

August • September 2007

An Arnold Publication

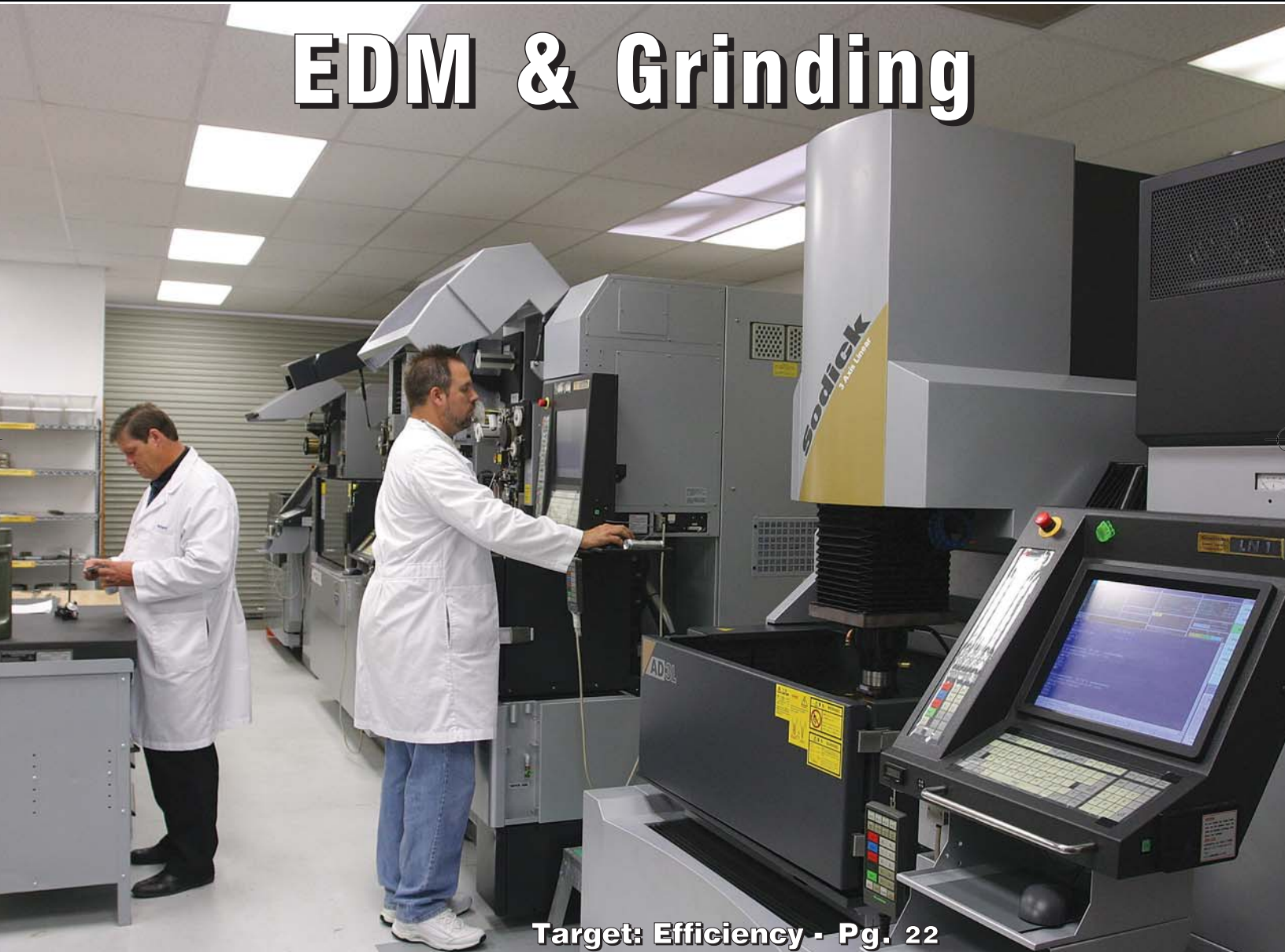
# CNC WEST

The  
Magazine for Western  
Metalworking  
Manufacturing

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## EDM & Grinding



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*John Colunga, EDM operator, sets up Barrot's newest wire EDM system, a Fanuc XOC. Barrot operates 6 Fanucs and one small Brother EDM machine. The department is run by James Barrot, the middle of the three brothers.*

