



Your Contract and Custom Manufacturing Needs from A-Z

The list below proves that the BTD list of capabilities is a long one. Many of our customers choose us because of our vast range of contract and custom manufacturing capabilities.

Whether you need to partner with BTD to engineer and manufacture one component of a larger project or you need BTD to handle a metal fabrication project from start to finish, we are the job shop that can make it happen.

The BTD Suite of Manufacturing Capabilities

- Assembly
- Finishing
- Tooling
- Stamping
- Fabrication
- Tubing
- Welding
- Machining
- Quality Control

Investing in Metals Innovation

Every year BTD invests in metal fabrication innovation. Whether it's partnering with another leader in our industry or developing a new metalworking solution, it's our intention to stay in front of your contract and custom manufacturing needs.



First Class Work for World-Class Brands

It is said you are judged by the company you keep. With that in mind, BTD is proud to serve some of the best brands in their respective industries.

Our work with these companies is strictly confidential, but you can see the locations of some of the top brands we work with below:





Assembly

Automated Assembly

- (6)-Automated self piercing riveting machines,
- (4)-With Fanuc robots and (2) – with Motoman robots ([Detroit Lakes & Lakeville, MN](#))

Self Piercing Riveters

- (10)-Henrob self-piercing riveters, joint thickness 1mm to 6mm steel/1mm to 10mm aluminum, 20" throat depth ([Detroit Lakes & Lakeville, MN](#))

Insertion Machines

- (3)-Auto-Sert AS-7.5 insertion machine, 20" throat depth, 300 to 15,000 lb force range ([Detroit Lakes & Lakeville, MN](#); [Washington IL](#))
- Haeger 824 One Touch 3 multi bowl insertion machine, 24" throat depth, 1,000 to 16,000 lb force range, 4 station automatic tool changing system with servo driven upper axis ([Lakeville, MN](#))
- (1) Haeger Model HP6-B 6-Ton Stud Insertion Press ([Dawsonville, GA](#))
- (1) Haeger Model 824-IL 8 Ton x 24 " Stud Insertion Press ([Dawsonville, GA](#))

Other Assembly Capabilities

- (4)-Hydraulic C-frame presses, up to 500 ton, up to 30.75" x 50.25" bed size, up to 36" stroke ([Washington, IL](#))



Finishing

Tumblers

(8)-Tumblers up to 20 cubic feet capacity ([Detroit Lakes & Lakeville, MN](#); [Washington, IL](#))

Belt Sanders

Timesaver belt sander, max width 12" ([Detroit Lakes, MN](#))

Timesaver belt sander, max width 36" ([Lakeville, MN](#))

Timesaver dual head belt sander, max width 12" ([Lakeville, MN](#))

Grindingmaster MB-900 belt grinder, max width 36" ([Washington, IL](#))

Timesaver belt sander, max width 37" ([Lakeville, MN](#))

Oxide Removal Machine

Lissmac laser oxide removal machine, max thickness .750" x 60" ([Lakeville, MN](#))

Blasting

Wheelabrator table type blast finishing machine, 96" diameter table, media augur, media return ([Washington, IL](#))

Wheelabrator air blast room, single end entry, double swinging doors, 20' x 40' x 14' high inside dimensions, roof slot, sand or steel shot capable ([Washington, IL](#))

Painting

(1) Precision Quincy 6-FPM Iron Phosphate Paint Line: Precision Quincy Overhead Trolley Conveyor, Wagner In-Line Powder Coat Booth, Precision Quincy Model 13298 In-Line Parts Washer, Precision Quincy In-Line Dry-Off/Cure Paint Oven ([Dawsonville, GA](#))



Tooling

Vertical Machining Centers

Mazak VARIAXIS 730-5X, 5 axis, 10k spindle, CAT 50 Taper, 28.7" x 33.4" table travel, 120 tool ATC, 1,000 psi coolant thru, 1,102 lb table capacity ([Detroit Lakes, MN](#))

Johnford DMC2600SH, 8K spindle, CAT 50 Taper, 70" x 102" table travel, 60 tool ATC, 1,000 PSI coolant thru, 22,000 lb table capacity ([Lakeville, MN](#))

Johnford DMC1600H, 6K spindle, CAT 50 Taper, 51" x 63" table travel, 60 tool ATC, pallet changer, 1,000 PSI coolant thru, 13,200 lb table capacity ([Lakeville, MN](#))

