

## Using the SD Long trowel

The SD Long trowel is designed to resist the forces associated with the detonation of an anti-personnel blast mine.



SD Part no.: SKU3012

The length of the tool (nominally 30cm in front of the hand) is designed to keep the hand safe and also to make it easiest to use at a low angle to the ground.

Tests have shown that the handle, handguard and blade do not separate in a blast. This does not mean that the tool will not be damaged in a blast. It is intended to bend but not to break or separate into component parts.

A magnet clip can be provided with the tool. The magnet clip fits on either side of the blade for right or left-handed use. When soil is tipped off the blade and over the magnet, any magnetic material will stick to the magnet. In areas with scrap metal in the ground, this can accelerate the investigation of metal-detector signals dramatically.



The magnet can be used to attract ferrous metal from the surface where a metal-detector signalled or when moving loose spoil aside with the trowel.



### CAUTION!

Do not use the tool with both hands. If one hand is on the shaft or the trowel head, it will be dangerously close to any explosion.

When the ground is not loose enough to use the trowel with one hand, the deminer should use the **SD Oval profile prod**, the **SD Pick-prod** or the **SD Two-handed excavator** to break up the ground.

*SD blast-resistant hand-tools for Humanitarian Demining are made using design rules developed during research funded by US Army CECOM NVESD by Andy Smith. See the design rules at <http://www.nolandmines.com/hand-tool-design-criteria.htm>*