD): 24" - 60" (600 mm - 1500 mm)

Eraser MDP™



The Eraser MDP is the Super Eraser system with a one-piece 11.25" polyurethane blade in the same profile as the SHD blade. Meant for use in the toughest, mine duty applications, the MDP is extremely rugged, durable and long-lasting.

Recommended Belt Speeds: 0 - 1200 fpm (6.0 m/s)
Recommended Pulley Diameter (PD): 24" - 60" (600 mm - 1500 mm)





The Eraser HD is designed to withstand heavy vibration. This system has a reinforced mainframe and a heavy-duty channel attachment design. It utilizes a series of 6'' wide x 7'' tall polyurethane blade segments that conform to crowned head pulleys.

Super Eraser HD™



The Super Eraser HD is a channel mount version of the Super Eraser. It matches Mine Duty design with segmented blade technology. If you like big equipment, this is the one. Even the harshest environments don't stand a chance against the Super Eraser HD. Available in pin style or with Safe Torque.

Recommended Belt Speeds: 0 - 1000 fpm (5.0 m/s)
Recommended Pulley Diameter (PD): 16" - 48" (400 mm - 1200 mm)

Eraser SHD™



The Eraser SHD utilizes the Super Eraser mainframe and Safe Torque tensioners paired with an 11.25" tall replaceable tip blade. A mine duty design, this heavy-duty system allows for only the 6" blade tip sections to be replaced when they become worn, rather than the entire blade length.

Recommended Belt Speeds: 0 - 1200 fpm (6.0 m/s) Recommended Pulley Diameter (PD): 24" - 60" (600 mm - 1500 mm)



Secondary conveyor Belt Cleaning Systems

XTCTM



The XTC is one powerful reversing conveyor cleaner. The system can handle wet, dry, sticky or slimy conditions. The unique Web-Torque tensioner has enough give for mechanical splices and the flow-over blade design reduces material build up.

XTC[™] Tungsten



The XTC with tungsten is ideal for applications with belt speeds up to 1000 fpm. The tungsten system uses the same mainframe and unique Web-Torque tensioner as the urethane system, which has proven effective in wet, dry, sticky or slimy conditions. Tool steel- and stainless steel-tipped blades are also available.

Eraser DS™



The Eraser DS is an economical version of our XTC cleaner, with a .19'' thick, 2''x 2'' powder-coated tube stock steel mainframe for strength and durability. The DS uses the same polyurethane blade as the XTC.

Eraser DS™ Tungsten



The Eraser DS tungsten system is urethane-free for use with high-temperature materials. It uses the same .19" thick, 2"x 2" powder-coated tube stock steel mainframe as the DS system. It also utilizes the same tungsten carbide blades as the XTC.

Secondary Conveyor Belt Cleaning Systems

Super-G™



The Super-G's unique "pass-through" mainframe design allows material to freely fall through it, keeping your systems online with little to no maintenance. This system is based on the same heavy-duty mainframe and Perma-Torque tensioner as our Eraser system.

Super-G™ Tungsten



The Super-G with tungsten features a completely unique, redesigned blade. It uses the same mainframe and Perma-Torque tensioner as the urethane Super-G. The urethane cartridge holds the 6" tungsten blade tips, which allows the blades to flex with and maintain contact and pressure against the belt.

Super-G™XL



The tungsten Super-G XL is a longer version of the tungsten Super-G, available in lengths of 72", 84", and 96". The Super-G XL is built on a .25" thick, 3.5" box steel mainframe, similar to the Super Eraser. Pins in the center allow it to hold two of our tungsten-tipped urethane blades, which flex to maintain pressure against the belt.

Brush Cleaner



The Brush Cleaner is a completely contained system, which utilizes a Van der Graaf drum motor. This motor is an enclosed unit with all motorized parts inside the roller, making it the choice for the most challenging environments. The compact, low-profile design operates at 96% efficiency and is virtually maintenance-free. It is ideal for use on chevron or cleated belts.

Plow Conveyor Belt Cleaning Systems

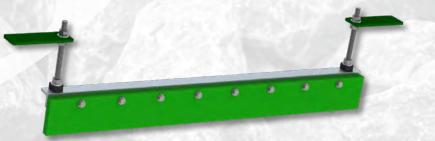
Diagonal Plow



The V-Max X-Plow may seem simple, but don't be fooled, it works!

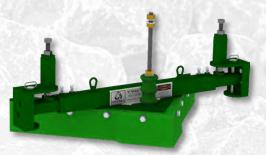
Thanks to the adjustable down pressure system, this single-minded plow will reduce your down time and increase your bottom line.

Aluminum Diagonal Plow



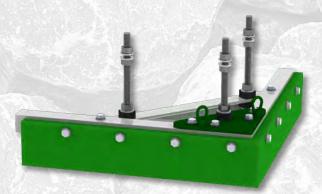
The Aluminum X-Plow offers complete cleaning at an economical price. Utilizing the same blade as the V-Max X-Plow with a lightweight aluminum mainframe, this system is best suited to quarry or other like environments.

V-Max V-Plow™



The V-Max V-Plow has seen duty in some of the world's largest quarries and has protected them from major damage and costly repairs. Dirt and rocks can get caught in between the belt and pulleys, ripping holes and creating hours of costly downtime. The V-Max delivers adjustable down force, so nothing will get through.

Aluminum V-Plow[™]



The Aluminum V-Plow is an economical solution for budget-conscious quarries that want the protection that a v-plow offers. The Aluminum V-Plow glides on the belt's surface, effectively removing the dirt and rocks while keeping an eye on your budget.

