A LITTLE BIT CAN MAKE A BIG DIFFERENCE.

WHICH DRILL BIT DOES THE JOB?

Drill bits come in a wide range of shapes and sizes, and are available in a variety of materials and coatings. Most drilling and machining operations have a drill bit that’s designed specifically for the task. Here’s a quick overview of several types of drill bits, materials and design types.

DRILL BIT MATERIALS

- **HIGH SPEED STEEL (HSS)**: A popular material good for drilling into soft steels as well as wood and plastic.
- **CARBIDE (CARB)**: Considered an upgrade from HSS because it includes COBALT (HSCO) blended into the base material. Great option for drilling into harder steel as well as stainless steel grades.
- **CARBIDE TIP**:
  - **COOLANT**: Helps reduce friction and increase tool life. Great for high-speed drilling.
  - **BRIGHT**: Not a true finish, but polished for increased chip flow. For use in aluminum and brass.
  - **TIN**: Titanium Nitride, Gold Color. Can be run faster than uncoated drills and helps increase tool life.
  - **TICN**: Titanium Carbonitride, Blue-Gray Color. Great for stainless steel, cast iron and a variety of materials. More wear-resistant than other coatings.
  - **TIN**: Titanium Nitride, Gold Color. Can be run faster than uncoated drills and helps increase tool life.
  - **BRIGHT**: Not a true finish, but polished for increased chip flow. For use in aluminum and brass.

DRILL POINT ANGLE

- **118º STANDARD**: Found on most common drills. These drill bits typically have two cutting lips.
- **135º SELF-CENTERING**: Four cutting lips enable this bit to begin drilling faster, especially in stainless steel materials.

DRILL LENGTH

- **SCREW MACHINE LENGTH**
- **MECHANICS LENGTH**
- **JOBBER LENGTH**
- **TAPER LENGTH**
- **TAPER SHANK**

FLUTE DESIGN

- **STANDARD**: This is the most common with 30º ANGLES.
- **PARABOLIC**: The open design helps remove chips from the hole. These are especially effective in very soft materials like plastics and aluminum.

GET MORE USE OUT OF YOUR DRILL BITS

Choosing the right drill bit can extend its life, as well as improve productivity and minimize costs. Whether it’s matching the appropriate bit to the substrate material, getting the right match for the depth and diameter of the hole, or even the volume of work needed, the right choice can extend the life of your drill bits.

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