

Steam Profiler Gets a New Lease on Life

Retrofitting its steam profiler actuators helps a newsprint producer ensure reliability and reduce maintenance costs.

MARK WILLIAMSON



The profiler has 114 new actuators.

During the latter part of the 1990s, the market for steam profilers was at its peak, but many of those profilers are now starting to show their age, with some actuators failing at an accelerated rate. Tasowheel, a profiler actuator manufacturer based in Tampere, Finland, now offers a retrofit solution for those aging profilers that extends service life and reduces the cost of maintenance – at a cost considerably lower than a complete rebuild of older actuators.

A major European newsprint manufacturer has already taken advantage of the retrofit. Their steambox was installed in 1999 and many of the actuators were failing regularly in the high temperature environment. Replacing them was a maintenance burden that occurred every six months when the profiler was taken out and overhauled.

Tasowheel proposed a solution in which the old and now obsolete actuators would be replaced in-situ with new bolt-on actuators designed to perform reliably even in high temperatures. The new STA-1015 actuators featured a control card isolated from the heat,

and heat resistant components and motor coil cables and bearings.

The STA-1015 was able to replace old model electromechanical steambox actuator types (EMA15, EMA1000 and STC900). The customer noted that the new actuators fitted perfectly with the same connections and even the same gaskets as the old ones. To evaluate the reliability, a test actuator was provided which was fitted for an extended period, ensuring that there were no control, compatibility or reliability issues. There were no problems during the test period.



Original actuators (left) and new STA-1015 actuators (right).



The new STA-1015 is heat resistant, reliable and can be fitted to different steam valves.

OVERHAULS EXTENDED

The mill placed an order for 114 new actuators, which were installed in September, 2014, by three mill staff over two day shifts.

The customer reports that the replacement cost was considerably less than alternative solutions since no original-design replacement actuators were available. Overhaul of the entire old actuator set was possible, but would have required considerable downtime, manpower and lost production. The cost of the OEM service components would have been at least 20 percent more than the Tasowheel solution.

With the reliability problem solved, the mill staff hopes to extend the steam profiler overhaul cycle from the previous six months to two years. This means lower maintenance costs and a longer lifetime with better reliability for the profiler. **360**

Mark Williamson is a journalist/engineer who has written extensively about the pulp and paper industry. Contact him at: mark_williamson@sympatico.ca.