

Lindsey Racing represents a fully equipped manufacturing company featuring turning, milling, sawing, grinding, lapping, and wire EDM machinery with fully equipped tool room, inspection and tool crib departments. We are capable of machining and assembling a variety of parts from a few grams to 1000 lbs in most materials including: mild, alloy and stainless steels, aluminum, copper alloys, cast aluminum, cast irons and plastics, etc. We have a highly skilled work force utilizing computer controlled machinery and specializing in parts requiring precision machining, serving a variety of industries: medical, HVAC compressor parts, data processing, valve pump, electronic, oil field drilling tools and instruments , aftermarket automotive parts, etc.

#### FACILITIES AND LIST OF EQUIPMENT

Plant Size: 160,000 SQUARE FEET  
Employees: 110  
Machine Capacity Hours: Approximately 9000 hours per month.  
Can be expanded to 13000 hours per month.  
No. of Shifts: 1 (Note: can be expanded to 2 shifts)

#### GENERAL DESCRIPTION OF EQUIPMENT

1 CNC 5 axis Multitasking Machine  
30 CNC Lathes  
1 CNC Swiss type Machine  
27 CNC Mills  
3 CNC Grinders  
3 Wire EDM Machines  
4 Coordinate Measuring Machines  
Support Machines (manual lathes, mills, grinders, lapping machines, etc.)  
(See complete listing for types and size capacity)

## **CNC MULTI-TASKING MACHINE**

- 1 MAZAK INTEGRIX 3003 Y-60" CNC TURNING CENTER, 5 AXIS, 760 MM MAXIMUM MACHINING DIAMETER, 1524 MM (60") MAXIMUM MACHINING LENGTH, 10" MAIN SPINDLE CHUCK SIZE, MAX MAIN SPINDLE SPEED 4000 RPM, MAX MILLING SPINDLE 6000 RPM, 80 TOOL CAPACITY, 1000 PSI COOLANT, PROGRAMMABLE STEADY REST

## **CNC TURNING EQUIPMENT**

- 1 WASINO LJ-62 TURNING CENTER, FANUC CNC CONTROL, 2-1/2" DIAMETER BAR CAPACITY, 10" DIAMETER CHUCK CAPACITY 25" C-C, AND CHIP CONVEYOR
- 1 MORI SEIKI SLS 25 TURNING CENTER, YASNAC CNC CONTROL, PROGRAMMABLE TAILSTOCK, 10" DIAMETER CHUCK CAPACITY, 10 POSITION TURRET, 25 HP AC DRIVE 35-3500 RPM, 21" MAXIMUM TURNING LENGTH, X 10" DIAMETER AND CHIP CONVEYOR
- 1 MORI SEIKI CL-25 TURNING CENTER (CHUCKER), FANUC CNC CONTROL 10" DIAMETER CHUCK, 10 STATION TURRET, 25 HP AC DRIVE 30-3,000 RPM MAXIMUM TURNING CAPACITY 18" X 10" DIAMETER, CHIP CONVEYOR
- 1 TAKISAWA TC-30 TURNING CENTER, FANUC CNC CONTROL, 10" DIAMETER CHUCK, 10 STATION TURRET, 20 HP AC DRIVE 40-4,000 RPM, PROGRAMMABLE TAILSTOCK QUILL, PARTS CATCHER, TRAVEL X=5.50, Z=14.55, MAXIMUM CAPACITY 12" X 9.5 DIAMETER
- 1 TAKISAWA TC-30 TURNING CENTER, FANUC CNC CONTROL, 10" DIAMETER CHUCK, 8 STATION TURRET, 20 HP AC DRIVE 40-4,000 RPM, PROGRAMMABLE TAILSTOCK QUILL, PARTS CATCHER, TRAVEL X=5.50, Z=14.55, MAXIMUM CAPACITY 12" X 9.5 DIAMETER
- 1 TAKISAWA TK2 VERTICAL LATHE, FANUC CNC CONTROL, 10 HP AC SPINDLE DRIVE, 106-3,200 RPM, 8" CHUCK, GANG TYPE TOOLING SLIDE, A AXIS TRAVEL = 15.75, Z= 12.60
- 2 TAKISAWA TC-20 TURNING CENTER, FANUC CNC CONTROL, 8" DIAMETER CHUCK, 8 STATION TURRET, 15 HP AC DRIVE 40-4,4000 RPM, PROGRAMMABLE TAILSTOCK QUILL, PARTS CATCHER, TRAVEL X=5.50, Z=14.55, MAXIMUM CAPACITY 12" X 9.5 DIAMETER, REAR DISCHARGE CHIP CONVEYOR

