Scribing and Marking Tools

Accurate layout work in FRC depends on clearly marking where cuts and holes will be made. Scribing and marking tools help create precise, repeatable reference lines before drilling or cutting.

Pencil and Marker

- Used for general layout on metal and plates
- Easy to see and quick to apply
- Best for rough or medium-precision marking

Limitations:

- Can be thick or imprecise
- Marks can wear off during handling

Scribe

A scribe is a sharp tool used to scratch fine lines into metal surfaces.

Advantages:

- Very high precision
- Permanent marking (does not wipe off easily)
- Thin, accurate lines for hole centers and cut lines

Best use:

- High-accuracy hole layout
- Critical alignment features
- Final marking before center punching

Combination Square

A combination square is used to mark straight, perpendicular lines.

Uses:

- Drawing 90° lines from a datum edge
- Checking squareness of parts
- Extending measurement marks across a plate or extrusion

Speed Square

A speed square is used for quick and accurate right-angle marking.

Uses:

- Fast layout on extrusion and plate
- Marking cut lines
- Checking alignment during fabrication

Best Practice

- Always measure from a single datum first
- Mark lightly before final scribing
- Use a square tool to ensure all lines are perpendicular
- Double-check critical marks before punching or drilling

Key Idea

Good fabrication starts with good marking. Scribes and squares turn measurements into accurate, repeatable reference lines that prevent errors during drilling and cutting.

Revision #1
Created 25 June 2026 18:10:18 by eharis
Updated 25 June 2026 18:10:28 by eharis