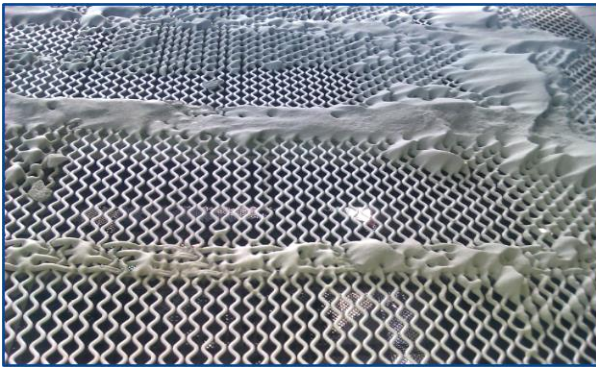




Flex-mat[®] Vs Wire Ripple/Agivibe



All-wire self cleaning screen cloth



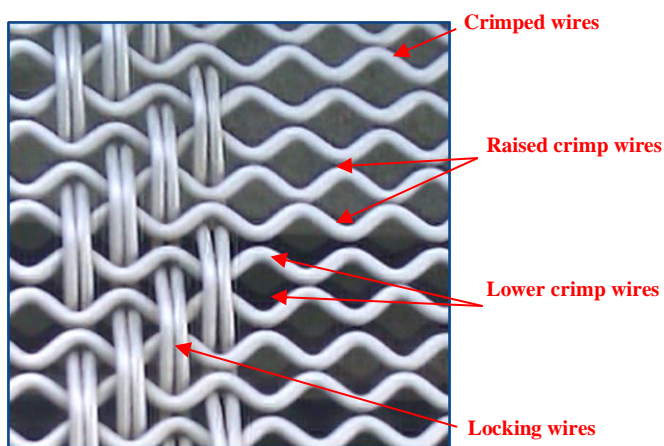
Flexmat[®] 3 self cleaning screen cloth

Flex-mat3 & the all-wire Ripple/Agivibe screen cloths are by definition “self-cleaning” wire screens. Whilst they are all quite similar in concept there are some fundamental differences that have a very significant influence on wear life and screening performance.

Flex-mat 3’s distinctive lime-green polyurethane strips bond the individual wires and allow them to vibrate independently. The all-wire style cloth is constructed from a combination of crimped wires (running hook to hook) held in place by locking wires.

It’s the different construction methods that separates the different self-cleaning screens apart.

With the all-wire self-cleaning screens the locking wires raise some of the crimped wires up and push others down, creating high wire and low wires, opening the apertures and allowing material larger than the aperture to pass through the screen cloth.



Example opened apertures with all wire style screen



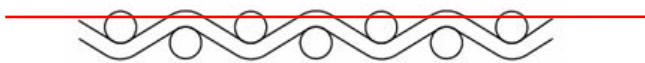
Flex-mat[®] 3’s lime green polyurethane strips hold all the wires flat so the apertures don’t open up and allow oversize material to pass through, giving more accurate product grading.

Flex-mat3 screen cloths produce a cleaner more consistent, accurate spec product than the all-wire screens

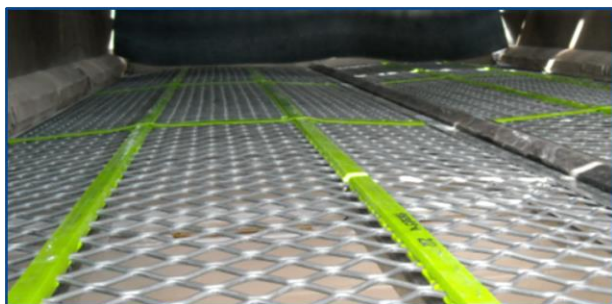
There are many factors that affect how screen cloths wear. Screen cloth construction is one of them.

Close inspection of worn wire screen cloths will reveal that the high ridges of the locking wires wear away much faster than the crimped wires. As the tops of the locking wires wear they become thin and eventually break, resulting in screen cloth failure

High ridges of locking wires wear thin and break



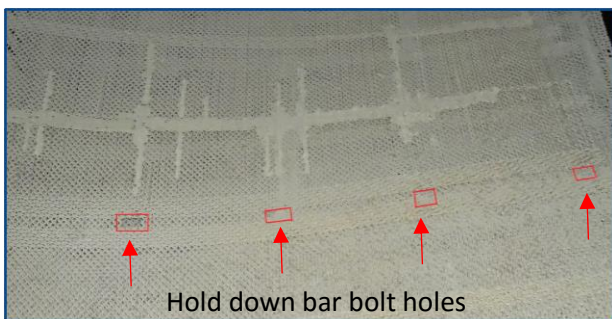
The locking wires on all-wire style screens will wear and break long before the crimped wires wear



Flex-mat[®]3 screen cloths use abrasion resistant polyurethane to hold the crimped wires in place.

The flat screening surface has no high ridges to wear therefore wear of the wires is quite even.

Flex-mat3 screen cloths typically last 3 times longer or more than the all-wire style screen cloths



This photograph shows a self-cleaning wire screen used on a double camber deck with a centre hold down rail. The crimp wires for the bolt holes are flame cut. Cutting the crimp wires makes it impossible to tighten those cut wire when tensioning.

It can be seen silicon has been used to seal the gaps created by the loose severed wires.