# The Headless Job Shop

***A Committee of Three Brothers Leads Barrot Corporation to Success.***

*Story and photos by C. H. Bush, editor*

Typically, a successful machining job shop is driven by the strong will of a single individual. That individual may be called 'president' or 'general manager' or just 'owner,' but no matter what the title, most major decisions are filtered through that 'boss.'

Irvine, CA's Barrot Corporation, a combination milling, turning and EDM job shop with 30 employees operating in a modern, company-owned 16,000 sq ft facility, totally shatters that stereotype.

"Actually, since my father semi-retired ten years ago, we don't really have a central boss here at Barrot," says Jim Barrot. When asked about his job title, Barrot calls himself a partner. "My two brothers, Carlos, who is older, and Robert, who is younger, and I are equal partners in the company. Carlos runs the milling department. Robert runs the turning department, and I'm in charge of EDM machining. We really don't have a boss."

## ***Three-Partner Management System***

How did this three-partner management system develop and why does it seem to work so well?

"It wasn't always this way," Barrot says. "My dad, Jesus, started the business out of his garage around 1984. Back then it was Barrot Industries. He and my mother came to the U.S. from Spain via Germany, then to Canada and finally to the Los Angeles area. Dad was good manual machinist, and it was natural for him to start his own business."

Barrot says he and his brothers joined the company one at a time as they got old enough help out.

"Carlos was first to work for dad full time," he says. "Then Robert and I worked part time. I went to college and Robert came to the company full time straight out of high school. I joined Barrot full time when I finished college."

Barrot's father, who had been a semi-professional soccer

*As seen in CNC-West August/September 2007 issue*

**Jame Barrot, right, and Nick Garcia, EDM operator, discuss quality requirements on a customer's part.**

player as a young man, believed in teamwork. As a result, he trained his sons to work together as a team. Consequently, over the years there has been no squabbling about “who does what” at the company. They just do whatever has to be done that comes their way.

“Back in the late ‘80’s we got our first CNC Mill,” Barrot recalls. “My dad said, ‘What do we do with this thing?’ So Carlos, the oldest, said, ‘I’ll go take classes. I’ll learn how to work it.’ So he figured out CNC milling, and he’s been in charge of that ever since.”

Then the company bought its first CNC lathe.

“Robert, who was full time by then, said, ‘Okay, I’ll learn to program the lathe.’ So, he’s been in charge of turning ever since.”

It was the same thing for Jim Barrot, too.

“When I finally came on board full time, dad was running the company, making most of the decisions with our input. Carlos was running the milling department. Robert was in charge of turning. About then, we realized we were spending a lot of money subcontracting out EDM work, so we decided to buy a wire EDM of our own. We bought a Japax and my brothers looked at me, so I said, ‘Okay, I guess it’s my turn. I’ll learn to program and run the EDM.’ I’ve been doing it ever since.”

Over the years the brothers developed a loose form of communication between themselves and their departments.

“We never developed a formal meeting procedure,” Barrot says. “We each just did our job, and when dad got out of the loop ten years ago, we just kept on doing things the way we always did. Sometimes we’ll go a whole day without seeing each other, and we’re no more than 50 feet apart. Sometimes I’ll put a note on one of their desks about a P.O. or a job schedule or they’ll do the same for me. If we write ‘hot’ on the note, we all know it means hot. If I see that kind of a note, I start on the job immediately. I don’t wait until the last minute. They treat my notes the same way. We’ve developed an efficient way of communicating that works great for us.”