- 1 TAKISAWA TC-20 TURNING CENTER, FANUC CNC CONTROL, 6" DIAMETER CHUCK OR 2" DIAMETER CAP COLLET 12 STATION TURRET, 15 HP AC DRIVE 40-4,000 RPM, PROGRAMMABLE TAILSTOCK QUILL, PARTS CATCHER, TRAVEL X= 5.50, Z= 14.55, MAXIMUM END DISCHARGE CHIP CONVEYOR
  
- 1 DAINICHI F-15 TURNING CENTER, FANUC CONTROL, 1.75" DIAMETER BAR CAPACITY, 6" 3 JAW OR 1.75" COLLET CHUCK, 12 POSITION TURRET 10 HP AC DRIVE, 160-6,000 RPM, PROGRAMMABLE TAILSTOCK QUILL AND PARTS CATCHER, COMPLETE WITH LNS BAR FEEDER .250 - 1.75" DIAMETER CAPACITY X 144" LONG AND TURBO CHIP CONVEYOR
  
- 1 DAINICHI F-20 TURNING CENTER, FANUC CNC CONTROL, 2" DIAMETER BAR CAPACITY, 8" 3 JAW OR 2" COLLET CHUCK, 12 POSITION TURRET, 15 HP AC DRIVE, 100-4,000 RPM, PROGRAMMABLE TAILSTOCK QUILL AND PARTS CATCHER COMPLETE WITH LNS HYDRAULIC BAR FEEDER 5/8 - 2" DIAMETER CAPACITY X 12 FT LONG, AND TURBO CHIP CONVEYOR
  
- 1 DAINICHI F-35 TURNING CENTER, FANUC CNC CONTROL, 3-1/2" DIAMETER BAR CAPACITY, 12" DIAMETER 3 JAW CHUCK CAPACITY, 10 POSITION TURRET 30 HP AC SPINDLE DRIVE, 25-2,500 RPM, PROGRAMMABLE TAILSTOCK AND CHIP CONVEYOR
  
- 1 EGURO NUCLET TURNING CENTER, FANUC CNC CONTROL 5 C THREADED SPINDLE NOSE, 7.5 HP AC DRIVE 0-5,000 RPM TRAVEL X= 10.20, Z= 7.90, GANG TYPE TOOLING SLIDE PART CONVEYOR
  
- 1 EGURO NUCLET TURNING CENTER, FANUC CNC CONTROL, 5C THREADED SPINDLE NOSE, 7.5 HP AC DRIVE 0-5,000 RPM, X AXIS = 10.2 AND Z AXIS = 7.9, GANG TYPE TOOLING SLIDE, 1" DIAMETER CAPACITY X 3 FT MAXIMUM LENGTH
  
- 2 TAKAMAZ X-10 TURNING CENTER, FANUC CNC CONTROL A2-5 SPINDLE NOSE TRAVEL X= 4.72, Z=9.05, 8 STATION TURRET, 5/7.5 HP SPINDLE MOTOR 0-3,500 RPM, HYDRAULIC CHUCK ACTUATOR, 6" CHUCK AND 5 C COLLET ADAPTOR COMPLETE WITH CHIP CONVEYOR
  
- 2 TAKAMAZ X-10 TURNING CENTER, FANUC CNC CONTROL A2-5 SPINDLE NOSE TRAVEL X= 4.72, Z= 9.05, 8 STATION TURRET, 5/7.5 HP SPINDLE MOTOR 0-3,500 RPM HYDRAULIC CHUCK ACTUATOR, 6" CHUCK AND 5C ADAPTOR COMPLETE WITH CHIP CONVEYOR

