



Outsourcing Maintenance Provides Rapid ROI

November 1, 2007
By Houghton LeRoy

An *Asset Management Survey* conducted by ARC identified a significant interest in maintenance outsourcing by most participants. From 3 percent to 15 percent, outsourcing of maintenance existed in all asset categories, with strong growth very likely to about 15 percent to 35 percent. Possible explanations for the significant growth in outsourced maintenance include shortages in skilled labor resources, costly spare parts inventories and increased training costs. Even with these incentives, there still appears to be many barriers that prevent organizations from outsourcing maintenance. How can these challenges be overcome, and will outsourcing solve the difficult maintenance issues facing many companies today?

Advanced Technology Services (ATS), a major provider of maintenance services in North America, offered to answer many of my questions about outsourcing maintenance as part of a visit to one of their customers. My choices included plant tours of **J&L Fiber**, **Eaton Hydraulics**, and **NACOM**, and the visit was to be scheduled during October 2007 for potential customers. I chose to visit NACOM in Griffin, Georgia because of their variety of production lines and attention to best practices as part of a Japanese parent company.

The first half of my NACOM visit was spent with the ATS Marketing team who had worked very hard to schedule and coordinate the plant tours and customer visits. I was impressed to see that the plant tour series had created an open forum for discussing the concept of outsourcing maintenance with the hosting plant managers. New ATS customers can begin by developing a solid continuous improvement (CI) strategy using proven best practices, such as Six Sigma, Lean Manufacturing, Reliability Centered Maintenance (RCM), or Total Productive Maintenance (TPM). ATS provides the needed expertise to help launch and implement the desired CI program, which can then be self managed by the customer, or outsourced to ATS with long term performance guarantees.

The second half of my visit was spent with Director of Operations at the NACOM plant facility reviewing the production operations and maintenance services provided by ATS. Lean Manufacturing using Kaizan is the primary CI program deployed at NACOM, with special attention to the TS16949 Quality Standard. Excellent quality results measured in Parts Per Million (PPM) Defects are achieved in all automotive parts production areas, including injection molding, stamping, pick and place electronics, and assembly areas for signal light housings and wire harnesses. The NACOM CI program appears to be very successful with performance metrics, such as 60 percent improvement in plant productivity over two years, 69 percent improvement in scrap versus production over 5 years, and major improvements in defects, customer claims, overtime and other key performance indicators (KPI). With such impressive results why did NACOM decide to outsource maintenance, and how could ATS help?

The results of the CI Program at NACOM, although impressive, were not enough, as the decision from the parent company to move the plant to Mexico was delivered in early 2007. Since maintenance personnel are a highly sought skill set in the Atlanta market, it raised concerns about the loss of skilled maintenance personnel and difficulty replacing them. ATS was asked to fill the maintenance role, and they assumed full responsibility in April 2007 by hiring most of the NACOM maintenance organization. A Service Level Agreement (SLA) was negotiated with performance guarantees based on availability by production line, scrap reduction and total plant performance. A strong collaborative partnership began with the short term goals of successfully creating and transitioning world class operations to Mexico.

Fortunately, an evaluation of NACOM operations done three years prior, and support from existing personnel, helped ATS quickly establish successful maintenance processes for most production lines. ATS Best Practices permitted proactive improvements for many important maintenance metrics. The number of work orders, hours worked, average response time, repair time, availability, and MTBF all improved, accounting for a 45 percent increase in machine availability and a 30 percent reduction in maintenance overtime, resulting in real labor cost improvements. Other significant benefits were linked to Tribal

Knowledge, or the ability of ATS to selectively deploy talent to NACOM Tiger Teams from a force of 1,500 skilled maintenance professionals. In less than one year, ATS has assumed full maintenance responsibility and is helping with the transition to world class operations in Mexico.

In summary, Advanced Technology Services appears to offer sustainable, competitive, and competent consulting and maintenance outsourcing services and comes highly recommended by many of its satisfied customers. The Director of Operations at NACOM made a supportive statement during his overview presentation to the visiting audience, "When viewed from a total cost perspective, a rapid Return on Investment (ROI) quickly paid for the increased direct cost of outsourcing maintenance to ATS."