

## Manual demining tools

### The AVS "MIT profile" probe

This tool is based on the common demining probe or "prodger". Many hundreds are currently in use.

With a 40cm long blade in front of the handle, the shaft is malleable stainless steel that has been reduced in one plane. This makes the tool blade almost oval in cross-section. A demining research group at MIT observed that ground friction could be significantly reduced using a probe with this cross-section and twisting it while inserting it.

Since a deminer is usually required to probe to a depth which ground-friction denies, any reduction in friction is most welcome. If the tool is rotated through 360° when inserted as far as possible, it can then be pushed further without extra force. How much further it can then be pushed depends entirely on the



composition of the soil.

The 40cm blade length obliges a kneeling/squatting deminer to approach the target area from a low angle. The tool is designed to be used with a steady forward push by one hand in soft ground. The forward movement is followed by a rotating action to reduce friction, then a further forward push moves the tip deeper into the soil.

The handle is made of non-shattering polyethylene. The user's hand is protected by a pliant and washable ballistic aramid hand-guard. The guard does not prevent the use of a second hand to hold the blade, but is intended to discourage it. It weighs around 0.4Kg (12oz).

The tool stayed in one piece when placed on top of a mine in tests. The blade curved gracefully. Variations have been used in more than 25 actual accidents, and have always bent as designed.

As well as having been supplied to military users in South America and Europe, this tool is known to have been used in Vietnam, Angola, Mozambique, Sri Lanka, Tajikistan,

Afghanistan, Lebanon and  
Sudan.