

Purchase Power



by Anna Wells, Editor, IMPO

If you took a stroll through the aisles of Columbia Tech, the turnkey contract manufacturing division of Coghlin Companies, Inc. in Worcester, MA, you'd stumble across a bevy of items in various stages of production: one might be a subsystem for an Ion implanter, another a cellulite reduction tool, and steps away, an explosion sniffing device used for security and detection.

Needless to say, there is no typical day at Coghlin Companies. That said, the company does have a mind for consistency, namely in its meticulously managed supply chain strategy. And it's easy to see why the company's efforts are so targeted.

According to Jim Coghlin, VP supply chain & project management, "If we have a sales dollar, about 65 to 70 cents of that dollar is made up in purchased material. It's the biggest opportunity in our business, and also potentially the biggest liability."

Old School

Coghlin is a privately held manufacturing and engineering services organization spanning four generations, and has been located in Worcester for an astounding 125 years. Four of its wholly owned subsidiaries—Columbia Tech, Coghlin Precision, Cogmedix, and DCI Engineering—provide creative design, engineering, and manufacturing solutions to a diversified group of capital equipment and device manufacturers throughout the United States.

Part of Coghlin's value comes from what it calls its "practical approach" business model, combining front end design and engineering services with worldwide purchasing leverage and customized manufacturing programs renowned for extreme flexibility and attentiveness to detail. It's this purchasing leverage that the company feels has honed its competitive edge.

The Labor Component

These days, it might be easy to assume that shipping work overseas is a cheap fix to production woes, but the Coghlin brothers, Jim and Chris, beg to differ. In fact, they're happy to explain

which niche they fit perfectly: projects with low to medium volume applications, ECO traffic, and a need for intellectual property protection.

“The labor component of the products we build is small—it’s 10 to 20 percent relative to the overall product cost, therefore global sourcing combined with domestic labor equals the perfect blend of cost efficiency, high quality, and intellectual property protection” says Chris Coghlin, president. “So if we’re buying parts from all over the world, we’re buying them more cost effectively than they can be made domestically. But because the percentage of assembly time is so small relative to the cost of the product, you can still do it profitably, do it right, and protect the customer’s design without worrying about infringement overseas.”

“Intellectual property protection is huge,” adds Jim. “Say you spend five or ten years developing a product, and now you want to start manufacturing. If you send that documentation over to China, you have no assurance via the law that your intellectual property is going to be protected. We, in turn, have worked with a customer who spent years developing an amazing product that was doing very well in the marketplace. They looked at moving it to a low-cost region. They had someone acquire those products over there, reverse engineer it, and create a knock-off at basically one-third of the price. The knock offs were priced so low, they actually had to shut down that business.”

Sometimes it’s a matter of a global marketplace that’s so big, that U.S. patent protection isn’t a big enough stick for the reverse engineering carrot: “It’s difficult to extend U.S. patent protection for items manufactured in China,” says Chris. “They can’t sell it to the United States, but if the world is the market, they don’t even care.”



MRP Share Programs

“Another area of supply chain that’s really important is inventory timing,” says Jim. “We want to have inventory arrive here just when it is needed, with perfect quality, as we ordered it, and at a very competitive price. Developing that type of a supplier takes time and diligence, so with these suppliers, we’ve developed all sorts of programs, including brand name programs like Kanban, which is used everywhere.

“A Kanban program is something that we’ve spent a lot of time developing with our suppliers here on large structures and large, high-dollar assemblies. We give our supplier a commitment, based on the commitments we get from our customers, but we have the materials stay at the supplier location until we absolutely need it here. And by doing that, we send them a Kanban

release, it arrives here within 24 hours, and it arrives right to our production cell. It doesn't have to go to a warehouse to be staged, it doesn't have to be handled multiple times, so by having it arrive to the production cell cuts down on the production costs, the carrying costs of the inventory, the risk of damage... all of that comes into play.

“We've spent a lot of time developing the suppliers to do that on the larger, high-dollar items. On the day-to-day items, which are very costly to manage, we've set up what we call 'MRP Share Programs.' An MRP Share Program is when we will send our supplier a list of demands that can go out to 365 days. With all of the products we're purchasing with that supplier on these programs, it shows the demands there. We've pre-negotiated pricing and release quantities, so we in turn don't have to manage it; the supplier manages it at that point. They look at our demand and send in material based on when we need it and in the quantities that we've agreed to.”

Sometimes this method means it's more practical to order six months worth of a smaller, less expensive component, simply because it's a nuisance to manage. “To only have to receive it once, pay for it once, and handle it once really saves a lot of money,” explains Jim. “On the larger parts, we may have items that come in three times a week, because it is very costly to manage, takes up a lot of space, and the risk of damage of having it on our production floor is something we can avoid by having it on the floor in the shortest (necessary) period of time. So it's not just about having as little inventory as possible, it's how do you work with your supply chain to manage the material as efficiently as possible.”

A Dynamic Of Respect

So as the supply chain management buzz gets louder, how does Coghlin plan to keep this competitive edge? Jim explains it frankly— it's about treating your suppliers like a partner, and not a bank: “The way you treat your suppliers during the really good times is a direct reflection of how they are going to treat you during the difficult times. And when I say 'difficult,' I mean extended lead times and allocation periods,” explains Jim. “As the economy comes back, there is a limited supply and increased demand, therefore extended lead times. We in turn have treated them very well during the good times, so if there are a hundred pieces of something available and there are a lot of people trying to go after them—and we're one of them—more than likely, they're going to give it to us because of the way that we've treated them and supported them. They know they're going to get paid right away and we're loyal to them in the good and bad times.