OKK VM5III, 10k spindle, CAT 50 Taper, 22" x 41" table travel, 30 tool ATC, 1,000psi coolant thru, 1,760 lb table capacity ([Detroit Lakes, MN](#))

OKK MCV 1060, 13K spindle, CAT 50 Taper, 44" x 84" table travel, 60 tool ATC, pallet changer, 1000 PSI coolant thru, 11,020 lb table capacity ([Detroit Lakes, MN](#))

Supermax V116B, 6k spindle, CAT 50 Taper, 23.5" x 47" table travel, 24 tool ATC, 2,646 lb table capacity ([Lakeville, MN](#))

Supermax TV146B, 10k spindle, CAT 50 Taper, 23.5" x 59" table travel, 40 tool ATC, 3,307 lb table capacity ([Lakeville, MN](#))

YCM TV-146B, 6,000 RPM spindle, CAT 50 Taper, 24" x 55" table travel, 40 tool ATC, 1000PSI coolant thru, 3,300 lb table capacity ([Detroit Lakes, MN](#))

Makino PS95, 14k spindle, CAT 40 Taper, 20" x 36" table travel, 30 tool ATC, 1,323 lb table capacity ([Lakeville, MN](#))

Johnford SV32, 10K spindle, CAT 40 taper, 20" x 32" table travel, 24 tool ATC, 1,750 lb table capacity ([Lakeville, MN](#))

YCM DCV2012B, 10K spindle, BT50 taper, 43.3" x 78.74", 60 tool ATC, 1000 PSI coolant thru, 8818 lb table capacity ([Washington, IL](#))

Manual Equipment

(6)– Geared Head Drill Presses ([Detroit Lakes & Lakeville, MN](#))

(7)– Radial Arm Drill Presses ([Detroit Lakes & Lakeville, MN](#))

(14) – Surface Grinders ([Detroit Lakes & Lakeville, MN](#))

(6) – Hydraulic Grinders up to 20" x 60" ([Detroit Lakes & Lakeville, MN](#))

(3) – Blanchard Grinders up to 60" ([Detroit Lakes & Lakeville, MN](#); [Washington, IL](#))

Medina End Grinder ([Detroit Lakes & Lakeville, MN](#))

(14) – Vertical Mills all with digital readouts ([Detroit Lakes & Lakeville, MN](#))

(2)–Horizontal Mills ([Detroit Lakes & Lakeville, MN](#))



(4) – Engine Lathes up to 28" x 60" (Detroit Lakes & Lakeville, MN)

(2)– Horizontal Band Saws (Detroit Lakes & Lakeville, MN)

(2)– Vertical Band Saws (Detroit Lakes & Lakeville, MN)

EDM Hole Drills

(2) – Agie Charmilles Drill 11, 15.75" x 11.8" table size (Detroit Lakes & Lakeville, MN)

EDM's

Agie Charmilles 440 Robofil, 13.7" x 21.5" table size, auto threader (Lakeville, MN)

(2) – Agie Charmilles 510A, 15.7" x 28.5" table size, auto threader, auto slug eject (Lakeville, MN)

Agie Agicut Challenge 3, 21.5" x 33.5" table size, auto threader (Detroit Lakes, MN)

Agie Agicut Progress 3, 21.5" x 33.5" table size, auto threader (Detroit Lakes, MN)

Mitsubishi DWC-110, 11.84" x 17.75" table size (Detroit Lakes, MN)

Fanuc Alpha C600iA-12", 15.7" x 23.6" table size, autothreader (Washington, IL)

Tryout Presses

Verson 600 ton, 60" x 108" bed size (Lakeville, MN)

Verson 500 ton, 60" x 108" bed size (Detroit Lakes, MN)

Warco 350 ton, 60" x 96" bed size (Lakeville, MN)

Bliss 300 ton, 48" x 72" bed size (Lakeville, MN)

Warco 300 ton, 42" x 73" bed size (Lakeville, MN)

Minster 150 ton, 45" x 60" bed size (Lakeville, MN)

Komatsu 110 ton, 24" x 43" bed size (Detroit Lakes, MN)

PA Industries SRF M32 electronic servo controlled feeder (Lakeville, MN)

Coil straightener's to 36" wide (Detroit Lakes & Lakeville, MN)

Coil reels with capacities up to 10,000 lbs (Detroit Lakes & Lakeville, MN)

(2) – Heat Treat Ovens (Detroit Lakes, MN)

Water Jets

Omax 5555, 40 hp/60,000 psi pump, table size 80" x 65", work envelope size(X) 55" x (Y) 55" x (z) 8" , repeatability +/- 0.0013", max work piece load 250lbs/sq. ft. (Detroit Lakes, MN)



