



MPI INTERNATIONAL KEEPS IMPROVING A “FINE” CONCEPT

BY LISA R. BROWN

When MPI International Inc. was founded in 1969, the goal was to apply the Swiss developed process of fineblanking in the U.S. manufacturing environment, where MPI's founders believed that an enormous potential existed for this high precision manufacturing process. However, in the early years, considerable missionary work was needed to make the process known to potential customers before the first orders were received.

At the historical first meeting with Chrysler, MPI, then

Michigan Precision Industries, explained the inherent attributes of the Swiss fineblanking process to a purchasing manager, who responded, “We build cars at Chrysler, not coo coo clocks,” says Franz Boos, the company's executive vice president for sales and marketing. This statement was a clear message to MPI's entrepreneurial staff that the

road to success would not come easily.

To book the company's first orders required identification of high volume, close tolerance components; which was the easy part. The bigger challenge came in convincing engineers who were not familiar with the process that fineblanking was in fact a viable manufacturing process, capable of eliminating the need for additional machining processes. Fortunately, over time, the first orders came, and slowly MPI started to grow from its annual sales of \$500,000. A few years down the road the pace started to increase rapidly.

The same advantages fineblanking has provided for more than 35 years still apply today—increased accuracy from a single high-quality process which drastically can reduce manufacturing costs.

Unlike conventional single action press metal stamping, the fineblanking process is performed using special fineblanking presses with three concurrent forces that control the material flow as parts are blanked/extruded from raw material, generally in coil form and traditionally in heavy gauge. Fineblanking becomes particularly interesting and advantageous for parts »

PROFILE

MPI International Inc.
www.mpi-int.com
 Sales: \$140 million
 HQ: Rochester Hills, Mich.
 Employees: 950
 Services: Fineblanking and precision machining
 Karl Pfister, CEO: “The overriding theme is continuous improvement in every area.”



» between 1/4 and 1/2 inch in thickness. Fineblanked parts are recognizable from their cleanly sheared edges that are totally perpendicular to the face of the component. Less visible features include reduced die-roll, improved flatness and overall tightly held tolerances. Another advantage is repeatability – there is virtually no difference between the first and last part produced on a fineblanking die.

Not entirely by design, MPI's largest market is the automotive industry. In earlier years, the company found as much as 40 percent of its business in other areas, including hand-tools, medical equipment, computer applications and appliances. At one time, MPI was also heavily involved with a huge scientific program for the development of a super-collider, which was essentially planned to be a giant atom-smasher. The program ended when federal funding was pulled.

The automotive industry, however, tends to be an ideal market when considering shear volume, lifespan of many programs, and ever more demanding design criteria that lend well to the fineblanking process. While the auto industry is not an easy one to succeed in, MPI continues to earn its merits every day, producing evermore demanding components and intricate subassemblies, including a wide array of safety critical, or inverted delta, products, Boos says.

All of the MPI manufacturing operations are ISO 9002, QS 9000, and ISO 14001 certified. The company is also diligently working toward TS 16949 certification in the first half of 2004. These credentials offer the company far more than flags to fly over its buildings – they are a license to do business within its

industry, says CEO Karl Pfister.

The combination of craftsmanship, ingenuity and the drive to succeed are absolutely the name of the game. Wherever possible, MPI looks for opportunities to work with its customers from the infancy of programs to design reviews and collaboration in making design recommendations that lead to cost reduction, improve process consistency and quality, and in general create the best possible product. The MPI success is predicated on the success of its customers – and in today's global environment, a product that doesn't sell for one reason or another simply won't be produced.

The other unique specialty which is typically less discussed is the full range of value-added special machining capabilities. Every MPI part starts with a fineblanked component. Many of these are enhanced with the special machining processes required to make them ready to be assembled by the customer. MPI looks to provide its customers with the greatest value and to position itself as the prime contractor of choice by providing commonsense solutions.

"Sometimes we are surprised ourselves at the achievements we reach by simply staying focused on our day-to-day business," says Marc Pfister, MPI marketing manager. For example, MPI is one of the largest user of double-disc grinding wheels in North America, not as a job shop grinding house, but as the high volume producer of valve plates for climate-control systems, where grinding is an inherent requirement to achieve accurate thickness and finish.

FUTURE GROWTH

MPI has six manufacturing sites that fall under four respective divisions located in Wisconsin, Indiana, Ohio and South Carolina. Each division is fully staffed with design and process engineering resources as well as state-of-the-art equipped tool-rooms, staffed with skilled and specialized die makers. Among its operations, MPI has the largest concentration of heavy-tonnage fineblanking presses within the industry.

MPI projects a 6 percent growth rate in 2004. In spite of the challenges faced throughout industry today – the economic doldrums of the past few years, the historically weak dollar, indications of turbulence in the steel market for the months ahead, and international competition that includes China factor – MPI says it is poised to come out on top.

Furthermore, as the "international" in the name implies, this organization would not shy away from doing business in other regions of the world, Pfister says. "While no firm plans exist, we would not rule out producing product in Asia or Europe when the time is right," he says. "But first of all, we are keeping a pulse on what is going on here at home where we are constantly looking towards complementary processes that will add synergies to our core operations. Commonsense will continue to be a fundamental variable in setting our future direction." 