



MTG

No limits innovation



INS.2.5.1

RIPMET Adapter

Installation procedure

DISCLAIMER

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1. SAFETY

The practices described in this manual can be taken as guidelines for operating safely in many conditions and in addition to the safety standards that are current and enforceable in your area or region.

Your safety and the safety of third parties is the result of putting into practice your knowledge of the correct operational procedures.

Attention, when performing the work described in these instructions, always work safely and use the personal protection elements required to minimize or avoid injury. Always wear:



**HARD
HAT**



**SAFETY
GLASSES**



**EAR
PROTECTION**



**STEEL TOED
BOOTS**



**PROTECTION
GLOVES**

To avoid eye injury, always wear safety goggles or a protective mask when using any equipment, hammer or similar tool. When equipment is under pressure or when objects are struck, chips or other debris can be thrown out. Make sure no one gets hurt by the debris that is fired before applying pressure or hitting an object. Wear eye protection that complies with ANSI Z87.1 and OSHA standards. Also wear hearing protection and gloves.

Lifting a heavy object can cause serious or fatal injury. DO NOT exceed the maximum rated capacity of lifting and positioning devices: Stay away from the area under a suspended load.

Make sure that the chain is not damaged and that the load is always balanced.



**LIFTING
LUG**

2. WELDING

Following is a quick reference on consumables that can be used to weld MTG products. For a complete reference on welding procedures, refer to the document entitled "General welding recommendations".

WELDING UNALLOYED FILLER CONSUMABLES

PROCESS	EN CLASS	AWS CLASS
SMAW	EN ISO 2560-S E42X	E70X ACCORDING TO A5.1 OR EQUIVALENT UNDER A5.5
	EN ISO 14341-A G42X	E70C-X ACCORDING TO A5.18 OR EQUIVALENT UNDER A5.28
GMAW	EN ISO 14341-A G46X	E70S-X ACCORDING TO A5.18 OR EQUIVALENT UNDER A5.28
	EN ISO 16834-A T42X	E7XT-X ACCORDING TO A5.20 OR EQUIVALENT UNDER A5.29

WELDING AUSTENITIC STAINLESS FILLER CONSUMABLES

PROCESS	AWS CLASS
SMAW	E307-X ACCORDING TO A5.4
	ER307T-X ACCORDING TO A5.22
GMAW	ER307 ACCORDING TO A5.9
	307-X ACCORDING TO A5.22

NOTE: "X" MAY STAND FOR ONE OR SEVERAL CHARACTERS

3. SPECIFIC WELDING RECOMMENDATIONS

Tubular thread (Flux Core) **should be used with certified low hydrogen content.**

Recommended maximum diameter: 2.4 mm / 0.09 inches. Manufacturer recommendations should be followed:

Tubular thread recommended:

- **ASME/AWS: E 70 T1** (Rutile type tubular thread)
- **ASME/AWS: E 70 T5** (Basic tubular thread with high mechanical properties)
- **DIN: SG B1 C 5254** (DIN 85591 standard)

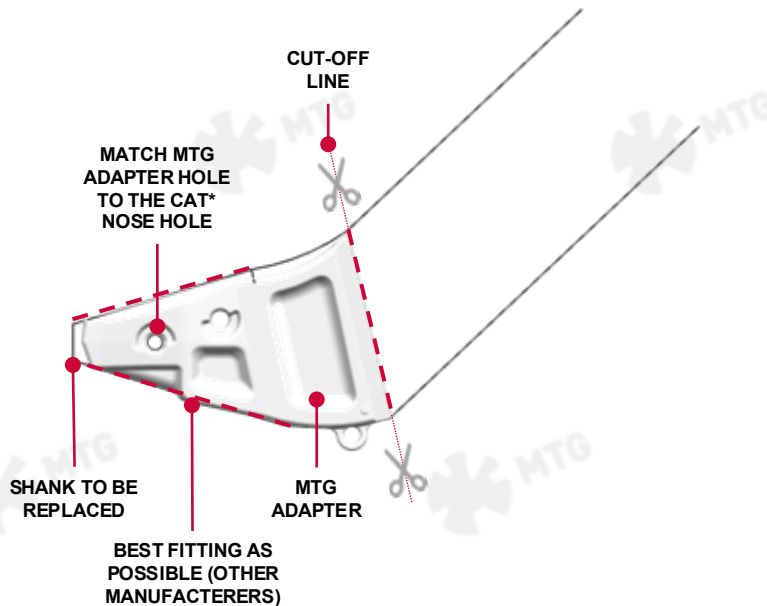
Gas mixture Ar + 25% CO2 should be used. You should specify that you cannot have any humidity. Maximum recommended flow would be 16.52 l/m.

