## Thermal Shock Induced Deflagrator (TSID)



Information sheet and SOP

## INTRODUCTION AND USE

The Disarmco Thermal Shock Induced Deflagrator (TSID) been designed to destroy by deflagration large high explosive (HE) cylindrical munitions. Three standard sizes of TISD blocks are stocked suitable for 152-155mm projectiles, 100-115mm projectiles and 250mm GP bombs (MK82); other sizes can be made. TSID has a UN transport DG classification 4.1 – flammable solid. Fig 1 shows the TSID kit.

## LIMITATIONS OF USE AND GENERAL SAFETY

The TSID blocks are designed to operate on a target munition that is resting approximately level; effectiveness will progressively decrease with inclination angle. The Disarmco TIS starter, is the only starting method recommended for TSID. With the TSID blocks Disarmco supply a fire clay to seal the block onto the target profile. Fig 3b; only the fire clay supplied by Disarmco should be used. Only Explosive Ordnance Disposal (EOD) operators or those who have the necessary competence/training should use this thermite device. Before using TSID, personnel unfamiliar with thermal EOD techniques should undertake a course of training.

## STANDARD OPERATING PROCEDURE (SOP)/INSTRUCTIONS

- 1. These instructions are not intended for standalone use; they are for inclusion into relevant customer SOPs.
- 2. Read also, the Information/SOP sheet for the Disarmco TIS starter.
- 3. To ensure the TSID remains dry, only remove from the bulk packing when use is imminent.
- 4. Place the TSID block onto the target and ensure the block sits closely to the target profile, remove any soil/debris that may prevent close contact, then remove the block. Fig 2.
- 5. Using the applicator provided (Fig 1), run a continuous 1.5 to 2 cm bead of Moldseel clay along the red outer casing of the curved side of the TSID block. Fig 3a.
- 6. Place the block onto the target, apply moderate pressure and smooth the clay to completely seal the block to the target; apply additional clay if required. This provides a seal to contain the molten iron produced by the thermit reaction. Fig 3b.
- 7. Apply a line of Moldseel along the length of a TIS starter. Fig 4a. Push the TIS starter into the hole in the TSID block as far as it will go with light pressure; do not try to remove the TIS once inserted. Add additional Moldseel to secure the block onto the target if required. Fig 4b.
- 8. For connection of firing cable, read the Disarmco TIS Information/SOP sheet.



Fig 2



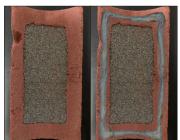


Fig 3a



Fig 1



Fig 3b Fig 4a

Fig 4b

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