

# CONSTRUCTION



**MTG**

No limits innovation

[mtgsystems.com](http://mtgsystems.com)

## ► OBJECTIVE

To supply construction machinery with efficient, safe and resistant bucket protection systems, extending the service life and providing maximum performance to the machine in multiple soils.



### Savings

The combination of teeth with a self-sharpening design and a stable and robust fitting system ensure a better penetration of the bucket and a lower consumption is achieved by the machine.



### Safety

MTG Systems incorporate the MTGtwist hammerless locking system that provides safety in the fitting and an excellent retention, preventing breakages and minimizing the risk of accidents.



### Productivity

The tooth-adaptor-shroud assembly ensure maximum productivity thanks to its stability and comprehensive design, lengthening the service life of the system in all soils: loose, compact and pre-blown stone quarries.



## EXCAVATORS

| 12 - 20 TON                                | 21 - 40 TON                                  | 41 - 90 TON                                       |                        |
|--|--|---|------------------------|
| 312E L<br>314E L CR<br>318E L              | 320E L/N<br>329E L/LN<br>336F L/LN           | 349E L<br>374F L<br>390F L                        | CAT <sup>(1)</sup>     |
| PC138USLC - 10<br>PC170LC - 10             | PC210LC - 10<br>PC290LC - 10<br>PC390LC - 10 | PC390LC - 11<br>PC490LC - 10 MH<br>PC800LC - 8 HM | KOMATSU <sup>(1)</sup> |
| ZX130LNC - 5<br>ZX160LC - 5<br>ZX180LC - 5 | ZX210LC - 5<br>ZX290LC - 5<br>ZX380LC - 6    | ZX470LC - 5<br>ZX670LC - 5<br>ZX870LC - 5         | HITACHI <sup>(1)</sup> |



## LOADERS

| 30 - 35 TON            | 45 - 55 TON                                     | 75 - 85 TON            | 95 - 110 TON  |
|------------------------|---|------------------------|---|
| CAT <sup>(1)</sup> 980 | CAT <sup>(1)</sup> 988<br>WA <sup>(1)</sup> 600 | CAT <sup>(1)</sup> 990 | CAT <sup>(1)</sup> 992<br>WA <sup>(1)</sup> 800<br>WA <sup>(1)</sup> 900<br>LT <sup>(1)</sup> - 950 |



<sup>(1)</sup>See note on the back cover.

## ► PATENTED MTG SYSTEMS FOR CONSTRUCTION

### SYSTEMS STARMET

Tooth-adaptor hammerless locking system for construction and quarries, which provide maximum protection for excavator and loader buckets.

### SYSTEMS PROMET

Hammerless locking system for bucket protection. Includes complete range of wing and lip shrouds for buckets in excavators and loaders.

### SYSTEMS RIPMET

Patented wear parts MTG Systems RipMet for bulldozers in quarries. Wear parts with longer wear life and optimal penetration.

### SYSTEMS KINGMET

Robust and resistant teeth-adaptor system for light, medium and heavy construction.

## ► OTHER PARTS FOR CONSTRUCTION

### MTG PLUS

A wide range of innovative designs of teeth, adapter and shrouds adaptable to the most common systems on the market.

Visit [mtgsystems.com](http://mtgsystems.com) or our **MTG Pro** app (iOS and Android phones) and set up your machine.

## MTG SYSTEMS STARMET

Tooth-adapter hammerless locking system for construction and quarries, which provide maximum protection for excavator and loader buckets.



Excavators for quarries and construction.



Loaders for quarries and construction.



### ▶ STARMET ADVANTAGES

**Provides safety, savings and greater productivity**

#### Teeth

- **Quick, easy and safe replacement** of the teeth, providing greater safety for the operator. There is no chance of accidents being caused by flying metal particles.
- **The hammerless MTGtwist locking system offers an excellent retention**, preventing the loss of its teeth. Since it is housed in the adapter, the pin is completely protected from wear and impacts thus enhancing the longevity of the locking system. With MTG Systems StarMet teeth sizes 20 to 60, the locking system allows the pin and the retainer to be mounted on either side of the adapter (only one pin and one retainer are required per kit).
- **MTG Systems StarMet includes a metallic locking system for hot slag applications.** Exclusive design of the pin and the metallic retainer. Entirely compatible with MTG Systems StarMet teeth and adapters, it does not require replacing the tooth or adapter.
- All our designs offer improved penetration, are **self-sharpening** and include more wear material, **increasing the productivity** of the machine.

