

Clearance Hole Calculator

Find the right through-hole size for a bolt or screw - close, normal, or loose fit - so the shank passes freely without the hole slopping around.

How it works

Imperial clearance holes follow the standard rule: close fit = nominal + 1/64 in, normal (free) fit = +1/32 in, and loose fit = +1/16 in. Metric values follow ISO 273: a fine (close) hole about +0.2 to +0.5 mm over the bolt, a medium (normal) hole, and a coarse (loose) hole for alignment slop. A normal fit is right for most assemblies; use close for fixtures where parts must locate precisely, and loose where several holes must line up at once.

For live values, use the interactive calculator: bookoffasteners.com/calculators/clearance-hole-calculator/

Reference values only — verify against the governing standard or manufacturer before use.