Replacement Blades for most oem systems



The Argonics primary and secondary replacement blades are specifically engineered to eliminate carryback by removing debris from the belt's surface. They are field-tested and proven to withstand the most severe conveying environments around the world, outlasting any other polyurethane blade by a 2-to-1 margin.

Our blades use our proven Kryptane® polyurethane formula. They directly retrofit OEM systems with no adaptation necessary.

RETROFIT BLADES AVAILABLE:

ARCH Environmental Equipment, Inc.

Gordon Saber® Mini Blade (Raptor MGS™)
Gordon Saber® Primary Blade (Raptor GS™)
Gordon "SCM" Channel Mount Blade (Raptor GSC™)
Gordon "SCM" Channel Mount Blade (Raptor GSC2™)

ASGCO® Manufacturing, Inc.

Mini-Skalper (Raptor AGM™) Skalper I® Blade (Raptor AGC™) Skalper II®

Skalper IV® Blade (Raptor AG2™)

Benetech®

AdvantEdge™ Primary Cleaner (Raptor BT™)

Flexco

Rockline[™] Primary Belt Cleaner (Raptor RL[™]) Mineline[™] Primary Belt Cleaner (Raptor ML[™]) MegaShear[™] Primary Blade (Raptor FMS[™])

Richwood Industries Inc.

Combi-T® 1C and 1C-ITC Blade (Edge™)

Superior Industries

Exterra® Primary Blade (Raptor MPV™)

Martin® Engineering

QCI™ Low Profile Double Notch Blade (Raptor MDL™)
QCI™ Standard Profile Single Notch Blade (Raptor MSP™)
QCI™ Standard Profile Double Notch Blade (Raptor MDS™)
QCI™ Standard Profile Blade (Raptor MHP™)
QCI™ Heavy Duty Profile Blade (Raptor MXA™)
QCI™ Extra Heavy Duty Profile Blade (Raptor MXB™)
QCI™ Extra Heavy Duty Profile Blade (Raptor MXB™)
Pit Viper™ Blade (Raptor MPV™)
Durt Tracker® Blade (Raptor MHD™)
Durt Tracker® Blade (Raptor DT2™)
XHD Durt Tracker® (Raptor DXT™)
Durt Hawg® Primary Blade (Raptor MDH™)
Durt Hawg® Primary Blade (Raptor DH2™)
Durt Hawg® Secondary Blade (AccuFlo PigHead™)
QC2™ Secondary Blade (AccuFlo TQ2™)

QC1™ Low Profile Single Notch Blade (Raptor MLP™)

Saber® is a registered trademark of ARCH Environmental Equipment Inc., Paducah, KY. ASGCO® and Skalper® are registered trademarks of ASGCO Manufacturing, Inc., Allentown, PA. Benetech® is a registered trademark of Benetech, Inc., Aurora, IL. AdvantEdge™ is a trademark of Benetech, Inc., Aurora, IL. Rockline™, Mineline, and MegaShear™ are trademarks of Flexco, Downers Grove, IL. Metso® is a registered trademark of Metso Corporation, Helsinki, Finland Combi-T® is a registered trademark of Richwood Industries, Inc., Huntington, WV. Exterra® is a registered trademark of Superior Industries, Inc., Morris, MN. Martin®, Durt Tracker®, and Durt Hawg® are registered trademarks of Martin Engineering, Neponset, IL.

Blade Durometer SELECTION GUIDE

Formula/Durometer Color	Application	Material	Temperature
ETHER 62 (N62)	Normally used for extremely wet applications, sands & fines	Lots of liquid on belt, sand or slurry	-40°F to 180°F
ETHER 80 (R80)	Good for wet applications with any pH level	Fine particles including sand, grain, 3/8" minus washed materials	-40°F to 225°F
ESTER 83 (G83)	Our standard, high abrasion-resistant all-purpose cleaning blade	Most sand and gravel materials, coal, ores	-40°F to 225°F
ETHER 90 (U90)	Good for dry applications with any pH level	11/2" washed / finished product. Wood chips, cement, limestone, grain, sugar, clay or other sticky material	-20°F to 225°F
ESTER 93 (B93)	Our high temperature cleaning blade	Extremely coarse aggregate, asphalt, recycled materials, glass, higher temp, sticky applications	-20°F to 250°F Up to 300°F inter- mittent
FRAS (RU83)	Flame-retardant, anti-static, cleaning blade. Argonics is one of the only blade manufacturers in the US to offer this formula Coal mining and coal-fired power plants -40°F to 225°F		
FLAME RETARDANT (FOxx) - CAN BE ANY DUROMETER	MSHA approved, FrontLine® flame-resistant cleaning blade	Flame retardant urethane (can be any durometer or formula)	Temperature varies depending on the durometer
CERAMIC (CALL FOR AVAILABILITY)	Good for very cold, winter applications or frozen materials		Temp. varies depending on the durometer, typically G83

Safe Torque™ RATCHET SYSTEM



FEATURES:

- Safer operation
- Easier to tension
- Corrosion resistant
- One hand adjustment
- · No kickback or pins
- Completely sealed

SAFE TORQUE RATCHET SYSTEM

The Safe Torque ratchet tensioner is available on most Argonics conveyor belt cleaning systems. Our Safe Torque tensioner is a unique solid urethane ratchet style adjustment device, specifically designed to work in conjunction with our patented Perma-Torque™ tensioning system. The Perma-Torque tensioner applies constant blade pressure across the full length of the head pulley.

