Nepean Rubber & Plastic’s rubber screen media is custom designed to suit each individual screening application. We have our own rubber mixing plant and “In-House” Rubber Chemists to formulate unique rubber compounds to meet you specific requirements. Our NATA registered laboratory and ISO 9001 accreditation ensure we deliver “In-spec” quality product every time.

Rubber Tension Mats

Fit most manufacturers’ screen decks.
- Suitable for a wide variety of applications highly flexible
- reduced pegging & blinding
- improved stratification
- reduced noise pollution
- Last around 5 times longer than woven mesh screens.

Flowmax Modular Tension Mats

Modular conversion for cross tension decks - No modifications required
Fits to your screen deck the same as cross tension cloth
Frame becomes a permanent fixture on the screen deck.
Moulded tapered apertures for accurate sizing and reduced Pegging.
Only replace worn 305 x 610mm clip-on modular panels
Allows for a combination of aperture sizes for fine tuning

Modular Screen Panels

Most commonly used in scalping and heavy duty applications or where additional structural support is required.
Moulded tapered apertures for accurate sizing and reduced pegging

Heavy Duty Steel Backed Screen Panels

Most commonly used in scalping and heavy duty applications or where additional structural support is required
Moulded tapered apertures for accurate sizing and reduced pegging

Trommel Panels (Poly/ rubber)

Best suited for heavy duty trommel screening
Moulded tapered apertures for accurate sizing
Bolt-on or clip-on fastening
Custom designed retaining dams and spirals
Nepean Rubber Cross Tensioned Fabric Reinforced screen cloths are manufactured using 2 layers of premium quality wear resistant rubber with a cord reinforcement between the layers.

Thinner cloths 3, 5, 7, 10 & 15mm thick have a single ply fabric reinforcement while 20, 25 & 35mm thick cloths have 2 layers. The polyester fabric reinforcement allows for correct and constant tensioning of the cloth.

Screen cloths +35mm thick occasionally don't require any fabric reinforcement due to the tensile strength of the rubber however the fabric can be included upon request.

**Aperture sizes** - from 3.5mm - 200mm with maximum lump sizes up to 300mm. Ideally suited to for high frequency screens with longitudinal support bars. They are effectively used in primary, secondary and tertiary screening applications as well as rotary trommel screens.

**Standard Lengths** - 1220 & 1524

---


- 4mm to 120 mm openings, 3 mm to 60 mm thick
- Modular systems available in 305 x 610 or custom sized
- various apertures and thicknesses

---

**Advantages**

Fits most screens  
Easy fitting  
Good Impact absorption  
Flexible—reduced pegging  
Excellent wear life
Flowmax® Screens

FLOWMAX
Polyurethane
Cross tensioned
Modular
Screens and Trommel Panels

Benefits:
• **Comparable Cost.** Polyurethane screening surfaces can last an average of 15 times the life of wire cloth
• **Reduced plugging and blinding.** Polyurethane has exceptional resilience and tapered apertures which help to eliminate plugging and blinding in difficult situations
• **Greater production.** With their larger percentage of open area, FLOWMAX systems outperform the production of other polyurethane systems from 5 to 15%
• **Easy to modify.** Removable, tensionable screens are available without converting to a permanent deck situation

Three Screen Designs:
- **Modular Removable System**
  - FLOWMAX modular tension mats combine the convenience of an easy change-out with the benefits of a modular system. Replace a module in seconds, or the entire system in minutes. No commitment to screen deck modifications
  - A FLOWMAX change-out to wire is just another change. No hassle with special parts or tools
- **Permanent Flat Decks**
  - Greater production
  - Flat screening surface means better material distribution and higher screening efficiency
  - Permanent installation has very low maintenance requirements
- **Tension Mats**
  - Polyurethane molded, tapered openings
  - Tension mats require no screen deck modifications and are as easy to install as wire cloth
  - Each tension mat is manufactured to match your specific deck requirements

Accessories:
Full range of accessories are available, including wear liners, centre hold-downs, sideliners rails, classifier shoes, belt scrapers, spray bar deflectors and more.

