



PIPE & TUBE FABRICATION SERVICES
CUSTOM BENDING | LASER CUTTING | END FORMING



UNRIVALED EXPERTISE

www.sharpeproducts.com

Sharpe Products: ISO 9001 Certified Quality Management System

INDUSTRIES SERVED




Sharpe Products provides unrivaled expertise in pipe bending, laser tube cutting and custom fabrication services that meet your unique bending and cutting needs in a timely, cost-effective manner.

SOLUTIONS DELIVERED HOW YOU WANT, WHEN YOU WANT

We know that when it comes to pipe and tube bending, laser cutting and fabrication services, things are rarely straightforward. Sometimes, you need guidance regarding what is possible when first considering a project. Other times, you have detailed specifications that must be met. Or maybe your existing plan needs to be optimized for greater efficiency.

Whatever the case, we're the partner you need for any job, no matter the size or scope. That's why we've worked so diligently and invested so heavily to expand our capacity, technology and machinery – it allows us to provide solutions you simply can't find anywhere else.

At every step of the way, from our efficient quoting process and exceptional customer service to our expert consultation and, ultimately, your finished product, you'll know your priorities are ours; we'll work hard to find the right solution for you.



Over the past decade, we've transitioned to "Lean and Green," ensuring our leading-edge technology remains environmentally responsible and of the highest quality when addressing your specific pipe and tube-bending needs.

PIPE & TUBE BENDING – CUSTOMIZED

THE MACHINERY TO GET THE JOB DONE

Thanks to our vast array of leading-edge machines, there isn't a job we can't handle. Need to bend pipe or tube from 1/4" O.D. to a full 6" O.D.? No problem. In fact, we have the machinery and equipment to get any of these jobs done on time and on budget:

- Tight radius bends
- Multi-radius bends
- Parts requiring tight and large radii
- Symmetrical bends/parts
- Parts requiring tight tolerances