- 1 MIYANO BNC-34T CNC TURNING CENTER, 3 AXIS, FANUC CONTROL 1-5/16" DIAMETER BAR COLLET CAPACITY, MAX SHAFT LENGTH 9", 5" DIAMETER CHUCK CAPACITY, B AXIS 6 POSITION TURRET MAX TRAVEL 9" LNS BAR FEEDER 12" TO 1-5/16" DIAMETER X 12 FT CAPACITY (6 POSITIONS) PARTS CATCHER AND PARTS CONVEYER, 7-1/2 HP, 150-5,000 RPM SPINDLE
  
- 1 MIYANO BNC-34 CNC TURNING CENTER, 2 AXIS, FANUC CNC CONTROL, 1-5/16" DIAMETER BAR COLLET CAPACITY, MAXIMUM SHAFT LENGTH 9", 5" DIAMETER CHUCK CAPACITY, PROGRAMMABLE TAILSTOCK, 6 POSITION TURRET, 12 FT BAR FEEDER 1-5/16" DIAMETER CAPACITY X 12 FT LONG, PARTS CATCHER 7-1/2 HP AC DRIVE 150-4,500 RPM AND CHIP CART
  
- 2 DOOSAN S310 ML CNC LATHE, 2 AXIS, 10" MAIN SPINDLE, 12-STATION LIVE TOOL DRUM TURRET, 10" MAIN CHUCK SIZE, HIGH RIGIDITY, STABILIZED CUTTING BY TOTAL THERMO BALANCE SYSTEM, 6" SUB SPINDLE WITH .95" BAR CAPACITY, 12.2" X 15.24 MAX TURNING DIAMETER, 3" BAR CAPACITY, SPINDLE RANGES FROM 30 RPM TO 3,000 RPM, VDI 30 TURRET
  
- 1 DOOSAN 390LX CNC LATHE, 2 AXIS, 12" CHUCK SIZE, 12 STATION V12 TURRET, 15.35" X 44.49" MAX TURNING DIAMETER, 3.5" BAR CAPACITY, 30 RPM TO 2,500 RPM
  
- 1 DOOSAN S700 CNC LATHE, 18" CHUCK, 4.6 BAR CAPACITY, 27.55" X 68 MAX TURNING DIAMETER
  
- 1 OKUMA LT 300-MY CNC LATHE, TWIN 8" CHUCKS, 13.78 X 7.87 MAX TURNING DIAMETER WITH BOTH SPINDLES, TWIN TURRETS LIVE TOOL CAPACITY, AUTOMATED FANUC SYSTEM INTEGRATOR
  
- 1 LEADWELL T6 CNC LATHE, 2 AXIS, PROGRAMMABLE TAIL STOCK, 6" CHUCK SIZE, 8" X 17" MAX TURNING DIAMETER, 1 SECOND FOR A 12 STATION TURRET, 2.0" BAR CAPACITY, 17.7" MAX SWING
  
- 2 CINCINNATI AVENGER 250S AM CNC LATHE, 10" MAIN SPINDLE, 6" SUB SPINDLE, 23.54" MAXIMUM SWING, 19.74" MACHINING LENGTH, 2.56" BAR CAPACITY, 12 POSITION LIVE TOOL TURRET
  
- 1 HITACHI SEIKI HITEC TURN 23II CNC LATHE, 12" MAXIMUM MACHINING DIAMETER, 2.5" BAR CAPACITY, 24.8" BETWEEN CENTERS, 20-3, 600 RPM, 10" CHUCK SIZE, PROGRAMMABLE TAIL STOCK

## **CNC SWISS TYPE TURNING EQUIPMENT**

- 1 STAR SA-16R 5 AXIS SWISS TYPE AUTOMATIC LATHE, FANUC CONTROL 3/5 HP 12,000 RPM MAXIMUM MAIN SPINDLE, 15 DEGREE SPINDLE INDEDEXING, 5/8" DIAMETER BAR CAPACITY, 5" HEADSTOCK STROKE, SYNCRONIZED GUIDE BUSHING, 6 TURNING TOOLS, 4 FRONT END WORKING TOOLS, 4 REAR END WORKING TOOLS, 3 POWER DRIVEN SIDE WORKING TOOLS, 8,000 RPM SUB SPINDLE, COMPLETE WITH GRAVITY BAR FEED