FLOWMAX is the modular solution.
FLOWMAX is an extremely adaptable system, offering either modular tension mats or a permanent, flat-deck solution. Typical modules are 12”x24” long, allowing the best use of available area in conjunction with optimum efficiency in replacement and maintenance. No matter which installation option you choose, FLOWMAX offers a universal, patented fastening method that provides substantial locking area. No pins, plugs, or other loose parts are required. You can interchange modules from one type of installation to another.

Features:
• Modular sections with maximum open area
• Superior fastening system
• Option of flat (permanent) or crowned (removable) decks
• Our removable (tensionable) crowned deck systems, feature no deck modifications

FLOWMAX screens have 5 to 15% more open area compared to competitive screens.
Moulded Rubber—steel reinforced Panels and modular systems

High impact screening applications, processing dry material, scalping applications, when there is a high percentage of crushed material.

Why Use Rubber?
Offers excellent resistance to impact and abrasion. Ideally suited for scalping applications or on the feed panel of any top deck. Will outlast conventional wire cloth or steel plate. Available in full panels, hooked or bolt-on, and in any modular system.

Flexibility—Rubber Graphite Liners
- Prevents sticky build-up
- Easy replacement and installation
- Increased wear life
- Used in feeder bins, chutes, feed and discharge lip liners
- Eliminates clean-out downtime
OptimumWire® Screens

Woven Mesh Screen Cloths

Engineered & Produced To Achieve Maximum Screening Potential

OptimumWire® woven screen media is clearly recognized as the industry’s highest quality woven wire screen in thousands of quarries throughout the world.

1. Our unique approach by combining the best in raw material chemical composition with the right processing method for each wire diameter size delivers the industry’s highest performance.

2. We have the most stringent weaving and finishing quality standards and the most dependable delivery in the industry.

3. We bring Nepean Rubber’s in-field personnel expertise our commitment to your satisfaction.

4. Our ISO 9001 Certified finishing facility is committed to delivering the highest quality screens in the shortest possible time.

Flexmat® 3 Self-cleaning screen cloths

Since 1996 the revolutionary Flex-Mat® High-Performance Self-Cleaning Screen Media technology has proven its value in more than 20,000 applications worldwide. Customers in aggregate, mining, recycle, asphalt, coal, green waste, top soil and other screening applications have experienced the revenue-generating, cost-reducing benefits of Flex-Mat® 3.

Why OptimumWire®

1. Up to 40% longer wear life against same diameter high carbon hard drawn wire
2. Ability in many quarries to increase throughput by using one smaller wire diameter without sacrificing wear life.
3. Less brittle and handles impact better than tempered wire in larger diameters
4. Variety of crimp styles, including Double-Wire® for high-impact loads and larger feed sizes
5. Wire diameters available from 1.2 mm to 19 mm
6. Manufactured with the industry’s most stringent wire opening tolerance of ± 3% for precise material passing
7. Consistently cut and hooked to exact specifications ISO 9001-2000 operations, C-TPAT Certified
The Industry’s Strongest Wire

OptimumWire® is the key durability component in most of our screen media (also known as screen cloth and screening media).

It is manufactured with a higher carbon and higher manganese content than traditional woven wire, providing more resistance to abrasion and better performance in your application.

Its high ductility, hardness and tensile strength make it less susceptible to breaking in high impact conditions and with highly abrasive materials, so it lasts longer and minimizes labour, maintenance and lost production costs.

RANGE OF COMMON SIZES EX-STOCK
OptimumWire® Screens

Flexmat® Modular Polyurethane Screen Panels
The Proven New Option to Traditional Polyurethane/Rubber Panels

- Increases Open Area Up To 40%
- Introduces Self-Cleaning Technology
- Proven to stay cleaner than rubber & poly
- Proven more efficient than rubber & poly
- Employs High-Frequency Vibrating Wires
- Delivers Precise Passing for life of the panel
- 305 x 305mm & 305 x 610mm panel sizes
- Most common fixing systems available

**Flexmat® 3 SNAP Modular Screen Panels**

The Flexmat® SNAP clip-on modular panels employ the same self-cleaning technology as the proven Flexmat® 3 cross tension screen cloths. Manufactured with OptimumWire® or stainless steel.
Screening Accessories