Stamping

45 Ton Punch Presses

Komatsu blanking press, bolster size 17.75" x 31.50", feed line max thickness .125" x 12"-.180" x 6" (Detroit Lakes, MN)

Komatsu blanking press, bolster size 17.75" x 31.5", feed line max thickness .074" x 8" (Lakeville, MN)

60 Ton Punch Press

Stamtec forming press, bolster size 35.50" x 19.75" (Detroit Lakes, MN)

80 Ton Punch Presses

Komatsu forming press, bolster size 23.50" x 39.375" (Detroit Lakes, MN)

Komatsu forming press, bolster size 23.50" x 39.375" (Detroit Lakes, MN)

(2) Amada Model TP80C 80 Ton Punch Press (Dawsonville, GA)

110 Ton Punch Presses

Komatsu blanking press, bolster size 27.50" x 43.375", feed line max thickness .075" x 24"-.105" x 18" (Detroit Lakes, MN)

Komatsu forming press, bolster size 27.50" x 43.375" (Detroit Lakes, MN)

Komatsu blanking press, bolster size 27.50" x 43.375", feed line max thickness .105" x 18"-.165" x 6" (Detroit Lakes, MN)

Komatsu forming press, bolster size 27.50" x 43.375" (Detroit Lakes, MN)

Komatsu blanking press, bolster size 27.50" x 43.375", feed line max thickness .105" x 18"-.179" x 6" (Detroit Lakes, MN)

Komatsu forming press, bolster size 27.50" x 43.375" (Detroit Lakes, MN)

121 Ton Punch Presses

(1) Seyi Model SN1-121 121 Ton Punch Press with Feed Line (Dawsonville, GA)

150 Ton Punch Presses

Komatsu blanking press, bolster size 31.50" x 49.25", feed line max thickness .105" x 18"-.179" x 6" (Detroit Lakes, MN)

Komatsu blanking press, bolster size 31.50" x 49.25", feed line max thickness .135" x 18"-.179" x 8" (Detroit Lakes, MN)

Komatsu blanking press, bolster size 30" x 82.375", feed line max thickness .012" x 2.2"-.125" x 24" (Lakeville, MN)



200 Ton Punch Presses

Komatsu blanking press, bolster size 35" x 57", feed line max thickness .075" x 24"- .179" x 8" (Detroit Lakes, MN)

Komatsu blanking press, bolster size 35" x 57", feed line max thickness .105" x 24"- .187" x 6" (Detroit Lakes, MN)

Aida blanking press, bolster size 33" x 95.20", feed line max thickness .105" x 24"- .179" x 14" (Detroit Lakes, MN)

Komatsu blanking press, bolster size 24" x 33", feed line max thickness .125" x 36" (Detroit Lakes, MN)

Komatsu forming press, bolster size 24" x 60" (Detroit Lakes, MN)

250 Ton Punch Presses

Komatsu blanking press, bolster size 37.40" x 106.20", feed line max thickness .090" x 36"- .500" x 6" (Detroit Lakes, MN)

Komatsu blanking press, bolster size 37.40" x 106.20", (Detroit Lakes, MN)

300 Ton Punch Press

Komatsu H2W 300S Servo press, bolster size 47.2" x 94.5", feed line max thickness .125" x 36"- .187" x 24" (Detroit Lakes, MN)

400 Ton Punch Press

Komatsu blanking press, bolster size 60" x 120", feed line max thickness .125" x 36" (Detroit Lakes, MN)

600 Ton Punch Press

Blow blanking press, bolster size 60" x 120", feed line max thickness .021" x 36"- .187" x 10" (Detroit Lakes, MN)

800 Ton Punch Press

Komatsu blanking press, bolster size 60" x 120", feed line max thickness .187" x 24"- .500" x 12" (Detroit Lakes, MN)

Leveler

Herr-Voss leveler, max thickness .090" x 36"- .190" x 10" (Detroit Lakes, MN)



Fabrication

Lasers

Automated Laser System - (2) - Trumpf TRULASER 5030, 5,000 watt, table size 60" x 120", fully automated with 11 material shelves (6000# cap. each) on the tower, repeatability .0012", max work piece weight 2044 lbs, max material thickness 1.00" steel, .750" stainless steel, .500" aluminum ([Lakeville, MN](#))

