

## 应用案例—美国洛兹 (Lozier) 公司

### 洛兹 (Lozier) 公司简介

美国洛兹公司是美国最大的超市设备制造商，该公司在全美有 6 个工厂。洛兹公司总共有 21 台激光切割机和转塔冲床，分别是：

- 百超激光切割机 1 台
- Mazak 激光切割机 13 台
- 天田 Amada 转塔冲床 1 台
- 史翠柏转塔冲床 2 台
- Finn-Power 转塔冲床 4 台



### JETCAM 解决方案

Lozier 公司于 2001 年开始使用 JETCAM 软件驱动 Finn-Power 转塔冲床，经过全面评估于 2006 年将 JETCAM 升级为支持全部 21 台数控机床，并且淘汰了全部其它机床原厂软件。主要原因：

- 多个编程系统不兼容造成人工浪费；
- 编程过程容易产生错误；
- 编程效率太低；
- 板材利用率迫切需要提高；

#### Case Study: Lozier Corporation

**At a glance:**

- Driving 21 punching and laser machines across 5
- Replaces six CAM systems with one
- The best out of three systems demonstrated with laser needs up to 5% more efficient and ongoing material savings on punching needs of up to 11.4%
- All six facilities installed within 1 week and ready for Lozier's use
- Part programming time reduced dramatically. Machine cycle time reduced by 5%.
- Modifications to program/panel allows for easy reprint from any point of NC program
- RCP allows needs to be automatically generated using JETCAM Orders Controller (JOC)
- Optimized lead-ins, composite cut-part mirroring and hole locations all reduce cutting time and material waste
- Operator relieved after two days of training
- All part, nesting and NC files now in a single location serving all plants remotely
- Reason control used to identify part and material mismatches between Lozier's ERP system and JOC
- Software maintenance decreased by 40%
- Easy to backup, restore or transfer between PCs
- System expected to pay for itself in under 12 months

Lozier Corporation manufactures store fixtures and has 6 manufacturing facilities across the US occupying 3 million sq feet of manufacturing and warehouse space. Since the purchase of their first CNC turret punch machine in 1952 they have rapidly expanded to a range of 21 CNC punch and laser machines, some with automatic loading/unloading equipment or incorporated in an FMS system. As a result they also acquired a whole range of different CNC programming and nesting systems. Because of this, parts and nests had to be constantly remade in different CAM systems to run on different machines, reports were not standardized, training of staff was difficult and costly and most nesting layouts had to be created manually, as some of the systems had either inefficient or no automatic nesting capabilities at all. Furthermore, no single person had experience across all programming software, making effective production of CNC programs impossible.

In 2005 Lozier embarked on a benchmark test of JETCAM against two other systems that could support their range of machines. A selection of existing parts were used to test nesting efficiency, with JETCAM's High Performance Rectangular Nesting module delivering a 4% lead over its closest competitor on punched parts. Due to JETCAM's new High Performance Free Form Nesting module, laser efficiency was also greatly improved. Matt Bruns, Manufacturing Engineer, said: "Many of our shelving components have complicated geometries and to maximize material utilization, require specific nesting orientations to efficiently pair and mirror them for common line cutting. We were manually pairing and mirroring parts for common cut nesting, so specific components were benchmarked to see how prospective nesting packages would pair, mirror and nest

Lozier decided to standardize on JETCAM Expert, along with the Remote Control Processing (RCP) module in one of the Omaha plants. JETCAM Orders Controller (JOC) licenses were also purchased and distributed through out all facilities. These communicate with the RCP enabled licenses to remotely queue individual parts and/or complete assemblies for automatic component processing, nesting and NC code generation for any of the machines at any plant. When an order is processed by one of these RCP 'Black Box' JETCAM systems, the resulting CNC program(s) and relevant reports are immediately and automatically sent to the particular machine at the particular plant. Each of the facilities outside Omaha also has the ability to use an 'interactive' JETCAM Expert license which can be used for programming in case of emergency and for any special jobs or modifications.

JETCAM's software installation across all facilities was completed in one week. Of the implementation Matt commented: "The installation of JETCAM was by far the easiest I've seen, with all six facilities having the ability

### 用户评价

以下是 Lozier 公司负责生产的工程师 Matt Bruns 先生对 JETCAM 的评价：

“JETCAM 软件在转塔冲床上的材料利用率比以前平均提高了 11.4%，激光切割机材料利用率比以前提高了 5%以上。”

“产品加工时间缩短了 5%，排料时间比以前缩短了 50%。”

“保守评估的结论是，我们在 1 年之内即可收回全部软件的投资（包括相应的 ERP 模块、RCP 远程自动控制、JOC 订单管理模块等等）。”

“我们仍然有继续购买机床的计划，无论采购任何厂家的机床，JETCAM 都可以为我们提供编程方面强有力的支持。”