Holemaking Solutions for Today's Manufacturing

## T-A ${ }^{\circledR}$ Deep Hole Drilling Guidelines

For Lengths Greater Than 9xD (including Extended, Long, XL, 3XL, and Special Length)

1. Pilot Hole

100 \% RPM
100\% IPR (mm/rev)

Establish the pilot hole using the same diameter short drill to a depth of $2 \times \mathrm{D}$ minimum. Utilize a pilot drill with the same or larger included point angle.

2. Feed-in

Feed the longer drill within $1 / 16^{\prime \prime}(1.5 \mathrm{~mm})$ short of the established pilot hole bottom at a
50 RPM max maximum of 50 RPM and 12 IPM ( $300 \mathrm{~mm} / \mathrm{min}$ ) feed rate.
12 IPM ( $300 \mathrm{~mm} / \mathrm{min}$ )

3. Deep Hole Transition Drilling

50 \% RPM
75\% IPR (mm/rev)

Drill additional 1xD past the bottom of the pilot hole at $50 \%$ reduction of recommended speed and $25 \%$ reduction of recommended feed.
Mimimum of 1 second dwell is required to meet full speed before feeding.

4. Deep Hole Drilling - Blind

100\% RPM
100\% IPR (mm/rev)

## 5. Deep Hole Drilling - at Breakout

50\% RPM
75\% IPR (mm/rev)

Drill to full depth at recommended speed and feed for longer drill according to Allied speed and feed charts. No peck cycle recommended.


## For through holes only:

Reduce speed by $50 \%$ and feed by $25 \%$ prior to breakout.
Do not break out more than $1 / 8^{\prime \prime}(3 \mathrm{~mm})$ past the full diameter of the drill.


Reduce speed to a maximum of 50 RPM before retracting from the hole.


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[^0]:    $\Lambda$ WARNING Tool failure can cause serious injury. To prevent:

    - When using holders without support bushing, use a short T-A ${ }^{\oplus}$ holder to establish an initial hole that is a minimum of 2 diameters deep.
    - Do not rotate tool holder more than 50 RPM unless it is engaged with the workpiece or fixture.

    Visit www.alliedmachine.com/DeepHoleGuidelines for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

