



Taylor Mfg. Introduces the "Smart Clamp"

James L. Taylor Mfg. has recently taken the Clamp Carrier control system to the next level and is again setting the standard for other woodworking machines to follow. This control system improves machine reliability by monitoring the functions of the machine and calibrating the machine in response to the data collected. The control system also collects a vast amount of data on the operation of the machine that can be accessed by a computer over a network (including the internet) to be used to gather production figures and diagnostic information. This control system will:

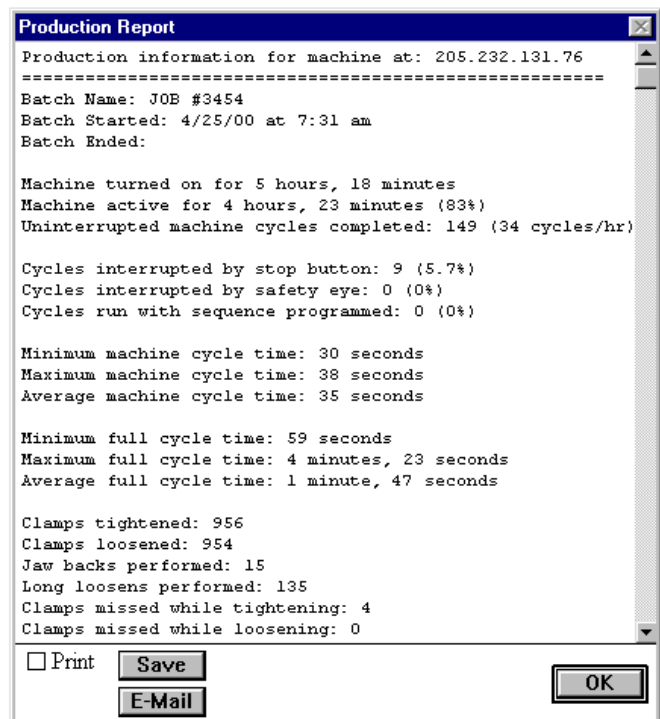
- Monitor and report production rates
- Monitor and self-adjust operations of key components
- Monitor and diagnose problems as they occur
- Remote monitoring of production, maintenance and troubleshooting anywhere with internet access

All the above leads to a faster more reliable machine.



View of the Control Cabinet which houses the "Smart Clamp" controller.

Windows Version



Screen shot of "Smart Clamp" Production Report

New Hydraulics

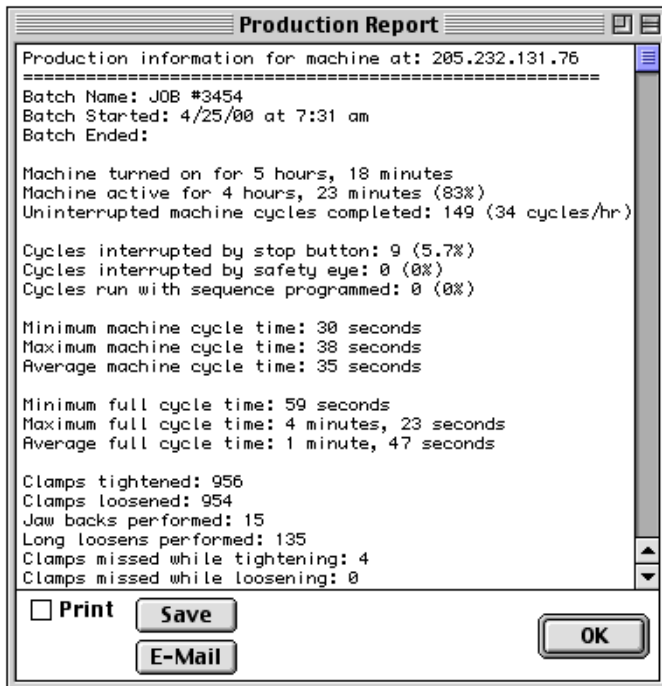
The Clamp Carrier hydraulic system now incorporates a proportional valve controlled by the programmable controller. By using a series of sensors and inputs, the controller monitors and measures the traverse speed of the Clamp Tightener carriage, the rotational speed of the Clamp Tightener, and the speed of the Clamp Carrier rotation. These measurements are taken on every cycle during normal operation and speeds are automatically adjusted up or down without operator or maintenance intervention. We, at Taylor, think that this upgrade is a huge step towards a **maintenance free machine.**

Taylor's New "Smart Clamp"

New Controller

The rugged industrial programmable controller also gathers data on almost every operation of the machine, including minimum, maximum and average cycle times and frequencies of various machine malfunctions (See reports for specific data). The machine accumulates thirty days worth of this data on a daily basis in its non-volatile memory. In addition, the machine keeps a log of the last 25 times it has been idle (down-time) for more than 10 minutes.

Macintosh Version



Screen shot of "Smart Clamp" Production Report

New Software

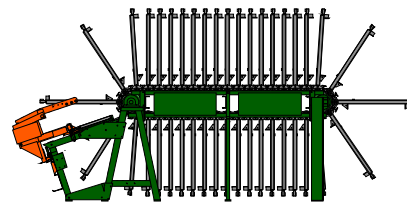
Using the second tier of the Smart Clamp Software, data can be retrieved from the machine at any time using a personal computer (Windows, or Macintosh) connected by either a serial cable or an ethernet connection. If the ethernet connection is connected to the internet, the machine can be monitored from anywhere in the world. The reports generated can be used by production managers to review production rates, or to compare one shift against another. Taylor service personnel can review machine data over the internet

and inform customers when machines are not operating properly.

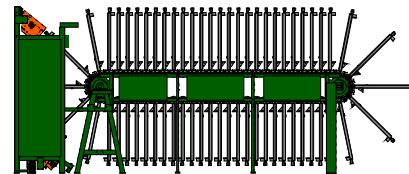
Taylor operates the third tier of the Smart Clamp Software. This is an automatic program that on an hourly basis monitors a list of customer's machines that are connected to the internet. When production figures change drastically, or the machine is recording an unusual number of malfunctions, this program automatically generates an e-mail to the appropriate person in the company and to the Taylor service personnel. This will help to keep the machines in top running condition.

This level of network machine diagnostics will set the pace for other machinery manufactures to match as we head into the connected 2000's.

*Come see the new Smart Clamp on both the **Hydraulic Automated** and **Hydraulic Dual Automated** at the IWF 2000 in Atlanta, GA!*



The Smart Clamp available on the Hydraulic Automated after June 15, 2000.



The Smart Clamp available on the Hydraulic Dual Automated after IWF.

