

HSS CENTER DRILLS - BS SERIES



- Manufactured from high speed steel for increased tool durability.
- Manufactured as per BS328 Standards. 60° inclusive angle
- Center drills have a conical shape with a pilot tip that creates a small, precise indentation in the workpiece.
- The primary purpose of center drills is to create a starting point for the subsequent drilling operation. They help prevent the twist drill from wandering and ensure that the hole is accurately centered.
- Many center drills are double-ended, providing two cutting tips. This feature extends the tool's life and provides flexibility in case one end becomes dull.
- **Typical Applications** : Steel, Stainless Steel, Cast Iron, Aluminium, Brass & Plastics

CAT NO.	BS NO.	BODY DIA	PILOT DIA.	OVERALL LENGTH
GCD-5441	BS1	1/8"	3/64"	1-1/2"
GCD-5442	BS2	3/16"	1/16"	1-3/4"
GCD-5443	BS3	1/4"	3/32"	2"
GCD-5444	BS4	5/16"	1/8"	2-1/4"
GCD-5445	BS5	7/16"	3/16"	2-1/2"
GCD-5446	BS6	5/8"	1/4"	3"
GCD-5447	BS7	3/4"	5/16"	3-1/2"

How to Use

Using center drills involves several steps to ensure accurate and efficient drilling. Here's a step-by-step guide on how to use center drills:

Materials Needed:

1. Center drill
2. Workpiece
3. Drill press or lathe
4. Cutting fluid (if required)
5. Safety gear (safety glasses, ear protection, etc.)

Steps:

1. Select the Right Center Drill:

- Choose a center drill that is appropriate for your application. Consider factors such as the material of the workpiece and the size of the hole you need.

2. Secure the Workpiece:

- Ensure that the workpiece is securely clamped or fixed in place on the drill press or lathe. This prevents movement during the drilling process and ensures accuracy.

3. Install the Center Drill:

- Insert the center drill into the chuck of the drill press or lathe. Make sure it is tightened securely.

4. Adjust Speed and Feed:

- Consult the specifications for the center drill and the material being drilled to determine the appropriate cutting speed and feed rate. Adjust the settings on the drill press or lathe accordingly.

5. Apply Cutting Fluid (if required):

- Depending on the material and the center drill being used, applying cutting fluid may be necessary to lubricate and cool the tool during the drilling process. Follow the manufacturer's recommendations for the specific cutting fluid.

6. Position the Center Drill:

- Bring the center drill into position above the point where you want to start drilling. The point of the center drill should touch the workpiece.

7. Align and Engage:

- Align the center drill with the desired drilling location on the workpiece. Lower the drill until it engages with the material. The conical point of the center drill will create a small, precise indentation in the workpiece.

8. Drilling:

- Once the center hole is created, you can proceed with the main drilling operation using a regular twist drill. The center hole serves as a guide, ensuring that the subsequent drilling is accurate and centered.

www.garvintools.com

9. Clean and Inspect:

- After drilling, clean the workpiece and inspect the hole for accuracy. Remove any chips or deis from the drilling process.

10. Safety Precautions:

- Always wear appropriate safety gear, including safety glasses and ear protection. Follow all safety guidelines for the specific drill press or lathe being used.

By following these steps, you can effectively use center drills to create accurate starting points for drilling operations in various materials.

