

Attention steel mills:

Need a production trouble-shooter? We've got the man with the answers

And you should be talking to him. One mill customer who took his advice has seen saw usage drop 62%.

Keith Pascoe's career began in 1956 as a problem solver in the rolling mills of BRITISH STEEL. He's been solving saw production problems ever since.

An engineer with almost 30 years experience, he knows how saws react under different conditions.

In 1967, Keith joined James Neill to work on the manufacture and use of all types of saws — from bandsaw and hacksaw blades to jeweler's filigree saws. He's been in mills all over the world watching saws made of different metals cutting all kinds of materials. He is a man of insight.

In 1985, Spear & Jackson merged with James Neill. In 1991, we began working with Keith when ORBITAL SAW became the

exclusive distributor of Spear & Jackson saws in the U.S. and Canada.

Results

How good is he? We took him to one steel mill where he studied the mill's operation and suggested a few changes.

At the time of Keith's visit, the mill was going through 18 saws a week on each of their machines. They took Keith's advice, and now they're down to 7 saws a week. Experience makes the difference.

3 easy steps to solve typical production problems in steel mills

Since Keith Pascoe has been all over the world watching steel mills in operation, we asked him what easy-to-apply advice he would give steel mills about improving production. This is what he had to say. (As you read this, you will see that Keith has a typical British sense of humor.)

According to Keith: "The most frequent complaint about hot/friction saws concerns the amount of fash [burr] left on the sawed product. If the truth be told, the fash [burr] problem frequently lies not in the saw itself, *but in the way the saw is used.*

"Mill people frequently fall prey to 3 common misconceptions that lead to fash [burr] problems. First, that the purpose of water cooling is to drown anybody who gets too close. Second, the saw motor is designed to spin the saw as fast as possible. Third, although the saw is worn, it will always last until the next shift."

But flippancy aside for a moment, let's talk about each of these points.

Water cooling

The guideline for cooling is 750-1100 psi. And the coolant has to be directed to the right place. Many mills have older machines that did

not come equipped with coolant sprayers, and so these mills have had to rig their own spraying system. The results of these poorly-rigged systems show up in three ways:

A. Cracked saws: Saws that are properly cooled withstand the beating they take during operation and resist cracking.

B. Too much swarf: If the water pressure isn't correct or aimed properly, it cannot clean the saw's gullet radius. So the saws begin to chew the product rather than cleanly cut it.

C. Poor cuts: If the coolant is directed toward the product rather than the saw,

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the saw overheats, the cut quality suffers, and excessive fash [burr] forms on the product.

Saw motors

Sometimes the pressure to turn out more product prompts you to increase the speed of the motor. However, just because the motor is capable of running faster doesn't mean this faster speed will give you the same quality product. In fact, just the opposite is true — the faster the speed, the more the quality of the cut suffers. The higher speeds are hard on the blade, causing it to wear faster, and your usage rises.

When we supply you with a saw, it is tensioned for the operating speed of the machine. So faster speeds stress the saws and motor and fail to give you a quality cut. In short, there's not a single advantage to increasing motor speeds.

The point here is this: often the saw is blamed for delivering a poor performance when motor speeds are increased. The resulting fash [burr] is really not the saw's fault — the mill is putting the saw in a cutting situation that it was not designed to handle.

Saw wear

Mills often expect the saw to last through the shift. Sometimes it will; sometimes it won't — depending on the material being cut. If you are cutting a difficult material and the saw's teeth have been worn down, stop the shift and change the saw. Yes, you would rather not disrupt production, but saws with no teeth can't deliver a quality product.

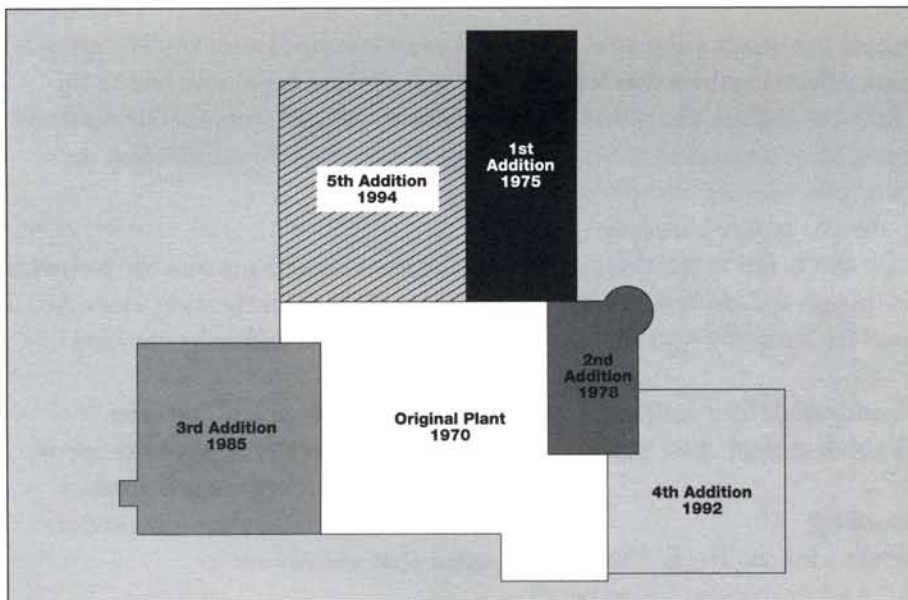
While to some of you these 3 points may be obvious, to others, the points make sense but the mistakes get made anyway. Why? Because millhands want to turn out more

product so they push the motors a little harder that day. Or the millhands don't want to stop the operation to change the saws — it's more convenient to wait for the next shift. But the fact remains: that thinking is short-sighted. Quality drops. Saw usage increases. Motors wear out and fail.

And from our standpoint, we want to defend the saws. It's not that our saws don't cut well or wear well. They will do their jobs if they are used properly, which is the point Keith was trying to make at the beginning of this article.

In writing this article, we asked Keith for simple and typical problems to solve. If you have different problems, more difficult problems, out-of-the-ordinary problems, call us. Keith and our Dan Herrmann will visit customers' mills next time Keith is in the States. We guarantee you it will be time well spent.

Kinetic expands for the 5th time since 1970



This time it's for more plant space. We've ordered large grinders for metals and paper work, and we've nowhere to put them. So for the 5th time since 1970, we're knocking out

walls and expanding.

In 1970, our facility occupied 18,000 square feet. In 1975, we enlarged and added the heat treating

area; in '79 the office; in '85 the plant, and in '92 the office again. When this plant addition is completed, we will be up to 62,000 square feet.

The additional space will give us badly needed room for the new equipment, but it will also give us the chance to reorganize and restructure our work flow to accommodate the new machines. We know it will lead to better efficiency.

While dust, noise, and bother come with any construction project, we aren't complaining. All of this inconvenience is a symbol that we are doing our job — the demand for Kinetic products is growing because the world market recognizes a good product at a fair price. Thank you for your support — we wouldn't be expanding if it weren't for your business.