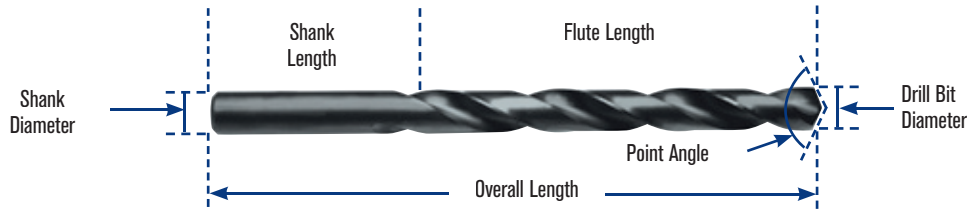


## Engineered for Controlled Precision and Speed



**Overall Length:** The length from the point to the end of the drill bit

**Point Angle:** The angle of the cutting edges

**Drill Diameter:** The cutting diameter of the drill bit

**Shank Length:** The end of the drill bit that is secured by the drill

**Flute Length:** The length from the point to the end of the flutes

### Tip Geometry

METAL DRILLING

**118° Conventional Point**

- General use
- Not self-centering
- Best for stationary drills
- Performs better in softer materials vs. hard metal

118° Point Angle

**135° Split Point**

- Self-centering (won't "walk")
- Best for portable drills
- Requires less force than 118°

135° Point Angle

**TURBOMAX® Tip**

- Self-centering (won't "walk")
- Precision-ground to stay sharp longer and drill faster
- Best for portable drills
- Requires less force than 118°

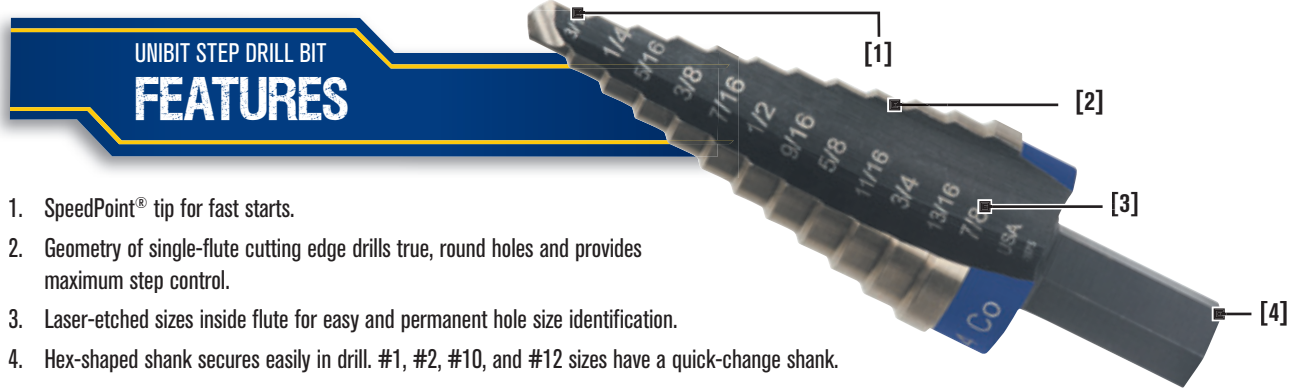
### Drill Bit Selection

Material	Point Angle	Black & Gold (135°)	TURBOMAX® (TURBOMAX)	Heavy-Duty (135°)	Titanium Nitride (TiN) Coated (135°)	Cobalt (135°)	General Purpose (118°)
Wood/Drywall		●	●	●	●	●	●
Sheet Metal		●	●	●	●	●	●
Mild Steel		●	●	●	●	●	●
High Alloy Steels		●	●	●	●	●	●
Stainless Steel		●	●	●	●	●	●
Cast Iron		●	●	●	●	●	●
Aluminum, Brass & Copper		●	●	●	●	●	●
Plastic		●	●	●	●	●	●

Key: ● Recommended ● Acceptable ● Not Recommended

## UNIBIT Step Drill Bits – Drill Multiple Hole Sizes with One Bit

IRWIN® UNIBIT® step drill bits are ideal for drilling holes in just about any type of thin material. General purpose high speed steel UNIBIT step drill bits are perfect for use in mild steel, copper, brass, aluminum, plexiglass, wood, and laminate. Our Titanium Nitride-coated (TiN) bits resist heat and friction, which extends the life of the cutting edge six times longer than standard step drills. And, our Cobalt step drill bits are engineered with M35 Cobalt steel for maximum life when drilling in the toughest steel, including stainless steel. Most UNIBIT step drills are designed with a SpeedPoint® tip that guarantees fast starts. They're manufactured with a single-flute cutting edge that drills multiple sizes of true, round holes with precise step control. Plus, the hole sizes are permanently laser-etched on the inside of the flute, so they can be easily identified throughout the life of the bit.



### UNIBIT STEP DRILL BIT FEATURES

1. SpeedPoint® tip for fast starts.
2. Geometry of single-flute cutting edge drills true, round holes and provides maximum step control.
3. Laser-etched sizes inside flute for easy and permanent hole size identification.
4. Hex-shaped shank secures easily in drill. #1, #2, #10, and #12 sizes have a quick-change shank.

### UNIBIT Application Guide

Cobalt	Titanium Nitride (TiN)	High Speed Steel (HSS)
Stainless Steel or Other Tough Materials	Repetitive Drilling	General Use

### UNIBIT Cobalt HSS



10231CB

- Engineered with M35 Cobalt steel for maximum life when drilling in tough steel.
- SpeedPoint® tip for fast starts.\*

Description	# of Hole Sizes	Hex Shank Size	Carded Item #
#1 1/8"-1/2" (1/32" steps)	13	1/4"	10231CB
#2 3/16"-1/2" (1/16" steps)	6	1/4"	10232CB
#3 1/4"-3/4" (1/16" steps)	9	3/8"	10233CB
#4 3/16"-7/8" (1/16" steps)	12	3/8"	10234CB
#9 7/8" and 1-1/8" for (1/2" and 3/4") KO	2	7/16"	10239CB
#20 9/16"-1" (1/16") Inc - Hole Enlarging	8	7/16"	10220CB
#1M 4 mm-12 mm (1 mm steps)	9	1/4"	11101CB
#2M 4 mm - 12 mm (2 mm steps)	5	1/4"	11102CB
#3M 6 mm - 18 mm (2 mm steps)	7	3/8"	11103CB
#4M 4 mm - 22 mm (2 mm steps)	10	3/8"	11104CB

### UNIBIT HSS Fractional Titanium Nitride (TiN) Coated



15101ZR

- Titanium Nitride coating resists heat and friction, extending the cutting edge life up to six times longer than other high speed steel step drill bits.
- SpeedPoint® tip for fast starts.\*

Set: 15502

Description	# of Hole Sizes	Hex Shank Size	Carded Item #
#1T 1/8" - 1/2" (1/32" steps)	13	1/4"	15101ZR
#2T 3/16" - 1/2" (1/16" steps)	6	1/4"	15102ZR
#3T 1/4" - 3/4" (1/16" steps)	9	3/8"	15103ZR
#4T 3/16" - 7/8" (1/16" steps)	12	3/8"	15104
#13T 1-1/8" (single hole)	1	7/16"	15313
#20T 9/16" - 1" (hole enlarging)	8	7/16"	15200
#21T 13/16" - 1-3/8" (hole enlarging)	10	7/16"	15221

▲ – SpeedPoint™ Tip

\*included on all self-starting sizes except for #1