

# Drill Presses vs. Hand Drills

Both drill presses and hand drills are commonly used in FRC fabrication. Choosing the correct tool depends on the accuracy, size, and location of the hole.

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## Drill Press

A drill press holds the drill bit perpendicular to the material and provides precise control.

### Advantages:

- Highly accurate hole placement
- Straight, perpendicular holes
- Better for large or repeated holes
- Safer for precision work

### Best for:

- Drilling plates
  - Tapping preparation holes
  - Multiple identical parts
  - High-accuracy hole locations
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## Hand Drill

A hand drill is portable and can be brought directly to the workpiece.

### Advantages:

- Portable and versatile
- Fast setup
- Useful on large assemblies
- Can reach locations that do not fit on a drill press

### Best for:

- Robot repairs
- Large assemblies

- Quick modifications
  - Field or pit work
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## Safety

- Always secure the material before drilling.
  - Wear safety glasses.
  - Remove chips and debris frequently.
  - Keep hands away from the drill bit.
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## Key Idea

Use a **drill press when accuracy is most important** and a **hand drill when portability and accessibility are needed**. The right tool depends on the job.

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