

QUASAR INDUSTRIES

EQUIPMENT LIST

HYDROFORMING

SHORT RUN PRODUCTION

CNC MACHINING

LASER WELDING

INJECTION MOLDING

METAL STAMPINGS

WATERJET CUTTING

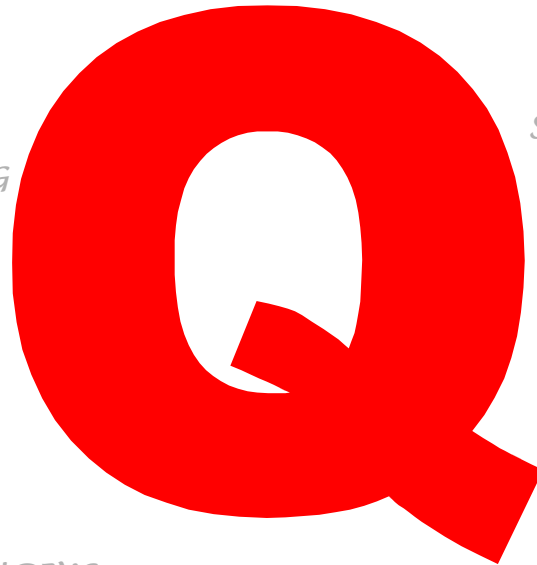
SUB-ASSEMBLIES

LASER CUTTING

RAPID PROTOTYPING

EDM

INSPECTION SERVICES



**ADVANCING THE ART OF
PROTOTYPE MANUFACTURING**

www.QUASAR.com

1911 NORTHFIELD DRIVE, ROCHESTER HILLS, MI 48309

(248) 852-0300 FAX (248) 852-0442

QUASAR INDUSTRIES' EQUIPMENT LIST

5-AXIS LASER CUTTING

Model	Quantity	Table Size	Power	Our 5-axis lasers can hold tolerances to ± 0.001" with: Steel $\leq .625$ " thick Aluminum $\leq .250$ " thick Stainless $\leq .236$ " thick
TRUMPF TLC-1000 TRUMPF TLF-2700	1	5' x 10'	2,700 Watts	
NTC TLM 610 ROFIN-SINAR 2000 SM	2	6' x 10'	2,200 Watts	
NTC TLM 610 ROFIN-SINAR 1700 SM	2	6' x 10'	2,000 Watts	
NTC TLM 610 ROFIN-SINAR DC 025	1	6' x 10'	2,500 Watts	
NTC TLM 610 PRC STS 3000	1	6' x 10'	3,000 Watts	
NTC TLM 408 PRC STS 3000	1	4' x 8'	3,000 Watts	

3-AXIS LASER CUTTING

Model	Quantity	Table Size	Power	Our 3-axis lasers can hold tolerances to ± 0.001" with: Steel $\leq .750$ " thick Aluminum $\leq .250$ " thick Stainless $\leq .250$ " thick
NTC TLV 510 ROFIN-SINAR RF 050 (SHEET CUTTER)	1	5' x 10'	5,000 Watts	
NTC TLV 408 ROFIN-SINAR 1700 SM (SHEET CUTTER)	1	4' x 8'	2,000 Watts	
ROFIN-SINAR DC 025	1	48" x 48"	2,500 Watts	
ROFIN-SINAR DC 025	1	48" x 40"	2,500 Watts	
ROFIN-SINAR 2000 SM	1	36" x 36"	2,200 Watts	
ROFIN-SINAR 2000 SM	1	24" x 24"	2,200 Watts	
ROFIN-SINAR 1700 SM	1	24" x 24"	2,000 Watts	

3-AXIS LASER WELDING

Model	Quantity	Table Size	Power	We have been perfecting our laser welding capabilities for over 16 years. Laser welding is a quick and efficient way to assemble transmission parts, air bag components, and other close tolerance work.
ROFIN-SINAR 880 HF	2	48" x 48"	8,000 Watts	
ROFIN-SINAR 860 HF	3	36" x 36" 24" x 24" 48" x 48"	6,000 Watts	

