ONSITE+

Step Tip Combination Drill & Tap

BEST PRACTICE GUIDELINES

The Alpha Onsite+ Step Tip Combination Drill & Tap is part of Alpha's Onsite+ range, designed specifically to perform with maximum efficiency so you can save time onsite and knock off early.

The Onsite+ Step Tip Combination Drill & Tap bits are available in the following sizes:
M3 x 0.5, M4 x 0.7, M5 x 0.8, M6 x 1.0, M8 x 1.25, M10 x 1.5 & M12 x 1.75

Developed in-house using our patented step tip design to eliminate pre-drilling and produce perfectly centered, clean cut and burr-free holes ready for threading. Each drill bit is coated with AlTiN for extreme temperature resistance and long service life and has a 1/4" Insert shank suitable for cordless drills.

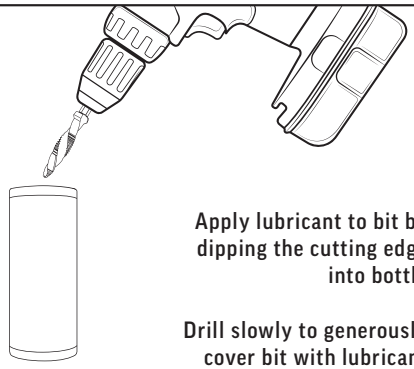
Instructions
- **Always apply lubricant before and during drilling**
- **Make sure you drill straight/at a 90˚ angle continuously**
- **Maximum material thickness (all metals) is 1 x diameter - eg. M8 has a maximum material thickness of 8mm**
- **This range is not Impact rated - for use in corded and cordless drills only**
- **Follow Best Practice guidelines for the best outcome and to maintain tool bit strength and longevity**

Always use the appropriate lubricant when drilling to ensure product efficiency and longevity. Consistently applying lubricant will protect bit against heat and friction and provide excellent surface finish.

Always wear Personal Protective Equipment (PPE) when using power tool accessories. Bits can become very hot with continuous usage.

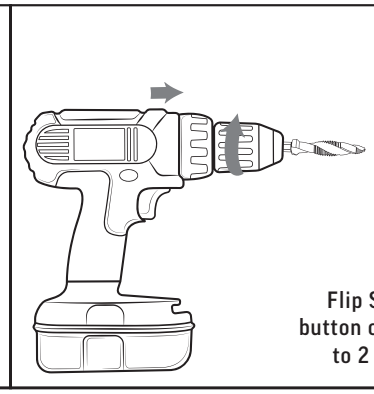
DRILL

- Recommended speed for the drilling process is Fast (Speed 2) with Medium Pressure - applies to all bit sizes and all materials; stainless steel, steel, aluminium, etc
- Lubricant before and during drilling is essential
- Extreme care must be taken when drilling and thread at maximum thickness - **1 x diameter**
- The drill must completely clear the material, then the speed must be slowed for threading

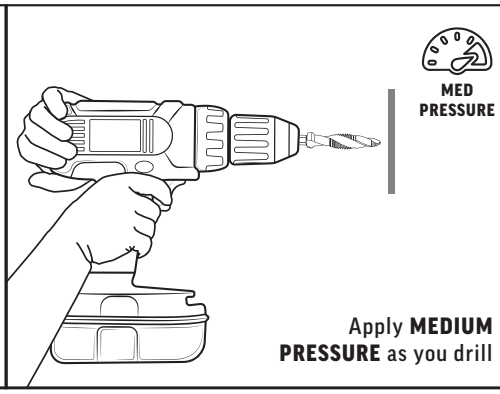


Apply lubricant to bit by dipping the cutting edge into bottle

Drill slowly to generously cover bit with lubricant



Flip Speed setting button on top of drill to 2 and drill fast

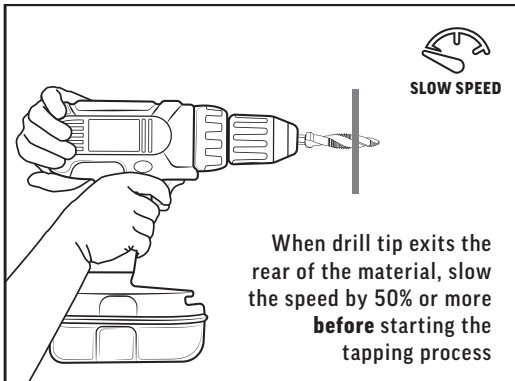


Apply **MEDIUM PRESSURE** as you drill

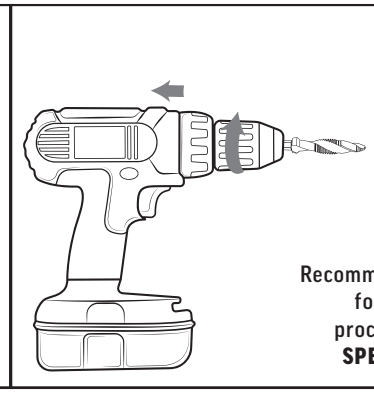
IMPORTANT: Extreme care must be taken when drilling and tapping at maximum thickness.