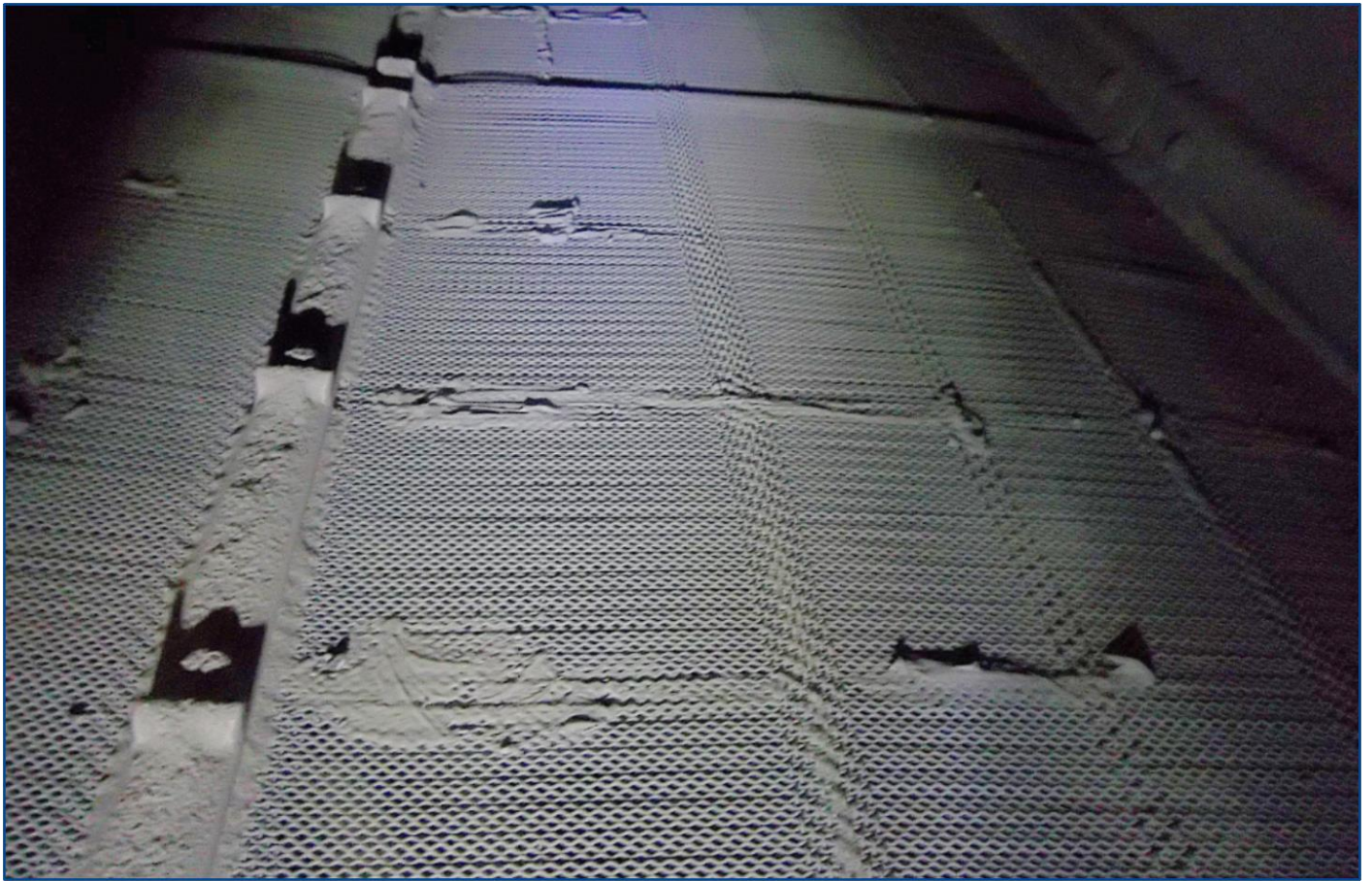
Tension is extremely critical for maximum performance from all self-cleaning screen cloths. The wires must be so tight they can vibrate, somewhat like a guitar string. If the wires are not tight they cannot vibrate properly and the self-cleaning capabilities of the screen cloth and wear life will be compromised.

Those wires that are cut for bolt hole no longer run from hook to hook, which means they will never be tight, regardless how much tension there is on the remainder of the cloth. Loose wires can allow the apertures to open up, enabling oversize material to pass through.

Any loose wires will be the first to break, reducing the service life of the screen cloth.



All Flex-Mat 3 screen cloths for use with hold down bars have steel washers welded to the severed bolt hole wires, restoring the integrity of every wire from hook to hook, ensuring even tension, maximum wear life and optimum screen cloth performance.



The above photograph of a wire self-cleaning screen shows all the typical problems caused by the outdated method of construction. Those problem being:-

- ✘ protruding locking wires exposed to high wear and early failure
- ✘ raised wires and low wires opening up the apertures, allowing out of spec oversize material to pass through the screen cloth.
- ✘ Cut centre hold down bar bolt hole wires causing the cut wires to be un-tensioned, with the apertures opening to allow out of spec oversize material to pass through. Silicon used to seal the opened gaps, blocking apertures and reducing the open area.
- ✔ **Flex-mat3 screen cloths use polyurethane strips to encapsulate the crimp wires, ensuring more accurate screening than all-wire self-cleaning screens**
- ✔ **Flex-mat3 screen cloths use welded steel washers for hold down bar bolt holes, ensuring the wires adjacent to the bolt holes are under full tension for maximum screening efficiency**
- ✔ **Flex-mat3 screen cloths screen cleaner and last up to 3 times longer than all-wire self-cleaning screens**