Trumpf TRULASER 5040, 5,000 watt, table size 80" x 158", max material thickness 1.00" steel, .750" stainless steel, .500" aluminum ([Washington, IL](#))

(2)-Trumpf TRULASER 3030, 5,000 watt, table size 60" x 120", max material thickness 1.00" steel, .750" stainless steel, .500" aluminum ([Lakeville, MN](#))

Trumpf TRULASER 3050, 5,000 watt, table size 60" x 120", max material thickness 1.00" steel, .750" stainless steel, .500" aluminum ([Washington, IL](#))

Mitsubishi ML 3015 LVPS, 4,000 watt, table size 60" x 120", sheet loader, repeatability .00039", max work piece weight 1521 lbs, max material thickness .750" steel, .375" stainless steel, .250" aluminum ([Detroit Lakes, MN](#))

Mitsubishi ML 3015 LVPS, 4,000 watt, table size 60" x 120", sheet loader, repeatability .00039", max work piece weight 1521 lbs, max material thickness .750" steel, .375" stainless steel, .250" aluminum ([Detroit Lakes, MN](#))

(2) Mitsubishi Model 3015LVP35CF 3500 Watt CO2 60 x 120 Sheet Laser with 5 Shelf Automation ([Dawsonville, GA](#))

(2) Mitsubishi Model ML3015LVP40CFX 4000 Watt CO2 60 x 120 Sheet Laser with 8 Shelf Automation ([Dawsonville, GA](#))

(1) Mitsubishi Model ML3015LVP 4000 Watt CO2 60 x 120 Sheet Laser with 8 Shelf Automation ([Dawsonville, GA](#))

(1) Mitsubishi Model ML3015eX 3000 Watt 60 x 120 Sheet Laser with 8 Shelf Automation ([Dawsonville, GA](#))

Punches

Automated Punching System - Trumpf TRUPUNCH 5000, fully automated with double material carts, 25 ton, 18 tool stations, max sheet size 60"(Y) x 120"(X), max material thickness .315" ([Lakeville, MN](#))

(1) Finn-Power Model Shear Genius (SG-6) 29.4 Ton Turret Punch ([Dawsonville, GA](#))

(1) Geke Model HYD110 Sheer/Punch Ironworker ([Dawsonville, GA](#))

(1) Geke Model P.P.-50 50 Portable Punch Machine / Ironworker ([Dawsonville, GA](#))



Shape Cutting Machines

Esab GXB-1400, Oxy type, 8 head, 96" x 120" bed size, cut up to 6" plate ([Washington, IL](#))

Genesis beveling torch, 10' radius, 16' straight, 5" thick plate ([Washington, IL](#))

Rolling

Bertsch plate bending roll, initial type, 6' x 5/8" rated capacity, power rear roll adjustment ([Washington, IL](#))

Bertsch plate bending roll, initial type, 10' x 1/4" rated capacity, power rear roll adjustment ([Washington, IL](#))

Irlle B100HH ring former/bar bender, 1-3/4" capacity in flat bar ([Washington, IL](#))

Steinweg B40 ring former/bar bender, 1-9/16" capacity in flat bar ([Washington, IL](#))

(1) Roundo Model PASS205 6' x 5/16 Plate Bending Roll ([Dawsonville, GA](#))

Press Brakes

Pacific K-600-11, 600 ton, bending length 168" ([Washington, IL](#))

Amada HFE 220-4s, 242 ton, bending length 156", repeatability 0.0004" ([Lakeville, MN](#))

Cincinnati 230AF, 230 ton, bending length 144" ([Washington, IL](#))

(2)-Bystronic Xpert 150, 165 ton, bending length 122", 0.00015", Bysoft offline programming ([Detroit Lakes, MN](#))

Amada HFE 130-3s, 143 ton, bending length 122", repeatability 0.0004" ([Washington, IL](#))

(2)-Amada HFBO 125, 137 ton, bending length 122", repeatability 0.0004" ([Detroit Lakes, MN](#))

Cincinnati 135 PROFORM, 135 ton, bending length 120", repeatability 0.0004" ([Lakeville, MN](#))

Toyokoki HYB-85, 93 ton, bending length 98.425", repeatability 0.0002" ([Lakeville, MN](#))

Accupress 7606, 60 ton, bending length 72", repeatability 0.001" ([Detroit Lakes, MN](#))

Toyokoki APB-3613WU, 36 ton, bending length 51.18", repeatability 0.00004" ([Detroit Lakes, MN](#))

Toyokoki APB-286, 28 ton, bending length 23.62", repeatability 0.00004" ([Lakeville, MN](#))

