

INTRODUCTION AND USE

The Hot Drop system is designed to use TD-A where the target is a **NO TOUCH** munition. The TD-A is held in a crucible that is placed at a standoff above the target object, resulting in a stream of molten iron falling on it and penetrating case; thicknesses up to 10mm steel. TD-A has a UN transport DG classification 4.1 – flammable solid.

The HOT DROP system consists of a crucible, stand, TD-A (up to a maximum of 950 grams), aluminum tape and a TIS starter (Fig 2(a)). The stand and crucible are reusable (assuming no detonation occurs), the crucible requires cleaning between cycles and can normally be used 3 or 4 times.

LIMITATIONS OF USE AND GENERAL SAFETY

The Disarmco TIS starter, is the only starting method recommended for TD-A. Only Explosive Ordnance Disposal (EOD) operators or those who have the necessary competence/training should use this thermite device. Before using TD-A or the Hot Drop system, 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 TD-A and crucible remains dry, only remove from the bulk packing when use is imminent
4. Ensure the crucible is free from slag left from previous use, then use aluminum tape to cover the hole in the base
5. Pour TD-A into the crucible, the weight of TD-A may be varied from 350 to 950 grams dependent on the case thickness of the target
6. Extend the leads of a TIS starter (see TIS Instructions/SOP) then lay the starter on its side in the center of the of the TDA powder (Fig 2(d)). Gently work the TIS into the TD-A powder until it is covered by approximately 12mm of TD-A powder (Fig 2(e)).
7. Holding the starter in place, bring the starter wires to the edge of the crucible and use aluminum tape to secure the wires to the rim of the crucible (Fig 2(f)).
8. Use aluminum tape to completely cover the crucible (Fig 2(g)).
9. Assemble the crucible stand (Fig 1) and place over the target object so the center is approximately over the point the target is to be penetrated
10. Place the charged crucible on the stand, adjust the height and position of the stand such that when the molten iron flows from the base hole it falls on the desired penetration point; note the flow will be vertically. The penetration point should be slightly off the center line of the cylindrical case (Fig 3).
11. Optimum stand-off distances vary dependent on the target case thickness (normally in the range of 50 to 120mm. It is recommended that inert tests are performed before deploying on a live target.
12. Connect the firing cable to the TIS starter; see TIS Information/SOP

HAZARDS: Very HOT > 2400°C (3rd degree burns). Do not inhale fumes



Fig 1 (a)



Fig 1 (b)



Fig 1 (c)



Fig 1 (d)



Fig 1 (e)



Fig 2 (a)



Fig 2 (b)



Fig 2 (c)



Fig 2 (d)



Fig 2 (e)



Fig 2 (f)



Fig 2 (g)



Fig 2 (h)



Fig 3