4. INSTALLATION PROCEDURE

4.1 WELDING PREPARATION WHEN THE ORIGINAL ADAPTER IS MAINTAINED

4.1.1 Place the MTG Systems RipMet adapter on the shank in the same original position. Holes will match when replacing a CAT* nose. For other kind of noses and all adapters, follow the original profile

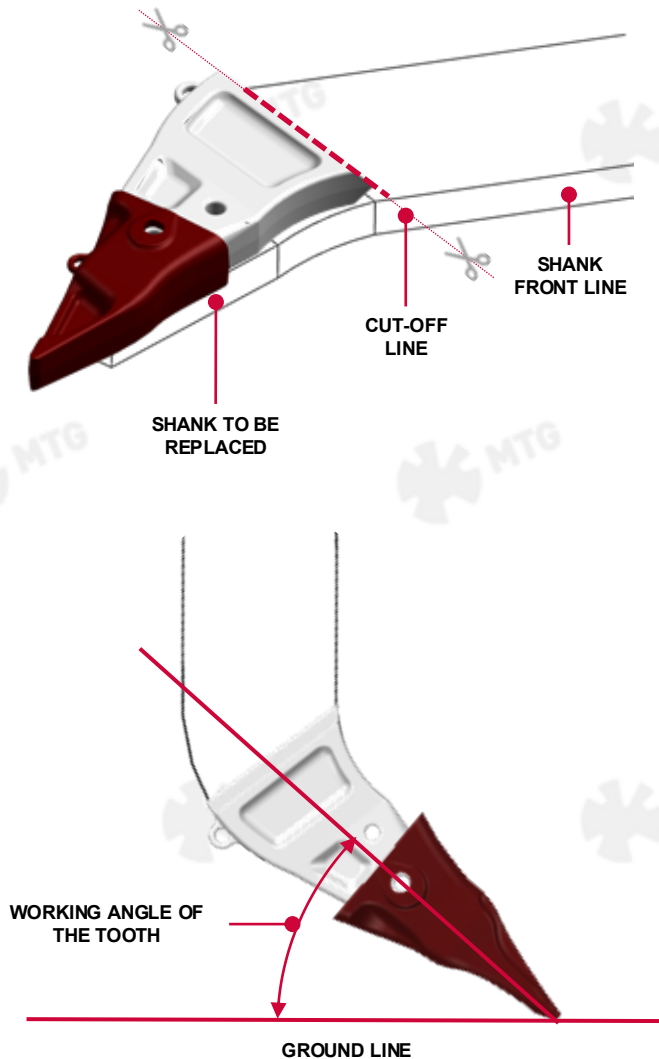
4.1.2 Draw the resulting cut-off line on the shank.



4.1.3 Preheat the area to be cut to a temperature between 175°C and 200°C (347°F and 392°F) and cut through the line. Without allowing the parts cooling down, perform the welding chamfer similar to that of the MTG Systems RipMet adapter.

4.2 WELDING PREPARATION WHEN THE ORIGINAL NOSE/ADAPTER IS NOT MAINTAINED

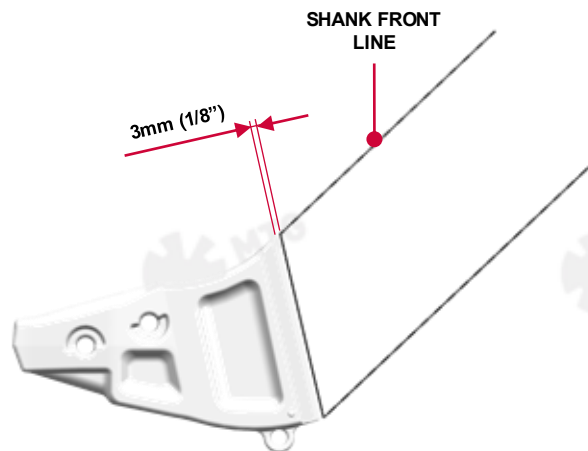
- 4.2.1** Place the tooth/adapter set on the shank, set the desired working angle for the tooth and mark the cutting line. MTG Systems RipMet allows a working tooth angle of between 45° and 60°. A 45-degree angle, or one close to it, is recommended for loose or medium compacted materials, such as sand, gravel, clay, silt. Conversely, a 60-degree angle, or one close to it, is recommended for highly compacted materials or soft rock, such as cemented gravel, very stiff clays, or soft limestone.



- 4.2.2** In the same way as in the previous case, preheat the area to be cut to a temperature between 175°C and 200°C (347°F and 392°F) and cut through the line. Without allowing the parts cooling down, perform the welding chamfer similar to that of the MTG Systems RipMet adapter.

4.3 ADAPTER WELDING

- 4.3.1** Place the adapter close to the shank. There must be a distance of 3mm / 0.12 inches between the adapter and the shank. If the welding groove lengths are slightly different, the front line must match.



- 4.3.2** Preheat adapter and shank to a temperature between 175°C and 200°C (347°F and 392°F) at a distance of 100mm (4") around the area to be welded.
- 4.3.3** Weld alternatively on both sides to correct deformities. Grinding should be performed longitudinally to the shank using a fine-grained grinding wheel to avoid scratches in the transversal direction of the shank.
- 4.3.4** At the welding ends, leave a small welding over-thickness and perform grinding so that we obtain a smooth flat surface (to avoid interference with the adapter).
- 4.3.5** Once the process is completed, verify if there are any cracks. If any, clean and re-weld the area.



Service Instructions

The latest welding recommendations and assembly / disassembly instructions can be found online:

www.mtgcorp.com/manuals

Please contact Technical Services in case of questions:

technical.services@mtgcorp.com



MTG HEADQUARTERS

Carrer d'Àvila, 45
08005 Barcelona (Spain)
(+34) 93 741 70 00
info@mtgcorp.com

MTG NORTH AMERICA

4740 Consulate Plaza Drive
Houston, TX 77032 (USA)
+1 (281) 872 1500
Info.na@mtgcorp.com

MTG AUSTRALIA

16 – 18 Thorpe Close
Welshpool, WA, 6106 (AUS)
+61 8 6248 6513
Info.au@mtgcorp.com