UNMATCHED EFFICIENCY & VERSATILITY

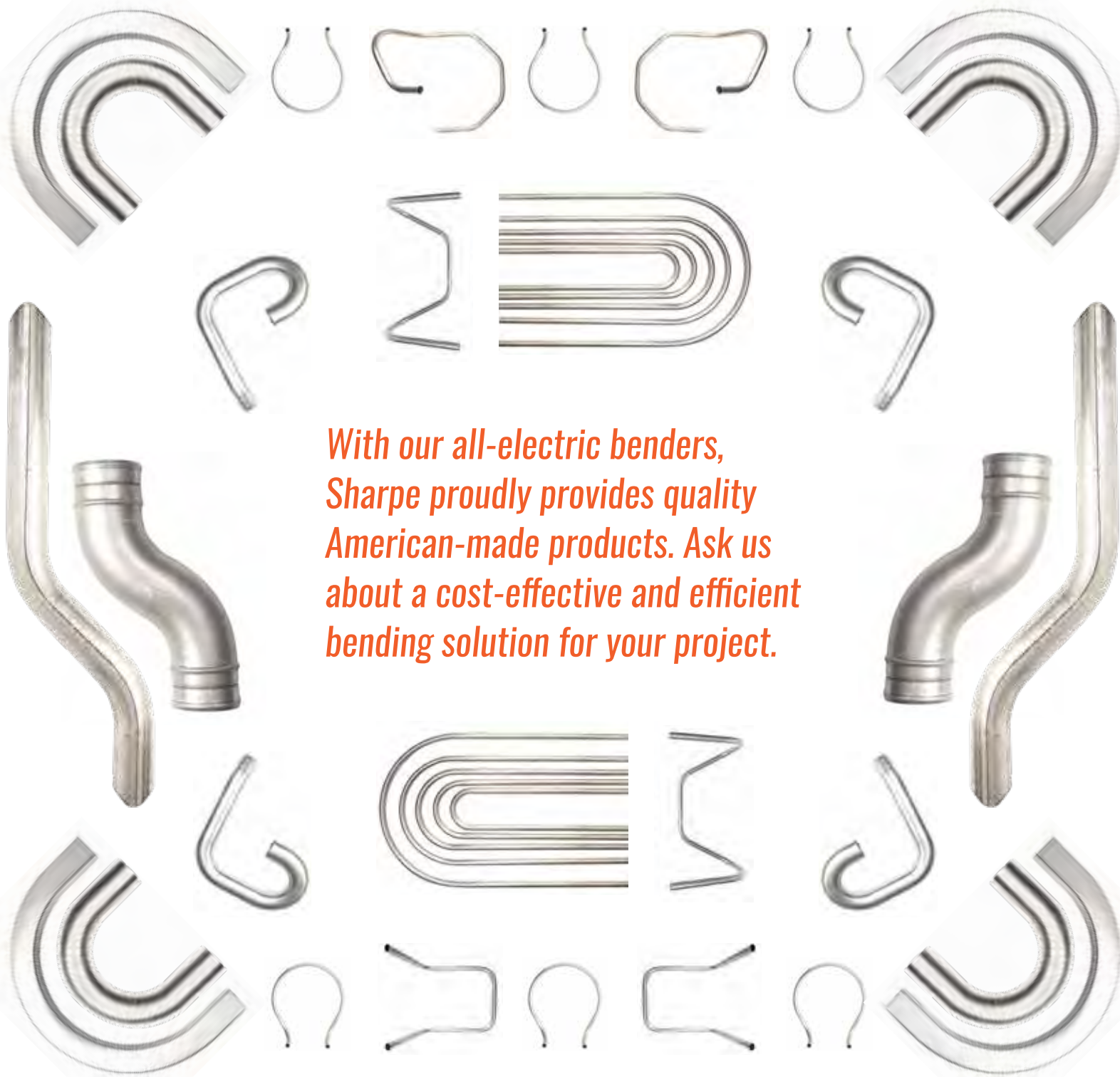
Our all-electric benders have unique capabilities and provide high accuracy and repeatability, making short runs cost effective to help you stay lean.

Advantages:

- High-quality parts
- Reduced set-up times
- Reduced scrap

Capabilities:

- Bends pipes and tubes up to 6" O.D.
- Multi-radius stacking and rolling
- Laser springback in-process inspection for reduced scrap and increased accuracy



With our all-electric benders, Sharpe proudly provides quality American-made products. Ask us about a cost-effective and efficient bending solution for your project.

HIGH-QUALITY WORK DONE WITHIN YOUR TIME FRAME

FAST & EFFICIENT

For complex jobs, we have machines with both right and left bending with fixed and variable radii, enabling flexibility in your part design and the ability to quickly manufacture the products your organization needs to run efficiently.

Advantages:

- Wide flexibility in part design
- Capability for complex structures

Capabilities:

- Bends up to 1¼" O.D.
- Right and left bending in one process
- Multi-radius stacking and rolling

FLEXIBILITY – COMPLEX PARTS WITHOUT EXPENSIVE TOOLING COSTS

Our 3D bender uses single-die technology to create flexibility in part design for your job needs. This flexibility is unmatched by traditional forms of bending.

Advantages:

- Able to produce angles greater than 180°
- Can be little to no distance between bends
- Wide flexibility in part design
- Produces the most complex parts
- No bend dies required (saving you tooling costs)

Capabilities:

- Bends up to 1¼" O.D.
- Multi-radius bends without additional tooling
- Variable-radius bends

MATERIAL CAPABILITIES BEYOND STEEL

Unique ability to process highly reflective materials:

- Stainless steel
- Copper
- Brass
- Bronze
- Galvanized pipe
- Aluminum (up to 3/8" thick)



WE'VE GOT THE PIPES & TUBES YOU NEED AND THE LASERS TO CUT THEM

CUSTOM CUTTING: FAST & EFFICIENT

Sharpe's state-of-the-art equipment provides you with the most precise results, completed in the shortest time frame, meeting your needs faster and better than anyone else in the industry.

