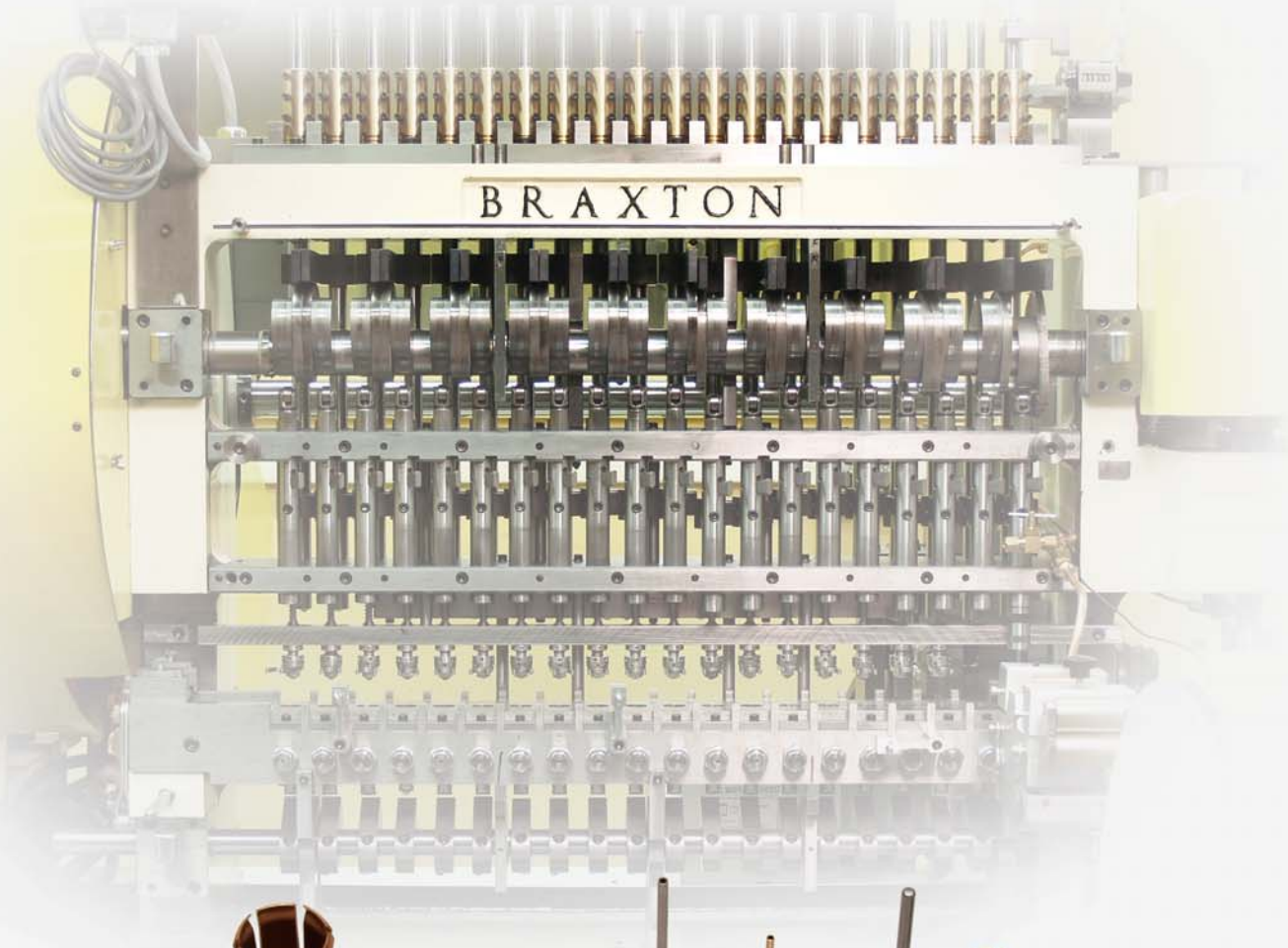




# Precision Crafted Deep-Drawn Components

**Braxton Manufacturing Co., Inc.**





**Starting with Flat Stock . . .**

# Braxton Provides the Deep-Drawn Advantage from subminiature to complex parts



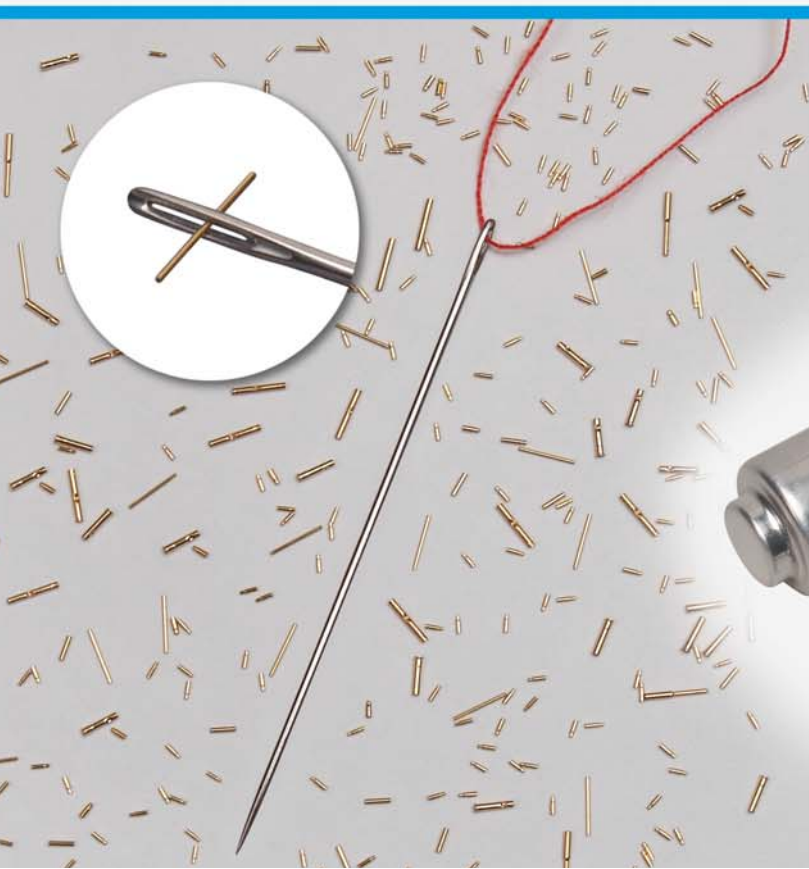
**Compared to screw machines, plastic extrusions, tubing and stampings, Braxton's deep-drawing techniques offer many benefits:**

- Starting with flat stock and ending with a tubular part, this process minimizes material waste.
- Superior part-to-part and batch-to-batch repeatability are assured.
- Slitting, flaring and hole punching, normally considered secondary operations, can be performed on the drawing machine.
- Intricate designs not previously possible can be produced.
- Raw material is work hardened during the drawing process, therefore eliminating the need for secondary heat treating on most finished parts.
- Starting stock can be clad or pre-plated with gold prior to the deep-draw process, guaranteeing even coverage of gold on both the OD & ID of microminiature tubes with or without a closed end as small as 0.005" (0.13mm) ID. This process also eliminates the threat of residual acid trapped in the parts, a type of contamination that is commonly found in the barrel plating process.



**Braxton is experienced in drawing a comprehensive range of conventional and special materials, including:**

- |                           |                   |                    |
|---------------------------|-------------------|--------------------|
| • Aluminum                | • Gold            | • Plated Stock     |
| • Beryllium Copper        | • Inconel         | • Platinum         |
| • Brass                   | • Invar           | • Platinum Iridium |
| • Bronze                  | • Kovar           | • Platinum Rhodium |
| • Copper                  | • Monel           | • Silver           |
| • Gilding                 | • Nichrome        | • Stainless Steel  |
| • Glass Sealing           | • Nickel          | • Titanium         |
| Alloys 42, 52 and Ni/Fe48 | • Nickel Silver   |                    |
|                           | • Phosphor Bronze |                    |



# Braxton's Capabilities Maximize the Efficiency of Producing Intricate Components to Meet Your Needs



## Critical Dimensions and Tolerances

We can deep-draw parts to 0.006" (0.15mm) OD, with wall thicknesses as low as 0.0005" (0.013mm). Maximum length is 2" (50.8mm), and length-to-diameter ratios greater than 55:1 are attainable. Finished part tolerances are as low as  $\pm 0.00015$ " (0.004mm), with surface finishes to 10 microinches rms.