Toyokoki APB-1840, 18 ton, bending length 15.75", repeatability 0.00004" ([Detroit Lakes, MN](#))

Toyokoki APB-062, 6 ton, bending length 7.8", repeatability 0.00004" ([Lakeville, MN](#))

(2) Toyokoki Model APB5613 56 Ton Electric Press Brake ([Dawsonville, GA](#))



- (1) Toyokoki Model APB5613W 56 Ton Electric Press Brake ([Dawsonville, GA](#))
- (1) Toyokoki Model HYB250 250 Ton Hybrid Electric / Hygralic Press Brake ([Dawsonville, GA](#))
- (4) Safan Model 50-2050 50 Ton Electric Press Brake ([Dawsonville, GA](#))
- (1) Safan Model 200-4100 200 Ton Electric Press brake ([Dawsonville, GA](#))

Shears Power Squaring

Cincinnati 500 Plus CNC power squaring shear, 12' x 1/4" capacity in mild steel, 12' x 3/8" capacity in stainless steel, 30 strokes per minute, CNC back gauge 48" range, 13' squaring arm ([Washington, IL](#))

Cincinnati 2510 power squaring shear, mechanical type, 10' x 3/8" capacity in mild steel, 10' x 1/2" capacity in stainless steel, 50 strokes per minute, front operated power back gauge 36" range, 8' squaring arm ([Lakeville, MN](#))

Accushear 625010 power squaring shear, 10' x 1/4" capacity in mild steel, 10' x 3/8" capacity in stainless steel, 48 strokes per minute, CNC back gauge 36" range, 8' squaring arm ([Lakeville, MN](#))



Tubing

Tube Lasers

BLM LT FIBER, 2,000 watt, round tube size .500" to 5.50", square tube size .500" to 5", rectangle tube size .500" to 5", max material thickness .315" steel, .236" aluminum, .197" stainless steel, .197" Brass .118" copper, max tube length 27'-10", weld seam detection (Detroit Lakes, MN)

BLM LT712, 2,500 watt, round tube size .472" to 5.50", square tube size .472" to 4.72", rectangle tube size .472" to 5.11", max material thickness .375" steel, .250" aluminum, .250" stainless steel, max tube length 27'-10", weld seam detection (Detroit Lakes, MN)

(2)-BLM LT722D, 2,500 watt, round tube size .472" to 5.50", square tube size .472" to 4.72", rectangle tube size .472" to 5.11", max material thickness .375" steel, .250" aluminum, .250" stainless steel, max tube length 27'-10", weld seam detection (Detroit Lakes, MN)

Tube Benders

(2)-BLM E-Turn, fully electric, right and left hand bending with fixed and variable radius, multi stacked tooling (up to 8 stacks), max tube O.D. capacity 2" X .060" wall (Detroit Lakes, MN & Washington, IL)

BLM Dynamic 4, right and left hand bending, compound tooling, variable radius tooling, multi stacked tooling (up to 4 stacks), automatic tube loader, max round 1.75" with a .098" wall thickness, max square 1.375" with a wall thickness of .060", max tube length 252" (Detroit Lakes, MN)

BLM Dynamic 4, right and left hand bending, compound tooling, variable radius tooling, multi stacked tooling (up to 4 stacks), max round 1.75" with a .098" wall thickness, max square 1.375" with a wall thickness of .060", max tube length 252" (Detroit Lakes, MN)

BLM Dynamic 8, right hand bending, compound tooling, variable radius tooling, multi stacked tooling (up to 4 stacks), max round 5.00" with a .125" wall thickness, max square 3.50" with a wall thickness of .095", max tube length up to 4.00" round is 255", max length over 4.00" round is 86" (Detroit Lakes, MN)

(2)-BLM E Bend 76, right hand bending, compound tooling, multi stacked tooling (up to 4 stacks), max round 3.00" with a wall thickness of .125", max square 2.00" with a wall thickness of .083", max tube length 156" (Detroit Lakes, MN & Washington, IL)

Pines 40, left hand bending, compound tooling, max round 1.50" with a .098" wall thickness, max square 1.125" with a wall thickness of .109", max tube length 144" (Detroit Lakes, MN)

(1) BLM E52 Tube Bender (Dawsonville, GA)

(1) Pines Vertical Tube Bender (Dawsonville, GA)

Band Saws

Daito GA260W, capacity 11.8"W x 7"H, horizontal band saw (Detroit Lakes, MN)

