



P.O. Box 2037
Jamestown, NC 27282
(336) 410-7260
Fax - (336) 884-5033
www.ks-tool.com

Visit our web site at www.ks-tool.com for more details!

**Metal Stamping, CNC Precision Machining, Sheet Metal Fabrication,
Welding, Brazing, Assembly, Tool and Die Maintenance, EDM,
Finishing and Heat Treating and Laser Cutting**

Overall Facility Information

Our facilities are located among five plant buildings. Our Plant 1 and Plant 2 facilities are located at our main office site and total just under 50,000 square feet. In June 1999 we opened Plant 3 to house our expanding sheet metal fabrication and assembly operations. This 20,000 square foot building is located minutes from our main site. Our Plant 4 was created for focus on welding, and comprises 10,000 square feet and is located next to Plant 3. In November of 2005 we opened Plant 5 to provide 12,000 square feet of space to create a location dedicated to our mechanical assembly functions.

Mailing Address:

P.O. Box 2037
Jamestown, NC 27282

Manufacturing Facility Addresses:

Plant 1 – 34,240 sq ft

614 Hendrix Street
High Point, NC 27260

Plant 2 – 13,800 sq ft

612 Hendrix Street
High Point, NC 27260

Plant 3 – 19,200 sq ft

1249 Elon Place
High Point, NC 27263

Plant 4 – 10,000 sq ft

1253 Elon Place
High Point, NC 27263

Plant 5 – 12,000 sq ft

1235 Elon Place
High Point, NC 27263

Telephone Number: (336) 410-7260

FAX: (336) 884-5033



CAD/CAM Engineering and Quality Capabilities

K&S Tool and Manufacturing Company is committed to providing outstanding quality and service at affordable prices. We are not satisfied with the status quo. We work toward continual improvement of our production and service. Our trained workforce plays an integral role in the achievement of these goals. We keep our staff trained in the latest techniques. Every employee understands our quality objectives:

- Satisfied Customers
- Zero Defects
- On-time Delivery
- Continuous Improvement

Our quality control staff is fully equipped in order to ensure the integrity of the part and that it is in accordance with the manufacturing specifications required for your product. That control is practiced throughout the entire manufacturing process, to provide ready detection of any discrepancies and to ensure corrective action is taken.

Our quality assurance equipment is equipped with standard gages and metrology equipment, including an optical computer, hardness testers, surface roughness testers and other special meters and gages as required. All gages and measuring equipment throughout the company are maintained in accordance with MIL-I-45208A standards. In addition we have a Brown and Sharpe One shop floor CMM with automatic probe head at our Plant 1 facility and a Faro Sterling Arm multi-axis probe at our Plant 3 facility.

ISO 9000 Certification Status and AIAG/PPAP Compliance

K & S Tool and Manufacturing Company is ISO 9000 certified since September 1999. We are certified and registered under number A8265 to the ISO 9001:2000 requirements. In addition, we are capable of providing AIAG compliant PPAP documentation as required by our customers.

We can work from CAD models and drawings directly into our processes. For your convenience we accept computer files of the following format:

- ❖ .DXF
- ❖ IGES
- ❖ AutoCAD .DWG
- ❖ Solid Edge
- ❖ Amada CAD .DWG
- ❖ ProE .STP files
- ❖ Metamation files

Software

We use the following software packages in our business and manufacturing functions:

- ❖ Alliance MFG – for MRP, CRP and shop floor documentation
- ❖ Cebos MQ1 – for quality functions including AIAG/PPAP
- ❖ AutoCAD LT – for light duty 2D CAD applications
- ❖ Solid Edge – for 3D modeling
- ❖ Metamation – for CAM output to our laser and turret press equipment
- ❖ Quickbooks – for our accounting functions

