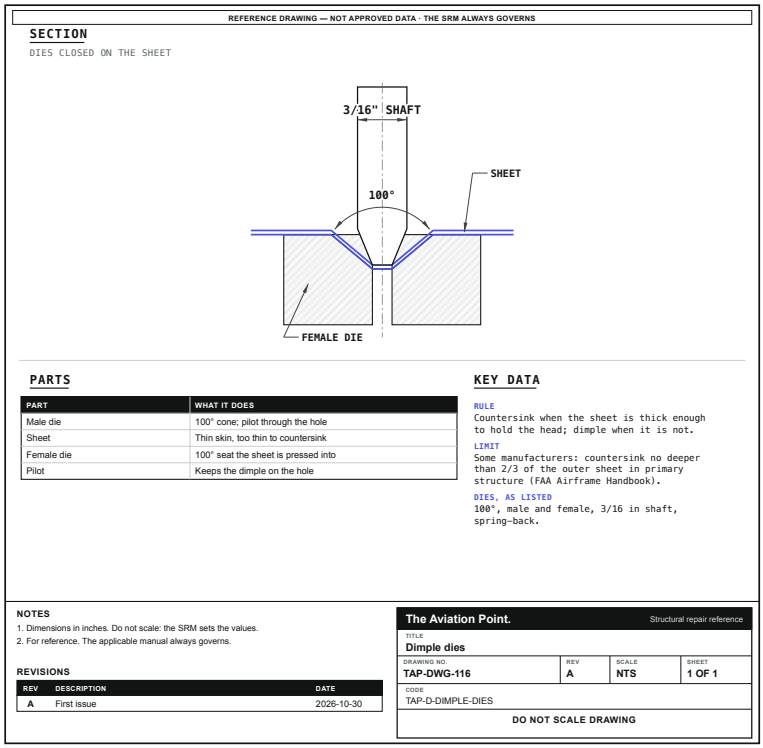
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How to Dimple Sheet Metal with Dimple Dies

Dimpling presses a cone into the sheet around a rivet hole so a flush rivet head sits in it.



The two dies

Die	Shape	Job
Male die (punch)	A guide the size of the rivet hole, beveled to match the rivet head countersink	Presses the sheet into the female die
Female die	Has a hole into which the male guide fits, with a matching bevel	Rests on a solid surface and shapes the dimple

Typical mistakes

Mistake	What happens	Fix
Too many hard blows	Work-hardened, cracked area	Two or three solid blows; no more
Wrong die size	Poor seat for the rivet	One set per rivet size and head shape
Squeezer gap not matched to sheet	Shallow or crushed dimple	Adjust accurately to the thickness
Coin dimple with a different rivet	Recess does not fit the head	Drive the rivet that was used as the die

Key points

- **Not approved data.** The SRM or drawing sets whether to dimple, countersink, or use a mixed stack.
- **Minimum thickness.** The Handbook gives no single figure; it is set by the rivet, the temper and the maker's data.

SOURCES · FAA-H-8083-31B, AMT Handbook: Airframe, Chapter 4

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theaviationpoint.com/standard-practices/tools/dimple-dies/

 Educational reference only, not approved data. Always consult the applicable SRM, AMM, or AC 43.13-1B and your certifying authority.

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