The Safe Torque ratchet actuating system offers the unique ability to tension a conveyor belt cleaning system with only one hand, and is extremely useful in confined areas. The supplied dust cap seals the system from fine particle impaction, common to so many tensioners on the market today. You'll benefit from the ease of use and the inherent safety that our Safe Torque ratchet tensioner offers.



PRIMARY CLEANER SELECTION GUIDE

System Name	Max Belt Speed in FPM	Min Pulley Diameter	Max Pulley Diameter	Max Belt Width	Tensioner
Eraser™ SHD	1200	24"	60"	120"	Safe Torque™
Eraser™ MDP	1200	24"	60"	96"	Safe Torque™
Super Eraser™	1000	24"	60"	96"	Safe Torque™
S3 Max™	900	24"	48"	96"	Safe Torque™
Super Eraser HD™	1000	24"	60"	120"	Safe Torque™
Eraser HD™	750	16"	48"	96"	Safe Torque™
Eraser™	750	16"	32"	96"	Safe Torque™
Eraser™ RPQ	450	8"	24"	60"	Spring
Eraser™ PQ	450	8"	20"	60"	Spring
Micro Eraser™	500	8"	20"	72"	Pin Style

SECONDARY CLEANER SELECTION GUIDE

System Name	Max Belt Speed in FPM	Max Belt Width	Blade
XTC™	750	72"	Urethane
XTC™	1000	96"	Tungsten
Eraser DS™	600	72"	Urethane
Eraser DS™	900	72"	Tungsten
Super-G™	750	72"	Urethane
Super-G™	900	60"	Tungsten
Super-G XL™	900	96"	Tungsten
Brush Cleaner	Varies	72"	Nylon bristles (others available)

PLOW CLEANER SELECTION GUIDE

System Name	Max Belt Speed in FPM	Max Belt Width	Mainframe
V-Max [™] V-Plow	1000	96"	Steel
Aluminum V-Plow	750	72"	Aluminum
V-Max™ X-Plow	1000	96"	Steel
Aluminum X-Plow	750	72"	Aluminum



520 9th Street • Gwinn, MI 49841 906.226.9747 f: 906.226.9779 www.argonics.com





Conveyor Belt Skirting



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 on providing cost-effective solutions for some of the most demanding applications.



BENEFITS:

- · 8-10 times the wear life over rubber
- 60 percent lower coefficient friction compared to rubber, which reduces drag on the conveyor motor
- · Will not groove your conveyor belt
- Light-weight
- · Load-bearing
- · Can be formulated to work in wet or dry conditions

INDUSTRIES SERVED:

- Aggregate
- Cement
- Concrete
- Coal mining
- Coal fired power plants
- · Precious metal mining
- Pulp and paper



Conveyor Belt Skirting

Duo Seal™

- Material and dust containment in one solution
- Flexible secondary seal conforms to the belt to keep dust and particulate material under control
- Works with most existing skirt board clamping systems on the market
- Available in a variety of widths and thicknesses, in lengths up to 50 feet
- Rounded primary seal will work with any trough angle



Standard Skirting

- Fits into any other manufacturers' existing skirt clamping systems on the market today
- Available in a variety of widths and thicknesses in lengths up to 50 feet
- Can be ordered with 35-degree beveled edges* or a straight edge

*The beveled edge provides an even greater advantage because it already matches the troughing angle of your belt, eliminating the "break-in" adjustment.



Snap-Loc™ Dust Seal

- The gold standard for dust containment skirting
- Snaps into standard unistrut railing that can be bolted or welded into place
- Engineered to create a perfect seal that follows the contours and low spots of the belt between trough rollers
- No additional adjustments needed for the life of the seal
- Available with cavity for use on highspeed belts



Load Zone Containment Liner

- Excellent for containing material at the transfer points on your belt line
- Extra-rugged, reinforced design with 1/4" steel
- Extremely effective in reducing spillage
- Available with flat edge or 20-degree beveled edge
- Plain liners come in 60" and 96" lengths; varying heights and thicknesses available
- 1" thick ceramic liners contain ceramic hextiles, while the 2" contains ceramic cubes
- Ceramic liners available with flat, 20° or 35° beveled edge, in lengths of 48 inches or 60 inches

Containment liners come with Snap-Tite polyurethane plugs that cover the mounting slots and prevent material build-up.





Conveyor Belt Skirting

Combination Snap-Loc System

- Combination of Snap-Loc and Containment Liner work together to provide the ultimate dust control product
- Fits most conveyor systems on the market
- Excellent abrasion and hightemperature resistance
- Can be used with all belt widths and troughing angles

*The combination of Snap-Loc and Containment Liner is not sold together as a single unit; however, field testing has proven that these two products work exceptionally well together to provide solutions to dust problems



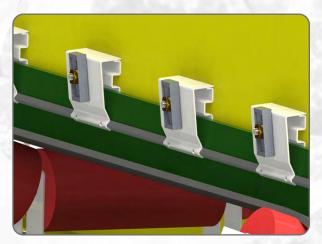
Fold-n-Seal™

- Quality, multi-sealing conveyor skirting solution
- Material and dust containment in one unique solution
- Primary seal keeps material on the belt while secondary seal keeps dust and particulate material under control



Wedge-Loc™

- Easy to install and adjust
- Stitch, weld, or bolt into place, install skirting, drop to belt, then knock wedges to lock down
- Frame made from 12-gauge, galvanized steel; clamping utilizes a stainless steelto-brass thread contact, coupled with cast aluminum wedge for continuous operation in corrosive and abusive environments





