

Equipment List

CAZTEK | PRECISION

ENGINEERS

- (8) - Mechanical Engineers
- (1) - PhD Mechatronics Engineer
- (1) - Licensed Professional Engineer
- (2) - Electrical Engineer
- (1) - Industrial Designer

CNC MILLING

Matsuura MAM 72-42V 5 axis with work envelope of 20.5"x 28.7"x 20.1" x-y-z travels, full simultaneous motion, 32-station pallet changer, 330 station tool changer, 20,000 rpm spindle speed

DMG Mori DMU65 Monoblock 5 axis with work envelope of 28"x 25"x 22" x-y-z travels, full simultaneous motion, 60 station tool changer, 18,000 rpm spindle speed

Haas VF-4SS with HRT-160 4th-Axis 50"x20"x 25" x-y-z travels, 40 taper 12k rpm spindle, through the spindle coolant, high speed machining

Haas VF-2SS with 4th axis drives 30"x16"x 20" x-y-z travels, 40 taper 12k rpm spindle, high speed machining

Haas GR-510 CNC Gantry Router with work envelope of 121"x 61"x 11" x-y-z travels, 3-axis motion, 10 station carousel tool changer, 15,000 rpm spindle speed

CNC TURNING

DMG Mori NLX2000-500 Lathe with Y-Axis and live tooling 15" diameter by 20.2" long work envelope, 6k rpm spindle with 10k rpm live tooling, programmable tailstock

SWISS MACHINE

Citizen Cincom L32-1M10 Swiss-type CNC lathe, 32/38mm max machining Ø, 320mm headstock stroke, dual spindles, and live tooling for complex turned parts in one setup.

PRECISION GRINDING

Kent KGS-616S surface grinder with Accurite DRO, power spinner for O.D. grinding

WELDING

Miller Dynasty 350 GTAW welder, water cooled Miller
Synchrowave 250 GTAW welder, water cooled Miller
Milleromatic 211 GMAW welder

ADDITIVE MANUFACTURING

Markforged Mark II Fused Deposition Modeling (FDM) 3D printer, 320mm x 132mm x 154mm (xyz) [12.60" x 5.20" x 6.06"], high strength Onyx material and continuous filament carbon fiber and kevlar reinforcement material, 100 micron build layer

Forlabs Form-2 Stereolithography (SLA) 3D printer, 145mm x 145mm x 175mm (xyz) [5.7" x 5.7" x 6.9"], multiple materials: rigid, high strength, clear, flexible etc., 25 – 300 micron build layer

Stratasys Fortus 250mc 3D printer, 254 x 254 x 305mm (xyz) [10" x 10" x 12"], ABSplus™ – a production-grade thermoplastic, three build layer thicknesses: (.178, .254 and .330 mm)

Fusion3 EDGE Fused Deposition Modeling (FDM) 3D Printer, 368mm x 368mm x 343mm [14.5" x 14.5" x 13.5"], all major printable plastics, 20-500 microns

INSPECTION

Numerex/Zeiss Coordinate Measuring Machine with Nikon CMM Manager software, 24"x 24"x18" envelope

Hexagon GLOBAL S 7.10.7 Scan+ Accuracy+ /Tolerance + Coordinate Measuring Machine 700mm x 1000mm x 700mm envelope

PROGRAMMING SOFTWARE

Mastercam Computer aided Machining software with surfacing and multi-axis modules

SOFTWARE

SolidWorks, with FEA and CFD modules