Support Bar Capping Rubber

Colour coded to help avoid mixing different profiled capping rubbers which could result in premature cloth failure and inefficient screening.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SBMF</th>
<th>FT-10/15</th>
<th>RT-10/15</th>
<th>RT-10/20</th>
<th>RT-12/20</th>
<th>FT-11/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROFILE</td>
<td>SECTION</td>
<td>PROFILE</td>
<td>SECTION</td>
<td>PROFILE</td>
<td>SECTION</td>
<td>PROFILE</td>
</tr>
<tr>
<td>SBMF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Side Clamping Bars

Mild steel, Hardox, rubber or polyurethane line Available in all profiles to suit any screen deck

Centre Hold Down Bars

Moulded rubber & polyurethane or steel hold down bars

Dust Sealing Components

Grip-strip straights & Grip-strip corners
Dust sealing rubber in rolls 2mm x 1400mm x 20m Cut to size and shape on request

Trowelable Repair Materials

Nepean ceramic reinforced epoxy is designed to minimise sliding abrasion and corrosion wear.
Nepean Polyurethane trowelable repair system that is an abrasion-, impact- & chemical-resistant elastomeric repair material.

Abrasion Resistant Rubber Sheeting
Skirting, Poly, ceramic Wear Liners
Other Wear Products

Ceramic Wear Liners

A range of modular Ceramic liners moulded on wear and impact absorption rubber,

Tiles are with 92% alumina content and are available in 6, 12 or 25 mm hexagonal shapes or 40 mm balls

Mining & Material Handling Hose

NRP flexible Rubber hose is designed for all types of material handling applications, including dry bulk and slurries. Hose design requirements for dry bulk differ from slurry applications. Suits various flanges with couplings

Inflatable Wear Rubber/Graphite / MoS2 liners

Nepean manufacture a range of Inflatable wear liners supplied with PLC control boxes, 240 /24 Volts using standard air on site.

The liners are infused with graphite to reduce friction and come in custom built modules to suit applications where high moisture content and sticky material cause flow and build up problems

Rubber and Polyurethane Wear Liners and Modular Screens for Trommels
## Screening Media Selection Guide

<table>
<thead>
<tr>
<th>Screening Media</th>
<th>Max. Feed Size (mm)</th>
<th>Separation</th>
<th>Application</th>
<th>Diverting</th>
<th>Deck Design</th>
<th>Parallel Spacing</th>
<th>Aperture (mm)</th>
<th>Thickness (mm)</th>
<th>Fastening Alternatives</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woven Wire</td>
<td>0.5 - 150</td>
<td>Wet / Dry</td>
<td>Pre-tensioned</td>
<td>Yes</td>
<td>Flat</td>
<td>Optimum Wire / poly</td>
<td>0.6 - 0.9</td>
<td>5 - 50</td>
<td>Grooved or sideways tension</td>
<td>Support...</td>
</tr>
<tr>
<td>Flat self-supporting screening media</td>
<td>2.000mm</td>
<td>Wet / Dry</td>
<td>Self-supporting</td>
<td>No</td>
<td>Centre hold down</td>
<td>Polyurethane</td>
<td>1.5 - 3.15</td>
<td>2.5 - 25</td>
<td>Wedge on Screen side or down</td>
<td>Side liner and capping</td>
</tr>
<tr>
<td>Tensioned modular rubber screening media</td>
<td>30 - 120</td>
<td>Wet / Dry</td>
<td>Dry / anti-blinding</td>
<td>No</td>
<td>Side hold down</td>
<td>Polyester</td>
<td>3.0 - 30</td>
<td>4.0 - 105</td>
<td>Brussels grommet or side tension</td>
<td>Side liner and capping</td>
</tr>
<tr>
<td>Pre-tensioned modular rubber screening media</td>
<td>30 - 120</td>
<td>Wet / Dry</td>
<td>Tensioned</td>
<td>Yes</td>
<td>Side hold down</td>
<td>Rubber</td>
<td>2.5 - 10</td>
<td>6.0 - 40</td>
<td>Side liner and capping</td>
<td>Side liner and capping</td>
</tr>
<tr>
<td>Pre-tensioned wire screening media</td>
<td>55 - 120</td>
<td>Wet / Dry</td>
<td>Tensioned</td>
<td>Yes</td>
<td>Side hold down</td>
<td>Optimum Wire</td>
<td>0.5 - 0.9</td>
<td>5 - 50</td>
<td>Grooved or sideways tension</td>
<td>Side liner and capping</td>
</tr>
<tr>
<td>Secondary and Final</td>
<td>≥ 150mm</td>
<td>Wet / Dry or anti-blinding</td>
<td>Tensioned</td>
<td>Yes</td>
<td>Side hold down</td>
<td>Rubber</td>
<td>1.5 - 3.15</td>
<td>2.5 - 25</td>
<td>Wedge on Screen side or down</td>
<td>Side liner and capping</td>
</tr>
<tr>
<td>Primary and Final</td>
<td>≥ 200mm</td>
<td>Wet / Dry</td>
<td>Pre-tensioned</td>
<td>Yes</td>
<td>Side hold down</td>
<td>Polyurethane</td>
<td>3.0 - 30</td>
<td>4.0 - 105</td>
<td>Brussels grommet or side tension</td>
<td>Side liner and capping</td>
</tr>
</tbody>
</table>