Hyd-Mech H-14A, automatic, capacity 14"W x 14"H, horizontal bandsaw (Detroit Lakes, MN)



Hem-Saw BT-130HA-60, 16" x 16" round capacity, tilt frame, 60 to 400 FPM, vertical band saw ([Washington, IL](#))

Hyd-Mech V-18A, 20" x 20" round capacity, tilt frame, 65 to 385 FPM, vertical band saw ([Washington, IL](#))

Hyd-Mech S-23A, horizontal mitering type, 16" x 18" capacity ([Washington, IL](#))

(1) HYD-Mech Model H14A SV Horizontal Band Saw ([Dawsonville, GA](#))

Cold Saws

Scotchman 315HT, manual, ferrous, 16" blade ([Detroit Lakes, MN](#))

Behringer PSU-450-GS, up cut, semi automatic, ferrous, 17.7" blade ([Detroit Lakes, MN](#))

End Former

Eagle Precision, reducing and expanding, max tube size 3.00" round with a wall thickness of .125" ([Detroit Lakes, MN](#))

End Chamfering Machine

Soco DEF-FA/60SS double end finishing machine, .875" to 2.5" OD, 1" to 12" long ([Detroit Lakes, MN](#))



Welding

Robot Welders

Genesis dual arm robot with turntable and trunion, part envelope size is 94.125"W x Ø36", 2 Lincoln Powerwave 455 power supplies ([Lakeville, MN](#))

Genesis, trunion style, part envelope size 48" x 96", Powermate 655 power source ([Washington, IL](#))

Genesis Versa system, trunion type, part envelope size 36" x 60", Idealarc CV-40C power supply ([Washington, IL](#))

ABB Flexarc 1000K dual arm with trunion, part envelope size 157"W x Ø55", 2 Miller Axxess 650 power supplies ([Lakeville, MN](#))

(2)-ABB Flexarc 600R dual arm with trunion, part envelope size 78" W x Ø47", 2 Miller Axxess 450 power supplies ([Detroit Lakes, MN & Lakeville, MN](#))

(7)-ABB Flexarc R 250-1600 robot welder with turntable and trunion, part envelope size 63"W x Ø39.37", Miller Axxess 455 power supply and Fronius CMT4000 aluminum power supply ([Detroit Lakes, Lakeville, MN & Washington, IL](#))

Motoman robot welder with turn table, part envelope size 36"W x 16"D x 16"H, Sensarc 350 power supply ([Detroit Lakes, MN](#))

(2) Cloos Robot Welders with Cloos Turntable 2 Position ([Dawsonville, GA](#))

(1) OTC Daihen Robotic Weld Cell Model

Fusion ARC Bullet weld Cell with 3 Position Turntable ([Dawsonville, GA](#))

Resistance Welders

(2)-Spot Weld Inc. press type, 100 KVA, 8mm auto feed ([Detroit Lakes, MN; Washington, IL](#))

(2)-Spot Weld Inc. press type, 100 KVA, 6mm auto feed ([Detroit Lakes, MN; Washington, IL](#))

(1) Spot Weld Inc. press type, 100 KVA, 3/8-16 auto feed ([Detroit Lakes, MN](#))

(2)-Spot Weld Inc. press type, 100 KVA ([Lakeville, MN](#))

(1) Standard Model Spot 1-Head Spot Welder ([Dawsonville, GA](#))

(1) Rapco Model 6120-12 1 head Spot Welder ([Dawsonville, GA](#))

(1) Rapco Model 68512 1 head Spot Welder ([Dawsonville, GA](#))

(1) Standard Model Spot 2 - Head Spot Welder ([Dawsonville, GA](#))

(1) Standard Model FR450 1 Head Rocker-Arm Spot Welder ([Dawsonville, GA](#))

Stud Welder

HBS Stud welder with auto feed, welding range #4 to 5/16" – M3 to M8 ([Detroit Lakes, MN](#))



Mig/Tig Welders

(5) Fronius Model TransPuls Synergic 4000 Mig Welder (Dawsonville, GA)

(1) Fronius Model TransPuls Synergic 4000 400-A Mig Welder (Dawsonville, GA)

(1) Fronius Model MagicWave 3000 Comfort Tig Welder (Dawsonville, GA)

(1) Miller Model XMT 350 CC/CV Mig Welder (Dawsonville, GA)

(61) – Weld Cells (Steel/Stainless/ Aluminum), mig, tig, latest model Miller welders, dual schedule, dual feeder, pulse, dual shield, and sub-merged arc (Detroit Lakes & Lakeville, MN; Washington, IL)