## **CNC MILLING EQUIPMENT**

- 1 MORI SEIKI M300-A1 MACHINING CENTER FANUC 4 AXIS CNC CONTROL #40 CAT TAPER 30 TOOLS, 2 ROTARY INDEX PALLETS SIZE 12.4 X 12.4, FULL 4<sup>TH</sup> AXIS (360,000 INCREMENTS) TRAVEL X= 15.70, Y= 11.80, Z=19.50, HIGH PRESSURE THRU THE SPINDLE COOLANT SYSTEM, CHIP CONVEYOR
- 1 MORI SEIKI M300-A1 MACHINING CENTER FANUC 4 AXIS CNC CONTROL #40 CAT TAPER 40 TOOLS, 2 ROTARY INDEX PALLETS SIZE 12.4 X 12.4, FULL 4<sup>TH</sup> AXIS (360,000 INCREMENTS) TRAVEL X= 15.70, Y= 11.80, Z=19.50, 10,000 RPM SPINDLE, HIGH PRESSURE THRU THE SPINDLE COOLANT SYSTEM, CHIP CONVEYOR
- 1 KIRA KN-30VE-2APC MACHINING CENTER, FANUC CNC CONTROL #30 BT TAPER, 10 TOOLS, ROTARY PALLET CHANGER, SPINDLE SPEED 250-8,000 RPM, 5 HP, TRAVEL X= 11.80, Y=9.80, Z= 11.80, SCREW CHIP CONVEYOR
- 1 KIRA KN-30VE-2APC MACHINING CENTER, FANUC CNC CONTROL #30 BT TAPER, 10 TOOLS, ROTARY PALLET CHANGER, SPINDLE SPEED 360-12,000 RPM, 5 HP, TRAVEL X= 11.80, Y=9.80, Z= 11.80, SCREW CHIP CONVEYOR
- 4 KIRA KN-40VS MACHINING CENTER, FANUC CNC CONTROL, #40 CAT TAPPER 12 TOOLS SPINDLE SPEED 180-6,000 RPM, 7.5 HP, SINGLE OR DUAL ZONE TRAVEL X= 47.2 (DUAL ZONE 2 X 11.8), Y= 9.8, Z= 11.8, SCREW CHIP CONVEYOR
- 1 KITAMURA MYCENTER-4 VERTICAL MACHINING CENTER, FANUC CNC CONTROL, CAT #40 TAPER, 30 TOOLS, 15 HP AC DRIVE 60-6,000 RPM, 2 SPEED GEARED HEAD, SYNCHRONIZED TAPPING, HIGH PRESSURE COOLANT, TRAVEL X=44.3", Y=22.2", Z=22.5"
- 1 KITAMURA MYCENTER-3XI VERTICAL MACHINING CENTER, FANUC CNC CONTROL, CAT #40 TAPER, 30 TOOLS, 15 HP AC DRIVE 20-10,000 RPM, 2 SPEED GEARED HEAD, SYNCHRONIZED TAPPING, HIGH PRESSURE COOLANT, TRAVELS X= 29.92", Y= 17.91", Z= 18.11"