**Screening Media Selection Guide**

- **Priority and Feeder Setup**
  - Primary and Secondary Feed Screening
  - Final Feed Screening

- **Screening Area**
  - Wet/Dry
  - Wet/Dry/Wet/Dry
  - Wet/Dry/Wet/Dry/Wet/Dry

- **Supporting Media**
  - Polyurethane
  - Polythene
  - Rubber

- **Supporting Fixings**
  - Wedge
  - Brussels Grommet
  - Side Liner

- **Deck Design**
  - Flat
  - Centre hold down
  - Side hold down

- **Aperture**
  - 0.6 - 0.9
  - 1.5 - 3.15
  - 3.0 - 30

- **Thickness**
  - 5 - 50
  - 2.5 - 10
  - 6.0 - 40

- **Fastening Alternatives**
  - Grooved or sideways tension
  - Brussels grommet or side tension
  - Side liner and capping
Did you know your capping rubber may be the cause of your screen cloth failures and screening efficiency problems?

If your woven wire screen cloths are breaking or wearing out too fast, rubber or poly screens flapping and splitting or your self-cleaning wire screens are pegging or blinding, there is a very good chance you have tension related issues caused by capping rubbers.

Capping rubbers come in various shapes and sizes. Long leg, short leg, round top, flat top, high profile or low profile. Whilst some capping rubbers may look similar often the profile can be a few millimetres different and that is all it takes to cause you all kinds of screening headaches.

Just the slightest gap between the capping rubber and screen cloth will make it impossible to tension screen cloths properly.

Next time you change-out your screen cloths run a string-line across the screen to check that the crown is even across the whole deck. If you find the string doesn't sit firmly on all support bars check all capping rubbers are the same and the support bar heights are correct. If you are unsure what the heights should be contact the screen box manufacturer.

If the OEM can't help you we will.
One very simple almost foolproof way to ensure you get the most out of your screen cloths and never mix different profiled capping rubbers is to only use Nepean Rubber’s coloured support bar capping rubbers. Each different profile, whether it be round top, flat top, long leg or short is a different colour.

- 15mm profile - Orange capping
- 20mm profile – Green capping
- 25mm profile – Blue capping

If the capping rubbers colours don’t match you can easily see you have the wrong capping.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SB7/F</th>
<th>FT-10/15</th>
<th>RT-10/15</th>
<th>RT-10/20</th>
<th>RT-12/20</th>
<th>FT-11/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROFILE SECTION</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>10</td>
<td>12</td>
<td>11</td>
</tr>
</tbody>
</table>

Nepean Rubber is conducting Seminars for aggregate producers to help them understand the screening issues and problems most have or will experience & how to fix or avoid them.

Developed by Major Wire, the operator-oriented Screen Maintenance Simplified Seminar has received very strong positive reviews from the over 800 producers who attended in 2009, and the 700 producers who attended in 2010. Surveys returned by participants are all marked with either “Best Seminar I have ever attended” or “One of the best” Seminars. 100% of the surveys received indicated the person would “ Seriously consider attending another Seminar in the future”.