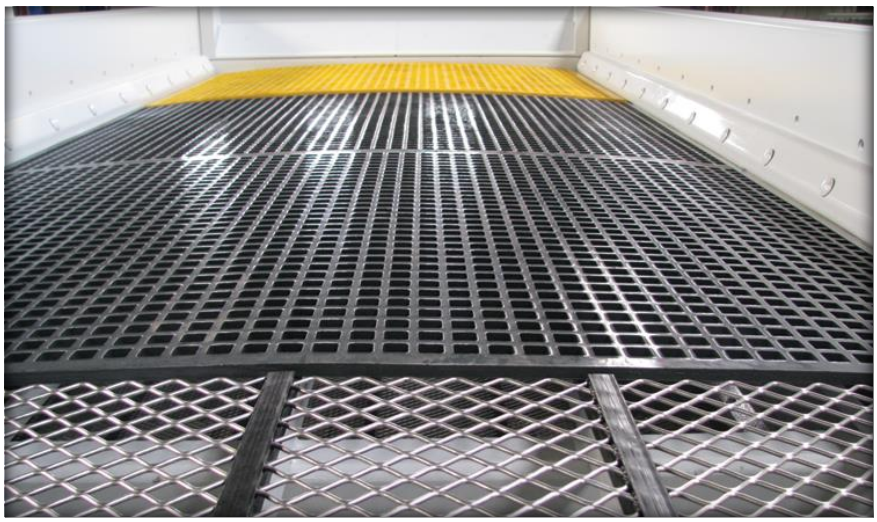
PRO-Deck

Blending screen media types for maximum output and minimum maintenance

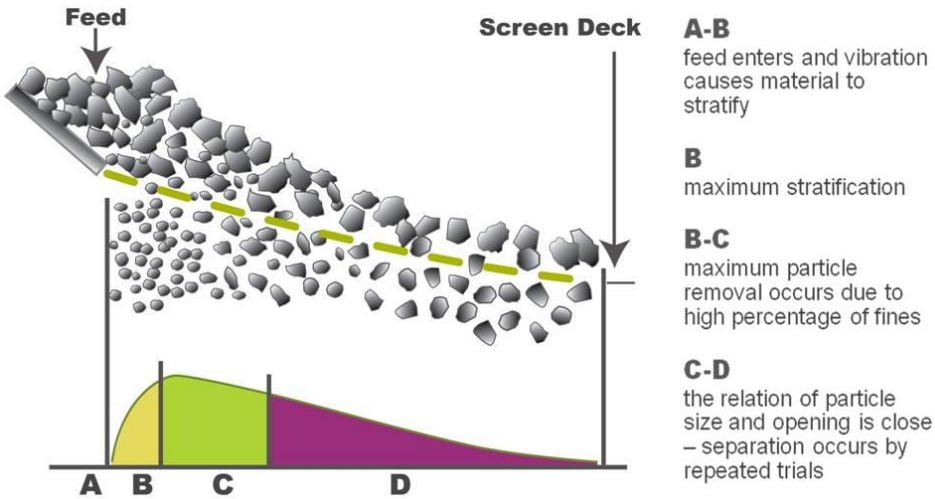


Most of us are familiar with the blending of aggregates or ore types to meet final product specifications. Screen media can also be blended to maximise screening efficiency and wear life whilst minimising maintenance.

With a good understanding of the screening process, screen media characteristics and production requirements it is possible to use a mix of screen media types to make your screening plant operate at maximum efficiency with less maintenance.

The Screening Process

Ideally, the bulk of screening should be completed within the first 65% of the screen deck with the last 35% used for clean-up and capture of any remaining near size material.



On most screens the bulk of stratification occurs in the first metre or so from the feed end with only a small amount of material screening taking place. Heavy duty screen cloths such as rubber,

polyurethane or larger diameter wire can be installed in the stratification zone for longer wear life with only minimal impact on screening performance.

The middle section of the deck is where most screening is done. It is critical to the overall performance that the right type of screen media is used in the main screening area particularly on the upper deck(s) of multi deck screens. Slow or inefficient screening on the top deck will adversely affect the decks below, leaving limited time for stratification and screening.

Screen media with more open area than necessary can be TOO efficient. Screening can be completed in the first half of the deck and the full wear life potential of the screen media is not maximised. In such circumstances reducing open area will spread the load, screen cloths will last longer with reduced change-out frequency while maintaining product specifications.

Pegged, blinded or extra heavy duty screen media with insufficient open area will result in contaminated final product and excessive carry over recirculating through the system. Several strategically placed high performance Flex-mat® style screen cloths can open up the screening area to capture any remaining undersize material and producing a cleaner in-spec product.

Nepean Rubber's screening plant audits in conjunction with W.S Tyler's Pro-Deck Program and Screen Vibration Analysis will help identify key areas for improvements, eliminate those common screening problems such as blinding, pegging, premature wear and unscheduled downtime through the use of the most appropriate blend of screen media on every deck, on every screen in the crushing plant.

We combine historical screen media usage data with an onsite discussion and examination of our professional analysis to audit your current screen media, and create an action plan for success

It is important to implement any screen media changes in a planned progressive order. Adjustments to the screen media are made one section at a time and results are closely monitored to ensure the highest quality output and maximum productivity. With analysis of material characteristics and adapting the screen media to accommodate wet, dry or even abrasive materials, Pro-Deck blending becomes a scientific approach to screen media management.

Blending can be applied to virtually any vibrating screen unit in any application. It does not matter whether the screen is under-utilized, overloaded or screening just about right, Pro-Deck blending has benefits in every situation.

The use of blended screen media in combination with a comprehensive screening plant audit and Vibration Analysis make Pro-Deck a professional, comprehensive and complete approach to screening plant optimisation.

Contact your Nepean Rubber representative for more information on Pro-Deck blending or to arrange your screening plant audit and vibration analysis.