





Gorilla Tough for Mining & Aggregate

It's so ugly *it's* got to be good!







# It's solution is a set to be good!

#### What do we mean by ugly?

All great companies can define what they do well. We offer parts large or small, black or colors, custom or standard utilizing compression, transfer and injection molding. We do it all, but these are not the things that separate us from the rest.

**BIG** – Valley Rubber can produce extremely large parts – over 15 times larger than your average rubber molder. This sets us apart in the Mining & Aggregate Industry where Big is the name of the game. Can we mold small parts? Yes! If we can manage a part that is over 100 square feet and weighs thousands of pounds, then handling a small part that weighs a few ounces is not a problem. **BLACK** – It was Henry Ford who said you could have any color - so long as it's black when referring to the Model T. We echo his statement. For tremendous tensile strength and abrasion resistance, the best additive for rubber is a high-grade carbon black. Hence the name, the rubber comes out black. Can we mold colors? Yes, but for tough applications, black is best.

**UGLY** – We manufacture parts that are dimensionally correct and functionally superior, but let's face it; you will probably never see one of our parts hanging on the wall of the Metropolitan Museum of Art as you will never see a gorilla win the Miss America Pageant. We address **Ugly** applications with parts that are **Gorilla Tough**. There is nothing cute about it.

# Why Rubber?

In 1770 an English chemist, Joseph Priestly, gave the name "rubber" to the raw material when he discovered it would "rub off" pencil marks. Since that time many advancements in the use of natural rubber and the development of synthetic rubber material allows it to resist heat, fire, moisture, oils, cold weather, sunlight, ozone, material build–up and more. Most choose rubber because it will:

#### **1)** Absorb Great Impact.

When the goal is reducing the shock and damaging vibration of severe impact, rubber maximizes the life of equipment and dramatically decreases your cost-per-ton.

#### **2)** Resist Severe Abrasion.

In most cases, metal surfaces just can't compete with rubber for long-term abrasion resistance.

### **3)** Reduce Noise Emission Significantly.

Noise pollution is a key consideration of the environment and for people working on and living around job sites.

Rubber also comes in handy for dust control, weight reduction, ease of installation and corrosion resistance. Plus, it is highly customizable...

## **Rubber is More Durable than Steel!**

#### In the right application – Rubber is more durable and lighter than hard steel.

Rubber can be compounded to create the properties that are needed to satisfy the product's end use. It can be made soft or hard, bendable or rigid, with countless combinations, including dual durometer which makes rubber very versatile when properly compounded. Rubber is not just for erasers anymore!

## Not all Rubber is the Same.

We offer highly specific compounds to solve highly specific problems. With the variety of rubber polymers we can formulate – natural and synthetic – the possibilities are almost limitless. We only use premium-grade materials and we test every batch of our compounded stocks to specification requirements before production ever starts to give long life and protection against impact, cut, tear and abrasion.

Haul Truck Bed Liners – Valley Rubber manufactures Haul Truck Bed Liners for all size truck bodies - historically we have lined 25-ton up to 400ton trucks. We can effectively line heated and nonheated beds, offering extreme abrasion resistance and reducing metal fatigue and stress fractures, while increasing driver comfort and reducing noise. The easy-to-install liner system is cost effective and maintenance free compared to steel liners, increasing equipment availability.

- R
- Protect Equipment from Damage
- Reduce Downtime
- Reduce Maintenance Time
- Lower Cost per Ton



#### Compounds Include - but not limited to:

- High heat resistant Viton
- SBR
- Silicone
- Nitrile
- Neoprene
- Hypalon
- SCOF (Static Conductive)
- EPDM
- Natural Rubber
- Carboxylated Nitrile
- Proprietary, Non-Stick Rubber

RUBBER

• FR-IC-163/1 MHSA (Fire Resistant Rubber approved for underground mining applications)

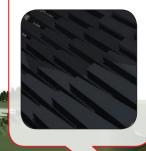
# Why Valley Rubber?

specifications, giving you a truly custom manufactured product. We formulate premium-grade Bonding rubber to these materials requires knowledge and experience. Valley Rubber has field-

#### Fast - Dependable - Creative - Experienced

#### **Grizzly Bars**

Segregate the toughest materials with field-proven Valley Rubber double tapered grizzly bars. You'll be pleasantly surprised at the consistent quality and timely turnaround we will provide.



Curtains, Seals & **Belt Products** 

Control the flow with these reliable conveyor components and you'll handle large volumes of material while eliminating spillage and dust. Easy to replace and abrasive resistant, our products are built for high productivity.

#### 1. Dust Curtains

- 2. Heavy Duty Skirt Liners
- 3. Dust Seals
- 4. Conveyor Impact Bars

# Steel-Backed Rubber

Liners

Line your transition points and chutes with Valley Rubber steelbacked rubber liners to increase your plant's performance and lower your operating costs.

