Abstract: Hand tools sold in Nigeria are becoming increasingly unreliable due to critical failures during use. The objective of the project is to test samples of these tools vis-à-vis manufacturer’s claims.

A total of fifteen (15) hand tools from six (6) different countries available on the Nigerian market were tested for their quality characteristics. The tested tools included spanners, hammers, screwdrivers, pliers and chisels. Three samples of each of the groups of the hand tools were ranked in accordance to their impact energy which is a major property of percussion tools. The results showed that built-in mechanical properties of these hand tools were largely controlled by their alloying elements, manufacturing processes and heat-treatment. Five (5) of the fifteen (15) selected hand tools conformed to BS 876, 1981 and were adjudged safe and reliable.