#### Adapters














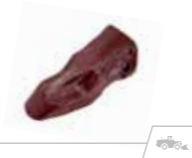










- **Designs that protect the bucket's welds**, as well as the side and blade of the bucket, thus extending the service life of the adapter.
- **Optimized designs reduce the number and length of stoppages** generating savings in maintenance downtimes due to its longer wear life.



#### BILATERAL LOCKING SYSTEM

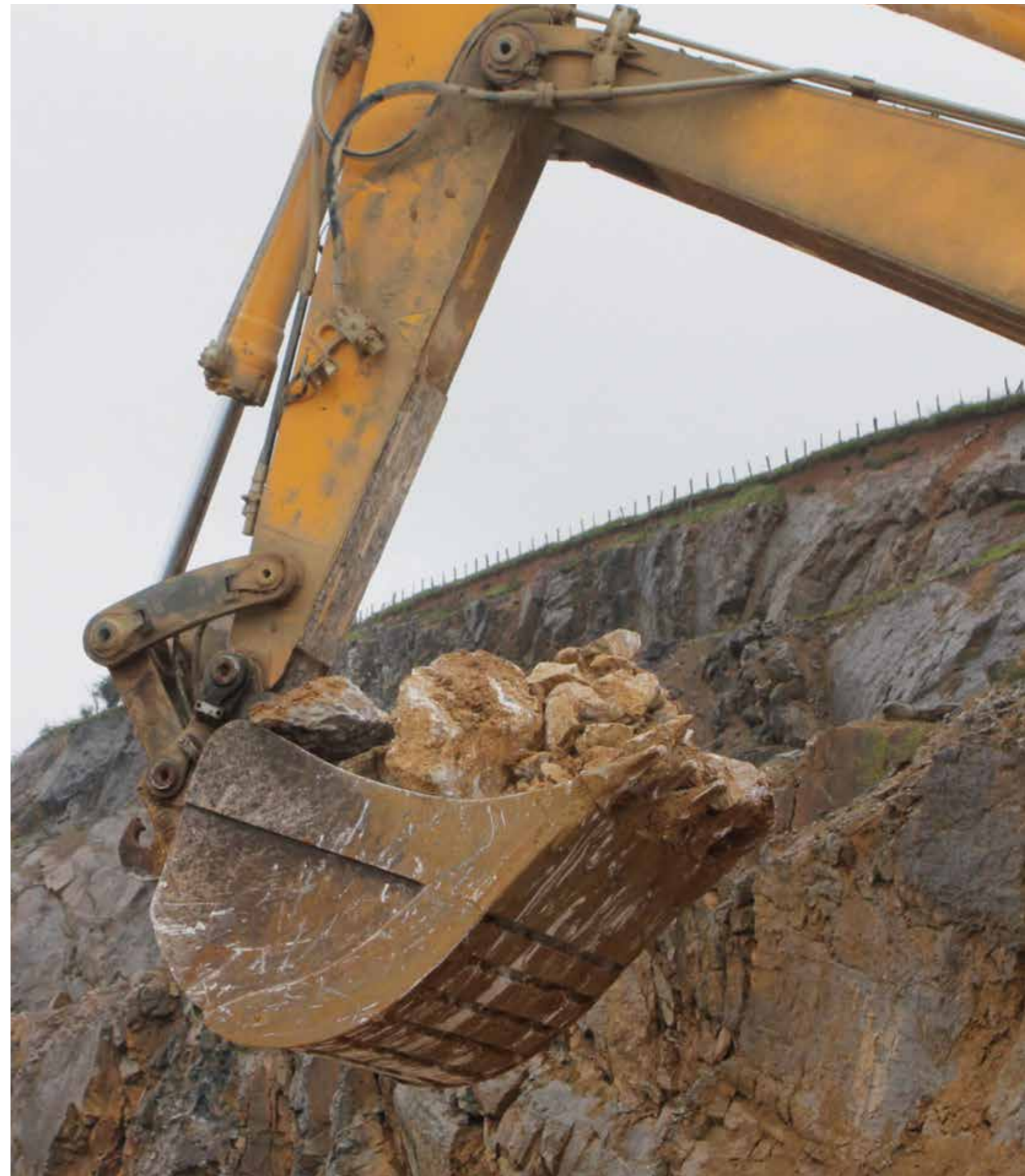
1. Hammerless conical pin for an easier extraction.
2. Standard shaped square hole.
3. MTGtwist retainer made of ElastoMet and polyurethane.
4. Plug to prevent the square hole becoming filled with soil, saving cleaning time during disassembly.

