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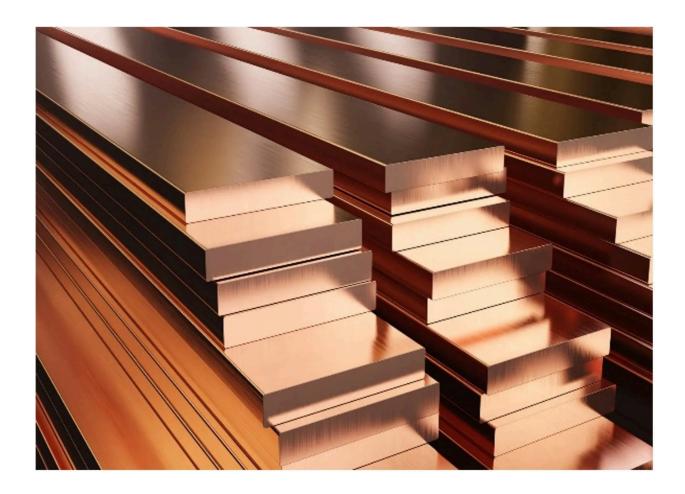
# SOUTHERN COPPER AND SUPPLY COMPANY, INC.

#### PELHAM, ALABAMA

Southern Copper, is a metals service center providing copper and specialty copper alloys and resistance welding components to its customer base in the southeast. Raw material is available in sheet and bar lengths as required. "Sawing and cutting technology is our bread and butter." remarks Matt Riha, owner and president of the company.

Until two years ago, Southern Copper primarily used cold saws to cut material to customer specifications, but the company is continually looking to improve its processes through innovation to better serve customers. At the time, Southern Copper was outsourcing work to a company in Birmingham, Alabama, which it did with abrasive waterjet machines from Jet Edge. Southern Copper has long been interested in water jetting to expand its service offering providing more custom machining as a value added service.

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SCS offers nonferrous metals including Beryllium, Chromium, Brass, Bronze and Copper Tungsten alloys. Additionally machining and waterjet cutting is a value added service offered.

#### **Equipment Specifications** were drafted after research and speaking with Jet Edge:

- A 6' x 12' cutting envelope with a high rail gantry
- A 3-axis cutting head with 12" of servoed travel
- 60k psi of cutting pressure with a 100hp drive system
- Isolated catch tank with air operated tank bladder
- Lights out cutting
- IGEMS Nesting Software
- Abrasive removal system
- Closed Loop Filtration System for water recycling
- 2,500 lb bulk abrasive hopper
- A capital expenditure price that met the ROI goals.



The high rail motion system opens up the cutting envelope for easy access. SCS utilizes a single 3-axis abrasive cutting head, with 12" of Z travel. Several productivity enhancements were added including lights out cutting and IGEMS nesting software. An abrasive removal system and closed loop filtration system combine making this a fully contained, environmentally friendly waterjet system.



(click to read Southern Copper's story featured in the FF Journal)

#### **SOUTHERN COPPER RESULTS:**

We can now cut profiles in all kinds of shapes and sizes per customer specifications, expanding our product offering. We operate on an eight-hour shift five days a week, but that doesn't restrict the waterjet to cutting only when an operator is present. Since we added the lights-out cutting option to our system, we can operate the waterjet unattended. We often run the waterjet an extra three to five hours after a shift ends, and in one extreme situation, had it run for 24 hours straight for three days in a row.

Waterjet cutting doesn't generate a heat-affected zone in a workpiece material while cutting. When using a saw blade, whether it's a steel, bimetal or carbide, the friction between the blade and the workpiece tends to warp copper because the metal is so thermal- and heat-conductive. This machine eliminates all of that as there is literally no heat involved in the cutting process.



We have a fully contained water jet cutting system that is environmentally friendly, capturing spent garnet and recycling the process water rather than dumping it down the drain.

# "I'VE GOT COPPER THAT IS AS HARD AS TOOL STEEL, AND THIS WATERJET CUTS IT JUST LIKE IT'S BUTTER."

#### - MATT RIHA, OWNER, PRESIDENT

Southern Copper's Mission is to be viewed by its family of customers and employees as a Metals Service Center that is: Quick, Affordable, and Uncomplicated when distributing Raw Metals' and Machining services. Its ISO 9001 certification also makes it a leader in precision machining and fabrication.

Southern Copper & Supply has ordered a second waterjet from Jet Edge and expects delivery shortly. The new system will have an even larger table size as the first machine and come with dual abrasive cutting heads to cut two parts simultaneously doubling productivity. The system will be driven by a larger, 150-hp, 60,000-psi ultra-high pressure pump to generate the power for dual head abrasive cutting.

## ABOUT SOUTHERN COPPER & SUPPLY COMPANY

#### **SOUTHERN HOSPITALITY!**

"Our mission is to provide service with quality first. Don't get me wrong, price lead times, etc. matter a lot. And we are continually looking to invest and raise our performance in all the areas that are important to you first."

#### Matt Riha, Owner/President

Southern Copper is a family owned, premier distributor and contract machining company of non-ferrous metals, copper tungsten alloys and resistance welding products. Al & Debbie Riha, high school sweethearts, married in November 1967. With three small children Al and Debbie took a leap of faith and started their own business to provide for their growing family. Incorporated in 1987, Southern Copper is still family

owned and operated. Hard work and the embracing of technology has transformed this business into the professional partner a broad and loyal customer base relies upon.

## SOUTHERN COPPER & SUPPLY COMPANY'S 2ND SYSTEM SPECS

- A 6' x 14' cutting envelope with a high rail gantry
- A 12" servoed Z, with a 6' Spreader Bar
- 2 cutting heads with independent 3" of sub Z travel
- Laser display manual head positioning
- 60k psi of cutting pressure with a 150hp drive system
- Isolated catch tank with air operated tank bladder
- Lights out cutting
- IGEMS Nesting Software
- Abrasive removal system
- Closed Loop Filtration System for water recycling
- 2,500 lb bulk abrasive hopper

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