See us online at

**Rubber/Ceramic Liners** Perfect for areas that deal with severe impact and high abrasion. With our "Gorilla Tough" ceramic liners your plant is ready for high production.

### www.ValleyRubber.Solutions



Bolt Down









Snap On



Pin & Leg



**Magnetic Patch Liners** 

Need a quick fix for a hole in a hopper? Try a Valley Rubber super strong magnetic patch. These magnetized rubber patches are available in various sizes to cover holes and prevent spillage. They save you from unscheduled shutdowns and help to improve safety.







Changing the angle of impact with profile liners absorbs the punishing shock that material delivers to your chute walls. Many styles or custom designs are available to add years of life to your system.

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#### **Side Tension & Steel Backed Screens**

No design is too unique for the engineers at Valley Rubber. Whether you need one custom screen produced ASAP or a large quantity of the same design, we're sure you'll be impressed with the rugged, flexible and reliable products we'll deliver.



There are many parts and pieces needed to create a reliable screen deck and Valley Rubber is your trusted single source for rubber replacements. Our lineup includes:

- 1. Side Clamp Rails 2. Center Hold Downs
- 3. Side Wall Liners 4. Discharge Lip Liners
- (Shown with integrally molded ceramics)



#### **Crusher Cones, Liners** & Feed Plates

Here at the heart of your operation you need just the right mix of flexibility and strength to withstand the constant pounding today's crushers deal out. Valley Rubber makes sure you are ready with some of the industry's toughest hoppers, liners and feed plates on the market. We are proud to provide solutions to lower your cost-per-ton with:

1. Distributor Feed Plates 2. Cone & Hopper Liners 3. Main Frame Liners







#### Inflatable Liners

Sticky material is no longer a problem with Valley Rubber's super-tough inflatable liners. Impact resistant rubber liners are designed to inflate and deflate as needed to prevent material from sticking, eliminating buildup. These liner systems are custom built to fit your purpose and to run clean and maintenance free.

#### **Screen Fastener Options**

**Modular Screens** 

Valley Rubber modular screens are blended with a high grade natural rubber and vulcanized for long life against wear. Many styles are available to fit your screening applications. Let our team design a cost-effective solution for your plant.

You'll be able to use your existing system or we can convert your deck to best suit your needs.



#### **Tube Covers**

Steel is tough, but not tough enough to withstand the punishing effects that mining and aggregate material can deliver at your plant. Simple and cost effective, our rubber tube covers eliminate unnecessary wear on your eccentric and cross tubes.



**Belt Cleaners** Available in both brush and blade styles, rubber belt cleaners offer an effective solution for keeping your belts free of wet or fine material buildup.

## **Getting Started**

Simply provide your representative with a drawing, part, or access to take measurements and we will use our team of experienced professionals to custom design a solution for you. We capture critical information on an Application Data Sheet and utilize our chemist, application specialist, technical planners and CAD department with 3-D capabilities to begin the process of building components that will maximize your benefits in terms of efficiency, ergonomics, ease of maintenance, and cost effectiveness – Providing you with custom solutions to lower your cost per ton!

# tandard or Custom



#### Side-Tensioned Screens & Flex Screens

For crown deck applications on any vibrating screen equipment, stainless steel aircraft cables are encapsulated in wearresistant rubber and equally tensioned between the hooks. These screens have a lower cost-per-ton than wire & punched plate.



#### Steel-Backed Screens

These screens are designed to withstand extreme scalping applications. Stiffeners can be added for additional strength if the application warrants. As with other Valley Rubber solutions, these screens can be custom designed with hooks or bolt downs.



#### Double-Tapered Grizzly Bars

These bars are designed to withstand severe applications for the maximum removal of fines with a field-tested rubber compound and a unique internal structure. They are manufactured to suit any method of installation in new or existing equipment.

#### VALLEY RUBBER UTILIZES A TEAM APPROACH TO PROBLEM SOLVING.

#### WE LISTEN TO YOU.

Blinding, Pegging, Sagging, Oversized Material, Downtime, Throughput, Service Life, Sticking, Stress Fractures, Weight, Difficulty of Installation, High Maintenance Cost, Noise, Dust, Premature Wear Life, Operator Discomfort...

#### WE GATHER CRITICAL INFORMATION.

Type of Material, Size of Material, Hardness, Feed Rates, Drop Height, Angle of Impact, Moisture Content, Operating Temperature, Chemical Exposure, Weight Requirements...

#### WE UTILIZE AVAILABLE RESOURCES.

Representatives, Directo of Mining & Aggregate Sales, CAD Team, Chemist, Metallurgist, Manufacturing Group...