## Quality Control . . . A Continuous Process at Braxton

Braxton Manufacturing is ISO 9001:2000 certified. Quality is an essential part of our manufacturing operation.

In addition to building our own drawing machines and maintaining in-house die making facilities, Braxton takes many other steps to ensure the superior quality of our deep-drawn parts. The members of our Quality Assurance staff have an average of over 20 years of experience and are highly trained in the technical aspects of inspection and testing. Our precision inspection equipment assists us in the measurement of all dimensional requirements and enables us to work to extremely tight tolerances. All inspection equipment is regularly calibrated and traceable to the National Institute of Standards and Technology. An up-to-date statistical data collection system, used to monitor and maintain control of critical characteristics, also assists in our problem-solving techniques.

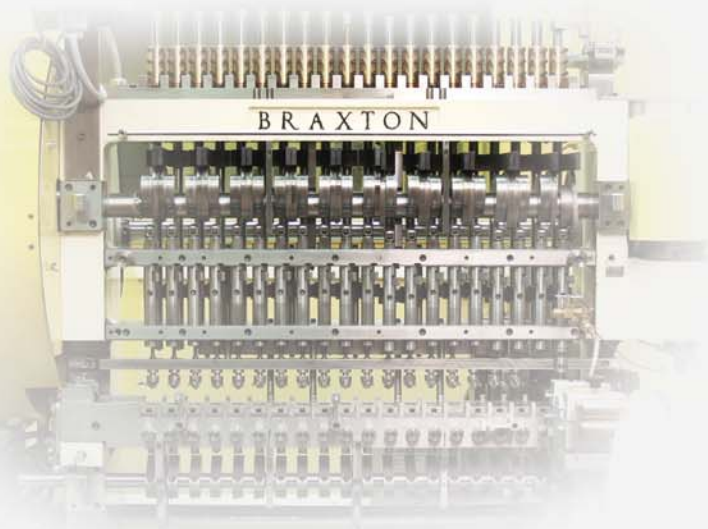




## **All made possible with drawing machines** **... designed and built by Braxton.**

Like artistic drawing, superior deep drawing takes talent and the right tools. Braxton Manufacturing has both. Our skilled employees take pride in creating parts that meet the highest industry standards for precision. We are able to maintain such exacting standards because our proprietary drawing machines are designed and built in-house, and have been for more than 40 years. Coupled with our advanced in-house carbide die making facilities, our drawing machines enable us to produce parts in more sizes, and with significantly superior tolerances and finishes, in comparison to competing products. With up to 25 independent tooling stations available on a single machine, we can add features such as holes, slots and flares, without secondary operations. This not only reduces the costs of additional handling, but also makes possible intricate designs not previously practical.

Our CNC department has expanded to meet the needs of our tool room and machine building department. Use of the most advanced equipment in multi-function CNC machining technology allows us to manufacture and supply the machine building department with the precision components required to assemble the complete drawing machine. Once the components are fabricated, our experienced machine builders can complete the assembly process and have a new production machine on line in as few as 2 or 3 weeks.



# Braxton . . .

## A Long Tradition of Craftsmanship

Braxton Manufacturing was founded in 1964 in central Connecticut, internationally known as a center of precision tool and die making with a highly skilled work force. In 1972, a second manufacturing facility was opened in southern California to supply deep-drawn components to our growing west coast customer base. Today, the 60,000-square-foot Watertown, Connecticut facility and the 30,000-square-foot Tustin, California facility are modern, state-of-the-art production plants that provide identical engineering and production capabilities on both coasts. We currently meet the demanding requirements of customers in a wide range of industries, including medical, communications, aerospace, specialty automotive and electronics.



**Connecticut Facility**

Braxton's engineering department and proprietary drawing machines consistently meet the unique size, tolerance and finish requirements of the most challenging applications. If you have critical parts requirements, contact Braxton today to learn how our precision deep drawing process can provide you with enhanced production efficiencies and cost savings over traditional manufacturing methods.



**California Facility**



**ISO 9001: 2000  
CERTIFIED**

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