Common Formulations

69

The most common skirting durometer choice

83

Typically used for belt speeds in excess of 600 FPM

93

Used on belts with elevated temperatures, up to 250° F constant temperature



Front Line®, our flame retardant formulation, is MSHA approved and can be added to any durometer



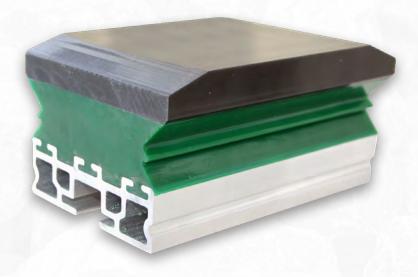
Flame Retardant Anti-Static (FRAS) combines our Front Line® flame retardant with a proprietary anti-static additive, making it perfect for use in underground mining and coal fired power plants

Load Zone Impact Bars



Our patented Load Zone impact bars are made of Kryptane® polyurethane and are engineered to absorb and disperse the forces of impact.

The Load Zone impact bar provides maximum protection for your belt surface and is produced exclusively by Argonics.



FEATURES:

- 3/4 inch thick Ultra High Molecular Weight (UHMW) wear surface
- Heavy-duty extruded aluminum insert for increased support and strength
- Replacement bar for most beds on the market
- No expensive T-bolt required
- Less rebound than rubber impact bars

BENEFITS:

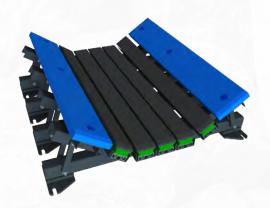
- Reduces costs
- Decreases downtime
- · Reduces maintenance time
- · Reduces material spillage
- · Minimizes belt damage
- Settles bulk product faster
- · Longer time in between replacement

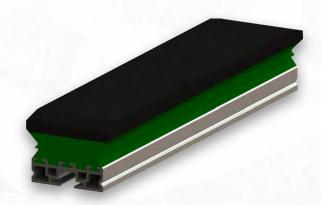


Sizes and Availability

NO T-BOLTS NECESSARY

All bars come standard with a heavy duty extruded aluminum insert, which provides rigidity and is designed to be installed using a standard $\frac{1}{2}$ inch (13 mm) grade 8 bolt and washer, reducing cost by eliminating expensive T-bolts.





Part Number	Length (in)	Length (mm)
CP-IB-3418-A-G69	18	457
CP-IB-3424-A-G69	24	610
CP-IB-3448-A-G69	48	1220
CP-IB-3455-A-G69	55	1400
CP-IB-3460-A-G69	60	1525
CP-IB-3472-A-G69	72	1830



520 9th Street • Gwinn, MI 49841 906.226.9747 f: 906.226.9779 www.argonics.com



Aggregate Processing Parts



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 on providing cost-effective solutions for some of the most demanding applications.



AGGREGATE PRODUCTS:

- Screen deck shaft tube covers
- Crown bar channel covers
- Spray shields
- Spray deflectors

- Redi-Liners
- Modular liners
- Classifier shoes



Screen Deck Parts

Screen decks provide many possibilities for wear, due to the abrasive materials being screened. Our polyurethane screen deck parts meet the demands of even the most abrasive material, whether it be sliding or impact abrasion, sticking, or corrosion.



Screen Deck Shaft Tube Cover

Our shaft tube cover wraps around the tube and bolts on for easy installation. It's preformed to fit the tube snugly and is thicker at the top to give you more wear material where it is needed. Available in lengths of 24" and 30", with nominal sizes of 6", 8", 12", and 17".



Crown Bar Channel Cover

This product lasts five times longer than a rubber channel cover. Available for 3/8" and 1/2" channel. Available in any length up to 25 feet.

Benefits include:

- Slightly tapered legs to prevent rolling off the bar under harsh conditions
- · Reduces noise and vibration
- Extends the life of your screen
- Outstanding abrasion resistance



Spray Shield

Designed to keep water on your deck where it belongs.

Simple, inexpensive, with an effective design, this product has a longer wear life than rubber boots. Available for 11/2", 2", and 3" pipe.



Spray Deflector

The longest lasting spray deflectors available, with easy installation and increased wash effectiveness. Available for $1\,1/2"$ and 2" pipe.





Redi-Liner™ MODULAR LINING SYSTEM



Our Redi-Liner 12"x12" panels can be arranged into any wear pattern you need. Its unique, simple installation method allows you to replace only what's needed, instead of replacing the entire liner.

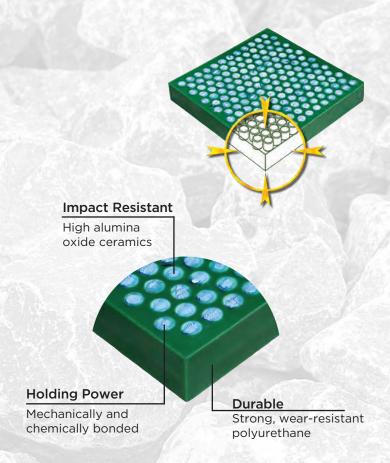
PERFECT FOR:

- Screen discharge liners
- Screen feed liners
- Conveyor transfer points
- Chutes with high wear
- Charge chutes

AVAILABILITY:

Choose from solid or ceramic-embedded polyurethane

- Ceramic-embedded available in 2" and 2¹/₂"
- Solid available in 1", 1½", 2", and 2½"

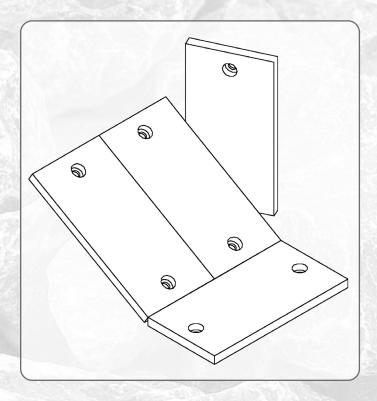


Redi-Liner is easy to install, requires no maintenance, will outlast most any other wear product available, and provides protection for your toughest wear areas.