- 1 MORI SEIKI MV-40B VERTICAL MACHINING CENTER, 4 AXIS FANUC CNC CONTROL, #40 CAT TAPPER, 20 TOOLS, 10 HP AC DRIVE 50-8,000 RPM, COOLED SPINDLE, SYNCHRONIZED TAPPING, X=31.5, Y= 16.1, Z= 21" AND 10" DIAMETER FULL 4<sup>TH</sup> AXIS ROTARY TABLE (360,000 INCREMENTS)
- 1 MORI SEIKI MV-40B VERTICAL MACHINING CENTER, FANUC CNC CONTROL, 20 TOOLS, 10 HP AC DRIVE 50-8,000 RPM, SYNCHRONIZED TAPPING, TABLE TRAVEL X=31.5", Y=16.1", Z= 18", PLUG IN PROGRAM CONTROLLED INDEXER INTERFACE
- 2 TAKISAWA MAC VIE VERTICAL MACHINING CENTER, FANUC CONTROL 10 TOOLS 7-1/2 HP AC DRIVE 60-6,000 RPM, CAT #40 V-FLALNGE TAPPER, SYNCHRONIZED TAPPING, TABLE TRAVEL X= 17", Y= 13.75", Z= 18", PLUG IN PROGRAM CONTROLLED INDEXER INTERFACE
- 2 TAKISAWA MAC V1 VERTICAL MACHINING CENTER, FANUC CONTROL, 10 TOOLS 7-1/2 HP AC DRIVE 60-6,000 RPM, CAT #40 V-FLANGE TAPER, SYNCHRONIZED TAPPING, TABLE TRAEVL X= 17", Y= 13.75", Z= 18"
- 1 ROKU-ROKU VERTIMAC-G VERTICAL MACHINING CENTER, FANUC CNC CONTROL, 5 HP AC DRIVE 200-12,000 RPM, CAT #40 V-FLANGE, 18 TOOLS, TABLE TRAVEL X=18.11", Y= 14.17", Z= 14.17"
- 2 LEADWELL V40 CNC VMC, 4<sup>TH</sup> AXIS INTERFACE, 19" X 47" TABLE SIZE, 100 LBS MAXIMUM WEIGHT OF WORK PIECE, 24 AUTOMATIC TOOL CHANGER, CAT 40 SPINDLE TAPER, 8,000 RPM SPINDLE SPEED, SPINDLE NOSE TO TABLE; MAX 26" / MIN 6"
- 1 CINCINNATI MAXIM HMC 400EP CNC LATHE, 40 AUTOMATIC TOOL CHANGER, 40 ATC TOOL CHANGER, CAT 40 SPINDLE TAPER, 8,000 RPM SPINDLE SPEED, FULL 4<sup>TH</sup> AXIS, 40 MM TWIN PALLETS
- 4 KITAMURA MYCENTER HX500I CNC HMC, 100 AUTOMATIC TOOL CHANGER, 1,000 PSI SPINDLE COOLANT, FULL 4<sup>TH</sup> AXIS, TWIN 500 MM PALLETS, CAT 50 SPINDLE TAPER, 10,000 RPM SPINDLE SPEED, 1000 COOLANT PSI, 19.7" X 19.7" TABLE SIZE
- 1 HARDINGE BRIDGEPORT VMC 1000XP3 CNC, 4<sup>TH</sup> AXIS INTERFACE, 30 TOOL AUTOMATIC TOOL CHANGER, CAT 40 TOOL SHANK, 12,000 RPM SPINDLE SPEED (BELT DRIVEN), 30 STANDARD CAROUSEL CAPACITY, 86 MM MAX TOOL DIAMETER
- 1 NTC NV4G VMC CNC, 25 AUTOMATIC TOOL CHANGER, CAT 40 TOOL SHANK, TWIN PALLET, 10,000 RPM MAX SPINDLE SPEED, 25 ATC TOOL STORAGE CAPACITY

- 1 KIWA TRIPLE V21I-R VMC CNC, 24 AUTOMATIC TOOL CHANGER, DOUBLE ARM, TWIN PALLET, CAT 40 SPINDLE TAPER, 10,000 RPM STANDARD SPINDLE, 440 LBS MAX WEIGHT

## **MANUAL MILLING EQUIPMENT**

- 1 SHARP VH3 COMBINATION HORIZONTAL/VERTICAL TURRET MILLING MACHINE, 7-1/2 HP HORIZONTAL #50 MMT, 5 HP VERTICAL VARIABLE SPEED 120-3,600 RPM #40 MMT, TABLE TRAVEL 37-3/8 X 14-13/16 X 18-1/2, POWER FEED & RAPID TRAVERSE ALL DIRECTIONS, BUILT IN COOLANT TANK, PENDANT CONTROL PANEL
- 4 BRIDGEPORT SERIES 1 VERTICAL MILL 12 X 32 TABLE TRAVEL, VARI-SPEED 2J HEAD, #30 ERICKSON QUICK CHANGE TAPER, CHROME WAYS AND POWER FEED Z AXIS COMPLETE WITH ACURITE MILL MATE DIGITAL READOUT

## **MANUAL TURNING EQUIPMENT**

- 1 WARD TURRET LATHE 12" CHUCK
- 2 HARDINGE HSL 2<sup>ND</sup> OPERATION LATHE 5C COLLET, THREADED SPINDLE NOSE AIR OPERATED COLLET CLOSER
- 6 ENGINE LATHES 6" - 12" CHUCKS AND 24" - 60" BED LENGTHS

