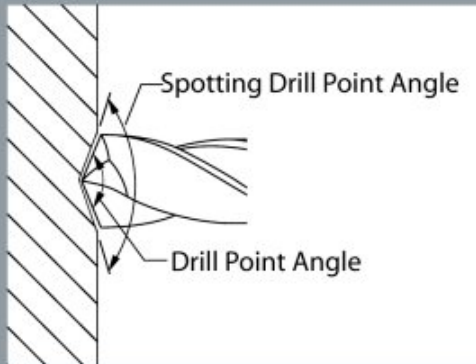


■ SPOTTING DRILL RECOMMENDATIONS

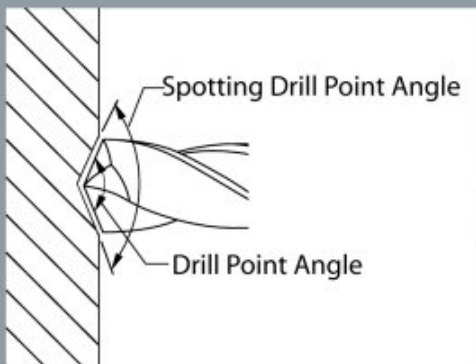
SPOTTING DRILL RECOMMENDATIONS FOR SOLID CARBIDE AND QWIK TWIST DRILLS



BEST

Spotting drill angle is greater than the drill point angle.

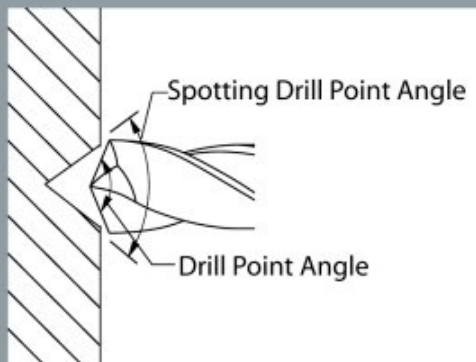
- First contact is at the drill point.
- Best drill centering possibility.
- Drill loading increases with penetration.



ACCEPTABLE

Spotting drill angle is the same as the drill point angle.

- Tool loading problems can occur due to immediate full engagement.
- Chatter may be a problem.
- Reduced feed at entry recommended.
- Good drill centering.



NOT RECOMMENDED WITH CARBIDE

Spotting drill angle is less than the drill point angle.

- Point contact along cutting lips or corner - drill point should contact spotted hole first..
- Chipping likely in these areas.