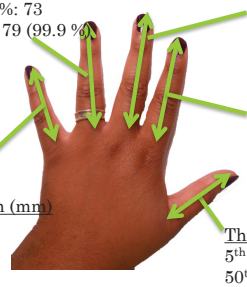
Anthropometry of the Hand

Human Factors, Design Thinking. Fall 2012

By Kathy Dixon



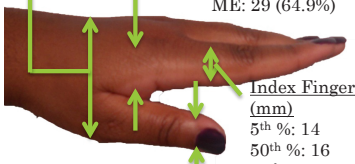
Ring Finger Length (mm)
5th %: 59
50th %: 66
95th %: 73
ME: 79 (99.9 %)

Middle Finger Length (mm)
5th %: 69
50th %: 77
95th %: 84
ME: 84 (95 %)

Index Finger Length (mm)
5th %: 60
50th %: 67
95th %: 74
ME: 81 (99.9 %)

Little Finger Length (mm)
5th %: 43
50th %: 50
95th %: 57
ME: 63 (99 %)

Thumb Length (mm)
5th %: 40
50th %: 47
95th %: 53
ME: 55 (99.7%)

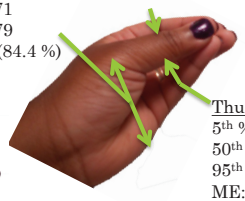


Hand Thickness Including Thumb (mm)
5th %: 40
50th %: 45
95th %: 50
ME: 49 (91.5%)

Hand Thickness Metacarpal (mm)
5th %: 24
50th %: 28
95th %: 33
ME: 29 (64.9%)

Index Finger Thickness (mm)
5th %: 14
50th %: 16
95th %: 18
ME: 19 (99.9%)

Thumb Breadth (mm)
5th %: 17
50th %: 19
95th %: 21
ME: 17 (5%)



Hand Breadth Minimum (mm)
5th %: 63
50th %: 71
95th %: 79
ME: 76 (84.4 %)

Thumb Thickness (mm)
5th %: 15
50th %: 18
95th %: 20
ME: 18 (50%)

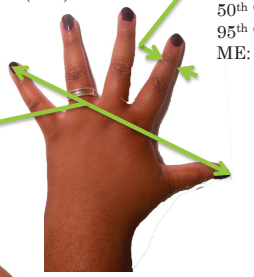
Max Functional Spread (mm)
5th %: 109
50th %: 127
95th %: 145
ME: 136 (79.8 %)

Hand length (mm)
5th %: 159
50th %: 174
95th %: 189
ME: 212 (99.9 %)

Palm length (mm)
5th %: 43
50th %: 50
95th %: 57
ME: 63 (99 %)

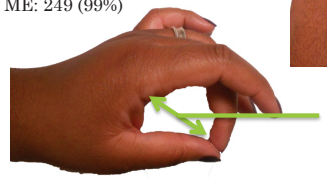
Hand Breadth Metacarpal (mm)
5th %: 69
50th %: 76
95th %: 83
ME: 84 (97.5 %)

Hand Breadth Across Thumb (mm)
5th %: 84
50th %: 92
95th %: 99
ME: 102 (97.5 %)



Index Finger Breadth (mm)
5th %: 16
50th %: 18
95th %: 20
ME: 18 (50%)

Maximum Spread (mm)
5th %: 165
50th %: 190
95th %: 215
ME: 249 (99%)



Max. Grip Diameter (mm)
5th %: 43
50th %: 48
95th %: 53
ME: 55 (98.7 %)