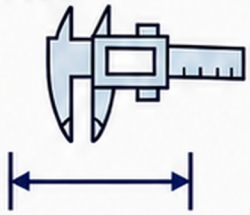
CHECKPOINTS TO AVOID MISTAKES IN MATERIAL CUTTING

Check Before Cutting to Prevent Rework

MATERIAL CUTTING SUCCESS STARTS "BEFORE YOU CUT"

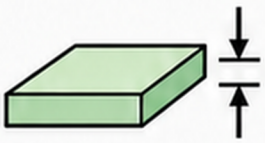
1 Avoid Dimension Errors

- Check the drawing dimensions carefully
- Watch for misread numbers and incorrect mm entries



2 Calculate with Plate Thickness in Mind

- Check inside and outside dimensions
- Ignoring plate thickness can cause a poor fit

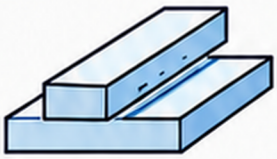


3 Check Shrinkage Allowance

- Material shrinks when welded
- Take special care with long parts

4 Cut Long Parts First

- Long stock may not be available later
- Short parts can often be cut from offcuts

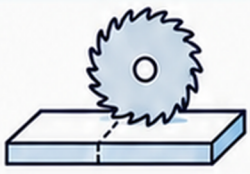


5 Check Material, Thickness, and Quantity First

- Even with correct dimensions, the wrong material, thickness, or quantity means rework

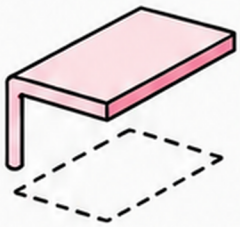
6 Account for Kerf and Blade Thickness

- Cutting creates a kerf
- Do not cut with no margin



7 Check Developed Length for Bent Parts

- Cutting the outside dimension as-is may cause a poor fit
- Check bend R, plate thickness, and number of bends

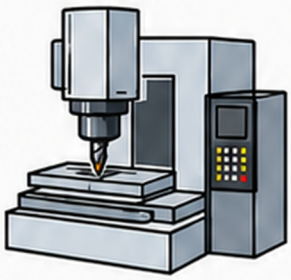


8 Set the Reference Face, Front/Back, and Orientation

- Take special care with hole positions, notches, and bend direction

9 Allow for Finishing

- Leave a finishing allowance on parts requiring later machining
- Do not cut exactly to the final dimension

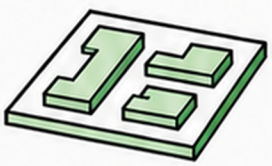


10 Mark Part Numbers After Cutting

- Write the part number, dimensions, and quantity to prevent mix-ups

11 Check Whether Offcuts Can Be Used

- Check whether short parts can be cut from offcuts
- Reduce material loss



12 Final Check Before Cutting

- ☐ Dimensions ☐ Quantity ☐ Material
- ☐ Thickness ☐ Shrinkage ☐ Cutting allowance

★ **Mistakes in the initial checks lead to material loss, dimensional defects, and rework.**
Do not rush. Always check before cutting.

TRAINING MATERIAL FOR NEW WORKERS