MTG Systems StarMet – Rope Shovels

Featuring mechanical locking systems, the StarMet rope shovel products allow the most common lip fitting configurations for P&H* 4100 and CAT* 7495 (BE495HR*)-Whisler 12 electric rope shovels. MTG will be extending its product range, adding new configurations (Berkeley*, Whisler 10 etc...) as well as launching a new hammerless locking system for adapters and shrouds.

Hammerless locking system in the StarMet nose
The hammerless locking system ensures the robustness in the assembly and disassembly process, turning it faster and safer. For the other parts system we use the conventional (mechanical) locking, waiting to launch the "hammerless" system for the whole system.

Wear caps
The adapter allows the use of wear caps where necessary. Different wear cap designs are available, depending on the soil abrasion level and type of application.

Shrouds
The new wing and blade shrouds, in combination with a conventional mechanical fastener system, offer full bucket protection. The robust design extends the working life of the bucket and its productivity.

Templates
MTG offer a range of templates allowing correct lip reconstruction, ensuring the correct installation of adapters and shrouds, extending the bucket’s working life and preventing incidents during loading.

Hammerless locking system in the StarMet nose
The hammerless locking system ensures the robustness in the assembly and disassembly process, turning it faster and safer. For the other parts system we use the conventional (mechanical) locking, waiting to launch the “hammerless” system for the whole system.

Conventional locking (mechanical) in 2 parts Whisler system:
1. Insert the C-Clamp
2. Insert the Wedge

Conventional locking (mechanical) in 3 parts Whisler system:
1. Insert the C-Clamp
2. Insert the Inverter Wedge
3. Insert the Wedge

MTG Systems StarMet use the MTG Twist hammerless locking solution, StarMet offers proven reliability (the system has been used in mining machinery since 2006), with greater ease and speed of use, as well as improved safety when assembling and disassembling teeth.

Specific tooth design with advanced self-sharpening, offering the perfect balance between penetration and resistance to abrasion. New range of stronger teeth with more wear material which guaranteed increased bucket productivity with such machinery.

Adapters
The StarMet rope shovel products allow the most common lip fitting configurations for P&H* 4100 and CAT* 7495 (BE495HR*)-Whisler 12 electric rope shovels. MTG will be extending its product range, adding new configurations (Berkeley*, Whisler 10 etc...) as well as launching a new hammerless locking system for adapters and shrouds.

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Adapters
Electric shovel adapters have been designed with the StarMet tooth and adapter fitting system and a conventional two- or three-part lip fastener system. MTG is currently developing a hammerless fastener system for adapters.

It’s not required to convert the lip to install the hammerless locking system in a MTG adapter.

Tooth
MTG Systems StarMet use the MTG Twist hammerless locking solution, StarMet offers proven reliability (the system has been used in mining machinery since 2006), with greater ease and speed of use, as well as improved safety when assembling and disassembling teeth.

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1. Tooth
2. Adapter
3. Hammerless locking system in the StarMet nose

1. C-Clamp
2. Wedge
3. Inverter Wedge

MTG SYSTEMS
www.mtg.es
**GENERAL ASSEMBLY AND DISASSEMBLY INSTRUCTIONS FOR MTG SYSTEMS STARMET ROPE SHOVELS**

**Accessories**

- **CL** Clamp conventional adapter
- **W1** Wedge conventional adapter
- **W2** Internal wedge 3 parts

**SUMMARY OF MTG SYSTEMS STARMET ROPE SHOVELS RANGE**

<table>
<thead>
<tr>
<th>Shovel</th>
<th>BUCYRUS 495HR (CAT*7495)</th>
<th>P&amp;H* 4100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RS</strong></td>
<td>Lip shroud center</td>
<td>For CAT<em>7495 or P&amp;H</em> 4100 machine</td>
</tr>
<tr>
<td><strong>RSX</strong></td>
<td>Wing shroud lower right</td>
<td>For CAT<em>7495 or P&amp;H</em> 4100 machine</td>
</tr>
<tr>
<td><strong>WH12</strong></td>
<td>Wing shroud upper left</td>
<td>For CAT<em>7495 or P&amp;H</em> 4100 machine</td>
</tr>
<tr>
<td><strong>WC-M</strong></td>
<td>Wing shroud lower left</td>
<td>For CAT<em>7495 or P&amp;H</em> 4100 machine</td>
</tr>
<tr>
<td><strong>WC-MX</strong></td>
<td>Lip shroud center</td>
<td>For CAT<em>7495 or P&amp;H</em> 4100 machine</td>
</tr>
<tr>
<td><strong>PR</strong></td>
<td>Locking tooth (pin + retainer)</td>
<td>For CAT<em>7495 or P&amp;H</em> 4100 machine</td>
</tr>
</tbody>
</table>

**NOTE 1.** The references presented here are valid unless if there is an error or omission.

**NOTE 2.** Availability of references presented is not guaranteed. Enquire before ordering.

**ASSEMBLY INSTRUCTIONS CONVENTIONAL LOCKING 2 PARTS**

Assembly instructions conventional locking 2 parts

- Place the shovel dipper.
- Place the adapter.
- Place the C-Clamp on its position.
- Introduce the wedge.

**DISASSEMBLY INSTRUCTIONS CONVENTIONAL LOCKING 2 PARTS**

Disassembly instructions conventional locking 2 parts

- Place the forward wedge.
- Place the adapter.
- Extract the rod and hit with a hammer.
- Locking tooth retainer.
- Locking tooth (pin + retainer).