ER COLLET SETS

- DESIGN: ER collets are cylindrical in shape and consist of a threaded outer surface that allows them to be screwed into a corresponding collet chuck or tool holder. They have multiple slits or slots along their length, which enable them to compress when tightened, effectively clamping onto the tool shank.
- Clamping Mechanism: To secure a tool in an ER collet, it is inserted into the collet, and then the collet is tightened using a collet chuck or collet nut. This causes the slits on the collet to compress around the tool shank, holding it firmly in place.
- Versatility: ER collets are versatile and can hold a wide range of tool sizes within their specified capacity. This flexibility is advantageous in various machining applications.

+91-11-41764519 | sales@garvintools.com Ravi International - Garvin Tools M-278, Sector 1 Bawana Industrial Park, New Delhi 110039, INDIA

Cat No.	STYLE	No of Pcs	CLAMPING RANGE
GER-ER25	ER25	15Pcs	2 - 16mm
GER-ER32	ER32	19Pcs	2 - 20mm

How to Use

Using ER collets involves several steps to securely hold a cutting tool (such as an end mill or drill bit) in a tool holder or collet chuck. Here's a step-by-step guide on how to use ER collets:

Tools and Materials Needed:

- ER collet set (matching the size of your cutting tool shank)
- Collet chuck or tool holder
- Collet nut wrench (if required)
- Cutting tool

Procedure:

1. **Select the Right ER Collet Size:** Ensure that you have the correct ER collet size that matches the diameter of your cutting tool's shank. ER collets come in various sizes, so choose the one that corresponds to your tool's dimensions.

2. **Insert the ER Collet:** Insert the ER collet into the collet chuck or tool holder. Make sure the collet is seated correctly, and the slits or slots in the collet align with the chuck's collet pockets.

3. **Insert the Cutting Tool:** Slide your cutting tool (e.g., an end mill) into the ER collet, ensuring that it goes all the way in, making contact with the bottom of the collet. It's important to insert the tool straight and avoid any tilting.

4. **Tighten the Collet Nut:** Place the collet nut over the collet and tool. Use a collet nut wrench if necessary to ensure a secure grip. Hand-tighten the nut initially. The collet nut typically has slots or holes for a wrench or a spanner, so you can apply additional force if needed.

5. **Final Tightening:** To securely hold the tool, use a torque wrench or a wrench that's caliated to the manufacturer's recommended torque value. Proper tightening is essential to ensure the tool is held firmly and runs true.

6. **Check for Proper Installation:** After tightening the collet nut, visually inspect the assembly to ensure that the tool is correctly centered within the collet and that there's no visible tilting or misalignment. Proper concentricity is crucial for accurate machining.

7. **Mount the Assembly:** Install the collet chuck or tool holder, along with the attached ER collet and cutting tool, into the spindle of your milling machine or lathe. Follow the specific instructions for your machine to secure the assembly properly.

8. **Machine Setup:** Set up your machine for the desired machining operation, including toolpath, feed rates, and depth of cut.

9. **Machining:** Start your machining operation, making sure to follow safe operating practices, such as wearing appropriate personal protective equipment and adhering to your machine's safety guidelines.

10. **Tool Changes:** If you need to change the cutting tool, follow the same procedure in reverse. Loosen the collet nut, remove the tool, insert the new tool, and then tighten the collet nut again.

Remember to refer to the specific instructions provided by the manufacturer of your ER collets, collet chucks, and machining equipment. Proper installation and maintenance of your tools and equipment are essential for safe and accurate machining operations.

+91-11-41764519 | sales@garvintools.com Ravi International - Garvin Tools M-278, Sector 1 Bawana Industrial Park, New Delhi 110039, INDIA