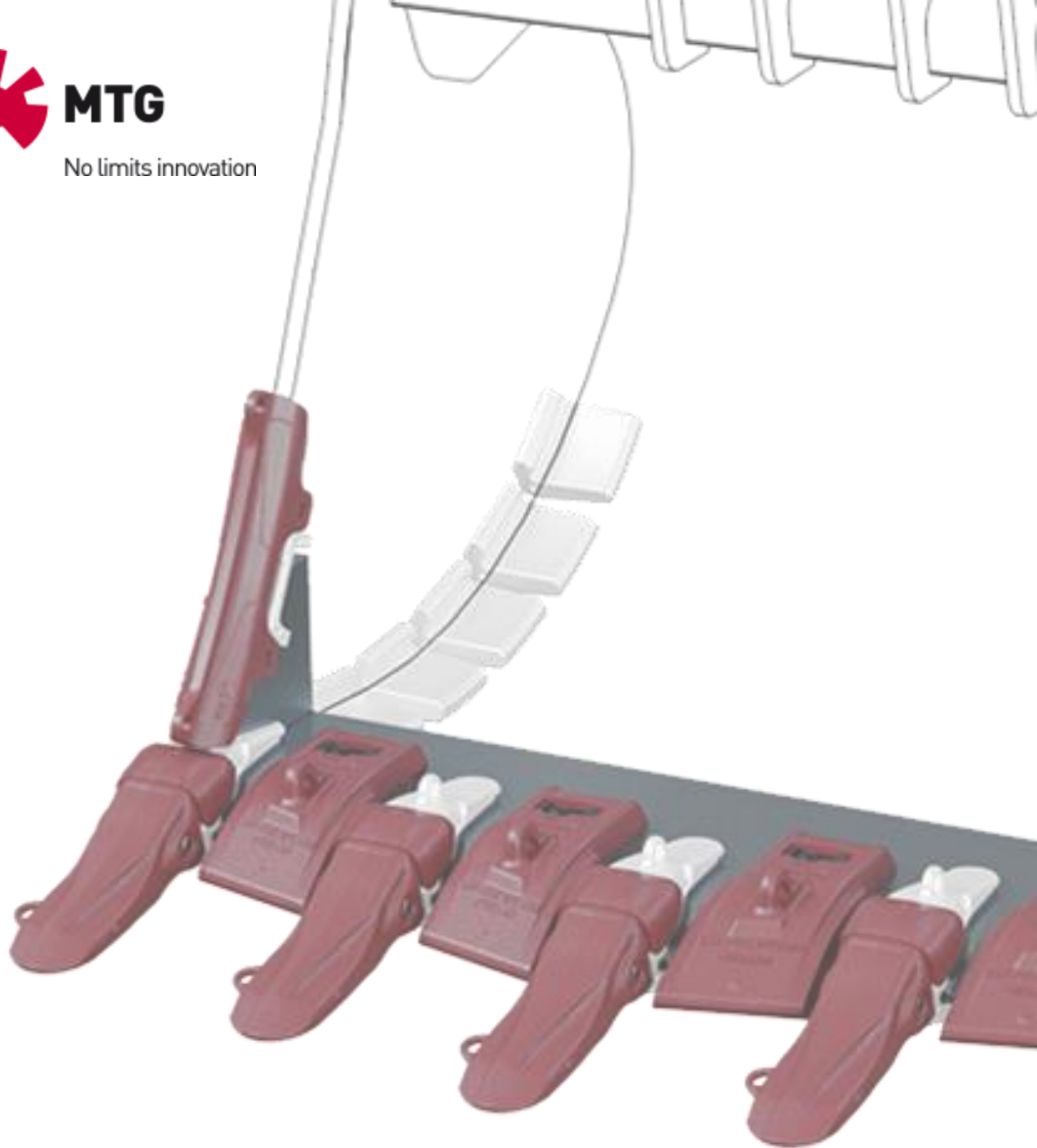




MTG

No limits innovation



INS.3.3.6

PLUS LA&LS Weld-on Wing Shroud

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
FCAW	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
FCAW	307-X ACCORDING TO A5.22

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

3. IMPORTANT

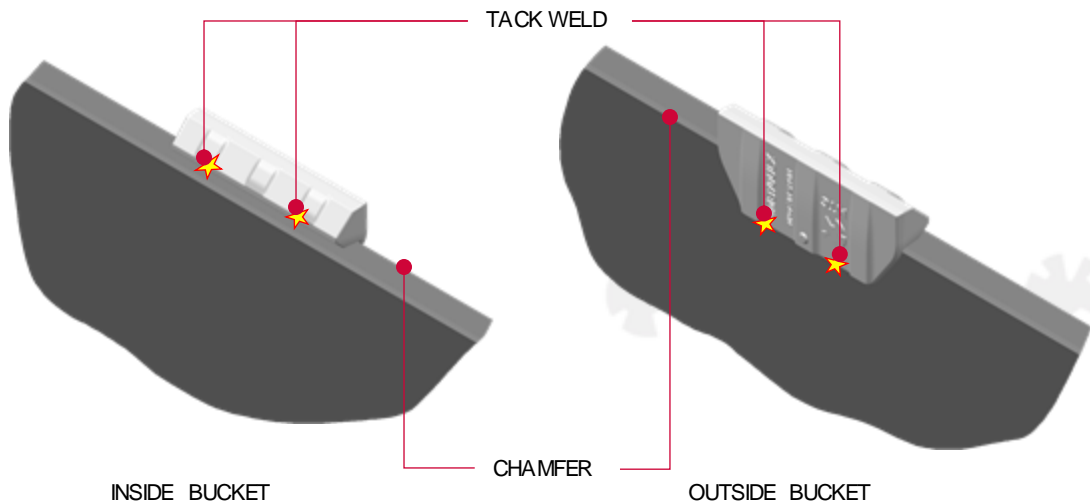
This installation procedure comprises just protectors with size 70 as the sizes 20, 25 and 30 will require its own procedure due to its different shape.



