

WHITE PAPER

# DIY Estimating For Chemical Etching Projects



# **DIY Estimating For Chemical Etching**

This quick guide will let you do your own rough estimates for photo etching costs. Keep in mind that we will only commit to prices we have actually quoted.

#### Here are the ground rules:

- 1. The standard precision sheet is 12" x 24" in thicknesses from .005" to .032".
- 2. The active area of the sheet is 11.5" x 23.5".
- 3. The common alloys are 302, 304 and 316 stainless, C110 copper, C260 brass, and 6061 aluminum.
- 4. Minimum drawing block tolerances of +/-.005" apply.

### **Calculate Parts Per Sheet**

- 1. Add .100" to the length and width of your part.
- 2. Divide the adjusted length and width into the active dimensions of the sheet (11.5" or 23.5").
  - Note that the rolling grain of the metal is generally in the long axis of the sheet.
- 3. Choose the layout that produces the most parts per sheet.

#### Basic Sheet Costs (Not including metal cost and shipped tabbed in sheet)

- 1. Metal thickness from .005---.015": 1-3 sheets- minimum lot charge of \$960
- 2. Metal thickness from >.015---.025": 1-3 sheets- minimum lot charge of \$1100
- 3. Metal thickness >.025-.032": 1-3 sheets minimum lot charge of \$1200

## Complete the Calculation

1. Divide the pieces per sheet into the relevant sheet cost.

Keep in mind that this produces a *conservative ball park estimate*. There are a number of additional factors that go into "production pricing," which can lower costs, sometimes dramatically.

- Part nesting can improve piece counts
- Some parts can be run on larger sheets; more pieces per sheet means less labor per part
- · Higher volumes earn more favorable overhead rates

For an accurate production quote, please send your drawings to sales@conardcorp.com.

Keep in mind, too, that we have a wide variety of alloys available including nickel, nickel---iron, Kovar, beryllium copper, phosphor bronze, additional grades of aluminum, blue steel, HyMu, molybdenum, and nickel silver.

Thickness ranges are from .001" to .040" in white metals (steel and nickel alloys, moly), .065" in red metals (copper alloys) and up to .080" in aluminum.

Contact us for more information: 800---443---5218 or sales@conardcorp.com.



101 Commerce Street PO Box 676 Glastonbury, CT 0603

Phone: (860) 659-0591 Fax: (860) 659-8705 Email: sales@conardcorp.com

www.conardcorp.com