MS® Fastener

Innovative and easy to install

A fastener that uses screws
SOLUTIONS FOR HEAVY AND LIGHT-DUTY BELTS, MANUFACTURER OF TECHNICAL BELTS, TOOLS, VULCANIZING PRESSES
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A metal splice solution that’s easy to use!
The MS® fastener is an innovative and easy solution to splice by simply using screws.

Your problem
• Long downtime
• Expensive solutions
• Expensive equipment investment
• Requires qualified technicians

Your solution
To counter those constraints, MLT teams have developed an extremely easy solution to use: the MS® fastener. Patented: this metallic fastener solution has drawn its inspiration from the technology of the rivet fastener, while bringing a major evolution in its easy installation.

As a matter of fact, the MS® fastener is a metal fastener that can be screwed into the conveyor belt. The installation screws are self-threading screws: no need to pre-drill. Also, its easy and simple installation doesn’t require any special tools: an electric or pneumatic driver is enough.

The MS® fastener then falls into the category as truly revolutionary in the metal fastener market, as it is more economical, practical and safe.

It can be installed on high tensile strength belts:
- Up to 800 PIW (1250N/mm) and pulley diameters from 3” to 18” (75 to 450 mm)
- Its screws enable you to easily tighten the fastener on the belt with a “vice effect”.

The MS® fastener is available in coated carbon steel or stainless steel. By using the stainless steel fastener, the MS® joins the belt designed for the food, beverage and recycling industries. The connecting pin is available in diameters from 4 to 10 mm (.16” to .4”). Coated steel or in stainless steel coated polyamide.

The advantages:
No need for expensive installation tools, a cordless driver is enough
Fast installation leading to a reduction in downtime
Installation is completed only with screwing the screws (no pre-drilling required)
Tightening the fastener on the belt
Allows you to fix rubber belts in an emergency
The fastener can then be embedded into the conveyor belt after removing the covers
For more strength and a better seal: install the MS® fastener right side up on the return side or upside down

Applications:
Mine
Cement plant
Quarry
Heavy duty industries
Agricultural machines
And more

We can hot vulcanize cleats on magnet detector belts.

The belt can then be joined with an MS® fastener

Number of required screws for MS® fasteners

<table>
<thead>
<tr>
<th>Belt width (mm)</th>
<th>300</th>
<th>500</th>
<th>600</th>
<th>800</th>
<th>1000</th>
<th>1200</th>
<th>1500</th>
<th>2000</th>
<th>3000</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 25</td>
<td>48</td>
<td>80</td>
<td>96</td>
<td>104</td>
<td>124</td>
<td>132</td>
<td>164</td>
<td>196</td>
<td>248</td>
</tr>
<tr>
<td>MS 35</td>
<td>28</td>
<td>48</td>
<td>56</td>
<td>60</td>
<td>76</td>
<td>96</td>
<td>116</td>
<td>148</td>
<td>200</td>
</tr>
<tr>
<td>MS 45</td>
<td>20</td>
<td>36</td>
<td>44</td>
<td>48</td>
<td>60</td>
<td>76</td>
<td>92</td>
<td>116</td>
<td>160</td>
</tr>
<tr>
<td>MS 55</td>
<td>36</td>
<td>66</td>
<td>78</td>
<td>84</td>
<td>108</td>
<td>138</td>
<td>162</td>
<td>210</td>
<td>282</td>
</tr>
<tr>
<td>MS 65</td>
<td>56</td>
<td>88</td>
<td>104</td>
<td>112</td>
<td>144</td>
<td>184</td>
<td>224</td>
<td>280</td>
<td>376</td>
</tr>
</tbody>
</table>

*except the MS25
### Easy pick your MS® fastener:

<table>
<thead>
<tr>
<th>MS® 25</th>
<th>MS® 35</th>
<th>MS® 45</th>
<th>MS® 55</th>
<th>MS® 65</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Light Duty Industries</strong></td>
<td><strong>Heavy Duty Industries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final belt thickness (mm)</td>
<td>Screw Length</td>
<td>Final belt thickness (mm)</td>
<td>Screw Length</td>
<td>Final belt thickness (mm)</td>
</tr>
<tr>
<td>3.5 - 4.5</td>
<td>4 x 7</td>
<td>4 - 5</td>
<td>5 x 8</td>
<td>10 - 11.9</td>
</tr>
<tr>
<td>4.5 - 5.5</td>
<td>4 x 8</td>
<td>5 - 6.9</td>
<td>5 x 10</td>
<td>12 - 13.9</td>
</tr>
<tr>
<td>5.5 - 6.5</td>
<td>4 x 9</td>
<td>7 - 8.9</td>
<td>5 x 12</td>
<td>14 - 15.9</td>
</tr>
<tr>
<td>6.5 - 7.5</td>
<td>4 x 10</td>
<td>9 - 10.9</td>
<td>5 x 14</td>
<td>16 - 18</td>
</tr>
<tr>
<td>&gt; 7.5*</td>
<td>4 x 12</td>
<td>11 - 12.9</td>
<td>5 x 16</td>
<td>Overlength screws</td>
</tr>
<tr>
<td>&gt; 14.9*</td>
<td>5 x 30</td>
<td>&gt;18*</td>
<td>5 x 30</td>
<td></td>
</tr>
</tbody>
</table>