Wear Liners Modular Lining System



Wear plates help eliminate material adhesion and dampen noise levels significantly. Our polyure-thane wear plates have proven to be cost-effective over steel liners by as much as 5-to-1.



BENEFITS:

- High level of abrasion resistance
- Nonstick characteristics
- High-performance urethane extends plate life

Our wear plates are available in a variety of standard sizes, as well as weldable and boltable options. We can quickly produce custom sizes to suit your requirements.

Classifier Flight Shoes



We've replaced alloy shoes in sand and gravel plants around the world. Installation after installation, our classifier shoes outlast metal alloys and our competitors' best urethane shoes. We have classifier flight shoes available for most classification screws in the market with quick lead times. There is also a quick turnaround time on custom shoes.

REPLACEMENTS TO RETROFIT:

- Akins
- Blackstone
- Cindaco
- Denver
- Eagle
- Essco
- Greystone
- Kolberg
- Kolman
- Metz
- McLanahan
- Nermco
- Telsmith
- Torgenson
- Wemco

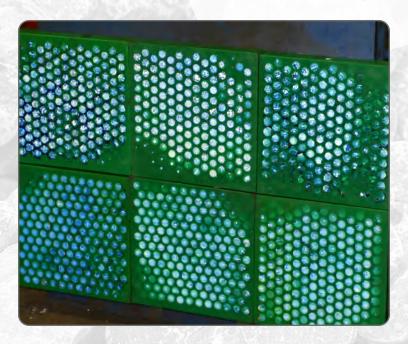


PRODUCT: Redi-Liner ceramic wear panels

Leslie Vale Quarry, located in Australia, annually produces **more than 700,000 tons of high-quality, hard rock dolerite products**. The volume of their crushing operations created enormous wear issues with their existing steel wear liner, which was lasting, on average, only five months.

Frustrated, they turned to Argonics products after a recommendation.

"The Redi-Liner Ceramic Lining System has lasted for over 3 years. It is so much better than the panels I used previously, and has far exceeded my expectations," said the quarry manager. "I can get on with my job because it's one less product I need to shop around for. I know I can rely on Redi-Liner."



PRODUCT: Redi-Liner wear panels

"Before we installed the 12"x12" [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 lift 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.



BENEFITS OF KRYPTANE® POLYURETHANE:

- Superior wear resistance
- Incredibly high split-tear resistance
- Not susceptible to thermal expansion
- Easy to handle and flexible
- Can be formulated to work in both wet and dry conditions



WHY ARGONICS?

We are one of the country's largest producers of hot cast polyurethane products. Many of these products are used in the concrete, aggregate, and mining industries. We can help with almost any wear or abrasion problems at your plant or facility.

Whether you're looking for custom liners, conveyor belt cleaners, or something else, we will tackle your wear problems from concept and design to solution and delivery.



520 9th Street • Gwinn, MI 49841 906.226.9747 f: 906.226.9779 www.argonics.com



Abrasion-resistant Polyurethane Liners



Argonics' Kryptane® polyurethane provides the most complete wear protection for your equipment. Kryptane has become the material of choice in many applications because of its outstanding physical properties, which produce a superior wear-resistant product, and the versatility of applications where it can be used.



BENEFITS:

- · Incredibly high split-tear resistance
- Extreme wear resistance
- Reduced product adhesion due to low coefficient of friction
- · High oil and grease resistance
- Not susceptible to thermal expansion
- · Flexibility aids in proper fit
- Elastomeric properties reduce breakage of and damage to the conveyed product

TYPICAL APPLICATIONS:

- Bins
- Hoppers
- Turnheads
- Chutes
- Discharges



Abrasion-resistant Polyurethane Liners

Designed to extend the wear life and reduce maintenance requirements of your equipment

- Argonics' polyurethanes offer unparalleled abrasion and tear resistance. They have proven themselves time and time again over the past two decades and stand up to the harshest abrasive environments.
- Argonics' polyurethanes save your company money by reducing costly downtime in process equipment, reducing your overall production cost.
- Argonics' polyurethanes are lightweight, reduce noise, are easy to install and corrosion-resistant.
- Argonics' polyurethanes are not brittle like plastics, exhibit and elastomeric memory and are not subject to thermal expansion.
- Argonics' polyurethanes have better abrasion and tear resistance than rubber, have a higher load-bearing capability, are ozone and ultraviolet resistant, and can be manufactured in a wider range of durometers (hardness).





Proven Cost Effective



High quality products and value-added service

At Argonics, we pride ourselves on the superior performance of all of our urethane components designed and formulated for aggregate equipment.

We offer a cost-effective warranty on all of our materials. All Argonics parts are warranted against defects in material and workmanship for one year after the date of purchase.

Our goal is to provide top-quality products and great service that will meet or exceed your expectations. Our success is measured by our customers' satisfaction.

Comprehensive Analysis



Choosing the best solution for the application

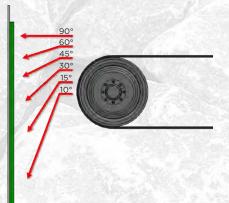
Whether your wear issue is sliding abrasion, impact damage, sticking material or excessive corrosion, Argonics polyurethane liners are engineered to meet the particular demands of your specific application.

