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## ***PartMaker® News Update*** - September/October 2004 Edition

# Medical Miracle: PartMaker Makes Medical Machining More Productive

Leading Medical Contract Manufacturers and OEMs use PartMaker to manufacture a variety of medical devices and implants

**P**artMaker is the CAM system of choice of many of the industry's leading manufacturers of medical devices. These manufacturers include such OEMs as Smith & Nephew, Biomet, W.L. Gore and Stryker Howmedica as well as a large number of leading contract manufacturers who do medical machining. To give you an idea, each month, the advertisers in *Medical Product Manufacturing*

*News* serve as a veritable, Who's Who of PartMaker users.

In this issue of PartMaker News, we'll be focusing on one PartMaker user who uses the software to machine parts for the medical industry.

### Criterion Tool & Die

"Our customers are people in the orthopedic and spinal industry, making implants and instrumentation," according to Tanya DiSalvo,

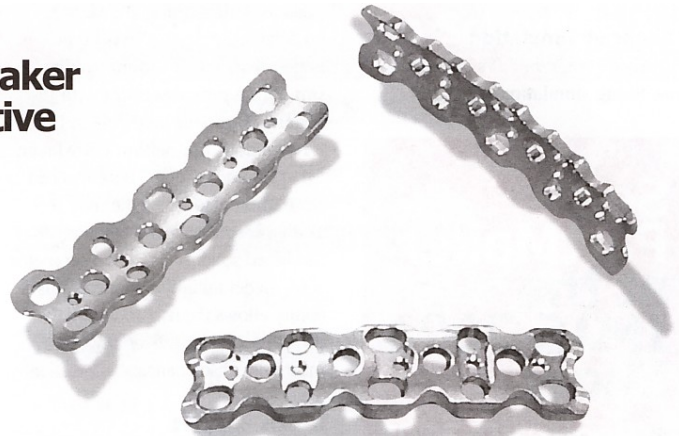
Operations Manager of Criterion Tool & Die.

The back bone of Criterion's medical machining capability are two Star SV-20s, a Tsugami S-16 and a Hitachi Super Hi-Cell Turn-Mill Center equipped with B-axis. The company also has a number of Kitamura Vertical Machining centers. All the machines are programmed with PartMaker.

### Programming is "Huge"

"Programming is a huge issue from the aspect of medical machining because of all of the geometry that is now required on all of these parts. Whether its screws or other implantables, everything is blended, nothing is flat, everything flows, one feature flows into the next. A flat into a radius to the next. It needs to look smooth on all of those screws, those instruments, and those implants. That's all a function of math and geometry that you cannot calculate the old fashioned way," according to DiSalvo.

Criterion has been using PartMaker for two years. Prior to implementing the software, the programming for the multi-axis lathes was done largely manually by the setup men at the machine control. With PartMaker, Criterion's personnel are able to program quickly off-line while the machine is running, which really reduces the amount of time spent in setup. In Criterion's medical business, like many other medical shops, lot sizes start at 5 - 10 pieces and a production run might top out at 5,000, so



■ Like many implants, these spinal plates have no straight lines. The geometry of such medical components often reflects the natural curves and irregular shapes of the human body. They are manufactured by Criterion Tool & Die in Brookpark, Ohio, and were programmed with PartMaker

quick setups are key. In one recent four day span, DiSalvo watched six new jobs be setup on the Star SVs. Needless to say, fast setups are key to the company maintaining its competitive advantage.

### Offline and More Productive

"With PartMaker, we're not programming online anymore, which is how we used to do things. So the operator would be running a job, and if he had the time he'd be sitting there with a paper and pencil trying to figure out what he was going to do next. Often you can't visualize what's going on that way, especially on the our Star SVs with the two spindles and multiple axes and the need to synchronize everything that is going to occur," says DiSalvo.