Precision CNC Machining

Machining Centers

- * **Daewoo/Doosan DMV4020 Vertical Machining Center** – Fanuc 21i-MB control – 24 station ATC – 40 x 20 x 24.6 travel – 47.2 x 19.7 table – 20 HP, 8,000 rpm spindle motor – **New 2007**
- * **Okuma MF-46VA CNC 2-pallet Vertical Machining Center** – Okuma OSP-E100M control – 32 station ATC – 30 x 22 x 18 travel – 30 x 18 table – 30 HP, 15,000 rpm spindle motor – thru the spindle coolant – **New 2005**.
- * **Matsuura H-Plus 405 Horizontal Machining Center** – 2-pallet system, Matsuura 16i control – 31 station ATC – 23.62 x 23.62 x 23.62 travel – 19.7" square table – 30 HP, 12,000 rpm spindle motor – thru the spindle coolant – **New 2004**
- * **Matsuura RA-II F CNC 2-pallet Vertical Machining Center** - Yasnac I-80 control - 30 station ATC - 23.6 x 16.1 travel - 23.6 x 14.9 pallet size - 7.5 HP spindle motor - **New 1996**.
- * **Matsuura RA-II F CNC 2-pallet Vertical Machining Center** - Yasnac I-80 control - 30 station ATC - 23.6 x 16.1 travel - 23.6 x 14.9 pallet size - 7.5 HP spindle motor - Thru-spindle coolant system - **New 1994**
- * **Matsuura RA-II F CNC 2-pallet Vertical Machining Center** - Yasnac I-80 control - 20 station ATC - 23.6 x 16.1 travel - 23.6 x 14.9 pallet size - 7.5 HP spindle motor - **New 1993**
- * **Matsuura RA-I F CNC 2-pallet Vertical Machining Center** - Yasnac I-80 control - 20 station ATC - 20.0 x 15.7 travel - 23.6 x 14.9 pallet size - 7.5 HP spindle motor - **New 1992**
- * **Kitamura Mycenter-2 CNC Vertical Machining Center** - Fanuc OMC control - 20 station ATC – 23 x 16.9 work capacity - 4.9" max. tool dia. - 7.5 HP spindle motor - **New 1992**
- * **Hurco KMB-I CNC Three-Axis Mill** – 14 x 24 Work Capacity
- * **Haas HRT-160 Rotary Table** - 160mm Servo Rotary Table w/air brake - **New 1997**

Turning Centers

- * **(2) Doosan/Daewoo Puma 240MB CNC Turning Centers** - Fanuc 21i-TB Control - 2½" bar capacity, 8-1/4" chuck capacity - 25 HP, 4500 rpm spindle - 12 tool position turret - C-Axis controlled live tooling capability in all tool stations, **New 2006, 2008**
- * **LNS EcoLoad Servo Bar Feeder** - ¼" to 3-1/8" dia x 59" max. bar capacity, pneumatic servo driven loading, programmable, interfaced with Puma 240MB – **New 2006**
- * **Nakamura Tome TW-20-6 Twin Spindle Twin Turret 7 Axis CNC Turning Center** - Fanuc 18T Control - 2½" bar capacity (left spindle), 2" bar capacity (right spindle), 8" chuck capacity - (2) 20 HP spindles - (2) 12 tool position turrets - C-Axis controlled live tooling capability in all tool stations, **New 2000**
- * **Nakamura Tome TW-20-6 Twin Spindle Twin Turret 6 Axis CNC Turning Center** - Fanuc 18T Control - 2½" bar capacity (left spindle), 2" bar capacity (right spindle), 8" chuck capacity - (2) 20 HP spindles - (2) 12 tool position turrets - C-Axis controlled live tooling capability in all tool stations, **New 1998**
- * **LNS Quick Load Servo Bar Feeder** - ¼" to 3-1/8" dia x 59" max. bar capacity, GE Fanuc servo driven loading, programmable, interfaced with each of the Nakamura Tome TW-20's – **New 1998, New 2000**
- * **Miyano LE-22B CNC Turning Center** - Fanuc 18TA Control - 2" bar capacity, 8" chuck - 25 HP spindle - 10 tool positions - **New 1995**
- * **Miyano JNC-60 CNC Turning Center** - Fanuc 3T control - 2-3/8" dia. bar feed with 18½" turned between centers and 10" chuck capacity - **New 1985**
- * **Miyano JNC-60 CNC Turning Center** - Fanuc OT control - 2-3/8" dia. bar feed with 18½" turned between centers and 10" chuck capacity - **New 1987**

