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# Senger News & Focus

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*Senger and Associates, Inc.*

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## Gerard Daniel Weaves Way to Industry Leader Company is Largest Wire Cloth Supplier in the World

As the largest U.S. weaver of industrial wire cloth, Gerard Daniel Worldwide (GDW, formerly Gerard Daniel and Company) knows all the ins and outs of meeting their customer's needs. Unlike other domestic producers who concentrate on other markets, for over 20 years GDW has focused exclusively on wire and wire cloth products for industrial uses. And, they have over 80 years experience in wire and weaving.

The GDW divisions offer over 5,000 different items from stock or from standard production but also specialize in providing their customers with solutions and alternatives in wire cloth for many applications. For long or short runs, their 200-loom capacity gives them the flexibility to create the necessary wire cloth, weaving to .032-inch diameters in meshes from four to 100 wires per linear inch.

GDW offers the broadest range of processing capabilities, so that the industrial wire and wire cloth are ready for use in their customer's products. GDW can draw, vacuum anneal, sinter, epoxy powder coat, Teflon7 coat, paint, slit as narrow as 2 inch, stamp, punch, form and calendar. In addition, GDW packages items to their customer's requirements for ease in shipping and handling.

Gerard Daniel Worldwide is the largest supplier of wire cloth to the filtration, aerospace, automotive and electronics industries. Together, the Eastern, Western, Metropolitan, Canadian and European divisions compose the largest wire cloth supplier in the world.

### Quality Counts with GDW

Gerard Daniel Worldwide is the first wire cloth manufacturer in the world to achieve QS 9000 certification and to achieve ISO 9002 registration.

Additionally, Gerard Daniel Worldwide has established exclusive, long-standing associations with leading weavers in Europe and the Far East which ensure the availability of the best quality products. Quality control is maintained through every phase of processing.

For the most demanding requirements, GDW's laboratory facility provides additional testing and analytical capabilities.

### A Leader in Other Industries

GDW is not only the largest industrial wire cloth producer, but also the largest producer of filtration-grade wire cloth. In addition, they are the leader in developing and manufacturing epoxy-coated and electro-galvanized wire cloth for liquid and air filtration.

GDW is the world leader in the production of nickel and Ni-Ply mesh for all battery applications, from tiny hearing aid batteries to military or satellite batteries. They also have a product line of hardboard production screens in high carbon steel and stainless steel.

In addition to woven mesh, GDW is a major source for carbon steel wire needsBtheir wire drawing department is able to handle even the toughest requirements.



### GDW Makes Big Changes

The year 2000 was an important year for Gerard Daniel and Company. In addition to changing their name to Gerard Daniel Worldwide, they also moved their headquarters from New York to Pennsylvania, making Hanover the center for three divisions -Gerard Daniel, GDC/Keystone and GDC/Specialty Products.

According to GDW Sales Manager, Steve Pfeffer, the move, which was completed in December, was made so that efforts and stock could be consolidated, which should result in improved customer service and cost stabilization.

## Remmele Plant 20 Purchases New CNC Machining Center

Adding to their already extensive Flexible Machining Systems (FMS), the Repetitive Batch Machining Division--Plant 20--



recently announced the purchase of a new Makino A55E 4-axis stand-alone CNC machining center with an eight-pallet shuttle system.

The operating system, which is Windows based, allows large complex programs to drip feed into the machine control and allows the flexibility of

storing programs locally or on a LAN server. It is possible to load up to eight jobs at a time and let it run overnight or over the weekend.

The new Makino is an improvement over previous models for several reasons. Feed and rapid traverse speeds are 3300 inches per minute. As a comparison, the A77 machines which Remmele also utilizes travel at 900 inches per minute. Assuming cutter technology and the material being processed would allow the machine to run at this rate, significant improvements in metal removal rates should result as well. This allows Remmele to experiment with leading edge cutter technology without having to deal with machine feeds and speeds as a potential bottleneck for improvement. It also means immediate improvements in cycle time due to the fast traverse speed capability when the tool is not engaged in the work piece.

There is also an improved chip and coolant handling system which allows more efficient removal of chips from the work zone. The cooling system has improved filters which reduce concern for chips interfering with cutter performance.

The A55E isolates vibration and heat generated from the coolant chillers from the machine. It also has systems in place to maintain the temperature of ball screws and motor mounts. This allows more accurate processing of parts on the machine.

The new machine also has a probing system integral to the machine which allows Remmele to automatically inspect parts in-cycle. This has the possibility of eliminating the need for some additional inspection set-ups outside the process.

The working envelope is a 22" diameter x 36" high cylinder or around a 20" cube. The A55E will handle any of the complex machining work that Remmele does, in any material that fits within its working envelope. Since it is among the most accurate machines Remmele has in their facility, it's used when tolerances are extremely tight.

## FMS Explained

By joining multiple CNC machining centers with an automated pallet storage and delivery system, Remmele has developed their Flexible Machining Systems. Work is loaded on pallets and fitted with memory chips identifying the pallet's place in the system. Then, a computer-controlled scheduling system coordinates the delivery of work to available machines, based on finished part requirements. Each machining center contains up to 240 tools, ensuring that the necessary cutting tools are available for a variety of parts.

According to Matt Boenish, Marketing Manager at Plant 20, Remmele purchased the A55E with a look to the future. "We needed to look down the road and try to understand what the next generation in machining technology might have to offer. Thus, the purchase of the A55E."



FMS offer Remmele customers several benefits: precision, flexibility, shorter production times, and five-axis capability. Coupled with Remmele's highly trained work force, accuracy and timeliness are ensured. Additionally, all jobs are assigned a project managerBa single point of contact who will keep you abreast on all progress your project is making.

## To Learn More

If you would like to learn more about Gerard Daniel, Remmele Engineering or any of the other lines the Sengers represent, contact Senger and Associates, Inc. at (651) 633-6040 or at [www.senger-assoc.com](http://www.senger-assoc.com).