**Final belt thickness (mm)**

- 3.5 - 7.5*
- 4.5 - 10
- 6 - 11
- 9 - 15
- 10 - 18

**mini pulley ø, mm**

- 75
- 90
- 125
- 250
- 450

**Maximum operating tension of the belt, N/mm**

- 45
- 63
- 65
- 100
- 125

**Maximum breakdown tension of the belt, N/mm**

- 450
- 630
- 650
- 1000
- 1250

**Connecting pin, mm**

- 4
- 4.6
- 5 (rigid)
- 5.1
- 6.5 (Flexible stainless steel)
- 7 (Flexible steel)
- 8
- 10

**Fastener**

- coated carbon steel or stainless steel

**Screw**

- Zinc-plated steel or stainless steel

**Connecting pin**

- coated or uncoated polyamide cable, coated carbon steel or stainless steel

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*For extra belt thickness: screws are longer, they need to be cut after installation*
Pick your connecting pin:  
A wire range at your disposal

<table>
<thead>
<tr>
<th>Steel</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 4 mm coated steel</td>
<td>Ø 4 mm uncoated steel</td>
</tr>
<tr>
<td>Ø 5.1 mm coated steel</td>
<td>Ø 7 mm coated steel</td>
</tr>
<tr>
<td>Ø 8 mm coated steel</td>
<td>Ø 8 mm uncoated steel</td>
</tr>
<tr>
<td>Ø 10 mm coated steel</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stainless steel</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 4 mm coated stainless steel</td>
<td>Ø 4 mm uncoated stainless steel</td>
</tr>
<tr>
<td>Ø 4.6 mm coated stainless steel</td>
<td>Ø 5.1 mm coated stainless steel</td>
</tr>
<tr>
<td>Ø 6.5 mm coated stainless steel</td>
<td>Ø 8 mm coated stainless steel</td>
</tr>
<tr>
<td>Ø 8 mm coated stainless steel</td>
<td>Ø 8 mm uncoated stainless steel</td>
</tr>
</tbody>
</table>

**Option**

You can install a clip (washer) on the ends of your connecting pin to stop migration.
Installation Requirements:
Easy install your MS® fastener

Required equipment
- 1 set square
- 1 ruler
- 1 cutter
- 1 hammer
- 1 electric or pneumatic driver
- 1 PZ2 bit
- 1 tape measure
- 1 marking pen

Advice
For better troughing and a more leak proof design, install the fastener up side down, or on the return side.

No need for extra equipment:
In order to install your MS® fasteners down into the belt, MLT recommends you use the cordless tool kit, that will enable you to also install other products easily and quickly from the MLT range of products.

Cordless Tools kit with skiver and powered driver
ref. 2991688
- Beltskiver® FEIN
- Blade for belt skiver
  (2, 4, 6, 8, 10mm)
- HSS Saw blade, with fine teeth for precise cutting
- Driver FEIN
- Charger
- Battery charger
- Cutter + 10 standard spare blades
- Silver ball point pen
- Cut resistant gloves
- STANLEY 3m with jamming
- Light protection goggles

Compatible with:
- Super-Screw®
- ISC® belt
- FIX’N GO®

AND MORE!
**MS® Installation operating mode recommended by MLT:**

1 - Check the belt thickness in order to select the correct screws. Cut the belt so that it ends up straight.

2 - Use a hammer to pre-close each link of the fastener.

Pick between a:
- fast installation: Install carry side up
- leak-proof installation / carry side down

3 - Start by screwing the two ends, then the middle part to complete the entire process.

**ATTENTION:**
Maintain the driver straight on the belt. You have screwed it enough, once the profile of the fastener enters the belt (called the "pucker affect")

4 - Take the other end of the belt. Align it with the side already installed into the belt. Mark the position of the fastener. Start again from step 2.

**NOTE**
For an even faster installation, first install the pin in the fastener before installing the two sides. Bring the belt into the already connected fastener, and install

5 - Cut the angles of the belt. Insert the connecting pin into the fastener.

**Your MS® is now installed**
YOU CAN **REPAIR YOUR BALER BELTS YOURSELF IN ONLY 5 MIN**

**MS 25 RB REPAIR KITS**
COMPATIBLE WITH ALL BALER BELTS
BRI was created to address the existing theoretical or practical needs of conveyor belt training, especially rubber belts. BRI was founded to offer a unique solution and a domain of expertise that would exceed the users’ expectations.

Our institute offers a complete range of training:
- conveyor belt training
- on-site expertise
- audit
- an independent testing laboratory

We study your needs and put together a customized offer. Please do not hesitate to contact us.

Our trainer: Eric Virbel
30 years of expertise in the conveyor belt industry

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MLT – it’s also metallic fasteners, flexible splices, tools, endless and spliceless technical belts
Innovation for 70 years.

MLT, it’s solutions for heavy and light duty belts, tools, technical belts, etc.