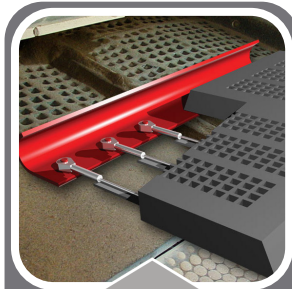


Screening Solutions



GRTrubber.com | ValleyRubber.Solutions

Standard or Custom



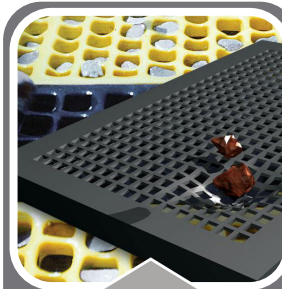
Side-Tensioned Screens & Flex Screens

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



Modular Screens

Our 1'x1' through 1'x4' panels replace modular screens styles with an open area that is equal to or greater than the competition.

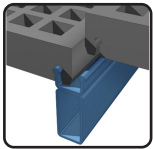
Note the increased wear and plugging in the polyurethane screen (yellow); the black Valley Rubber modular screen was installed at the same time.



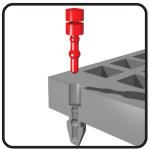
Trommel Screens

Along with the 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 cost-per-ton targets.

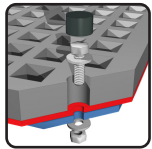
Modular Screen Options



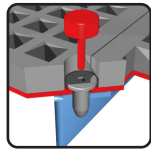
Snap On



Pin & Leg



Bolt Down



Pin & Sleeve

We capture critical information on an Application Data Sheet and utilize our application specialist, technical planners and design department 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!

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.

You & Your Teams, Field Support, Engineering, Design Team, Manufacturing, Logistics, Our Lab, as well as outside consultants.

Credible Custom Solutions.

Pegging Solutions

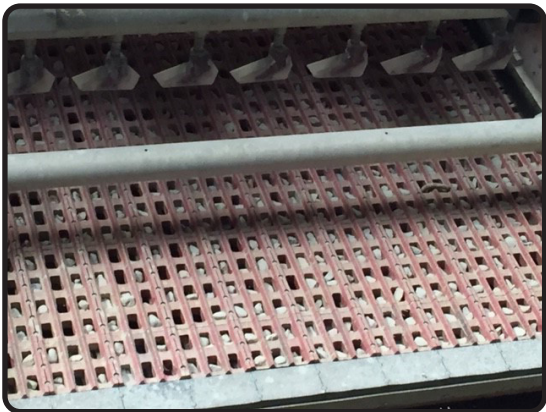
The availability of each solution is dependent on screen surface attachment, size, process conditions and service life requirements.

Screen Surface Clogging

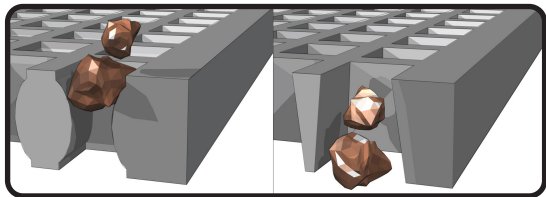
With Pegging or Blinding, the proper operation, speed, stroke, shaft rotation and machine balance should be checked to ensure it is optimized for the application.

If machine operation has been verified, then a change to the screen surface should be considered. Each of these problems requires a specific screen surface solution.

➤ Pegging (Plugging)



Individual particles lodge in screen surface openings.



Exaggerated for illustration.

Screen Surface Material

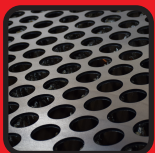
Pegging can in many cases be eliminated by a change in the physical properties of the screen surface material. Switching to a softer, more flexible material can allow the normally pegged particles to escape (either pass or be rejected).

Screen Surface Thickness

Pegging can sometimes be a result of the thickness of the screen surface, specifically at the aperture webs (the lands between the openings). This can be corrected by designing a thinner screen surface that allows the particles to pass more rapidly. This is typically a balance between proper load support, service life, screening accuracy, and pegging resistance.

Aperture Shape

Many pegging issues can be solved by changing the shape of the aperture. Square openings are the most common for tightly controlled sizing operations, but square apertures may tend to peg as particles will wedge into the corners of the opening. Note: Pegging can also be a result of using punched rubber screen products. All Valley Rubber products are manufactured with molded apertures designed with tapered relief to resist pegging.



Round Openings: Round apertures provide improved sizing accuracy and resist pegging, but can reduce open area by a small amount when compared to squares. They typically work best on large apertures (50mm and above) where pegging is a concern.



Slotted Openings: Slotted openings (when oriented with the flow of material) provide an increase in open area, efficiency, and aperture flexibility, but a natural decrease in product sizing accuracy. Slots will reduce pegging in many cases, but some processes are too sensitive to oversize material in the underflow to allow this solution.



Disconnected Web: These are specialty apertures designed for added flexibility to resist pegging while maintaining a balance of sizing control.

Blinding Solutions

Specific Design: Blinding is one of the toughest screening issues to solve and requires a combination of material properties, screen surface design (thickness, aperture, and reinforcing), and in many cases, requires the addition of anti-stick rubber compounds to the rubber material.

Screen Surface Thickness

The thickness of the screen surface is generally required to be ultra-thin to provide the most flexibility possible. This type of screen surface is generally limited to smaller modular type screens but may be applied to larger cable reinforced screens as well under certain circumstances.

Screen Surface Material

A soft natural rubber in the 40 to 55 Shore A hardness range is required for this type of problem solving screen surface.

Material Additives

Anti-stick rubber compounds are added to the rubber material to further resist process material adherence to the screen surface.

Aperture Shape

Generally, apertures can be made square but in extreme cases slotted designs are required – provided they are permissible based on screening accuracy requirements.

Blinding

(Bridging/Caking)

Fine material adhere to the surface of the screen and clog the openings. This typically occurs with moisture sensitive material (like clay and ultra-fine materials).



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.

We offer standard screening systems as well as custom designed screens to fit all makes of screening equipment, giving you a cost-effective solution. We can customize your screen 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.

Before: Severe Blinding & After: Improved Screening Efficiency



BEFORE



AFTER