How do we do it? A combination of equipment, experience and process.

Sharpe has two fiber-optic tube lasers. Our 1000-watt laser is built for speed. Our powerful, state-of-the-art 3,000-watt fiber-optic tube laser has added power that allows us to handle thicker stainless and aluminum material for ornamental jobs. Additionally, both lasers have unique cutting capabilities and increased production speed versus traditional CO2 tube lasers and give us the ability to cut highly reflective metals, such as copper, brass, bronze and aluminum.

Our newly acquired robotic 3D fiber-optic laser cutting system adds to Sharpe Products' capabilities with its ability to cut difficult areas on and near bends. It also cuts flat sheets.

And with our lean, CNC, all-electric bending machines and fiber-optic lasers, our process is streamlined to combine bending, cutting, notching, punching, coping and drilling, consistently supplying cost-effective, quality parts – all in one shop.

Advantages:

- Production of high-quality parts with holes, slots, part marks, etc.
- Significantly improved speed and efficiency over traditional manufacturing processes
- Cuts aluminum, stainless steel and other reflective materials

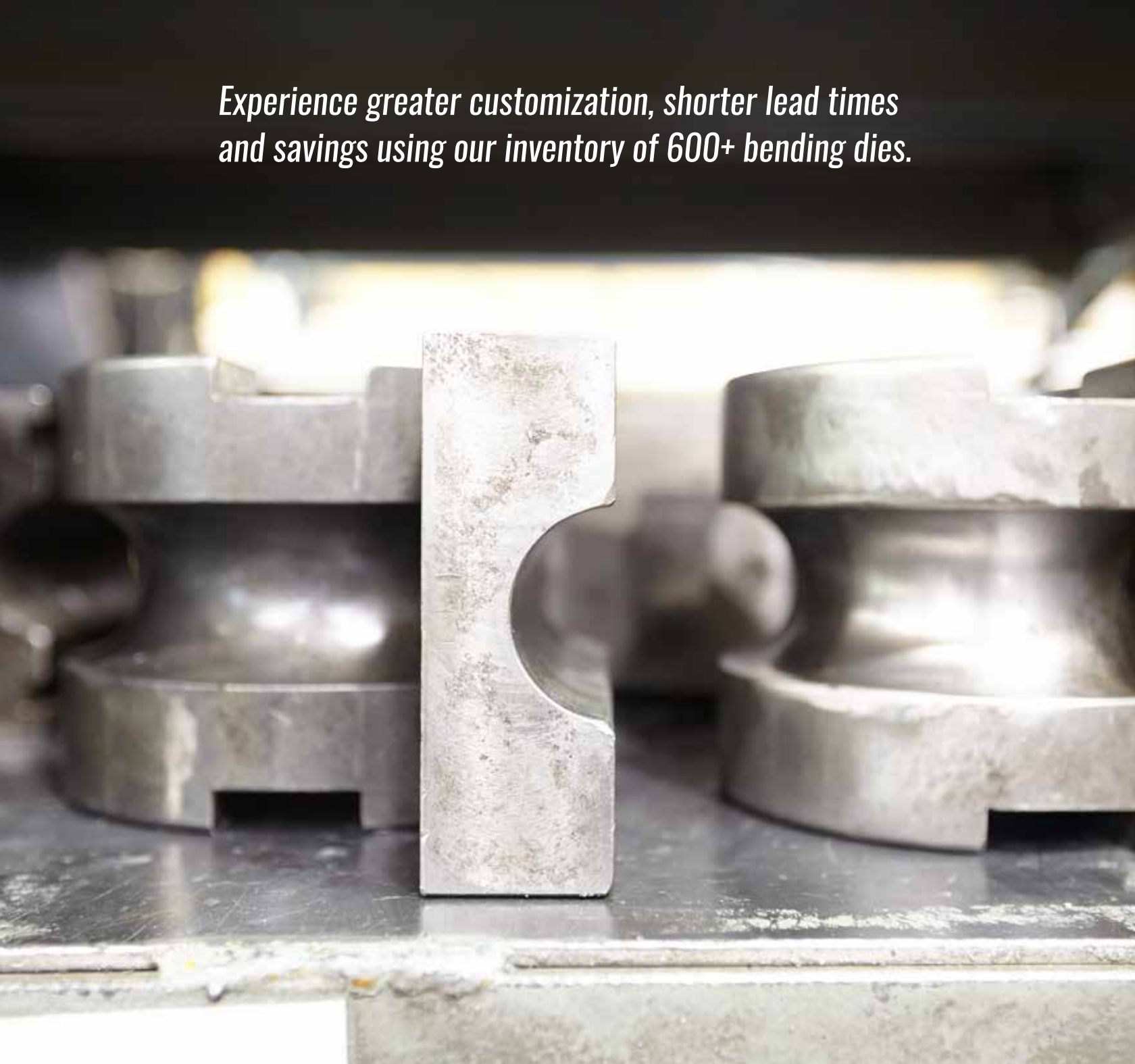
Capability:

