EN-13089	ICE TOOLS (Axes and Hammers)	UIAA-152

Note: This representation of EN 13089 and UIAA 152 does not contain the full details of the test methods and requirements in these standards; it gives only a simplified pictorial presentation.
For full details, EN 13089: 2011 + A1: 2015 and UIAA 152: 2018 should be consulted.

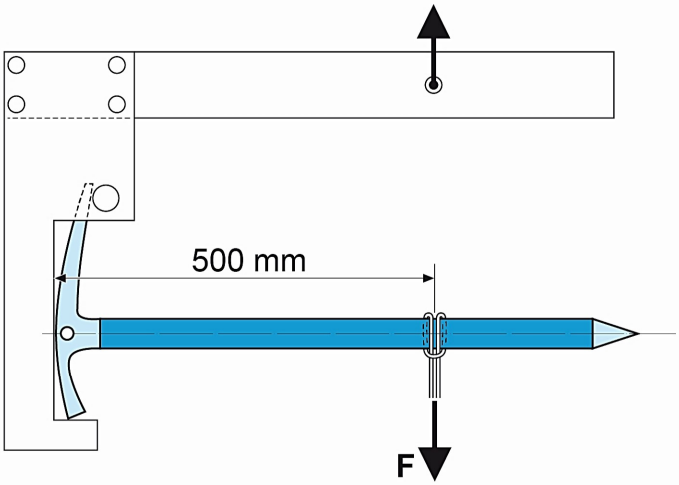
With regard to strength, two types of ice tools exist in accordance with these standards:

Type Ⓑ = Basic type, with lower strength, for use in general circumstances as on glacier, for snow hiking, for ski mountaineering etc. (no marking!)

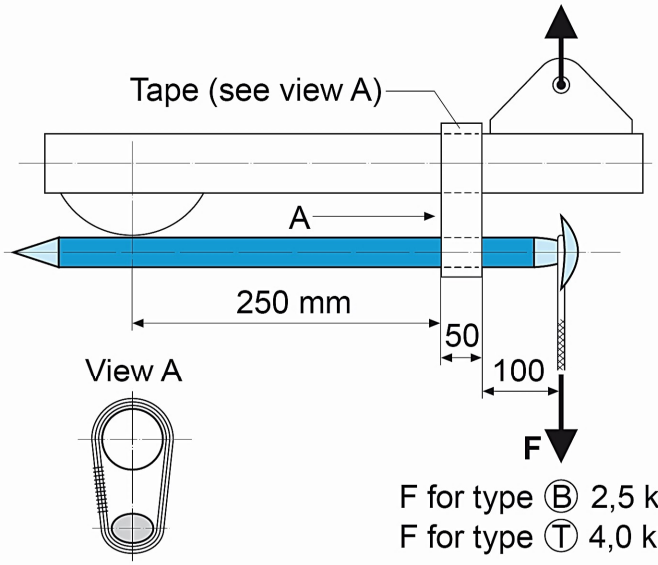
Type Ⓣ = Technical type, with higher strength, for use in all circumstances especially for ice climbing, dry tooling etc. (mark with "Ⓣ")