A comprehensive analysis addresses the problem at its source and guarantees maximum service life:

- Properties of the processed product
- Speed of the processed product
- Tonnage/loading of the application
- Product's drop height
- Impact angle of the product flow
- Ability to modify the application

The impact angle is an essential part of the analysis. The drawing to the right illustrates what happens when the impact angle is varied from 10 degrees to 90 degrees.

By correctly analyzing the proper application characteristics like the specific product type, the angle of impact and the wear issue to be addressed, Argonics polyurethane liners will provide a genuine improvement as a replacement for polyethylene, rubber, UHMW polyethylene and steel wear liners.



Ester Urethanes

KRYPTANE 83A GREEN

High abrasion resistance to harsh sliding, cutting and impact. Ideal for most sand and gravel materials, coal, ores. Impact angle of 30° to 60°.

KRYPTANE 83A FRAS

Specifically formulated for coal handling. Kryptane FRAS offers flame retardant anti-static properties that surpass the strictest standards. Impact angle of 30° to 60°.

KRYPTANE 93A BLACK

Strong abrasion resistance to sliding, grooving and impact. $1^{1}/2^{"}$ (38mm) washed/finished product. Impact angle of 60° to 90°.

KRYPTANE 63A YELLOW

Extremely elastic polyurethane with an exceptionally high resistance to impact of crushed rock up to 2" (50mm). Impact angle of 60° to 90°.



Ether Urethanes

KRYPTANE 80A RED

Resists sliding and/or impingement abrasion. Fine particles including sand, grain, $\frac{3}{8}$ " (9.5mm) minus washed materials. Impact angle of flat to 30°.

KRYPTANE 90A RED

Resists sliding and/or impact abrasion. Very low coefficient of friction. Fine particles up to $\frac{3}{16}$ " (5mm) in size, wet and dry. Impact angles of flat to 30°.



KRYPTANE ORANGE

MSHA-approved Front Line™ flame-retardant urethane can be any durometer or formulation. Impact angle of 30° to 60°.



Fully Customizable Panels REDI-LINER & MAGNETIC



Redi-Liner bolt-in 12"x12" panels can be arranged into any wear pattern that is needed. Their unique, simple installation method allows you to replace only what's needed instead of replacing the entire liner.

BENEFITS:

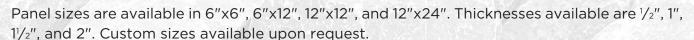
- Easy to install
- Requires no maintenance
- Will outlast most other wear product available
- Provides protection for tough wear spots in loading areas, hoppers and transfer points

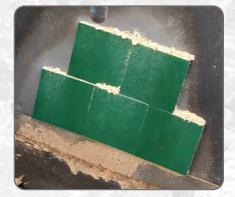
Redi-Liner is available in both solid and ceramic-embedded polyurethane. Choose from a variety of durometers and formulas designed for a number of different applications.

Magnetic modular panels can be quickly and easily installed into any pattern to help reduce wear in critical areas of your operation.

BENEFITS:

- Rare earth magnets hold panels in place
- Panels can be placed together to address wear areas of any size
- Our ½" thick patches are perfect for covering holes in walls or chutes
- Easy to install with no added maintenance





CUSTOM LINERS OFFER A VERSATILE SOLUTION

Custom liners can be used anywhere our standard sheets don't fit, where weight and size are a concern, or where a long-term solution is needed. Our custom liners save you hours of labor usually spent cutting and fitting sheets in the field.

- Pieces are manufactured to fit precisely together
- Easy to replace one piece at a time
- No wasted material
- · No extra labor cutting pieces from standard sheets
- Faster installation
- Extremely fast delivery

Ceramic Polyurethane Liners



KRYPTILE CERAMIC POLYURETHANE

Kryptile is the solution for aggressive applications. Kryptile ceramic liners combine the wear resistance of high alumina oxide ceramic with the impact resistance of Kryptane® polyurethane. Kryptile liners are all custom designed to the shape of your chute, bin or hopper, eliminating the need to cut or fit the liners in the field and ensuring a perfect fit every time.

KRYPTILE KT

Kryptile KT is the original ceramic hextile liner. The hextile formation is closely gapped to provide superior sliding abrasion resistance in high fines applications, wet or dry. Kryptile KT is generally not recommended for applications where there is impact; it is for slide abrasion only.



Kryptile KS is specifically designed for aggressive applications with high impact and large rock. Kryptile KS is generally recommended for applications with 10" (254mm) minus rock dropping from a maximum of 6 feet (1.83m).

KRYPTILE KC

Kryptile KC works well in virtually all applications.
Kryptile KC is available in liners at least 11/4"
(32mm) thick. Kryptile KC is generally recommended for applications with 6"
(152mm) minus rock dropping a maximum of 4 feet (1.22m).

KRYPTILE KH

Kryptile KH is our ceramic cube liner. Kryptile KH is available in liners at least 2" (51mm) thick. Kryptile KH is generally recommended for applications with 15" (381mm) minus rock dropping from a maximum of 8-10+ feet (2.44-3.05+ meters).