- Handles up to 6" O.D. | 4" square

Sharpe Products offers effortless solutions — for all your custom bending and laser-cutting needs.

CAPABILITIES CHART							
SERVICES	O.D.	MATERIALS	CAPABILITIES		ADDITIONAL INFORMATION	EQUIPMENT	
Bending	Up to 6"	Aluminum Brass Bronze Copper Galvanized Pipe Stainless Steel Steel	Tight radii (1x diameter) Large radii Multi-radius bends Tight & large radii on single part Freeform bending		Unique, custom projects Repeat production jobs Value-added fabrication services	1 Nissin CNC freeform bender 9 all-electric CNC stack and rolling machines: <ul style="list-style-type: none">(2) 30mm BLM in-process left & right-hand benders(2) 76mm Unison benders(1) 130mm Unison bender(2) 100mm Unison benders(1) 150mm Schwarze bender 8 manual tube bending machines	
Rolling	Up to 4-1/2"	And more!	Large radii (8x diameter +) Multi-radius bends		Unique, custom projects Repeat production jobs Value-added fabrication services	1 roll bending machine 6 all-electric mandrel benders with tube generation	
Laser Cutting	Round up to 6" Square up to 4" (Wall thickness up to 3/8")	If a material you need is not listed, please call us at 800-879-4418 , as we may be able to accommodate your request.	Coping Etching High-Speed Cutting Holes Hole Patterns/ Perforations	Lettering Mitering Notching Sheet Cutting Custom Designs	Robotic 3D laser capable of cutting on and near tube bends Combines many traditional processes into one streamlined process Short lead times	2 BLM fiber-optic straight tube lasers <ul style="list-style-type: none">1K-watt3K-watt 1 Jenoptik robotic 3D laser cutting system	
End-Forming	Up to 7"		Beading Expanding Flaring	Reducing Swaging Trimming		Proto-1 RAM-70 6-head end-former (up to 7") Addison end-former (up to 3") Proto-1 dual-head rotary end-former (up to 6") Proto-1 double-head tube expander/reducer (up to 3.5")	Proto-1 tube expander/reducer (up to 6") Finn-Power tube reducer (3") PHI flare & bead machine (up to 3")
Fabrication, Machining & Additional Services	Up to 6"		Coping Drilling Notching	Polishing Punching Welding	Finishing: <ul style="list-style-type: none">AnodizingPowder coating [Sharpe offers these services through a partnership with a quality local vendor.]	Punch presses Drill presses Coping machines CNC lathe CNC mill	TIP: Check our tooling inventory online so you can design your project with a die we already have: sharpesproducts.com/tooling .