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CNC MACHINING

Model	Quantity	Size	Power	Our CNC machines have working envelopes of up to 5' wide by 10' long.
AWEA SP 3016	2	X axis – 120" Y axis – 60" Z axis – 30"	35 HP	
AWEA SP 2016	1	X axis – 72" Y axis – 60" Z axis – 30"	35 HP	
HAAS VF5	1	X axis – 52" Y axis – 23" Z axis – 28"	30 HP	
HAAS VF3	3	X axis – 48" Y axis – 18" Z axis – 25"	25 HP	
HAAS VF3	1	X axis – 40" Y axis – 20" Z axis – 25"	15 HP	
HAAS VF2	5	X axis – 30" Y axis – 16" Z axis – 20"	10 HP	
Bridgeport ROMI CNC Lathe	1	D axis – 36" X axis – 14"	8 HP	
HURCO HAWK 5M	3	X axis – 31" Y axis – 14" Z axis – 6"	5 HP	
HAAS HRT210 (4 TH AXIS)	1	∅8"		

MACHINIST CENTERS

Model	Quantity	Size	Power	Type
Bridgeport SERIES I	22	9" x 48"	3 HP	Manual Mill
Logan	1			Lathe
LeBlond	1			Lathe
Nardini	1			Lathe
Parker-Majestic	1		3 HP	Precision Grinder

5-AXIS WIRE EDM

Accutex AX-8060 Submerged EDM	1	52" x 39" x 24"	Cutting Rate	Our 5-axis wire EDM machines can cut material up to 24" thick and hold a tolerance to within ±.0002".
FANUC ROBOCUT α-1C Submerged EDM	3	14" x 20" x 12"	Cutting Rate 3 mm/min	
FANUC ROBOCUT α-OB	2	8" x 12" x 6"	Cutting Rate 1.5 mm/min	
FANUC TAPE CUT- W1	1	100mm x 140mm x 70mm	Cutting Rate 1.5 mm/min	

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WATER-JET

OMAX 2652	1	30" x 65"	40,000 PSI	Our abrasive water-jet cutting machine is capable of cutting all grades of steel up to 2" thick and aluminum up to 6" thick. Other materials include: composites, glass, rubber, stone, wood, and exotic alloys. It has an accuracy of $\pm .003"$.
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INJECTION MOLD

Cincinnati MILICRON VISTA	1	16 oz. Shot	165 Tons	Our injection molding capabilities help to establish Quasar Industries as a complete prototyping job shop.
BOY 15S	1	2 oz. Shot	15 Tons	

WELDING - ASSEMBLY

Model	Quantity	
FANUC M-16iL T ROBOTIC WELDER	1	With 2 Koike Aronson RH 51.5 Rotary Tables
Lincoln Electric POWER WAVE 455		
SPOT WELDERS	6	
Lincoln Electric POWER WAVE 455	1	
Lincoln Electric POWER WAVE 450	1	
Lincoln Electric POWER WAVE C300	1	
Lincoln Electric IDEALARC SP-250	1	
Miller SYNCROWAVE 350 LX	1	
Miller SYNCROWAVE 350	1	
Miller SYNCROWAVE 250	1	
Miller DELTAWELD 302	1	
L-TEC MIGMASTER 250	1	
L-TEC VI-252 CV	2	
Thermal Dynamics PAK MASTER 75XL Plasma Cutter	2	

TUBE BENDING

Model	Quantity	
Adaptive Motion Vertical Tube Bender	1	Up to 110" Tube Length
Pines Tube Bender	1	0.250" – 4" Tube Diameter

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HYDROFORMING

Model	Quantity	Die Plate Area	Power	35" Slide Stroke 58,000 PSI Hydroforming Capacity 60 HP Rapid Fill Pump
Schuler HP 50,000-3150/2150	1	85" x 178" 75" Window 35" Shut Height	5,500 Tons	