(2) ABB Welding Cell with 2 Position Turntable (Dawsonville, GA)

(20) – Weld positioners up to 24,000 lbs (Detroit Lakes & Lakeville, MN; Washington, IL)

(5) – Pre Heat Ovens up to 6' x 6' x 6' (Detroit Lakes & Lakeville, MN)

15' x 15' x 20' tall stress relieving furnace (Washington, IL)



Machining

Gantry Mills

Quickmill Eliminator Bridge Mill, machine travel X238" Y200" Z40", 6,000 RPM, CAT 50 taper, high pressure coolant, 90 degree head, 20,000 lb table capacity ([Washington, IL](#))

Vertical Machining Centers

Toyoda FV-1680, machine travels X63" Y31.5" Z31.5", 6,000 RPM spindle, CAT 50 taper, 40 tool ATC, 4,400lb table capacity, 1000 psi thru spindle coolant ([Washington, IL](#))

Mazak VTC 300C, machine travel X65" Y30" Z26", 10,000 RPM spindle, CAT 40 taper, 24 tool ATC, 3,000 lb table capacity, thru spindle coolant ([Detroit Lakes, MN](#))

Fanuc Robo Drill, machine travel X19" Y15" Z12", 8,000 RPM spindle, BT30 Taper, 10 tool ATC ([Detroit Lakes, MN](#))

Mazak VTC 300, machine travel X65" Y30" Z26", 12,000 RPM spindle, CAT 40 taper, 24 tool ATC, 3,000 lb table capacity, thru spindle coolant, 4th axis indexer ([Detroit Lakes, MN](#))

Mazak VTC 250 D/50, machine travel X69.3" Y25" Z25.9", 6,000 RPM Spindle, Cat 50 taper, 24 Tool ATC, thru spindle coolant, probe, 4th axis indexer, 2,600 lb table capacity ([Detroit Lakes, MN](#))

Doosan VC 430, machine travel X22' Y16.7" Z22.4", 12,000 RPM Spindle, Cat 40 taper, 40 tool ATC, thru spindle coolant, pallet changer, 660 lb pallet capacity ([Detroit Lakes, MN](#))

Mori Seiki SV-500, machine travel X34.5" Y20" Z20" 10,000 RPM, CAT 40 taper, coolant through spindle, 30 tool ATC, 2,200 lb table capacity ([Washington, IL](#))

(2)-Mori Seiki MV-65, machine travel X50" Y25.6" Z25.6", 4,000 RPM, CAT 50 taper, 30 tool ATC, 4,400 lb table capacity ([Washington, IL](#))

(1) HAAS Model VF-3 CNC Vertical Machining ([Dawsonville, GA](#))

(1) Fadal Model VMC6030HF CNC Vertical Machining Center ([Dawsonville, GA](#))

(1) Mazak Model VCN Nexus 510C-II CNC Vertical Machining Center ([Dawsonville, GA](#))

(1) Mazak Model MTV-815/120 CNC Vertical Machining Center ([Dawsonville, GA](#))

Horizontal Machining Centers

Mazak Nexus 6000, machine travel X31.5" Y31.5" Z31.5", 7,000 RPM spindle, CAT 50 taper, 43 tool ATC, 2,204 lb pallet capacity, 1,000 psi thru spindle coolant, 500mm x 500mm pallet ([Detroit Lakes, MN](#))

Mazak Nexus 6000, machine travel X31.5" Y31.5" Z31.5", 10,000 RPM spindle, CAT 50 taper, 240 tool ATC, 2,204 lb pallet capacity, 1,000 psi thru coolant spindle, 500mm x 500mm pallet ([Detroit Lakes, MN](#))

Toyoda FH1250SW, 49" x 49"pallets, machine travel X86" Y59" Z72", 3,000 RPM, CAT 50 taper, 60 tool ATC, 11,000 lb pallet capacity ([Washington, IL](#))



Turning Centers

Mazak SQT 100MY, collet chuck, 2" draw tube, 8,000 RPM spindle, bar feeder, live tool head, 4,500 RPM live tool head. Turret style tool changer ([Detroit Lakes, MN](#))

Mazak Integrex, opposing twin spindles, 12" chuck main spindle, 10" chuck sub-spindle, 2.7" draw tube, 3.46" spindle bore, 3,500 RPM spindle speed, 6,000 RPM live tool speed, 40 tool magazine ([Detroit Lakes, MN](#))