*Experience greater customization, shorter lead times
and savings using our inventory of 600+ bending dies.*



LARGE TOOLING INVENTORY – LOWER COSTS, QUICK TURNAROUND

We want to provide solutions how you want them, when you want them. That's why we offer an inventory of over 600 bending dies. This allows you to save thousands on tooling costs while getting your project up and running in no time. Sharpe's in-house tooling department builds tools that are not already available in our large inventory.

Check out our tooling inventory online so you can design your project with a die we already have (www.sharpeproducts.com/tooling).





FABRICATION:

- Notching
- Punching
- Welding
- Coping
- Drilling

FINISHING:

- Polishing
- Anodizing
- Powder Coating

END-FORMING & CUSTOM FABRICATION SERVICES

PIPE & TUBE END-FORMING CAPABILITIES

Our range of machinery is perfect for standard end forms to custom projects and everything in between. When the job calls for complex end forms, we step up in a major way. Our RAM-70 is a unique 6-head end-former, a 7-position progressive ram end-forming machine for tube and pipe from .125" - 7.0" O.D.

With equipment like this, you'll never have to wonder if we can handle your end-forming needs.

COMBINED CAPABILITIES:

- Beading (including marmon beading)
- Expanding
- Reducing
- Flaring
- Swaging
- Threading
- Trimming
- Punching
- Piercing
- Rotary flaring
- Complex progressive ram end forming