Many of Barrot’s jobs require all three departments to work on them.

“When that happens,” Barrot says, “whoever sees the job first looks at it and decides who needs to get first crack at it. It might be me, then turning, then milling, or whatever. We’ve worked together so long we practically can read each other’s minds.”

### **What Do Customers Think?**

Barrot says that new customers are a little surprised at first to learn how they work, but that once they understand, they like the system.

**Robert Barrot, who heads up the Barrot Corporation lathe department, chats with Ambrosio Salas, CNC lathe operator and Robert's right-hand man. In the background is a Mori Seiki SL-150 turning center, a recent purchase.**



“Our systems can be as formal or informal as our customers like,” Barrot says, “but for a lot of them, once they realize they can talk to a specialist, when they call, they’ll say, ‘I want to talk to Carlos or Robert or Jimmy, because they know who is in charge of what. If a job is mostly milling with a little EDM work on it, they’ll ask for Carlos first, then they’ll switch over to me. They’ll say, ‘Hey, I just talked to Carlos. He said he can get this done in a couple of days. What about you?’ It only takes a few times for them to get the hang of the system, and once they do, they like it. Our customers are very loyal.”

Most of Barrot’s customers are in the Southern California area, but they ship parts as far away as Puerto Rico.

“We have a pretty broad customer base,” he says. “We’re pretty heavy into aerospace and medical R&D work. That’s probably the biggest part of our sales, but we have customers in the aerospace, computer, automotive and a lot of other industries. We machine just about any material that can be machined. We put a lot of work through this shop in order to maintain the business.”

### **One Big Happy Pot**

Most fairly large companies would treat their individual departments as profit centers, but Barrot doesn’t do that.





**Carlos Barrot, right, and Jose Jimenez, CNC mill operator, discuss a new project. Carlos is the eldest brother of the three and is in charge of the company's busy milling department.**

"All the money we earn goes into one big pot," Barrot says. "Our departments are here to service our customers. If one does well this year and another not so well, it doesn't really matter. We're here to give our customers what they need. We're all part of the same company, and, frankly, we're doing very well."

### **Equipment Decisions**

Barrot Corporation owns and operates more than 30 pieces of CNC machining, including milling, turning and EDM.

"Most of our CNC mills and lathes are Mori Seiki," Barrot says. "In the EDM department I have six Fanuc wire EDMs and one small Brother machine. We probably buy a couple of machines a year. My last Fanuc, an XOC, was purchased in May of this year."

Decisions to buy new equipment are made by the three brothers together.

"For small equipment, we just make the decision without consulting," Barrot says, "but if it's something major, we get together and talk. Maybe I'll say, 'Hey, it's time to buy another EDM.' Then we talk about it and make the purchase. These are little meetings, nothing big or formal."

When asked why he concentrated his EDM purchases on Fanuc machines, Barrot said it wasn't a big thing.

"We looked at all the different brands of machines," he says, "and they were all good. They all had good tolerance capabilities, easy programming, and they were all pretty reliable. What pushed me over to Fanuc was the applications guy, a man named Joel, at Methods Machine. Joel seemed like he really wanted to help me learn. He spent a lot of time with me, teaching me and he wasn't pushy. I really bought the first Fanuc because of him. Since then, of course, I've continued to buy Fanuc because of their performance. They're very reliable, easy to program, easy to maintain and we can get tolerances to plus or minus one tenth. We have a wide range of work envelopes on the machines, so we can handle anything that comes through the door. I don't try to tell my brothers what to buy for their departments and they don't try to tell me. I like the Fanucs and the service I get, so there's a 99.9% chance I'll keep buying Fanucs."

### **The Barrot Future**

Are the brothers interested in building the company into a giant manufacturing operation.

"We do want to grow," says Barrot, "but we don't want to grow so fast we can't keep giving the kind of service we always have. Happy customers are our specialty." ■