## **SAWING EQUIPMENT**

- 3 HORIZONTAL AUTOMATIC BAND SAWS, 14" MAX CAPACITY, 7,000 LBS MAX LIMIT
- 2 VERTICAL BAND SAWS

## **WIRE EDM EQUIPMENT**

- 1 SODICK MODEL A280L SUBMERGED WIRE EDM MACHINE COMPLETE WITH FILTER 75 GALLON REFRIGERATED DIELECTRIC SYSTEM AND 480/240 VOLT TRANSFORMER TRAVEL X- 11.80", Y= 7.80", Z= 6.90" (UPPER GUIDE ADJUSTMENT) UPPER GUIDE TRAVEL U= 2.00", V= 2.00" (10 DEGREES TAPER AT 3.94" HEIGHT) MAXIMUM WORK PIECE SIZE L= 15.70", W= 11.870", D= 6.9", MAXIMUM SUBMERGED WORK PIECE HEIGHT = 5.90"

- 1 FANUC ROBOCUT MODEL OB SUB MERGED WIRE EDM MACHINE FANUC CNC CONTROL, COMPLETE WITH EBBCO FILTER AND DEIONIZING SYSTEM, REFRIDGERATED DIELECTRIC SYSTEM, TRAVEL X= 11.81, Y= 7.87, U= 1.18, V= 1.18, MAX TAPER +/-30 DEGREE, MAX WORK PIECE 25.50 X 16.50 X 6.00
- 1 FANUC WIRE EDM MODEL ALPHA1:B SUBMERGE CUTTING WITH AUTO WIRE FEED (AWF), MAX WORKPIECE SIZE 33" X 28.7" X 12.2", TABLE TRAVELS X=20.4, Y=14.5, Z=12.1, U= +/- 2.3, V= +/- 2.3, MAX TAPER ANGLE +/- 30 DEGREE

## **GRINDING EQUIPMENT**

- 1 TOYODA GF70M-T CNC/CBN TWIN WHELLHEAD, PRODUCTION GRINDER, MAX SWING OVER TABLE 500 MM, 700 MM DISTANCE BETWEEN CENTERS, 20MM TO 70MM GRINDING DIAMETER RANGE, 65MM MAX THROW, AUTOMATIC MARPOSS SIZING SYSTEM
- 1 OKAMOTO OGM 12 - 20 UNCB O.D. GRINDER: SWING OVER TABLE 12.6", DISTANCE BETWEEN CENTERS 24", MAX GRIND DIA. 12", MAX WEIGHT BETWEEN CENTERS 330 LBS, GRINDING WHEEL 14 X 1.5 5", WHEEL HEAD TOTAL STROKE 11.8", WHEEL HEAD SWIVEL ANGLE +/- 30 DEGREE, MAX TABLE TRAVEL 29.5"TABLE SWIVEL ANGLE +3 DEGREE - -10 DEGREE, WORKHEAD SWIVEL ANGLE 30 DEGREE - 90 DEGREE, WORKHEAD DEAD/LIVE SPINDLE, WORK HEAD CENTER MR #4, TAILSTOCK CENTER MT #4, NC CONTROLLER FANUC, MARPOSS T25 Z AXIS WORK LOCATOR
- 1 OKAMOTO IGM-15NC I.D. GRINDER: INTERNAL DIA. TO BE GROUND .240 - 6" MAX. GRINDING STROKE 5", SWING OVER TABLE 24", SWING INSIDE SPLASH GUARD 10", WORKHEAD SWIVEL ANGLE -5 DEGREE - +15 DEGREE, 8" SCROLL CHUCK WITH ADAPTER, TABLE MAX TRAVEL 20", MINIMUM INCREMENT Z AXIS .00001, WHEELHEAD MAX. CROSSFEED X AXIS 6.7", MINIMUM INCREMENT X AXIS .00001, GRINDING WHEEL SPINDLE SPEED 20,000 RPM MAX., NC CONTROLLER FANUC
- 2 STUDER MODEL OC UNIVERSAL CYLINDRICAL GRINDER 6" DIAMETER X 16" CAPACITY, WITH LIVE WORK HEAD, GRINDING WHEEL 12 X 1.5 X 5 SEMI-AUTOMATIC CYCLING
- 1 HOSTIVAR UNIVERSAL GRINDER, MODEL BUAJ28/630 220/440V 3PH 60 HZ., 3 JAW CHUCK, 15" DIAMETER X2" WIDE WHEEL, LIVE AND DEAD WORKHEAD, HYDRAULIC FOOTSTOCK, SWING DOWN INTERNAL ATTACHMENT, PLUNGE FEED AND SWIVELING WHEEL HEAD