*Seamless and efficient production begins
with innovative engineering.*

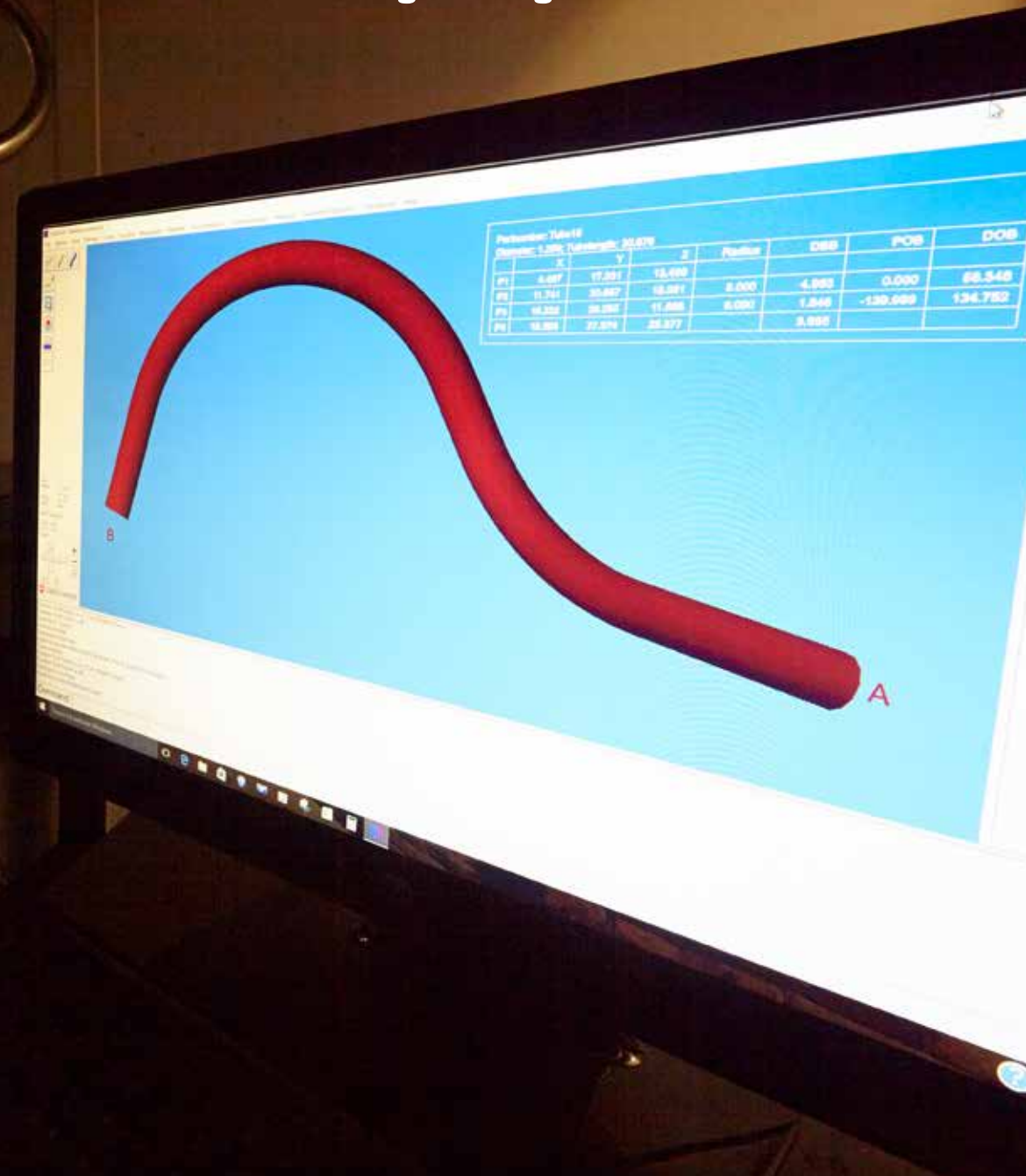
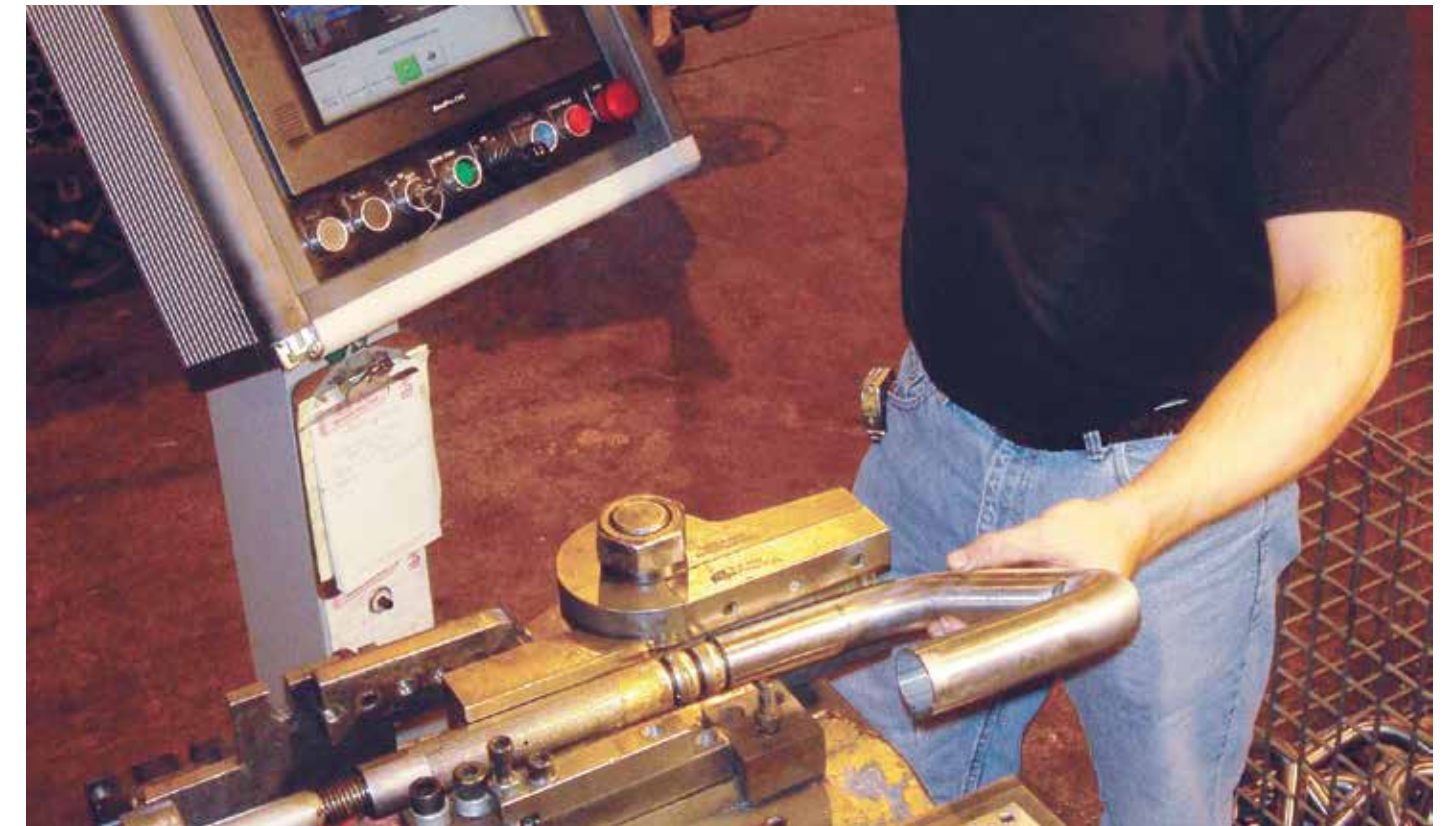


