

Steinke acknowledges that he might run into problems in the near future, as his workforce gets older.

“Within the next two to five years, I will have to start some serious planning ... (to figure out) how I am going to replace the aging workers,” he states.

Steinke will also be doing some serious planning regarding the company’s line-up of equipment. He says he’s been “spending very cautiously” in part because the banks, “aren’t that keen to help out anyone in manufacturing unless you have a lot to lay on the line.”

For all the troubles in the sector, Steinke remains guardedly optimistic about the future. He says Arnold is seeking out new markets in an attempt to diversify its client base.

While he welcomes new clients, Steinke is determined to maintain Arnold’s position as a family run business offering customized jobs and personalized service. He has no intention of becoming a big, impersonal corporation.

“We’re a one-shift operation,” he states. “I don’t want all this corporate crap. Some big companies we deal with, they can’t even make a decision. They pass the buck to this guy, to this guy, then to this guy.”

Steinke says he would rather stay true to his small-business roots while continuing to offer an alternative to off shore. **CM**

THE Renaissance SHOP

B.C. shop achieves product diversity with its waterjet machines

Out on the west coast in Delta, B.C., **FlexyShop Inc.** is cutting, bending, welding, finishing and engraving up a storm. The company specializes in laser and water jet services.

Burak Ataman founded the firm in 2004. He remains the current owner and president. FlexyShop currently has a total of six employees, and operates as both a job shop and contract manufacturer.

“We work on all sorts of material. Mainly metals, plastics, ceramics, glass and wood,” states Ataman. “We serve nearly all industries because of our waterjet machines.”

Clients include “machine manufacturers, automotive, industrial equipment manufacturers, other job shops, medical, construction, etc,” he continues.

The company produces an extremely broad range of tools, parts and products, ranging from directional signs for airports to jewellery, machine components, grounding rings for flow meters, aircraft parts, floor mats, electronic medical devices, glass artwork, wood artwork, etc. Some of the items are displayed on FlexyShop’s comprehensive website.

When asked what kind of equipment he uses, Ataman ticks off a list: “We have two **Omax** waterjet tables, one **Mazak** laser cutting machine,

one **Amada** press brake, one **Haas** vertical CNC machine, one **Gravograph** rotary engraver, one GCC small laser, one Bridgeport manual milling machine and several pieces of **Miller** welding equipment.”

The website for FlexyShop goes into exhaustive detail about this equipment. According to the FlexyShop site, the CNC machine boasts a 40-taper spindle, a 10-pocket automatic tool changer and can achieve speeds up to 6,000 rpm.

The hydraulic press brake, meanwhile, offers a bend length of 118 inches, an approach speed of 213 inches per minute and a maximum tonnage capability of 110 U.S. tons. The press brake itself weighs 19,400 pounds.

The Mazak laser, for its part, has a production rate “reaching speeds of 945 inches per minute” and a “96 inch-by-48 inch cutting envelope” states the website.

For all these details, the Flexy website gives place of pride to the firm’s water and abrasive jets.

“Our ultra-high pressure waterjet cutting uses water compressed up to 50,000 psi as a powerful and precise cutting tool with no heat affected zone or part distortion ... the jet stream generated by this process is capable of cutting material from .001 thick up to 12 inches thick,” reads the site. “All waterjet machines are equipped with tilting cutting heads which dramatically enhances the effectiveness of cutting, making our process competitive over other comparable methods.”

The waterjet cutting technology utilized at Flexy uses a mixture of water and fine garnet abrasive to cut materials. This water/abrasive mix is “pressurized to 55,000 psi and passed through a cutting head at speeds up to 1,000 feet per second.”

‘We serve nearly all industries because of our waterjet machines.’

The site says that abrasive jets are faster than EDM (electrical discharge machining) machines, require less set-up and can make bigger parts. Abrasive jets are also more precise than flame cutting and can machine “many materials that lasers cannot” such as reflective materials like aluminium and copper.

On top of this, abrasive jets can machine thicker materials than a laser is capable of. While lasers can

machine to a maximum of 0.5 inches (12mm) – 0.75 inches (19mm), abrasive jets can apparently do 2 inches (50mm) of steel and 3 inches (76mm) of aluminium.

In addition to these capabilities, Flexy utilizes CAD/CAM technology.

While the FlexyShop website puts an extremely positive spin on the firm’s capabilities, Ataman concedes that the machining industry does face some challenges.

In particular, he cites “cash flow and rising metal prices” as the two most pressing issues facing his particular sector. **CM**