- 2 BLANCHARD SURFACE GRINDERS, 42" TABLE, 3,000 LBS MAX LOAD
- 3 CINCINATTI #2 CENTERLESS GRINDER, INFEED .0625" – 3.75" DIA X 8"
- 4 NORTON CYLINDRICAL GRINDERS 6" X 16", 26" MAX GRINDING DIAMETER, 40" MAX GRINDING BETWEEN CENTERS
- 1 BERCO RTM 225A CRANKSHAFT GRINDER, 7.5" MAX GRINDING DIAMETER, 40" MAX GRINDING BETWEEN CENTERS
- 1 OKAMOTO SURFACE GRINDER 12 X 24 CAPACITY, COMPLETE WITH ELECTRO MAGNETIC CHUCK, VARIABLE CHUCK CONTROL, HYDRAULIC DRESSER, FULLY AUTOMATIC CYCLING INCLUDING TABLE STOP, RAPID "Z" AXIS, 12" DIAMETER X 2" WIDE WHEEL, 5 HP
- 1 ELB SURFACE GRINDER 8" X 18" CAPACITY, AUTO DOWN FEED
- 1 BLOHM MODEL 816 SURFACE GRINDER 8" X 16" CAPACITY

### **HONING EQUIPMENT**

- 1 SUNNEN ML-3500-D POWER-STOKED HONING MACHINE, I.D. RANGE (.060 – 3.94), W/ AUTOMATIC SIZE CONTROL (ASC) UNIT (PROBE SIZES .125 – 2.0), TWO STAGE FEED FORCE (ROUGHING & FINISHING IN 1-CYCLE), AUTOMATIC STONE WEAR COMPENSATOR
- 1 SUNNEN HONING MACHINE 1/16" – 6" DIAMETER CAPACITY
- 2 SUNNEN HORIZONTAL AUTOMATIC HONES, 1/16"-6" DIAMETER CAPACITY, HONING DIAMETER .60"-6.5", 16" MAX HONING LENGTH
- 1 SUNNEN HONING MACHINE MODEL ML-3500-L, POWER STROKING, SUTO SIZE CONTROL
- 1 SUNNEN AUTOMATIC VERTICAL MODEL HOME VSS-64, HONING DIAMETER .154" -2"

### **LAPPING EQUIPMENT**

- 1 SPEEDFAM 24B LAPPING MACHINE, 24" DIA., MAX RING CAPACITY 9", WITH PARTS HANDLING TABLE, AIR SYSTEM WITH DOWN PRESSURE OF 264 LBS. PER HEAD, WATER COOLED TABLE
- 2 LAPMASTER 15 LAPPING MACHINE: 15" LAPPING PLATE, 3 RINGS, MAX CAPACITY 5-7/16", OPEN FACE BENCH-TOP MACHINE

- 1 LAPMASTER 12 LAPPING MACHINE: 12" LAPPING PLATE, 3 RINGS, MAX CAPACITY 4-3/16, OPEN FACE BENCH-TOP MACHINE
- 1 SPEEDFAM 24B LAPPING MACHINE 24" DIAMETER MAX RING CAPACITY 9"
- 1 SPEEDFAM 24B LAPPING MACHINE 24" DIAMETER MAX RING CAPACITY 9"
- 1 SPEEDFAM 32BW LAPPING MACHINE 32" DIAMETER TABLE RING CAPACITY 12", WITH WATER COOLED TABLE