Static Tests

For all tests, the sample must be cooled to -30°C

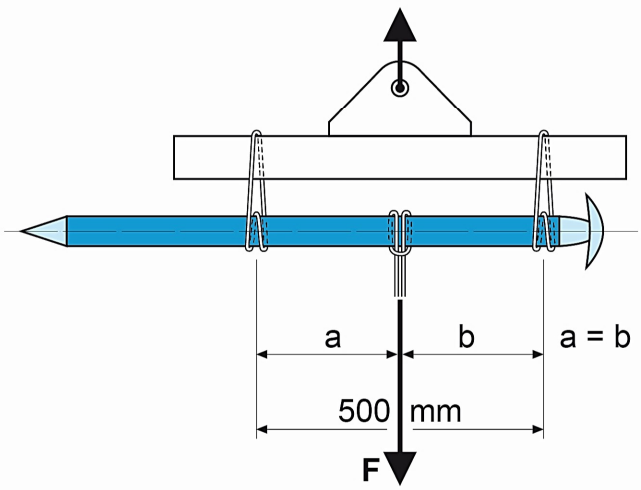


F for type Ⓑ 0,6 kN
F for type Ⓣ 0,9 kN



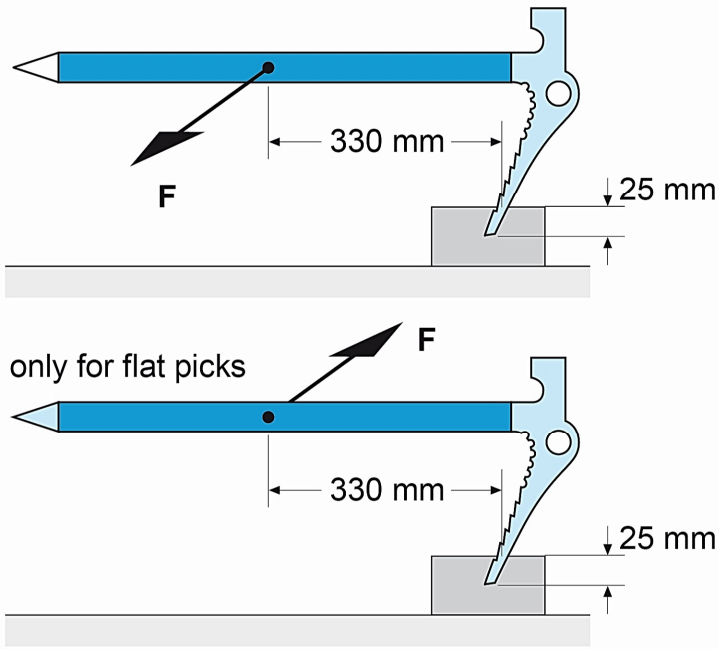
F for type Ⓑ 2,5 kN
F for type Ⓣ 4,0 kN

permanent deformation at the point of load after looking ≤ 10 mm



F for type Ⓑ and Ⓣ 2,5 kN

permanent deformation at the point of load after loading max. ≤ 3 mm



F for type Ⓑ 127 N
F for type Ⓣ 182 N

permanent deformation at the point of load after loading max. 70 mm

For all these tests: If the shaft of the ice tool is not long enough for the distance as drawn, shorter distances can be used with corresponding increases in the applied loads, to generate the same bending moment.

Designed by Georg Sojer

EN-13089	ICE TOOLS (Axes and Hammers)	UIAA-152

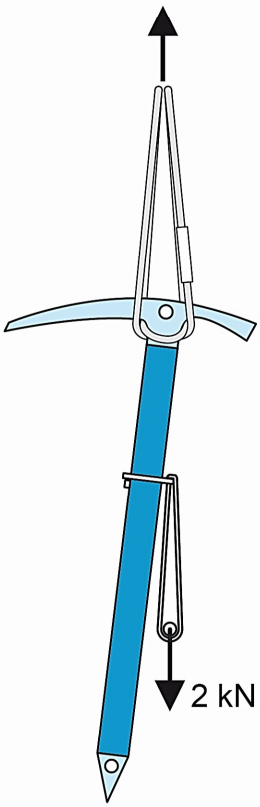
This representation does not provide full details. Read the Note at the head of page 1.

Additional UIAA Requirements

Ice tools shall have, either
(a) an attachment device, intended for attachment to the user's hand (hand loop) or body
or
(b) at least one hole in the head or shaft of the ice tool, for attaching a sling. If this hole is in the shaft, it shall be situated in that half of the ice tool that includes the head. All holes shall be free from sharp edges
or
(c) both (a) and (b)

Static Test of Loop

(only if designed for self belaying)



breaking strength ≥ 2 kN

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