## ▶ MTG STARMET RANGE OF TEETH, ADAPTERS AND WEAR CAPS

|   |   |  |   |  |
|---|---|--|---|--|
| <br><b>E</b><br>Extra  | <br><b>EX</b><br>Extra X             | <br><b>U</b><br>Universal                     | <br><b>P</b><br>Penetration               | <br><b>F</b><br>Flared                                |
| <br><b>V</b><br>Vector   | <br><b>VC</b><br>Vector Coal         | <br><b>W</b><br>Double Vector                 | <br><b>S</b><br>Standard                  | <br><b>I</b><br>Impact                                |
| <br><b>A</b><br>Abrasion                                       | <br><b>AX</b><br>Abrasion X          | <br><b>L</b><br>Long                          | <br><b>D</b><br>Delta                     | <br><b>H</b><br>Heavy                                 |
| <br><b>WN</b><br>Weld-on nose                                | <br><b>UC</b><br>Universal Central | <br><b>WC</b><br>Central                    | <br><b>WRD<br/>WLD</b><br>Delta         | <br><b>WC/M</b><br>Central with mechanical wear cap |
| <br><b>WRD/M<br/>WLD/M</b><br>Delta with mechanical wear cap | <br><b>FC</b><br>Flush Central     | <br><b>HD</b><br>Reinforced wear bottom leg | <br><b>M/M-A</b><br>Mechanical wear cap |  |

## ▶ ACCESSORIES

|   |  |  |
|---|--|--|
| <br>MTG twist locking system | <br>Metallic locking system for hot slag applications | <br>Extraction tool |
|---|--|--|



MTG Systems StarMet teeth working in a Spanish quarry.

## MTG SYSTEMS PROMET

Hammerless locking system for bucket protection in the construction industry. Complete range of ProMet shrouds, as well as the most common MTG Plus weldable and bolt-on shrouds.



Excavators for quarries and construction.



Loaders for quarries and construction.



Stand MTG at Bauma Munich, April 2016.

### ► PROMET ADVANTAGES

#### Longer wear life, safety and reliability

##### Wing shrouds

- Offer a wide range of reversible wing shrouds which allow exchanging its position in order to achieve a complete wear of the part, and extends its wear life.
- Protect the sides of the bucket from exposure to impacts and abrasions, increasing the bucket's wear life.
- Complete range, for wing thicknesses between 30 and 60 mm.
- MTGtwist hammerless locking system offers security and reliability to the system.
- Its sharpness and lightness increase penetration of the bucket, thus improving machine productivity.

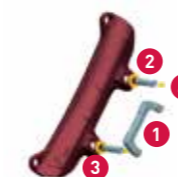
##### Lip shrouds

- Customized designs, for the purpose of offering up to 30% more wear material as compared to the equivalent model on the market.
- Reduce the exposure of the blade to impacts and abrasion, increasing the useful life of the bucket.
- The front of the shroud contains between 10% and 20% more steel.
- The fitting system only requires welding a base for each shroud, thus making installation easy and quick while reducing machine downtimes.
- Customized design for the locking system, improving wear parts contact and stability.



LIP SHROUDS  
(WITH HAMMERLESS  
LOCKING SYSTEM)

WING SHROUDS  
(WITH HAMMERLESS  
LOCKING SYSTEM)



#### PROMET LATERAL LOCKING SYSTEM

1. Weldable bases.
2. MTGtwist hammerless pin.
3. MTGtwist retainer made of ElastoMet and polyurethane.
4. Plug to prevent the square hole becoming filled with soil, saving cleaning time during disassembly.



#### PROMET BLADE LOCKING SYSTEM

1. Only one weldable base required.
2. Mechanical locking block.
3. MTGtwist retainer made of ElastoMet and polyurethane.
4. MTGtwist hammerless pin.
5. Plug to prevent the square hole becoming filled with soil, saving cleaning time during disassembly.

## ▶ MTG PROMET RANGE OF MECHANICAL WING AND LIP SHROUDS

**U**  
**Wing shroud**  
For excavators and loaders with 30-60mm wings. For abrasive applications with a medium high impact level.