TAP

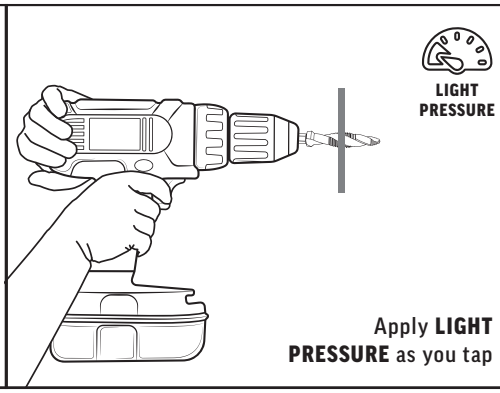
- When drill exits the rear of the material, slow the speed by 50% or more before starting the threading process
- Recommended speed for the threading and deburring process is Slow (Speed 1) with light pressure
- If deburring is not required, stop rotation before the thread on the drill and top bit has completely exited the material
- Switch the drill to reverse, and with slow speed and light pressure remove the drill and tap bit back out of the hole



When drill tip exits the rear of the material, slow the speed by 50% or more **before** starting the tapping process



Recommended speed for the tapping process is **SLOW SPEED** (Speed 1)



Apply **LIGHT PRESSURE** as you tap

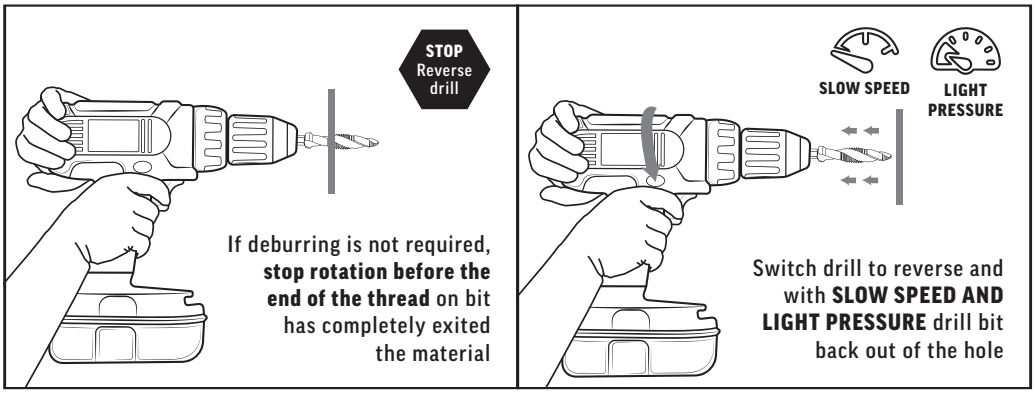
IMPORTANT: Failure to reduce speed before the thread engages in the material could lead to instant bit failure. **This is not warrantable.**

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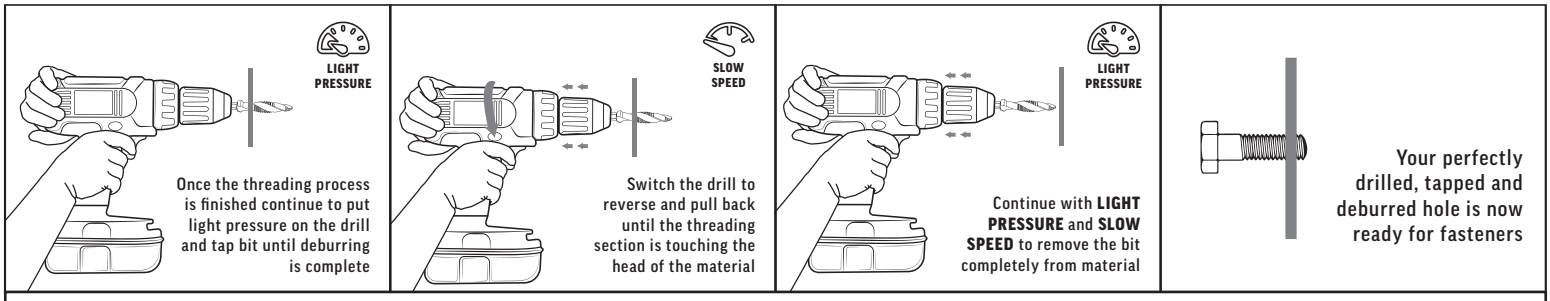
REMOVE

- If deburring is not required, stop rotation before the thread on the drill and top bit has completely exited the material
- Switch the drill to reverse, and with slow speed and light pressure remove the drill and tap bit back out of the hole



DEBURR

- If hole deburring is required, after the threading process has finished, continue to put light pressure on the drill and tap bit, until the deburring process has been completed to a satisfactory level
- Switch the drill to reverse, and pull back until the thread cutting section of the drill and tap bit is touching the read of the material
- Use very light pressure and slow rotation, until the thread on the drill and tap bit can be felt to engage with the cut thread in the material
- Continue with light pressure and slow speed to remove the drill and tap bit completely from the material



CAUTION: Using a high drill speed or high pressure when drawing the Step Tip Combination Drill and Tap bit back through the material without engaging the thread properly, could lead to damage, cutting of the thread, and cross-threading. **If the Step Tip Combination Drill and Tap bit binds this way on reverse, it could also lead to the bit snapping, which is not warrantable.**