Image: Software Screen

ENGINEERING OPTIMIZATION

Our engineering and estimating team uses the latest in advanced software to determine production feasibility of your part. To make production smooth and cost efficient, we begin by testing your drawings within our software before beginning the bending and laser processes. During the developmental phase, if modifications are necessary, we have the ability to adjust your design. When the modifications are complete, the revamped designs are simply exported back into 3D files for your review.

With final approval, models are imported directly into our laser or tube-bending machinery, and production quickly begins.





OUR MISSION: Stop at nothing to provide the highest-quality, most efficient and cost-effective solutions for your needs.

QUALITY ASSURANCE & PROCESS VERIFICATION

To align with our ISO 9001 registered Quality Management System, we attain the highest quality from start to finish by developing a plan for every project prior to production.

Thorough inspection processes are in place for every quality level needed to ensure we will do whatever it takes to provide you with the quality solutions that meet your needs.

TUBEINSPECT S

Specifically designed for the tube-bending industry, our TubeInspect S uses 14 high-resolution cameras to instantly measure tube bends and send corrections back to the tube-bending machines, resulting in reduced costs, set-up times and scrap.

Advantages:

- Accurate and efficient set-ups
- Reduces inspection time by instantaneously generating part measurement data

Capabilities:

- Inspects parts in seconds with the click of a mouse
- Sends corrections back to the bender when needed
- Able to reverse engineer from existing parts or prototypes

CMM INSPECTION ARM & 3D LASER SCANNER

To achieve the ultimate combination in quality inspection equipment, we have a CMM inspection arm and 3D laser scanner for projects that require advanced inspection reporting. This gives us the ability to create a 3D model of the scanned part to compare to the specified model and make adjustments to ensure high-quality production.

Expect outstanding customer service for all your bending, cutting and fabrication needs.



WE ARE HERE FOR YOU

With Sharpe's in-depth skills and years of experience working with diverse materials, a variety of sizes and every imaginable shape, you will receive helpful guidance, prompt quotes and exactly what you ordered for all your custom bending and laser-cutting projects.

For information on Sharpe Products' custom pipe and tube fabrication services or to request a quote:

Email: estimating@sharpeproducts.com

Call: 800-879-4418

Fax: 262-754-0374

When sending a CAD file of your part, please use one of the following formats:

- .PDF
- .STP
- .IGS
- .DWG
- .DFX



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