Stamping

Large Straight Side Presses

- * **Wean McKay Punch Press** - 400 Ton Straight Side – 48"x 84" Bolster with Draw Cushions - 16" Stroke - with Jaybird J201124 Feeder and Jaybird CS-2464 .156 thick x 24" wide 10,000 lb. capacity cradle and straightener – capable of handling .250 and .312 thick coil in narrower sizes
- * **Minster Punch Press** - 250 Ton Straight Side – 48"x 84" Bolster with Draw Cushions - 16" Stroke - with Littell .125 - .187 thick x 18"-8" wide straightener
- * **Niagara Punch Press** – 200 Ton Straight Side – 42" x 72" Bolster – 8" stroke, 25" shut height – 30 to 60 strokes per minute variable drive
- * **Niagara Punch Press** – 150 Ton Straight Side – 42" x 72" Bolster – 10" stroke, 25" shut height – 30 to 60 strokes per minute variable drive
- * **Verson Punch Press** - 125 Ton Straight Side Double Crank – 42" x 60" Bolster - 10" Stroke - 22" Shut Height - air cushions - 8" stroke - with auto feeder - .125" thick x 10" wide x 30" max. feed length
- * **Warco Punch Press** - 75 Ton Straight Side Double Crank - 72" x 26" bolster, 8" stroke, 19" shut height SDAU, 45 strokes per minute

Hydraulic Presses

- * **Rodgers Hydraulic Press** - Model MD125-2629A-WE - 125 Ton capacity, 18" stroke
- * **Dake Hydraulic Press** - 100 Ton - 4 Post Type - 30" x 32" bed, 0 - 24" stroke, 36" maximum daylight opening

OBI Presses

- * **Niagara Punch Press** - 110 Ton - O.B.I. - with Egan auto feeder - .187" thick x 12" wide x 18" max. feed length
- * **Federal Punch Press** - 100 Ton - O.B.I. - with multi-stroke & Jaybird auto feeder - .125" thick x 18" wide x 12" max. feed length
- * **Federal Punch Press** - 80 Ton – O.B.I.
- * **Minster Punch Press** - 75 Ton - with Di-Namic master die set & air cushion and auto feeder - .125" thick x 6" wide x 12" max. feed length
- * **Federal Punch Press** - 70 Ton - O.B.I.
- * **L & J Punch Press** - 65 Ton - O.B.I.
- * **Bliss Punch Press** - 60 Ton - O.B.I. - with Multi-Stroke & Auto Feed
- * **(4) Clearing Torc-Pac Punch Presses** - 60 Ton - O.B.I.
- * **V & O Punch Press** - 50 Ton - O.B.I. #5
- * **Minster No. 5 Punch Press** - 45 Ton - O.B.I.
- * **Federal Punch Press** - 46 Ton - O.B.I.
- * **(3) Clearing Torc-Pac Punch Presses** - 45 Ton - O.B.I.
- * **Bliss Punch Press** - 45 Ton - O.B.I.
- * **(3) U.S.I. Clearing Punch Presses** - 32 Ton - O.B.I.
- * **Minster Punch Press** - 32 Ton - O.B.I.
- * **Rouselle No. 3 Punch Press** - 25 Ton - O.B.I.
- * **Walsh Punch Press** - 25 Ton - O.B.I.
- * **Rouselle Punch Press** - 15 Ton - O.B.I.

Shearing Equipment

- * **Niagara Power Shear** - 3/8 x 8' capacity
- * **Wysong Power Squaring Shear** - 1/4 x 10' capacity
- * **Wysong Power Shear** - 14 Gage x 52" capacity
- * **Frederick Foot Shear** - 18 Gage x 36"

Miscellaneous Stamping Equipment and Accessories

- * **Pines Rotary Tube/Rod Bender** – 1-1/4 tube capacity, 1/2 dia steel rod capacity, with mandrel, CNC controlled
- * **Di-Acro Press Brake** - 14 Gage x 6' capacity - With extensive brake rails and punches
- * **Pexto Hand Brake** - 18 Gage x 36"
- * **Diacro Hand Bender** - 1/2" dia. capacity
- * **Tennsmith Bending Roll** - 18 Gage x 36"
- * **(2) Littell Continuous Stock Straighteners** - .040"x8" capacity
- * **(4) Littell Coil Cradle and Continuous Stock Straighteners**
- * **Rowe Continuous Stock Straightener** to .125" thick
- * **(5) Littell Coil Reels** – 650 to 1000 pound capacity
- * **(2) Littell Coil Reels** - 1000 pound capacity
- * **(2) Coil Cradles** - 600 pound capacity
- * **Rapid Air Feeders** – Various sizes and strokes

