



DIE CUTTING FREQUENTLY ASKED QUESTIONS

Q. Are sharp or rounded corners preferred? If rounded, what radius?

A. Sharp corners allow for better yields by nesting parts together in the tool. See Figure 1C. The joint between the two parts cannot be bent accurately from steel rule. The minimum radius that can be bent $1/32''$ and is often used when cutting mesh materials that don't cut properly at standard corner joints (polyester and fiberglass mesh for example). The $1/32''$ radius also appears to be a square corner unless carefully inspected.

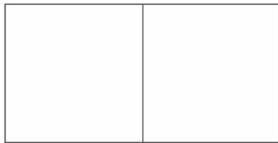


Fig 1A - OK

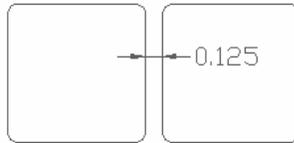


Fig 1B - OK



Fig 1C - Not possible

Q. Are round holes preferred to square holes? If so, what are standard diameters to use?

A. The only time there is a preference is at sizes of under $0.375''$ square. Square holes are difficult to fabricate at that level. It's important to note that holes are made using stock punches and a large number of holes can significantly increase the cost of a tool. Punches come in increments of $1/64''$

Q. Are there practical limits to the amount of holes that can be present in a shape?

A. Aside from cost limitations, punches follow the same rule as steel rule. Edges must be $0.125''$ apart, minimum. This number can be higher depending on the type of punch used, typically $0.1875''$. Another issue can arise from very thin materials. Sometimes the material between close holes cannot support itself and breaks during cutting.

Q. *What are the maximum dimensions for a shape?*

A. This depends on the material. Basic sheet sizes are listed below.

*Tputty 502: 18"x18"

*Tflex 200V0, 400 & 600: 18"x18"

Tpli 200: 16"x16"

Tgon 210: 14"x16"

Tgon 220: 16"x16"

Tgon 800: 18"x 24"

*Tpcm: 18"x18"

*Tmate: 18"x18"

*One length can be adjusted for special orders

Q. *When line cuts intersect holes, what is the best way to do it?*

A. The simplest construction is when the line is centered on the hole but there isn't any rule saying it can't be otherwise.

Q. *Are these constraints different based on the material used?*

A. Material is a big factor in how strictly many rules must be followed. In these areas, we will strive to give as much detail as possible on the differences.