Technical Specifications

OUR MOST COMMON POLYURETHANE FORMULATIONS

	Y63 Duro	R80 Duro	G83 Duro	R90 Duro	B93 Duro
Hardness durometer (shore A +/-5)	63	80	83	90	93
Tensile strength (PSI)	4865	4501	6600	4605	7500
100% modulus (PSI)	400	645	800	1216	1390
300% modulus (PSI)	708	1234	1264	2386	2250
500% modulus (PSI)	1947	2849	3413	4090	5500
Angle tear strength (die C) (lbf/in)	248	361	450	465	598
Trouser tear strength (lbf/in)	68	180	250	127	460
DIN abrasion loss (ml)	0.059	0.048	0.044	0.048	0.052
Cured density	1.21	1.05	1.21	1.05	1.21
Coefficient of friction	N/A	N/A	0.27	N/A	0.19





520 9th Street • Gwinn, MI 49841 906.226.9747 f: 906.226.9779 www.argonics.com



Concrete Products





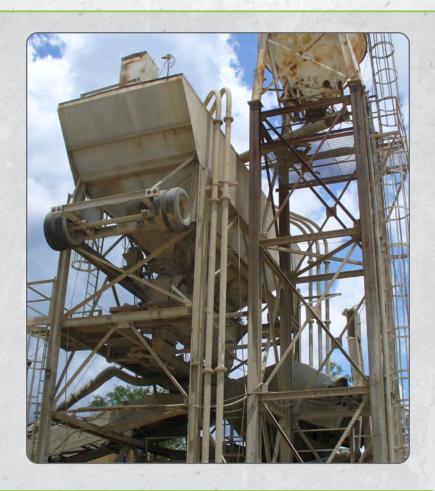
Argonics' Kryptane® polyurethane provides the most complete wear protection for your plant. It has become the material of choice in many applications because of its outstanding physical properties, which produce a superior wear-resistant product, and the versatility of applications where it can be used.

TYPICAL APPLICATIONS:

- Drums
- Bins/hoppers
- Chutes
- Turnheads
- Custom liners
- Concrete truck parts
- Pan mixer paddles and scrapers
- Belt cleaners
- Skirting

BENEFITS:

- Extreme wear resistance
- Reduced product adhesion due to low coefficient of friction
- · Flexibility aids in proper fit
- Elastomeric properties reduce breakage of and damage to the equipment





Evolution MIXER DRUM LINERS

The Evolution mixer drum liner features Argonics' unique Kryptane polyurethane formula, manufactured using proprietary manufacturing techniques. Argonics backs each central batch drum liner 100% against delamination. If any section of your mixer drum liner delaminates within the warranty period, that section will be replaced for free.

Argonics stands behind the Evolution mixer drum liners with a five year or one million yard warranty.





PRODUCT BENEFITS:

- Improved weld plate-tourethane bonding
- Originators of the Snap-Tite plug and weld-in liner
- The largest selection of liner sets on the market
- Established record of excellent performance
- Better than industry average lead times
- Standard and wrap-around tips available

Aggregate Batchers, Bins, Dump Cone, Turnheads & More



Liner Selection Guidelines

Most equipment at a concrete plant can be lined to protect it from abrasion.

TYPICAL THICKNESS SELECTIONS GUIDE:

1. Aggregate batcher

2. Aggregate bin/hopper

3. Central mix drum

4. Dump cone/directional hopper

5. Feed and discharge chutes

6. Turnhead

7. Ceramic/polyurethane

1/2" urethane

1/2" urethane

1" urethane

3/4" urethane

1" urethane

1" urethane

1" minimum

The purchase of a liner is a substantial investment. Maximum cost-effective performance can be reached through proper care and maintenance.

Kryptile

These ceramic liners combine the wear resistance of high alumina oxide ceramic with the impact resistance of our polyurethane. Kryptile liners are all custom designed to the shape of your chute, bin, or hopper, eliminating the need to cut or fit the liners in the field and ensuring a perfect fit every time.



Sheet Products getting the most from your investment

Sheets

Argonics provides a variety of standard sheet products for your needs. Standard sheets range in thickness from 1/4" to 1", and standard sizes are:

- · 4' x 8'
- 4' x 10'
- 5' x 8'
- 5' x 10'



Backings

Our sheeting is available in the following backings:

- · Plain backing
- Weldable
- Expanded metal backing
- · Solid metal backing

Weldable sheets are popular in the concrete industry and are easy to tack weld in place.





Mixer Truck Parts DISCHARGE CHUTE LINERS & BIBS

Charge Hopper Liners

- Weld-in design with Snap-Tite polyurethane plugs
- · Easy wash downs and clean-up
- Wear-resistant polyurethane reduces downtime







SNAP-TITE PLUGS

Discharge Chute Bibs

- Superior abrasion resistance
- · Long-lasting durability
- Custom colors to match your fleet
- Rear and front discharge liners available





Mixing Paddles FOR PRECAST & READY MIX PLANTS & Scrapers

Argonics pan mixer paddles and scrapers are engineered to retrofit OEM equipment. They attach in a similar fashion to metal blades, so change-out is easy. They are manufactured from the same Argonics Kryptane polyurethane formulas that the ready mix industry has come to trust over the past 20 years.



PRODUCT BENEFITS:

- Superior abrasion resistance
- Lasting durability
- Sound reduction
- · Reduced concrete buildup
- Easier wash downs and clean-up
- Steel insert embedded
- Custom parts available



Other Products by Argonics



Argonics makes a variety of products, for a wide array of industries, including custom parts to suit your specific application.

OTR Sidewall Protector

Protect your tires from the harshest environments with the Argonics OTR Sidewall Protector.

Made from durable, specially formulated polyurethane, the unique design helps keep your tires safe from puncture and other damage.

