



CONSTANTIN PRECISION INSTRUMENTS

EQUIPMENT LIST

CNC MACHINING CENTERS-HORIZONTAL MILL

FEELER Horizontal Boring Mill FBM 110R
60 Cat-50 Stations, 35HP Spindle
(1) 55" x 63" Pallet, full contouring rotary table
X 98", Y 71", Z 59" W27.6 travels

NIIGATA SPN 701 High speed Horizontal Machining Center
60 Cat-50 Stations, 60HP Spindle 14,000RPM
(2) 25" Square Pallets, automatic pallet changer
X 39.4", Y 37.4", Z 33.5" travels

CNC MACHINING CENTERS-VERTICAL 5-AXIS

DECKEL MAHO DMF-500 5 Axis
120 Cat-50 Stations 60HP Spindle
X 197", Y 36", Z 32" Travels
Fully Programmable 24" 4TH axis w/12.5" thru bore
Milling head +/- 100 degrees

HAAS UMC-750SS 5-AXIS
30 Cat-40 Stations, 25HP Spindle
19.68" Trunnion table
X 30", Y 20", Z 200" travels
Fully Programmable C-axis B-axis 120 deg to -35 deg

CNC MACHINING CENTERS-VERTICAL 4-AXIS

YAMA SEIKI VMB-1200 Vertical
24 Cat-50 Stations, 25HP Spindle
51" x 26" table (80 X 18" SUB-PLATE)
X 47", Y 25", Z 25" travels
Fully Programmable 12" Kitagawa 4TH axis w/4" bore

CNC MACHINING CENTERS-VERTICAL (CONT)

OKK MCV-660 Vertical

30 Cat-50 Stations, 25HP Spindle
65" x 30" table (90 X 18" SUB-PLATE)
X 60", Y 25", Z 30" travels
Fully Programmable 16" Tsudakoma 4TH axis w/6.75" bore

TRAK DPM RX7 BED MILL Vertical

Cat 40 / NMBT 40 / BT Spindle taper / 7.5 HP continuous spindle motor
60" x 23" X and Y travels
400/250"/minute rapid travel
Standard electronic handwheels with 4" quill diameter

KAO MING Vertical

30 Cat-50 Stations, 25HP Spindle
51" x 26" table (76 X 18" SUB-PLATE) Keyence IM 7001 – Image Dimension Measuring System
X 41", Y 22", Z 30" travels
Fully Programmable 12" Tsudakoma 4TH axis w/4" bore

ARES SEIKI High Speed Vertical CNC

30" x 20" table
X 30", Y 20", Z 20" travels
Cat V-40 12000 RPM Spindle

CNC MILL/TURN CENTERS

MORI SEIKI NZL6000BY/4000 CNC 6 AXIS

(2EA) 32" Chucks
100 HP Spindle
Twin turrets
25hp Live Mill tooling machine
47" swing x 163" centers
18" swing on Programmable hydraulic steady rest
Programmable Hydraulic Steady rest
15" through hole
Large Boring Bar changer 3ea 5" X 70" long boring bars

SAMSUNG – SL-45LY CNC with additional Y axis

24" chuck 50 HP
Live Mill tooling machine
32" swing x 126" centers
18" swing on manual steady rest
Programmable Tailstock
Programmable Hydraulic Steady rest
6.5" through hole

CNC MILL/TURNING CENTERS (CONT)

(2EA) SAMSUNG- SL-45MC CNC Lathe/Mill

24" chuck 45HP
Live Mill tooling machine
32" swing x 126" centers
18" swing on manual steady rest
Programmable Tailstock
Programmable Hydraulic Steady rest
6.5" through hole

SAMSUNG- SL-25MC CNC Lathe/Mill

10" chuck 25HP
Live Mill tooling machine
14" swing x 60" centers
Programmable Tailstock
3.5" through hole

CNC TURNING CENTERS

KINGSTON Hollow spindle CNC Lathe

(2ea) 32" chuck 50HP
34" swing x Chucker
14.5" through hole

IKEGAI ANC-56 CNC Lathe Large Hollow spindle

Center drive dual turret/chuck lathe
2ea 32" chuck 60HP
Right side 42" swing x 240" centers
Left side 36" swing x 157" centers
2ea Programmable Tailstock
Multiple Steady rests
11" through hole
Can run a 490" long part, 11" dia. and smaller

(2 EA) FFG-DMC Model DL 21 LA

8" Chuck / Bar capacity 2.56"
Swing over bed 21.6"
8.27" standard / 11.02" max (turning dia.)
20.87" max. cutting length

MORI SEIKI SL-35 CNC Lathe

15" chuck 40HP
18" swing x 35" centers
Programmable Tailstock
4" through hole

CNC TURNING CENTERS (CONT)

