Carryback from conveyor belts is an everyday occurrence, resulting in reduced operational efficiency, reduced safety and environmental conditions while generating increase maintenance and clean-up costs.

Planned maintenance shutdowns of conveyor belts are necessary to achieve effective and continual bulk handling operations. However, while conveyor areas are down production time is lost, so it is important to safely and quickly perform blade change outs to assure optimum cleaning efficiency.

The TM DOCTOR BLADE Primary cleaner is suitable for small spaces. It has a flexible configuration and choice of blade types and tensioning devices. The TM DOCTOR BLADE Primary cleaner modular blade is designed to allow for blade wear compensation and reduce manual handling.

The TM DOCTOR BLADE Primary Cleaner can be used as a stand-alone cleaner or in conjunction with a secondary cleaner such as the ESS InLine Secondary and often with a water spray system.

**FEATURES & BENEFITS**

**MAINFRAME**

The mainframe is available in either mild steel or Stainless steel constructions this means that corrosive environments can be catered for.

**TENSIONING DEVICES**

There are several types of tensioning device available to maintain the blade to belt pressure throughout the life of the blade. This provides optimal cleaning performance while preserving blade wear rates removing material that would otherwise pass between the belt and the blade surface.

Differing styles of tensioning device are and can be customised to suit what is available at each plant.

ESS tensioning device allows blade adjustment while the conveyor is still running from outside the chute, allowing the applied pressure to be fine-tuning without the need to stop production.

**BLADE TYPE**

Modular blade design provides increased wear life and ability to change blade order or material.

Constant Angle, Radial Pressure (CARP) blade profile assures that there is a consistent even blade to belt contact throughout the life of the blade. This provides efficient and protective cleaning.

A variety of urethane types allow blades to conform to the belt profile and conditions.

**URETHANE**

Urethane blade material protects the belt surface and splices from damage and is designed to fold back and pull through rather than damage the conveyor belts surface or splices if the belt reverses or experiences rollback. The risk of conveyor belt damage or replacement and subsequent downtime to repair or replace is effectively reduced.
HOW IT WORKS

The TM DOCTOR BLADE is a conveyor belt Primary Cleaner mounted on the face of the conveyor head pulley and is designed to peel off the thick layer of loosely adhering material that often accounts for 85%-95% of carryback. It is designed to clean the conveyor belt in the in the design direction.

The TM DOCTOR BLADE is typically used in conjunction with at least one secondary cleaner, such as the ESS Inline cleaner, and often with a water spray system. The segmented blades can be easily removed by sliding on and off the mainframe and suitable for use on crowned head pulleys and damaged or grooved belts.

Important points concerning the TM DOCTOR BLADE are:

- The cleaner should be positioned lower on the head pulley to ensure the blades are clear of the main material flow on slower moving conveyor belts.

- A tensioner is required on both sides to ensure equal pressure across the cleaning face for belts greater than 1500mm wide and or belts 1200mm wide and greater; or for certain heavy duty applications, a mainframe stiffener is required.

Belt Cleaner Dimensional Data

<table>
<thead>
<tr>
<th>Belt Width</th>
<th>450</th>
<th>600</th>
<th>750</th>
<th>900</th>
<th>1050</th>
<th>1200</th>
<th>1350</th>
<th>1500</th>
<th>1600</th>
<th>1800</th>
<th>2000</th>
<th>2200</th>
<th>2400</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of STD Blades</td>
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<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>15</td>
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<td>18</td>
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<tr>
<td>Blade Cover</td>
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<td>500</td>
<td>625</td>
<td>750</td>
<td>875</td>
<td>1000</td>
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<td>1500</td>
<td>1625</td>
<td>1875</td>
<td>2000</td>
<td>2250</td>
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<tr>
<td>Frame Length</td>
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<td>1400</td>
<td>1600</td>
<td>1800</td>
<td>1950</td>
<td>2100</td>
<td>2300</td>
<td>2450</td>
<td>2600</td>
<td>2800</td>
<td>3000</td>
<td>3300</td>
<td>3600</td>
</tr>
</tbody>
</table>

BACK UP AND SUPPORT

ESS backs up its products 100%. We proudly manufacture all our products at two separate locations in Australia.

ESS maintains local stores and service crew’s in most Australian mining centres. Service crews are available for installation, service, inspection and troubleshooting.

ESS design team provide a solution to your specific plant requirements.