Sheet Metal and Tubing Fabrication

- * **Mitsubishi LXP-4030D Laser** – 3000 Watt Laser, 48" x 96" sheet size, two pallet shuttle system, 5/8" thick mild steel, 1/2" thick stainless, 3/8" thick aluminum – ***Manufacturer Refurbished 2008.***
- * **Amada EM2510 Servo/Electric High Speed CNC Turret Punch Press** – 50" x 100" sheet size without repositioning, 20 Ton, 45 station (4 auto index), up to 1800 spm punch rate - ***New 2005.***
- * **Amada MP1530 Robotic Sheet Loader** - 120"x60" sheet capacity, 5500# maximum - interfaced to EM2510 Turret Press – ***New 2005.***
- * **Amada Apelio 357V CNC Laser/Punch Combination Machine** - 2000 Watt Laser, 33 Ton, 58 station turret, 72"x70" travel, 1/4" thick mild steel, 3000+" in/min positioning - ***New 2001.***
- * **Amada MP1530 Robotic Sheet Loader** - 120"x60" sheet capacity, 5500# maximum - interfaced to Apelio 357V Laser/Punch - ***New 2001.***
- * **Amada Pulsar 1212XL CNC Laser**- 2000 Watt, 50"x50" travel, 1/2" thick mild steel, 3000+" in/min positioning - ***New 1999.***
- * **Amada PL404 Robotic Sheet Loader** - 50"x50" sheet capacity, 2000# maximum - interfaced to Pulsar 1212XL Laser - ***New 1999.***
- * **Amada Vipros 345 CNC Turret Punch Press** - Amadan 04P-C+ PHNC Control - 33 Ton, .25" capacity - 58 station turret, 1968 in/min positioning - 39.37" x 50" max. sheet size - ***New 1994.***
- * **Amada MP-1212 Robotic Sheet Loader** - 50" x 50" sheet capacity, 4,400# maximum - interfaced to Vipros 345 Turret Punch Press - ***New 1994.***
- * **Amada HFE170-4S Hydraulic Press Brake** -187 Ton, 166" Bending Length, 7.8" Stroke Length, Operateur CNC Control – ***New 2003.***
- * **(2) Amada FBD8025 Hydraulic Press Brake** - 88 Ton, 5 HP - 102" Bending Length, 3.9" Stroke Length, Windows NT Control – ***New 2005, 2001.***
- * **Amada Fine Alpha Bender FDB5020EX Hydraulic Press Brake** - 55 Ton, 5 HP - 82.1" Bending Length, 3.9" Stroke Length - ***New 1994.***
- * **Amada 1991 RG-80 Hydraulic Press Brake** - 58 Ton, 5 HP - 102" Bending Length, 3.9" Stroke Length - bought used 1998.
- * **Amada 1991 RG-100L Hydraulic Press Brake** - 110 Ton, 13 Foot Length, 3.9" Stroke - bought used 1999.
- * **Pemserter Series 4 Press** - For inserting pem fasteners - 500 to 12,000 lbs force, 18" throat depth, 2.5" stroke, pneumatic.
- * **(2) Scotchman CPO350 PKPD Cold Saws** – Semi-automatic operation, 14" max dia blade, 2" dia round steel bar capacity, 4-7/8" round tubing capacity
- * **Horn Machine CNC100TBRE Tube Bending/Rolling Machine** – 4" dia tube, 3" square tube, 1.375 dia solid steel rod capacity, double stack with roll form capability, with mandrel, CNC controlled – ***New 2007***

