

ARTICLE: A Success Story

Machining company makes the switch to Inter-Source System; Sees immediate improvement



F&H Manufacturing is a family-owned machining company located in Jackson, Michigan. The company utilizes automatic screw machines, CNC lathes, and machining centers to provide high quality custom parts to a variety of customers.

Founded in 1987, F&H Manufacturing began with the purchase of two automatic screw machines. Today, some 32 years later, the company boasts 23 automatic screw machines, 10 CNC lathes, 9 machining centers, and a secondary department to allow for the in-house finishing of parts.

Such an increase in production capacity and volume prompted company president Scott Kellenberger to purchase a chip management system in 1998. At that time, the chip processing equipment (made by an Inter-Source competitor) consisted of the following:

- Small 6" incline conveyor – undersized for the operation
- Diagonal shaft spinner – requiring constant maintenance
- No chip shredder – limiting the use of the system

20 years after the original chip processing equipment was installed, Scott Kellenberger and F&H Manufacturing knew it was time for a change, so he called Inter-Source.

THE PROBLEM

“We simply outgrew our old chip system due to production increases in our plant”, said Kellenberger. “the biggest problem was that our old system did not have a chip shredder. The system would jam every time we ran large stringy chips through it. Eventually we just stopped running those types of chips.”

In addition to the old chip system’s inability to run stringy chips, the system was under constant maintenance. “It took one man just to push chips through our old system. We wanted the ability to just dump the chips and walk away” said Kellenberger. Upon a review of the failed chip system, Scott Kellenberger along with an Inter-Source sales associate discovered the following information:

- 25% or more of the oil in the chips was not being recovered
- The chips were heavily saturated in oil, causing an unwarranted mess
- The chips were not worth maximum value from the company’s scrap dealer, causing F&H to lose out on thousands of dollars.

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THE SOLUTION

F&H Manufacturing knew that they had to make a change. Scott Kellenberger received proposals from Inter-Source and another supplier. At the end of the day, Inter-Source was awarded F&H's business and more importantly, was awarded a relationship with the family-owned business. "We wanted a strategic partner, not just a scrap equipment supplier" said Kellenberger. "With the other suppliers, it felt like they were just going to drop off the equipment and we'd never hear from them again" Kellenberger added.

Relying upon 35+ years of experience and over 600 systems installed worldwide, Inter-Source was able to customize an excellent solution for F&H Manufacturing. We started with our patented 30" Chip Wringer, which is engineered to process up to 2,000 lbs./hour of oil-saturated chips. "The Chip Wringer is the heart of the system" Inter-Source president Bill Nemedi said. Only Inter-Source guarantees a moisture content of 2% or less after processing.

Next came the Wringer's feeding system. To ensure Scott's peace of mind, a Hydraulic Cart-Dumper and safety cage was installed. A 16" Incline Screw Conveyor complete with a Parts-Separator for solid removal was the ideal piece of equipment to feed the Wringer for F&H.

Stringy chips are no longer an issue for F&H as a powerful Inter-Source Chip Shredder was also included on the system. To ensure the stringy chips are being fed to the Shredder, a bridge breaker screw was installed.

Finally, after the chips are dried to 2% moisture content or less, they are pneumatically transferred (no air compressor required) by the Chip Wringer to the Automatic Mechanical Swivel Chute for discharge. A photo sensor monitors the chip output accurately and rotates the Swivel Chute when necessary, ensuring the chip container is filled evenly with every load.

A Drag Conveyor and primary filter system work in harmony to ensure the maximum amount of cutting oil can be reclaimed. Finally, a Magnetic Oil Filtration system was incorporated by Inter-Source.

BEFORE



AFTER



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CONCLUSION

The installation of the equipment was a complete team effort, as F&H Manufacturing along with Inter-Source technicians were able to combine forces and have the system up and running in less than 2 days. Minimal down time was very important to F&H during installation. "For us, if we're not running chips, our production is backed up. We're losing money!" Said Scott Kellenberger of F&H. "(Inter-Source) had everything measured to the last quarter inch. Your team was there start-to-finish, and was very thorough during the installation. I am very impressed with how well everything went, from the drawing board to spinning chips" said Kellenberger.

In addition to seeking a partner and not just a supplier, Scott had this to say when asked why he ultimately chose to work with Inter-Source: "People have told me, when you hear Inter-Source, you think about the best system out there. "Even my machine operators tell me that Inter-Source makes the best equipment from their experience at prior shops"

When we visited with Scott Kellenberger and F&H Manufacturing, he had this to say: "I am not ashamed of my chip spinning area anymore. In fact, it has become one of the bright spots in our building. I am proud to show visitors our Inter-Source system." Kellenberger went on to add that "For me, being the owner of this business, I can finally sleep at night knowing I did the right thing"

At Inter-Source, we pride ourselves on the relationships we are able to build with hard-working customers like F&H Manufacturing. Top to bottom, F&H has been a pleasure to work with and we look forward to another long-term relationship.

For a summary of the equipment installed at F&H Manufacturing, please [see page 4](#). To find out how Inter-Source can improve your operation, please call **1-269-375-5100** or send an email to: mail@inter-source.com.

ABOUT INTER-SOURCE

Inter-Source uses a **systems approach to chip processing** to engineer and manufacture a complete range of chip management systems to ensure we have the appropriate components to satisfy your unique chip management needs. Inter-Source, founded in September of 1984, was incorporated in Michigan in 1985. To date, Inter-Source has engineered and installed over 600 systems in countries around the globe.

The industry leader in innovation, Inter-Source perpetually engineers advancements to improve your bottom line. Inter-Source holds nearly three dozen patents in multiple countries, representing the industry's most important advancements. These advancements are part of the reason that only Inter-Source can guarantee a retained moisture content of 2% or less on processed chips.



Inter-Source Recovery Systems is headquartered in Kalamazoo, Michigan. Since 1985, Inter-Source has installed over 600 Chip Systems in 7 countries.

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F&H Manufacturing's Inter-Source System Summary



- 30" Chip Wringer: Model CA-6200-L
 - Shredder: Model M2-2410 (7.5HP)
 - 16" Incline Screw Conveyor: Model IR-1604
 - Bridge Breaker
 - Electrical Control Panel: 460V/3/60 w/ Omron PLC & HMI – Including more than 40 operations, management, an maintenance screens
 - Parts Separator
 - Magnetic Oil Filtration; Self-Cleaning
-
- Mechanically operated Swivel Chute w/ Photo Sensor for Automatic Operation



- Hydraulic Dumper: Model HD-72
- Hydraulic Dumper Safety Cage



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