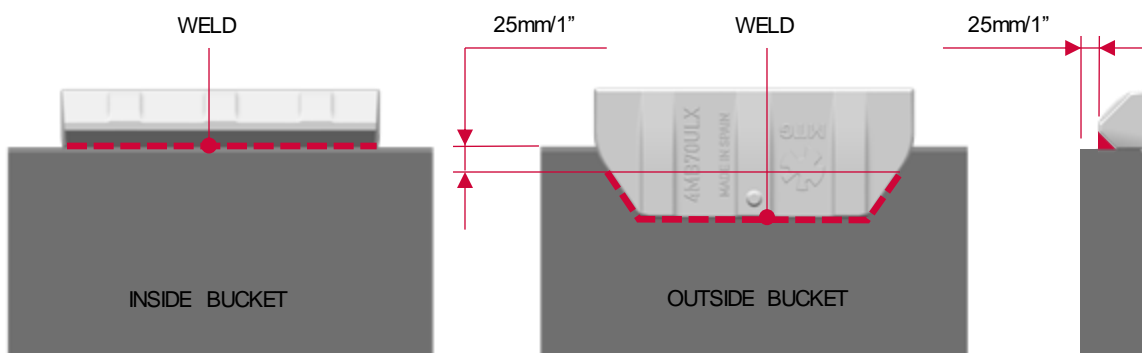
Prior to welding, determine the appropriate placement of parts based on preference or length to be protected from wearing.

4. INSTALLATION PROCEDURE

- 4.1** Prepare casting and plates according to what is exposed in the document entitled "General welding recommendations".
- 4.2** Perform a minimum of 5x5 chamfer at the outer edge of the wing plates covering the required length for the installation of one or more consecutive protectors.
- 4.3** Preheat wing plate and protectors to a temperature between 175°C and 200°C (347°F and 392°F) within an offset of 100mm (4") around the shroud.
- 4.4** Place protectors to be welded ensuring its proper frontal contact on the wing plate. Tack weld protectors to the wing plate at the inner and outer surface alternatively.



- 4.5** Proceed to weld the shroud at the shown area. Alternate inner and outer passes. Do not weld within 25-30mm (1"-1.2") from the edge of the wing plate.

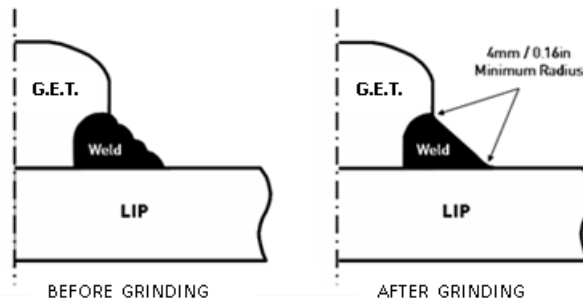


4.6 Ensure that the welding technique accomplish with what is exposed in the document entitled “General welding recommendations”.

4.7 All welds both inside and outside must be ground.

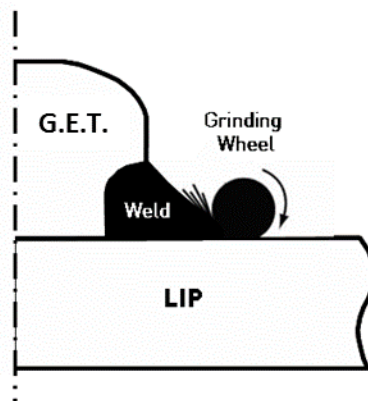
After grinding the surface must be free of rough areas and undulations associated with the arrangement of the weld beads.

The welding edge must be regularly and progressively attached to the lip and to the protector with a minimum radius of 4mm / 0.16 in.



4.8 Grinding shall be done using high speed electric or pneumatic grinders with grinding wheels no larger than 50mm - 2 in. in diameter. **ANGLE HEAD OR DISK GRINDERS ARE NOT ALLOWED FOR THIS WORK.**

Grinding shall be done with the perimeter of the wheel and not the face. The grinding direction must be perpendicular to the toes of the welds as in the illustration.



Grinding the radio at the toes of the welds is facilitated using cone-shaped grinding wheels. For final grinding, the abrasive may be no coarser than 24 Grit.

4.9 After completion of welding, all welds shall be subjected to visual and magnetic particle inspection, as described in the document “General welding recommendations”. Any detected welding crack must be cleaned and repaired.



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@mtg.es



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