**UX**  
**"Heavy" wing shroud**  
For excavators and loaders with 60-140mm wings. For high abrasion/impact applications.

**C**  
**Central Lip shroud**  
Protects the bucket blade in excavators and loaders.

**L**  
**Delta Left**  
Protects the left wing of the bucket in excavators and loaders.

**R**  
**Delta Right**  
Protects the right wing of the bucket in excavators and loaders.

## ▶ ACCESSORIES

**UWB**  
**Weld-on base for ProMet wing shrouds**

**UWBX**  
**Weld-on base for ProMet "Heavy" wing shrouds**

**WBL-A**  
**Weld-on base for ProMet lip shrouds**

**MB-A**  
**Mechanical block for lip shrouds**

**MTG twist locking system for wing shrouds**

**MTG twist locking system for lip shrouds**

**Extraction tool**

## ▶ MTG PLUS RANGE OF WELD-ON AND BOLT-ON WING, HEEL AND LIP SHROUDS



**UL/ULX**  
**Wing shrouds**  
For excavators. Provide excellent penetration for the bucket wing.

**ULH/ULHX**  
**Heel shrouds**  
Protect the corner of the bucket and adapt to its curvature. Range that covers excavators from 20 to 300 tonnes.

**UC/URD/ULD**  
**Welded blade shrouds**  
Welded blade shrouds for excavators in multiple applications. Range which covers blade thicknesses of 40mm to 120mm.

**BC-A/BCX-A/BLD-A/BLDX-A/BRD-A/BRDX-A**  
**Bolt-on blade shrouds**  
Bolt-on half arrow blade shrouds for Caterpillar<sup>®</sup> loaders which work on abrasive applications.

<sup>(1)</sup> See note on the back cover.



More bucket protection and productivity with MTG shrouds.

## MTG SYSTEMS RIPMET & MTG SYSTEMS KINGMET

Robust and resistant traditional MTG tooth system offering optimal penetration in quarries and construction work.



Excavators for quarries and construction.



Loaders for quarries and construction.



Bulldozers for quarries and construction.

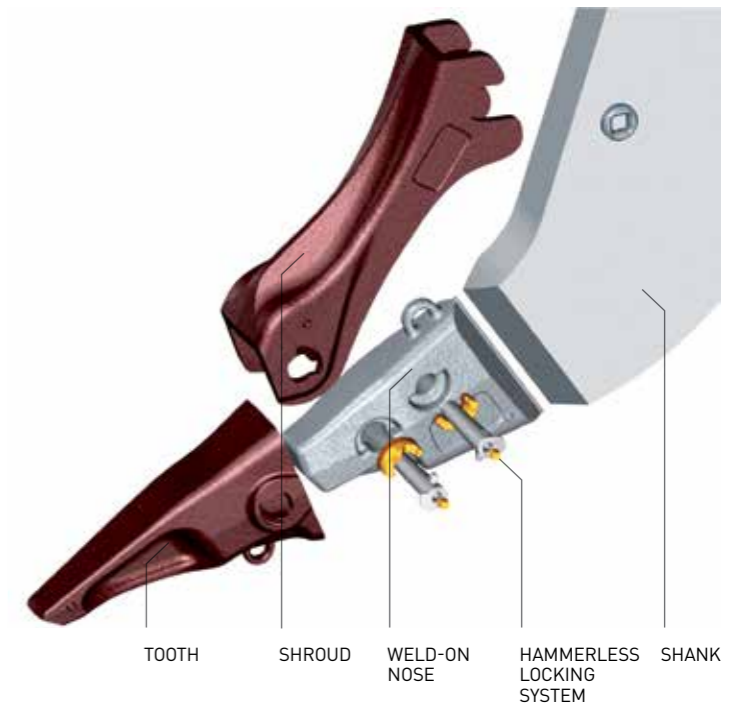


### ▶ RIPMET ADVANTAGES



#### Increased wear life and optimal penetration

- Teeth with a higher percentage of wear material, which **increases their wear life.**
- The teeth's longer self-sharpening channel **maintains the penetration until the end of their life.**
- **The shroud protects and optimizes the penetration** of the arm durably, preventing the wear on the central nerve to the maximum.
- **Excellent resistance on the toughest applications.** The stability of the fitting system better distributes the forces when working, minimizing breakages even on the toughest applications.
- **Safety and ease when changing teeth.** MTG Systems RipMet wear parts incorporate the MTGtwist hammerless locking solution which offers safety, comfort and faster changing of the parts.