CREDITABLE CUSTOM SOLUTIONS

We offer standard screening systems as well as customdesigned screens to fit all makes of screening equipment, giving you a cost-effective solution. We can customize your screens by adding diverter bars, skid bars, extra structural support and impact areas - available in both rubber and rubber/ ceramic configurations. In fact, we can replace your current media on the existing frame, with no adjustments necessary.



#### Modular Screens

Our 1'X1' through 1'X4' panels replace modular screen styles with an open area that is equal to or greater than the competition.

Note the increased wear and plugging in the polyurethane screen (yellow); the black Valley Rubber modular screen was installed at the same time.



#### Trommel Screens

Along with lifter bars, dams, and liners, Trommel Screens are designed to control the desired output and are delivered to exacting specifications to minimize installation time and maximize your costper-ton targets.

## Screening Solutions

Molded tapered apertures dramatically reduce plugging and pegging compared to punched holes.

**Tapered Apertures** – Valley Rubber screens have molded tapered apertures, providing you the best technology available on the market today. Round, square, slotted and custom-designed apertures, in a wide variety of sizes, are used to solve screening problems such as blinding, pegging and wear life.





Exaggerated for illustration.

#### Before



A major OEM's screens with severe blinding due to moisture content in the ore. After



Our V-Slot screens with an anti-stick rubber formulation solved the blinding problem.

# Customization Key

#### We can customize all of your screening solutions.

Valley Rubber can customize liners in any shape or dimension with a press width up to 7 feet and a length of 20 feet.

Up to 7ft.

Applications

• Chute Liner

Up to

20ft.

- Bin Liners
- Feed Box Liners
- Screen Side Liners
- Discharge Lip Liners
- Eccentric Tube Covers
- Cross Tube Covers
- Stationary Mixer Liners
- Skirt Board Liners
- Pan Feeder Liners
- Conveyor Transfer Liners
- Haul Truck Bed Liners
- Inflatable Liners
- Profile Liners
- Rubber/Ceramic Impact Liners
- Crusher Liners
- Impact Liners
- Classifier Wear Shoes
- Sheet Rubber

 Skid Bars can be added to extended the life of the screen and stratify the material, moving the larger material down the deck while increasing the throughput of the fines.

- Stiffeners can be added to accommodate heavy loading of the deck without compromising the structural integrity of the screen.
- Dams can be molded into the screen to increase material retention.

Screening Accessories – We supply rubbercovered side clamp bars to suit all vibrating screens. High-grade bucker rubber is available in 50-foot rolls. Center hold downs in standard and custom profiles. Gum rubber balls are available in multiple sizes.

# Liner Solutions

**Customization** – Valley Rubber manufactures highly customized rubber wear liners to fit your lining application. Our liners can be delivered to fit various shapes, sizes, thicknesses, and curvatures. In addition, we offer a wide variety of mounting solutions from plug welded to bolt in or track mounted. Our metal backing can be mild steel, stainless steel, aluminum, or anything appropriate to the application.





Magnetic – Ore Bed Liners – These liners are easy to install using powerful magnets that are molded within the wear-resistant rubber. The slotted back allows the liner to fit the wall contour. They come standard in 6.25"X10".



Magnetic Patch Liners – If a hole develops in a chute, simply place the Magnetic Patch Liner over the hole on the outside of the chute wall. This will keep the plant running safely and production going until a scheduled maintenance day.

**Standard Sizes** – Easy to install 1-foot square liners with counterbored mounting holes or studs. Liners can be cut with a band saw for a custom fit.

**Resistex Liners** – A perforated metal plate is molded inside a rubber liner to create a sheet that can be formed by hand to fit your desired contour. In addition, the sheets are made in standard 4'X8' pieces, making it simple to cut the size you need in the field. The liners can be installed using screws, nails or clamps. Custom sizes are available.

- Lab-tested rubber compound gives long life and protection against impact, cut, tear and abrasion
- Easy to install: Screw through the rubber the screw head will catch on perforated plate
- · Bend rubber and perforated plated to create a form that will stay
- Can be cut and shaped in the field

Sheet Rubber – Natural Rubber sheeting sold in a variety of widths, thicknesses and colors.

Air Control Panel



#### **Cone Crusher Liners**

Offer considerable reduction
in noise and are generally lighter
in weight and offer significantly
longer life than their steel
counterparts and have proven to
be more cost effective than steel in
the same application.

- Crusher Feed Tubes
- Distributor Feed Plates
- Cone & Hopper Liners
- Mainframe Liners

#### Inflatable Liner Systems –

Cost effective when installed in areas in which there is severe buildup as a result of high moisture content in the material. These systems consist of custom-fit rubber liners that inflate and deflate with low-pressure air supplied through a user friendly Valley Rubber Control Box and low-pressure plant air. The timed action keeps the liners clean and the chute free from buildup. These systems provide extensive periods of maintenance-free service in areas which were previously high maintenance.



