



Huffman family members involved in management at Capsco, Inc. are (l-r): Sammy Huffman, president; Bill Huffman, director of marketing; Helen Black, vice president of administration; and Sam Huffman, chairman.

Adapting to Customer Needs Keeps Carolina Plater Growing

It's been more than 50 years since metal finishing specialist Capsco Inc., Greenville, SC, was founded by Sam Huffman and his brother, James. Through all the ups and downs of the surface finishing industry, and the extensive process adjustments made to comply with environmental regulations, the family-owned business has continued to stay competitive and expand by taking advantage of new opportunities whenever possible. In fact, the company has done so well with environmental compliance

that it recently received the 1996 Governor's Pollution Prevention Award.

Sam and James Huffman started Carolina Plating Company (now known as Capsco) in 1946. They used money pooled from pay that each received when they were discharged from military service following World War II. At first, the brothers did mostly custom work, such as replating pistols, lamps and other items for local customers. For years, the business offered copper, zinc,

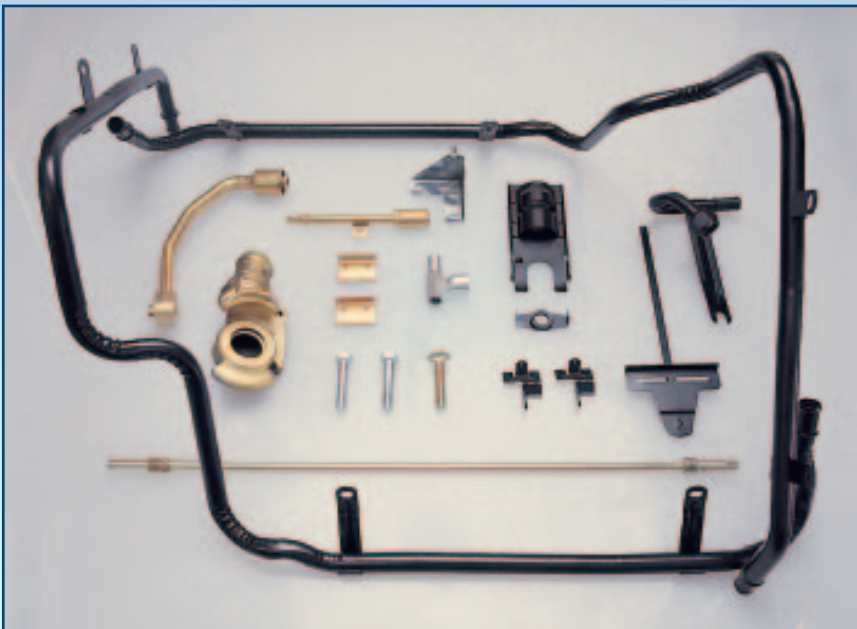
cadmium, nickel, gold and silver.

Today, the processes have been changed to be more environmentally friendly—zinc, zinc-cobalt, black oxide and zinc-nickel.

Remembering those early days, Sam Huffman says: "We weren't making enough money to pay the rent." The Huffman's survived, however, and both attended night classes to receive technical training.

In 1949, an opportunity came along that launched the company into a growth era that has continued since. The textile industry was prominent in the area, and the Huffman's started stamping and reconditioning a small metal part—called a drop wire—on a loom. A drop wire is a piece of thin, light metal about a half-inch wide and six and a half-inches long. The drop wires are hung on rows of yarn that feed into a loom. If the yarn breaks, the metal piece drops to cut off the electricity, shutting off the loom so the break can be repaired. Without the drop wire, the loom would continue and produce defective cloth.

Textile mills use thousands of drop wires. The constant friction from the yarn wears them down until the edges begin to fray the yarn. Buying new drop wires was costly for mills, so the Huffmans began to refinish worn drop wires. The company also manufactures and refinishes a part for the textile industry called a stop motion bar that has a similar function. Inventing methods to produce and



Automotive components, such as this tubing used for air conditioners, are among a variety of parts finished at Capsco.

refinish these parts in mass helped the business to grow rapidly.