PRODUCT BENEFITS

Withstands extreme conditions

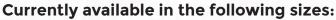
When tested in some of the most challenging quarry conditions, the OTR Sidewall Protector significantly reduced stress and damage to tires.

Cost effective, reduces downtime

The OTR Sidewall Protector safeguards tires from puncture and severe damage, helping to maximize your equipment investments and reduce time and money spent on repairs.

Unique design

The patent-pending OTR Sidewall Protector is unlike any other tire protection systems on the market. The modular system makes replacing a damaged part much more cost effective than the competitors' one-piece design.



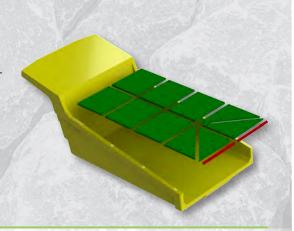
29.5R25 35/65R33 45/65R45 875/65R29



Haul Truck Bed Liners

Argonics' polyurethane haul truck bed liners absorb shock and protect the truck bed from damage and wear. Polyurethane liners outlast rubber and steel and install more quickly than AR steel liners.

- 3" thick polyurethane reinforced with 1/4" steel for increased durability
- Available for v-bottom, dual slope, and flat bottom beds
- Install with supplied weld studs and cover with Snap-Tite[™] plugs to cover and protect bolts
- 1/8" reinforced steel tail support
- · Side liners also available





Agriculture Products SHEETS AND ROLLS

Argonics offers two different formulations for agriculture sheets and rolls. **Kryptane® Xtreme™** is perfect for chutes, spouts, and other high-wear areas. This product is FDA Drygood Handling approved. Kryptane Xtreme is available in a wide variety of sizes and is lightweight, easy to install, and flexible. Custom liners are available to fit your specific applications. **Blue Ox™** is our economically-priced sheet that is made with a special ether-based formulation that will resist humidity and offers excellent abrasion resistance.

Sizes available:

- 4' x 8', 4' x 10', 5' x 8', and 5' x 10'
- Thicknesses range from ³/₁₆" to 1"
- Backings: plain, fabric backed, expanded metal, solid metal

SHEET ACCESSORIES

Coated Bolts

Coated bolts are capped with the same polyurethane as our sheets. Installing your liner using these durable fasteners provides an uninterrupted, abrasion-resistant surface.

- · No gluing or patching required
- No surface preparation needed
- Incredible holding power

Counterbore Tool

A high-quality counterbore tool is essential for proper installation of urethane-coated bolts. The counterbore tool is designed to work specifically with our coated bolts.







Custom Products

Argonics maintains a complete prototyping department to produce the "one off" prototypes and proof of concept parts essential to our customers. Low volume and hand cast production parts are the core of our engineer-to-order operation. Concept development, mold design and product implementation with quick turnaround are part of the day-to-day commitment to our customers.

Argonics offers customers its knowledge of urethane chemistry and the ability to adapt that chemistry to specific customer applications.

As a polyurethane manufacturer, Argonics formulates its own polymers and can therefore customize that material to meet very stringent requirements. In the case of less demanding applications, that chemical knowledge can save you money.

Our expertise in urethane formulations can cut the time and expense of bringing a product to market. With more than three decades of experience in solving tough applications problems for its customers, Argonics provides an invaluable advantage for you in your next urethane application.



Performance Polyurethanes

Demand the Edge

Proven Performance Products



KRYPTANE 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
- Distributor and launder liners
- Impact- and abrasion-resistant plates
- Down hold plugs and discharge sleeves
- Vibration pads, seals and gaskets
- Blasting curtains and screens
- Snowplow blades, shoes and deflectors
- Truck bed liners, wheel chocks and crossover pads

- Skirting systems
- Chute, bin and hopper liners
- Salt, sand and chemical spreaders
- Pipe, fitting and valve liners
- Chain and cable guides

products, manufactured at its state-of-the-art production facility.

Whether you're producing concrete, manufacturing

country's largest producers of

wear-resistant polyurethane

Argonics is one of the

concrete, manufacturing aggregate products, processing grain or mining precious metal, Argonics provides high-performance, cost-effective urethane solutions for the most demanding applications.

Argonics formulates Kryptane polyurethane products to meet your industrial applications.

WE SERVICE ALL INDUSTRIAL APPLICATIONS:

- Agriculture
- Aggregate
- Mining

- Materials Handling
- Concrete
- Pulp and Paper

- Power
- Utility
- Manufacturing

AWARDS:

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





The Argonics Nested Triangle logo, Micro Eraser™, Eraser PQ™, Eraser™, S3Max[™], Super Eraser[™], Eraser HD[™], Super Eraser HD[™], XTC[™], Eraser DS™, Super-G™, V-Max X-Plow™, E-Max V-Plow™, V-Max V-Plow™, Perma-Torque™, Safe Torque™, Web-Torque™, Fold-n-Seal™, KSO1™, Snap-Loc™, Wedge-Loc[™], Load Zone[™], Kryptile[™], Redi-Liner[™], Evolution[™], Xtreme[™], Blue Ox™, and Raptor™ are trademarks, and Kryptane is a registered trademark of Argonics, Inc. Gwinn, MI. USA

Patents: 6,056,112

6,318,545

7,441,647 6,913,138

5,979,638 6,547,062 7,284,658 7,484,617

520 9th Street • Gwinn, MI 49841 906.226.9747

fax: 906.226.9779 www.argonics.com

facebook.com/argonics

youtube.com/ArgonicsInc in linkedin.com/company/argonics-inc.

LIB-AR-CA-07-02 3/2020