#### MTGTWIST LOCKING SYSTEM FOR BULLDOZERS

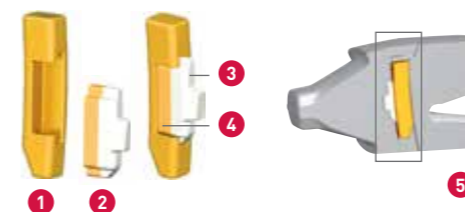
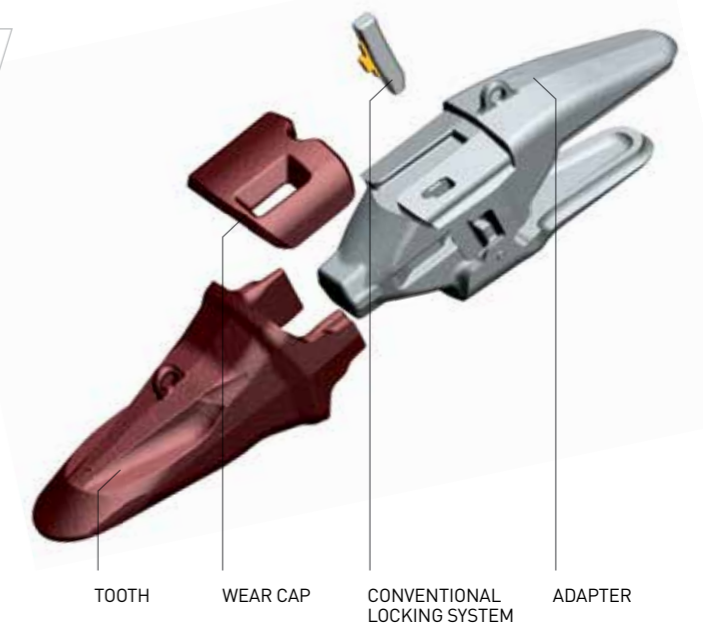
1. Hammerless conical pin for an easier extraction.
2. Standard shaped square hole.
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4. Plug to prevent the square hole becoming filled with soil, saving cleaning time during disassembly.

### ▶ KINGMET ADVANTAGES



#### More wear life and bucket penetration

- **Robust and resistant teeth.**
- Teeth operate **without breaking.**
- **Faster and easier tooth changing.** Conventional locking system, which includes a vertical pin that reduces any possible side interferences.
- **Teeth with a longer service life.** Long lasting and extended performance thanks to the good quality wear material and because they are built using steels by MTG Steels, which last longer and break less.
- **Teeth remain always sharp, improving bucket penetration** throughout the service life of the tooth.



#### CONVENTIONAL LOCKING SYSTEM

1. Body
2. Retainer.
3. Polyurethane.
4. ElastoMet.
5. Pin totally protected.

## MTG SYSTEMS STARMET IN LIMESTONE AND QUARTZ APPLICATIONS



MTG Systems StarMet tooth in a limestone and quartz quarry.

## MTG SYSTEMS STARMET TEETH FOR HOT SLAG APPLICATIONS



MTG systems working at extreme temperatures.



Construction excavator with MTG wear parts operating in Ireland.



G.E.T. in hot slag applications in Spain.

### STARMET

**RESULTS:** THE HAMMERLESS LOCKING SYSTEM IMPROVES THE SAFETY AND RELIABILITY OF TEETH, BEING THE MAIN ADVANTAGE OF MTG SYSTEMS STARMET TEETH. <sup>[2]</sup>



**Machine:** HITACHI<sup>[1]</sup> ZX 850  
**System:** MTG Systems StarMet  
**Terrain:** Limestones and quartz quarries  
**Location:** Ireland

<sup>[1][2]</sup> See notes on the back cover.

### STARMET

**RESULTS:** MAXIMUM RESISTANCE AND DURABILITY AT EXTREME TEMPERATURES WITH MTG SYSTEMS STARMET FOR HOT SLAG. <sup>[2]</sup>



**Machine:** LOADER CAT<sup>[1]</sup> 980  
**System:** MTG Systems StarMet  
**Terrain:** Hot slag application  
**Location:** Spain

<sup>[1][2]</sup> See notes on the back cover.





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