At the peak of the textile business in this country, Capsco was processing from six to seven million drop wires each week. Today, the company processes about 2.5 million per week.

"There's been a reduction in demand, caused by less production here, and an increase in production in other countries that import to the U.S.," says Bill Huffman, Sam's younger brother who retired recently as company president. He said there is also increased competition from surface finishing companies in other countries, such as Mexico.

Competition Creates New Opportunities

A reduction in industrial sales hurt Capsco in 1996. The company generated \$7 million in sales in fiscal year 1994-95, but saw that reduced to about \$6 million the next year, because one of its major customers took its plating work to another country. That forced the plant to lay off 20 employees.

The loss, however, hasn't kept Capsco from expanding, and it plans to employ even larger numbers of workers in the future. The company recently completed a 11,500 ft² expansion, at a cost of about \$250,000. That brings the total production area of the plant to about 80,000 ft², not including administrative offices. The work force is currently at 135 and growing.

The main purpose of the addition was a new zinc-cobalt line to process brake parts for the automotive

industry, increasing the company's customer-base in that area. Tubing for air-conditioning and heating was already being processed on zinc-cobalt plating lines for assembly by an automotive customer.

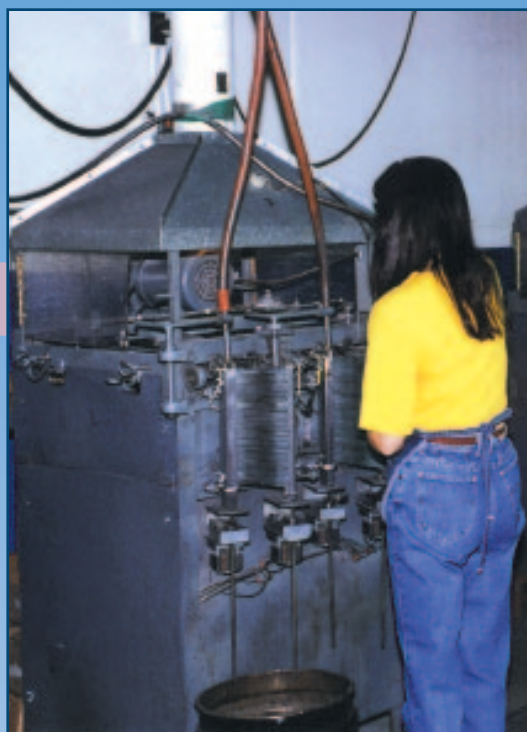
The Largest Market Is Still Textiles

According to Bill Huffman, who now serves as director of marketing, drop wires and stop motion bars for the textile industry still account for about 39 percent of Capsco's business. Finishing for the automotive industry makes up about 25 percent, and the other 36 percent includes plating components for hand tools, such as power saws, and other miscellaneous products.

Sam Huffman's son, Sammy, was named president of Capsco last November. He says he expects textiles to continue to account for a major share of business. "We have some patented processes that are not available anywhere else. It has been our speciality for many years, and we will always be competitive in that market," he said.

A Family Business

Capsco, formerly known as Carolina Plating & Stamping Company, has been a family affair from the start. Although founded by Sam and James (now deceased), two younger



Equipment at Capsco is custom-designed to provide speed and volume in the manufacturing and finishing of drop wires and other components for the textile industry.

Huffman brothers—Harold and Bill—began working for the company as soon as they were old enough. The two youngest Huffmans began running an industrial division, called Carolina Plating Works, in 1958 to plate parts for industries besides textile mills. The two divisions were merged in 1984 when the company was renamed Capsco, Inc., a shortened version of Carolina Plating & Stamping Company.