Our rubber/ceramic wear bar in the center was installed at the same time as the chrome steel bars on each side. Note the excessive wear on the chrome bars compared to the Valley Rubber product. Rubber/Ceramic Liners – These liners are suitable for applications in areas of severe impact and areas of high abrasion. Liners can be supplied to incorporate a variety of ceramic shapes, including balls, cylinders and cubes, all of which have a high alumina silica content that withstands severe impact and high abrasion.



Heavy Duty Skirt Liners – These liners are highly effective particularly where material is being bulk loaded onto the conveyor to control the material until it becomes stable. The liners are steel backed and made to fit existing loading stations; they are manufactured to conform to the belt with the ability to adjust the height to fit the belt and maximize the liner life. The rubber thickness varies and ceramics can be added to fit the application.

**Profile Liners** — To obtain the most efficient wear life, the optimum angle of impact for rubber is 90 degrees. If shear force is causing a problem in an application it can be overcome by installing a Profile Liner. With multiple styles available, we can introduce this liner to the system in order to get the material to hit the liner surface with a direct impact and to increase the life of the liners.

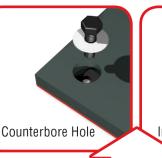
Lifter Bars – Impact Bars – Although these bars come in standard lengths of 48" & 60", they can be customized to various lengths and thicknesses. The mounting systems are typically a T-track that accommodates a T-bolt for mounting, but that, too, can be tailor made to order.



**Mounting Options** – We can provide a wide variety of mounting options to best suit the application and preferences.

Complete Chutes –

With our in-house fabricating department, we can provide complete chutes – fabricated and lined – ready to drop into place.



Track with T-Bolt



Stud Welded

Internal Mounting Nut

PLUS - Clamps, Straps, Hooks, Magnets, Weld Points, Adhesive, Brackets and more

See us online at WWW.ValleyRubber.Solutions

# **Conveying** Solutions

**Conveyor Dust Seals** – These seals are sold in 10-foot lengths and are effective in conjunction with Skirting & Canoe Liners for minimizing dust and fines from escaping from the belt.

Standard Skirt Board – This skirting is good quality, all-rubber construction with high resistance to tearing, cutting and abrasion. Skirting is shipped in 50-foot rolls and can be supplied in many thicknesses and widths.

3) Conveyor Impact Bars – Provide support across the width and length of the load area on the conveyor belt. UHMW provides low friction against the belt and is abrasion resistant while the soft rubber below absorbs the impact of the load. A strong aluminum T-track makes mounting easy.

**4 ) Dust Curtains** – Offer a safer and cleaner work environment by controlling dust and preventing stray material from escaping the belt while saving time and money on expensive cleanup. Curtains are provided in a custom size, shape and thickness to suit the application.

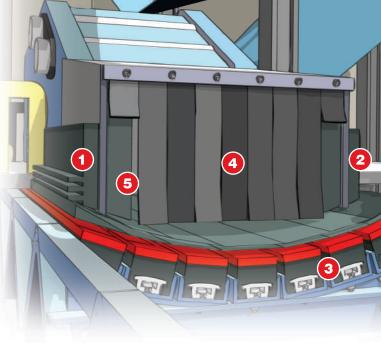




The mining, aggregate, and cement industries offer hardcore challenges when it comes to issues dealing with noise, dust,

spillage, sticky material buildup, abrasion and more. That is why Valley Rubber provides the leading engineering experts in these fields. Valley Rubber's elite team of field engineers is the reason we can offer our Guaranteed Rockland Engineered Solution.

Combining our solid manufacturing capabilities with our proven Rockland Engineered Solutions brand provides you with start-to-finish partner projects that include field reconnaissance, engineering, manufacturing, and installation supervision. Incorporating advanced technology, custom design, and engineering, we manufacture systems and components guaranteed to improve performance, reliability and profitability. Our international experience is based on decades of critical work under trial-byfire conditions. We have consistently commissioned successful operations in most types of extreme environments on the planet.









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See us online at www.ValleyRubber.Solutions

#### Screening Media & Accessories

- Side-Tension Molded Screens
- Side-Tension Punched Screens
- Steel-Backed Screens
- Modular Screens
- Crown Bar Rubber
- Center Hold Down Bars
- Shaker Balls

#### Wear Lining

- Steel-Backed Rubber Liners
- Rubber/Ceramic Liners
- Solid Rubber Liners
- Inflatable Liners
- Haul Truck Liners
- Cone Crusher Liners
- Distributor Feed Plates
- Resistex Liners
- Rubber Profile Liners
- Magnetic Profile Liners
- Magnetic Patch Liners
- Modular Liners
- Impact Bars

#### **Conveying Solutions**

- Conveyor Impact Bars
- Heavy Duty Skirt Liners
- Double-Lip Conveyor Dust Seal
- Triple-Lip Conveyor Dust Seal
- Skirtboard Rubber