(2)-Mori Seki SL-15, collet chuck up to 2", 1.50" draw tube, 6,000 RPM max spindle speed, bar puller, turret style tool changer ([Detroit Lakes, MN](#))

Mori Seki ZL-250, twin spindle, 10" chuck main spindle, 6" chuck sub spindle, twin turret, 2.5" draw tube, collet chuck up to 2.5", 6,000 RPM spindles, bar puller ([Detroit Lakes, MN](#))

Mori Seiki SL75B, 29.92" max turning diameter, 68.92" max between centers, 1,010 RPM, 6" spindle bore, 12 position turret, live tooling, programmable tailstock ([Washington, IL](#))

Mori Seiki SL403, 24.4" max turning diameter, 44.33" max between centers, 3,000 RPM, 12 position turret, live tooling, programmable tailstock ([Washington, IL](#))

Mori Seiki SL35B, 14.75" max turning diameter, 35.04" max between centers, 2,500 RPM, 4.13" spindle bore, 10 position turret, programmable tailstock ([Washington, IL](#))

(2)-Haas ST-20SSY, 10" max turning diameter, 21" max between centers, 5,000 RPM, 3.50" spindle bore, 24 position turret, 6,000 RPM live tool speed, programmable tailstock, bar support ([Detroit Lakes, MN](#))

Vertical Turning Lathes

YouJi YV-1200ATC+C, 53.14" max turning diameter, 47.24" max height, 2,400 RPM, 12 position turret, 11,000 lb table capacity ([Washington, IL](#))

Omega 60, 48" diameter chuck, 59" maximum swing, 600 RPM, 12 position turret, 4,400 lb table capacity ([Washington, IL](#))

(1) HAAS Model SL-20T CNC Lathe with Model 300 Bar Feeder ([Dawsonville, GA](#))

Horizontal Boring Mills

Doosan DBC 130, 5.1" spindle diameter, 63" x 70.8" table, 2500 RPM, CAT 50 taper, 60 tool ATC, 33,000 lb table capacity ([Washington, IL](#))

Kuraki KBT-10-DX, 4" spindle diameter, 37.5" x 43.5" table, 2,500 RPM, CAT 50 taper, 600 lb table capacity ([Washington, IL](#))

Kuraki KBI-11-WDX, 4" spindle diameter, 55" x 63" table, 2,500 RPM, 40 tool ATC, CAT 50 taper, 16,500 lb table capacity ([Washington, IL](#))

Kuraki KBT-13-A, 5.25" spindle diameter, 63" x 71" table, 2,500 RPM, 60 tool ATC, CAT 50 taper, 26,400 lb table capacity ([Washington, IL](#))

Tapping Machine

(2) FlexArm Model 1739 Pneumatic Tapping Machine ([Dawsonville, GA](#))



Quality Control

Coordinate Measuring Machines

Mitutoyo CMM, 24" x 20", 16" (Detroit Lakes, MN)

Numex CMM, 12" x 16" x 10" (Detroit Lakes, MN)

Brown & Sharp CMM, 26.6" x 39.4" x 25.6" (Lakeville, MN)

Wenzel CMM, 59" x 78.75" x 47.5" (Washington, IL)

Faro Arms

(6)-Faro Arms (2-2-3 axis) (Detroit Lakes & Lakeville, MN; Washington, IL)

Faro Arm (2-2-2 axis) (Detroit Lakes & Lakeville, MN; Washington, IL)

Romer Arm

Romer 3000i, 12' envelope (Detroit Lakes, MN)

Warehouse/Shipping Capabilities

Parts Picker (Detroit Lakes & Lakeville, MN; Washington, IL)

3-Wheel Sit-downs (Detroit Lakes & Lakeville, MN; Washington, IL)

Raymond Swing-reach Trucks (Detroit Lakes, Otsego & Lakeville, MN)

Stand-up Reach Trucks (Detroit Lakes & Lakeville, MN; Washington, IL)

Ottawa Commando 30-yd Tractor (Detroit Lakes & Lakeville, MN; Washington, IL)

Great Dane "Air-Ride" Vans (Detroit Lakes & Lakeville, MN; Washington, IL)

Great Dane Spring Ride Vans (Detroit Lakes & Lakeville, MN; Washington, IL)

Returnable Containers

Hand totes up to 6.75"H x 13"W x 45" L (All locations)

Bulk plastic containers up to 34"H x 48"W x 64.50" L (All locations)

BTM can build custom returnable containers to suit your manufacturing requirements