



OD = Outside Diameter, ID = Inside Diameter, & OAL= Overall Length

Multi-Spindle Lathes 1/8" - 2-5/8" ODx 5" max OAL(2-5/8" machines can go up to 7" OAL)

Multi's can run hex or roundmaterial. Multi's cannot cross drill, mill flats, or mill slots, but this work can be done on our secondary machines. They are fast and cost-effective for bulk precision product. Comfortable tolerance range is +/-.005", but can do better on critical dimensions.

- Target order qty = 20 to > 1 MM. Most parts run at 6k - 30k per week, per machine.

CNC Lathes .050" - 2" OD x(Can rear eject parts. No OAL limit.)

Live tooling on the CNC's makes most operations possiblen-machine, can hold tight tolerances, and a better than 32mi surface finish, but they run slower than the Multi's, so parts are generally more expensive than Mult-Spindle parts. Comfortable tolerance range is +/-.001", but can do better on critical dimensions.

- Target order qty = 100-100k. Most parts run 1k-6k per week.

Escomatic .015" - .125" ODx 4" max OAL

Esco's make pins and electrical leads. They can turn down material OD's tomake parts that have various outside diameters, grooves, and shoulders. Esco's can put chamfers, radius, and flat ends on parts. They are very affordable to set up and run. They annot do ID drilling, cross drill, or milled flats. Comfortable tolerance range is +/-.002", but can do better on critical dimensions.

- Target order qty 100pcs to > IMM. Most parts run 15k-50k per week

Vertical CNC Mill: 40" x 21" x 21" travel

All of our other machines are lathes and cut parts from bar stock. The vertical mill cuts parts from "blanks" that can be any size or shape, and can perform almost any operation required within its travel range. Comfortable tolerance range is +/-.002", but can do better on critical dimensions.

- Target order qty | pc - 10k. Most parts run 50 pcs- 2k per week.

## **MATERIALS:**

Steel = 1020 tubing, 1018, 1144, & 4140 (Good) and 1215 & 12L14 (Best)

Brass = 360and Phos Bronze (Best). Most copper, bronze, and brass are "Good" or "Best"

Alum = 606 l, 2024, & 2011 (Best)

Stainless = 303 (Best) and 15-5, 17-4, 304L, 316L, & 416 (Good)

Plastics = Most plastics are "Good" or "Best" applications

Tool Steel, Hastelloy, hoonel, and Monel are CNC only