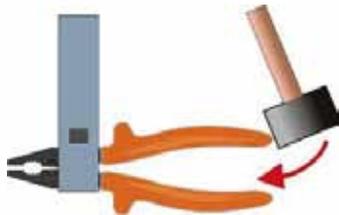
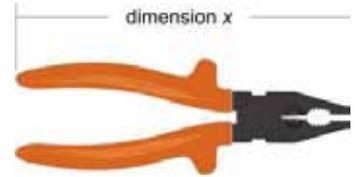




DIMENSIONS

IEC 60900 requires that all tools comply with various dimensional standards, to ensure that the tools meet important ergonomic design principles and are safe and easy to use. (Clause 5.3)

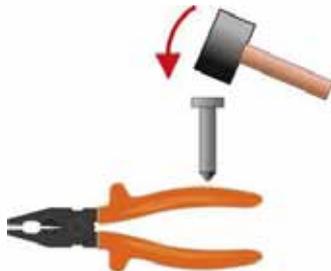
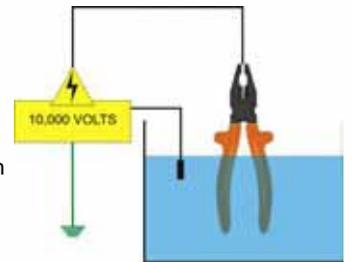


Each type of tool is subjected to an impact test to ensure the insulation can withstand normal daily wear and tear without serious damage. Impact tests are carried out at ambient, low and extremely low temperatures. (Clause 5.4)

IMPACT

DIELECTRIC STRENGTH

The dielectric test proves the integrity and performance of the tool's insulation. After conditioning in a water bath or wet chamber for 24 hrs, 10kV is applied for 3 minutes to the tool whilst it is immersed. The leakage current is measured and checked for compliance, the value of which depends on the type and size of tool. (Clause 5.5)

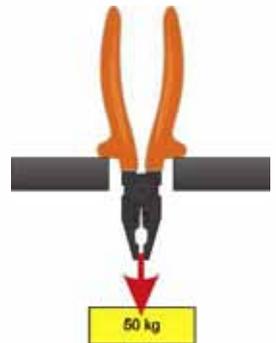


An indentation test is carried out to ensure the tool's insulating properties are retained after being subjected to a point impact. After the impact, the insulation must withstand 5kV for 3 minutes without puncture, sparkover or flashover. (Clause 5.6)

INDENTATION

ADHESION

The adhesion test ensures that the tool's insulating coat will not slip, move or separate from the metal parts of the tool. After conditioning at 70 deg C for 168 hours, the tool is allowed to cool to an ambient temperature, then various forces are applied to test the adhesion properties and performance. (Clause 5.7)



Each type of tool is subjected to mechanical tests to ensure compliance with various ISO or national standards and to ensure the tool has the necessary mechanical strength for its intended application.

MECHANICAL



Orange, flame retardant PVC insulating outer layer with anti-slip treatment.

Tough, impact resistant, white inner insulating layer, bonded to metal

Primary adhesive layer

Finger guard bonded to tool as part of the inner insulation layer