

About Elcon, Inc.

Elcon Inc., founded in 1967, provides diverse technical services and capabilities that include chemical milling (photo-etch), ceramic metallization, coil winding, plating, furnace brazing, clean room assembly and CNC machining. Elcon provides "one-stop shopping" for precision parts and assemblies, as well as fast turn-around for prototypes and small production runs. In addition to its traditional customers in the instrument, military, and microwave fields, Elcon also supplies precision parts and vacuum-tight ceramic-metal assemblies to several national labs as well as the vacuum electronics, aerospace, medical, semiconductor and telecommunication industries.

Anthony Barraco, founder and owner of Elcon, started his company based on a \$360 idea for producing precision oxide cathodes. His first customer was an internationally known supplier of instrument-grade oscilloscopes. Tony's idea grew to include several international customers for whom Elcon supplied hundreds of thousands of cathodes.

Elcon's diverse experience with vacuum and brazing technologies quickly led to other products, including the development of "taped" braze alloys. In the early 1970's, Elcon's unique method for applying high-temperature braze alloys as a formable strip is still used today for attaching turbine blades to the hubs of jet aircraft engines.

In the mid-70's Elcon developed a line of low-power, fast warm-up CRT cathodes for military grade field oscilloscopes. This product required a flat "pancake" style filament with a level of precision that was not then available. Elcon rose to the challenge by developing in-house chemical milling capabilities.

Elcon's unique metal etching capabilities allowed refractory metals to be etched with a level of precision and fine detail available nowhere else. To this day Elcon remains a premier supplier of precision photo-chemically milled parts. Elcon's capabilities include shaped cross-sections, and tolerances of less than $\pm .0005$ inch. Elcon also provides precision etched metal parts for fast turn-around and prototype applications.

In the late 70's Elcon worked with an international supplier of microwave tubes to photo-etch precision shapes into preformed refractory metal surfaces. To this day Elcon remains one of the few companies in the world with the metal forming and photo-etching capabilities needed to precisely etch 3D surfaces.

For 30 years Elcon produced a line of medium-range vacuum gauges. This knowledge base allows Elcon to offer precision metallized Al₂O₃ ceramics and vacuum-tight ceramic-metal assemblies built to customer specifications. Elcon also has in-house cleaning and plating facilities for metal and ceramic parts, as well as in-house facilities for high-temperature furnace brazing and heat treating. Elcon also provides its customers with in-house CNC machining of parts and assemblies, and automated parts inspection.