(2EA) SAMSUNG- SL-45 CNC Lathe

24" chuck 45HP
 32" swing x 126" centers
 Programmable Tailstock
 Programmable Hydraulic Steady rest
 6.5" through hole

TAKISAWA TC-4 CNC Lathe

15" chuck 35HP
 27" swing x 50" centers
 Tailstock, Steady Rest
 3.5" through hole

IKEGAI TC25 CNC Lathe

10" chuck 35HP
 17" swing
 3" through hole

CNC WIRE EDMS

MITSUBISHI MV4800 WIRE EDM (*LARGE EDM*)

53.1" X 43.3" X 31.5" Max. work piece submerged dimension
 6,600 lbs. Submerged Table capacity
 15 deg.@ 14.3
 Can EDM parts up to 31.5" tall

MITSUBISHI SX 20 WIRE EDM

19.7" X 13.8" X 10.6" Max. work piece dimension
 2,204 lbs. Table capacity
 5 axis, 15-degree at 4"

MITSUBISHI MV1200 WIRE EDM

15.7" X 11.8" X 8.7" Max. work piece submerged dimension
 6,600 lbs. Submerged Table capacity
 15 deg. @ 14.3

MITSUBISHI FX-10 CNC WIRE EDM

33.46" X 25.59" X 11.6" Max. work piece dimension
 1763lb. Table capacity
 5 axis, 15-degree max. Taper

MANUALS

KURAKI KH6-30 24" X 100" Engine Lathe

Front and rear 15" 4 jaw chucks
6.5" through hole
2 steady rests
Digital readouts

LEBLOND MAKINO 19" X 100" REGAL Engine Lathe

12" 3 jaw chuck & 15" 4 jaw chuck
3" through hole
2 steady rests
Digital readouts

LEBLOND MAKINO 14" X 50" REGAL Engine Lathe

10" 3 jaw chuck
2.25" through hole
steady rest
Digital readouts

CLAUSING 19" X 100" Engine Lathe

12" 3 jaw chuck & 15" 4 jaw chuck
3" through hole
2 steady rests
Digital readouts

BRIDGEPORT Variable Speed Mill

9" X 42" table
Powerfeed
Digital readouts

LAGUN FTV-2E Variable Speed Mill

11" X 54" table
Powerfeed
Digital readouts

STRAIGHTENING

ENERPAC 100 ton X 20' straightening press

INSPECTION

Keyence CMM-XM series – Handheld Probe Measuring System

Keyence IM 7001 series – Image Dimension Measuring System
(3EA) Mitutoyo Linear Height LH-600B 2D Measurement System 40”
STARRETT HE-400 16” Optical Comparator w/digital readouts, automatic edge detection
TELESIS PINSTAMP CNC Marking machine
2.5” x 1.5” Marking area
Dapra Marking Systems – Flex Mark
Dapra Marking Systems – Techno Mark Mult-4
Yuasa CNC rotary table 8” inspection grade with tailstock
Gagemaker Thread measuring system 0-24”
OD Micrometers: 0-32”
ID Micrometers: 0-40”
Blade Micrometers: 0-6”
Depth Micrometers: 1-12”
Vernier Calipers: 0-60”
Mitutoyo Digital Calipers 0-24”
Thread Wires: 4 pitch to 20 pitch
Gage Block Set: 88 PC. Grade 3
(2EA) Surface Plate 48” x 72”, Inspection Grade A
Surface Plate 48” x 96”, Inspection Grade A
Surface Plate 24” x 120”, Inspection Grade A
Surface Plate 36” x 48”, Inspection Grade A
Gage pins 0-1”

All inspection dedicated tools serialized and documented per our QA Manual.

CAD/CAM (REGISTERED)

EDGE CAM PROGRAMMING SYSTEM

Surfaces Module
Lathe Module
Mill 5 Axis

MISCELLANEOUS

COSEN SH-5542 dual column band saw / 18” round max.
DAYTON Bead Blaster
MILLER MIG Welder
DAREX V390 Precision drill bit sharpener

DAREX SP2500 Ultra precision drill bit sharpener
DO-ALL G-10 8 X 24 Hydraulic Surface Grinder
CARDINAL 5000# Electronic Scale

MATERIALS HANDLING

Ford F450 diesel Flatbed
ISUZU NQR 20' diesel Flatbed
CROWN 4,000 electric fork lift
CROWN 5,000 electric fork lift
RAYMOND 4,000 4 way for extremely long parts
NISSAN 9,000 diesel fork lift
GENIE Z-30/20N Electric man lift 30' height capacity
(3) 2 Ton Electric Jib Crane
(10) 1 Ton Electric Jib Crane
(3) 2 Ton Bridge Crane
(2) 1/4 Ton Pneumatic Jib Crane
(1) 1/2 Ton Pneumatic Jib Crane