Welding and Brazing

- * **400A Lincoln Power Wave 455MSST Robotic Welding Station** – Two independent stations, fully programmable 6' Fanuc robotic arm controlled in a full range of motion in multiple axes, MIG wire feed, Lincoln Model F355i welding control, 400A power supply – **New 2005**.
- * **350A OTC Robotic Welding Station** – Two independent stations, fully programmable 6' robotic arm controlled in a full range of motion in multiple axes, MIG wire feed, Model CPDP-350 welding control, 350A power supply – **New 2004**.
- * **200A OTC AC Mig Robotic Welding Station** – Three independent stations, fully programmable 6' Almega EX-6V robotic arm controlled in a full range of motion in multiple axes, MIG wire feed with Wire Attachment, especially effective for welding sheet metal enclosures and lighter parts, 200A AC power supply – **New 2003**.
- * **350A OTC DR-400 Robotic Welding Station** – Two independent stations, fully programmable 6' robotic arm controlled in a full range of motion in multiple axes, MIG wire feed with Wire Attachment, Model CPVPS-350 welding control, 350A power supply – **New 1999**.
- * **Miller CP302** - MIG wire feed with Wire Attachment
- * **Miller CP300** - MIG wire feed with Wire Attachment
- * **Miller CP200** - MIG Wire Feed with Aluminum Wire Attachment
- * **(2)Miller CP200** - MIG Wire Feed with Attachment
- * **Hobart** Automatic Wire Feed
- * **Hobart 200** - Stick and TIG
- * **OTC TIG Welder** - TIG
- * **Hobart 300** - Automatic Wire Feed & Controls
- * **Oxy-Acetylene Outfit** – for brazing and soldering

Assembly

- * **Taumel T-400** - Orbital Riveting Machine
- * **(2)Miller MPS20** – Rocker arm spot welders
- * **Precision 300 KVA** - Press-type spot welder with Weltronic/Technitron control
- * **Federal 200 KVA** - Press-type projection welder with Entron control
- * **Precision 75 KVA** - Press-type spot welder with Entron control and brazing option
- * **Schreiber** - 3-ton Water Chiller serving spot welders
- * **National Rivet Setting Machine** – Joining with hollow rivets, bowl feeder attachment
- * **Bench Assembly** - Hand assembly of components with fasteners, etc.
- * **POP Riveting** - Joining with POP style rivets using pneumatic tools.
- * **Special Assembly Operations** - Special assembly operations using customer provided equipment transferred from customer plants.

Tool and Die Department

- * **Sodick A-280 Wire-Cutting Electronic Discharge Machine (EDM)** - Three-axis movement, 11.8"x7.8" table travel, 15.7"x11.8"x6.7" max. work capacity
- * **Leadwell MCV-760AP CNC Machining Center** - Fanuc OMF control - 24 station ATC - 20" x 30" work capacity - 4½" max. tool dia. - 15 HP spindle motor - **New 1991**
- * **Bridgeport Vertical Mills** - 9x42 - Power and Horizontal Attachments
- * **Wells Index Vertical Mill** - 9x42
- * **Harig 618 Automatic Grinder** - Wet or Dry Surface
- * **Boyar Schultz Six Eighteen Challenger Grinder** - Surface
- * **Boyar Schultz Six Twelve Deluxe Grinder** - Surface
- * **Boyar Schultz Six Twelve Deluxe Grinder** - Wet or Dry - Surface

- * **Brown and Sharpe Grinder** - 8x24 - Wet or Dry - Surface
- * **W.F. Wells & Sons Saw** - Horizontal Band - 8x12 capacity
- * **GROB Saw** - Vertical Band - 24" capacity
- * **Nardini Lathe**
- * **Harrison Lathe**
- * **Heat Treat Furnace** - 8"x8"x24" - Electric
- * **Farquhar Hydraulic Press** - 125 Ton – for straightening and pressing

Miscellaneous Machining Services

Grinding and Honing Machines

- * **Matteson Rotary Grinder** - 42"x11" range - 3,000 lb. max. work load
- * **Cincinnati Centerless Grinder** - Wet
- * **Reid 618V Automatic Grinder** - Wet or Dry Surface
- * **Proth 618 Manual Grinder** - Wet or Dry Surface
- * **Sunnen Honing Machine**

Metal Finishing Equipment

- * **Gibson** Spinner Hanger Shot Blast Cabinet – 36 x 60" rotary capacity
- * **Empire** Sand Blast Cabinet
- * **(2) Sweco** Rotary Finishing Mill - 20 cu. ft.
- * **Sweco** Rotary Deburring Machine - 10 cu. ft.
- * **Sweco Rotary Deburring Machine** - 7 cu. ft.
- * **Timesaver Belt Sander** – 13" wide conveyer and belt
- * **Scantool Belt Sander** - 6" Wide
- * **Queen City Belt Sander/Grinder Combination**