PRESSES

Model	Quantity	Bed Size	Power	We have a variety of metal stamping presses and brakes. With bed sizes up to 7' x 15' and pressure up to 5,500 tons, we can meet your precision stamping needs.	
Schuler	1	85" x 178" 60" Window	5,500 Tons		
St. Lawrence	1	60" x 132" 48" Window	2,000 Tons		
St. Lawrence	1	72" x 108" 48" Window	1,000 Tons		
HPM Press	1	48" x 48" 48" Window	1,000 Tons	300 Ton Hydraulic Cushion	
HPM Press	1	48" x 48" 48" Window	750 Tons	200 HP motor is capable of running production.	
Baker	1	48" x 48" 36" window	400 Tons		
Verson SE-2-600-120-54 Mechanical	2	55" x 122" 44" Window	600 Tons		
Birdsboro	1	42" x 108" 36" Window	600 Tons		
Williams-White Moline SH-400-48-48	3	48" x 48" 48" Window	400 Tons		
Pacific 500-8SS	1	48" x 102" 48" Window	500 Tons		
Cincinnati 250 OBS	2	36" x 60" 17" Window	250 Tons		
Rodgers	1	36" x 72" 48" Window	350 Tons		12 Ton Nitrogen Cushion System
BLISS SE2-350 Mechanical	1	36" x 84" 38" Window	350 Tons		
Dorr-Patterson A5093	2	24" x 24" 18" window	150 Tons		
Komatsu	1	28" x 76" 21" Window	150 Tons		
Kukil P1A-110 Mechanical	3	24" x 48" 17" window	120 Tons		
Colonial PA 125-12	1	24" x 48" 18" window	100 Tons		
Hannafin S-100-96-12-4-2-SP	3	24" x 48" 36" window	100 Tons		

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PRESS BRAKES

Model	Quantity	Length	Power
Cincinnati 175AF CNC Hydraulic Press Brake w/ 6axis Back-Gage	1	120"	175 Tons
Cincinnati Hydraulic Press Brake	10	72"	90-230 Tons
Accurpress 7606 Press Brake	2	72"	60 Tons
Bantam Pneumatic Press Brake	23	24"	12-24 Tons

QUALITY CONTROL

Model	Quantity	Table Size	
Starrett RCS 6440-18 Manual CMM	1	X axis - 40" Y axis - 64" Z axis - 18"	<p>Quasar Industries maintains current certifications in:</p> <ul style="list-style-type: none"> • ISO/TS 16949:20XX • ISO 9001:20XX <p>Our quality assurance manual is updated annually and all our CMM machines are certified with the U.S. Bureau of Standards and meet all automotive standards as well as MIL-I-45208 and MIL-STD-45662.</p>
Starrett RGDC 6440-24 DMIS Controlled Programmable CMM	1	X axis - 40" Y axis - 64" Z axis - 24"	
Starrett HGC-EX2018-16 Manual CMM	1	X axis - 20" Y axis - 18" Z axis - 16"	
Starrett HGC-EX2420-16 Manual CMM	2	X axis - 20" Y axis - 24" Z axis - 16"	
Brown & Sharpe MICRO VAL Programmable CMM	1	X axis - 14" Y axis - 16" Z axis - 12"	
Q-Test 7 Tensile Tester	1	Up to .500" Thickness	
Antonik AERM Hardness Tester	1		

Microscopic Validation	
<p>Olympus SZX7 Stereo Microscope, up to 56x Zoom with PAXcam3 Digital Camera with PAX-it Software</p> <p>Capture Images Directly to PAX-it Image Database Software</p> <p>Used for weld verifications and small part inspection.</p>	<ul style="list-style-type: none"> • Calibrated image scaling • Point to point measurements • Segmented lines • Manual area measurements: Rectangles, Ellipses, Polygons, Irregular shapes • Angle measurement • Arc, circle and ellipse measurement • Grid overlays on image • Parallel line calipers • Reporting to various formats with Images