### **MISCELLANEOUS EQUIPMENT**

- 3 ZERO GLASS BEAD BLASTER
- 4 ULTRA MATIC SVB-5 VIBRATORY MACHINE WITH VARIABLE SPEED DRIVE, AUTOMATIC PREMIXING COMPOUND SYSTEM, TACHOMETER
- 1 METAL MUNCHER MODEL MM 35 GB HYDRAULIC PRESS 5" STROKE, 7" THROAT X 9' HIGH, 11" X 20" BED AREA VARIABLE PRESSURE 35 TON MAXIMUM
- 1 G&L FACE AND CENTER MACHINE, 80" MAX LENGTH, 4.5" MIN LENGTH, 8" MAX DIAMETER, .50" MIN DIAMETER
- 1 LINCOLN ELECTRIC ECELL ROBOTIC WELDING SYSTEM, POWER FEED WIRE, 2-24" X 24" TOOLING PLATES, 41"X 30"X 39" MAX WORK SIZE

### **INSPECTION & MEASURING EQUIPMENT**

- 1 ZEISS CMM ECLIPSE MODEL 2828-22/24, ZEISS RDS PROBE HEAD, ZEISS RST TRIGGER PROBE
- 1 MITUTOYO CMM MEASURING MACHINE MODEL FJ 1006, X AXIS 40", Y AXIS 29", Z AXIS 24", RENISHAW PH 1 HEAD
- 1 MITUTOYO CMM CNC MEASURING MACHINE MODEL BRIGHT 540, X AXIS 19.5", Y AXIS 15.5", Z AXIS 18", RENISHAW PH 1 HEAD
- 1 MITUTOYO CMM CNC MEASURING MACHINE MODEL BRIGHT A540, X AXIS 19.5", Y AXIS 15.5", Z AXIS 18", RENISHAW PH 1 HEAD

- 1 SIP LENGTH MEASURING MACHINE MODEL 300M FOR CALIBRATING GAGES 0 – 10", OD CAPACITY .15 – 8", ID CAPACITY COMPLETE WITH ID, OD FEELERS, THREAD WIRES, ELECTRONIC INDICATOR FOR SMALL HOLES, SOFTWARE .000003 ACCURACY
- 1 ZOLLER TOOL PRESETTER #50 TAPER AND #40 TAPER ADAPTOR COMPLETE WITH VISUAL COMPARATOR AND COMPUTER SOFTWARE FOR DIRECT DOWNLOADING TO MACHINE
- 1 PARLEC TOOL PRESETTER #50 TAPER AND #40 TAPER ADAPTOR COMPLETE WITH VISUAL COMPARATOR AND COMPUTER SOFTWARE FOR DIRECT DOWNLOADING TO MACHINE
- 1 KALIMAT TOOL PRESETTER #40 TAPER WITH DIGITAL SCALES
- 1 MITUTOYO BENCH CENTER SERIES 967-103 CAPACITY 16.4 DIAMETER X 40" C.C.
- 1 MITUTOYO SURFACE PLATE 72 X 96 X 12 COMPLETE WITH STAND
- 1 SHEER TUMICO SURFACE PLATE 36 X 60 X 8 COMPLETE WITH STAND
- 1 MITUTOYO SURFTEST 401 SURFACE ANALYZER
- 1 MITUTOYO PROFILE PROJECTOR 10" SCREEN 10 X & 20 X LENS
- 1 MITUTOYO PROFILE PROJECTOR 10" SCREEN 10 X & 50 X LENS
- 1 MITUTOYO PROFILE PROJECTOR MODEL PH353H 14" SCREEN COMPLETE WITH X AND Y, DIGITAL READOUT (.0001) 10 X, 20 X AND 50 X LENS, SURFACE ILLUMINATION, VISE, V-BLOCK AND CENTERS
- 1 MITUTOYO PROFILE PROJECTOR MODEL PH-14LS 14" SCREEN COMPLETE WITH X AND Y, DIGITAL READOUT (.0001) 10 X, 20 X AND 50 X LENS, SURFACE ILLUMINATION, VISE, V-BLOCK AND CENTERS
- 1 STARRETT PROFILE PROJECTOR MODEL HD400 12" SCREEN COMPLETE WITH X AND Y, DIGITAL READOUT (.0001) 10 X, 25 X AND 50 X LENS, SURFACE ILLUMINATION, VISE, V-BLOCK AND CENTERS
- 1 OGP PROFILE PROJECTOR MODEL XL14C 14" SCREEN COMPLETE WITH X AND Y, DIGITAL READOUT (.0001) 10 X, 25 X AND 50 X 62.5 X 100 X LENS, SURFACE ILLUMINATION, VISE, V-BLOCK AND CENTERS