The consolidated company continued to run two plants until a fire destroyed one. The two plants were



In ceremonies at the plant, Capsco received the 1996 Governor's Pollution Prevention Award in October. From left: Linn Cooper, manager of Michelin-North America, director of the technical advisory committee for the Hazardous Waste Management Research Fund for South Carolina; Owen Roberts, environmental manager of Capsco; Bill Huffman, recently retired company president; Charles Condon, Attorney General for South Carolina who presented the award; Sam Huffman, chairman and Sammy Huffman, president of Capsco.

then combined at one location on West Blue Ridge Drive, rather than rebuilding the plant that burned.

Other family members have joined the business through the years, including Sammy and his sister Helen Black, who serves as vice president of administration. Sammy's son is now also employed by Capsco, signaling the third generation of Huffmans to be involved with the business.

Even the company's employees become part of the "family" at Capsco. Many have been there for long terms of service, as have their children and other relatives. Capsco has an exceptional record for retaining employees.

Finding Better Ways

In recent years, tougher environmental regulations have affected plating operations, but plant consolidation has allowed the company to operate with one lab and waste treatment system, eliminating some duplication and helping to reduce costs.

Capsco still has a presence at the old site, however, because some plating chemicals were spilled during the fire, which increased contamination levels in groundwater in the area. The company still maintains monitoring wells at the site, as well as two recovery wells that collect and treat groundwater before releasing it into sewers. The new plant features a completely diked waste treatment area to prevent accidental spills.

Until 1993, Capsco used solutions that contained cyanide and cadmium for metal plating. The chemicals were necessary for parts that were copper-plated, such as drop wires, and others that required cadmium, such as tubing.

Because of environmental concerns, Capsco approached its customers and received their approval to switch to safer finishing processes. Today, cadmium, copper and cyanide solutions are no longer used. Capsco now offers zinc, zinc/nickel, zinc-cobalt, black oxide and E-coat. "It makes our complete operations a lot safer," says Sammy Huffman.

The company also invested about \$200,000 to update its pollution treatment and control processes.

"We've learned a lot over the years," said Bill Huffman about the waste treatment program. "Although our processes are now a lot safer, not

one drop of treated water leaves this facility without being checked and re-checked to make sure it is clean."

To ensure that the water is clean, the company has installed 12 (12,000-gal each) holding tanks to retain all water after the metals and impurities have been removed. The water is tested for compliance, then retained in tanks and later re-tested before it is discharged to the local POTW.

Capsco is now investigating methods for recovering the metals removed from the wastewater. "Eventually, we'll be a closed-loop facility," Bill Huffman, says.

Rewarded for Efforts

Changes, upgrades and investments in preventing pollution at Capsco have been worth it. The company maintains complete and accurate records, trains all employees in proper procedures and is well on its way to becoming certified under the ISO 9000 program and, eventually, the ISO 14000 environmental standards.

Some prestigious environmental awards have also been presented to Capsco. In 1995 it received the Best Pollution Prevention Award from the Western Carolina Regional Sewer Authority. In 1996, as Capsco



Unique barrel plating techniques, including a patented process for plating drop wires used in the textile industry, are featured at Capsco.

celebrated 50 years in business, it received the Governor's Pollution Prevention Award, the highest honor for pollution prevention given to a business by the State of South Carolina.

Efforts to produce quality work in a clean and healthy environment, while reducing or eliminating waste, also led to a team concept that is now used throughout the plant. Teams working on production lines and other assignments have helped to increase efficiency and morale, and also help ensure that safe operating procedures are being followed.

Planning for Growth

Capsco expects to continue to expand in the future. The company is already building another automatic black oxide line that will be operating soon. "We have plenty of room to expand and qualified personnel to meet the needs of all our customers, while adding new processes to serve new customers," says Sammy. So look for Capsco and its "family" of surface finishing professionals to keep changing and growing as long as there is a need in the surface finishing industry. **P&SF**

Services offered by Capsco, Inc.

- Zinc-nickel
- Zinc-cobalt
- Zinc
- Black Oxide
- Anodizing
- E-Coat
- Conversion coatings