Whether you’re operating a fixed architecture or modular machine, it’s impossible to see what is happening inside the printing/transfer area without stopping and in some manner opening or entering the machine. Jams, false trips or other unexpected stoppages can lead to additional downtime as operators open and inspect each machine section to identify where the jammed sheets are located prior to resolving the incident and restarting production. On a fixed architecture machine this can consume a considerable amount of valuable production time. On a modular machine, where each section must be opened, inspected for jammed sheets and then closed prior to restarting the machine, the lost production time can be staggering.

In-PRESS DRYER INSPECTION & MONITORING SYSTEM

In-Press Monitoring

VisionMaster™ from JB Machinery allows operators to visually monitor the status of the dryers and sheets without stopping and opening the machine. During normal operation operators can continually monitor the status of the printing/transfer area. In the event of an unscheduled stoppage, operators can see which stations are affected and then tend to only those sections without wasting valuable production time unnecessarily opening and searching through each section.

With VisionMaster’s real-time high-definition (HD) monitoring of sheet travel and dryers, operators can see what is happening inside the machine as it is happening. Trending problems can often be detected and acted upon before they become jams or other major issues.
DVR Incident History Review

The system’s Digital Video Recording (DVR) capabilities can record machine operation 24/7. This capability provides valuable information when troubleshooting quality or operational issues. After an incident, crews, supervisors and quality control personnel can review the recording to potentially discover or confirm the cause, and work toward resolution and elimination of reoccurrences. Recorded video can also be shared with OEMs or other third parties to allow them to assist with troubleshooting.

Simultaneous Multi Camera Views

VisionMaster allows the operator to display up to 32 different camera views simultaneously on the 24-inch (600mm) high-definition LED TV screen to provide an overview of the entire operation. Any single camera view can be displayed at full screen resolution for enhanced detail. The system will also let users automatically cycle through camera views for a full resolution view during operation.

Each camera is equipped with an air-cooled, vibration resistant enclosure to provide protection against IR/UV light, heat and dust emissions.

Automatic Sheet Detection System (ASD) and Global Reset

JB’s LED based light curtain provides an additional and superior level of safety to your printing operation by being proactive and not reactive. High precision LED light curtains are strategically positioned over each and every complete dryer surface. Each monitors for an interruption through the dryer zone, whenever powered up. At the first indication of a jam or fragment, the ASD immediately shuts down the dryer systems to standby mode (10%) and stops the press feed to minimize the chance of damage to the machine, printing plates and waste in the form of unsalable sheets. ASD, unlike an operator, never gets tired, bored or distracted.

HIGH PRECISION LED LIGHT CURTAINS ARE STRATEGICALLY POSITIONED OVER EACH AND EVERY COMPLETE DRYER SURFACE. THE AVERAGE TIME SAVED PER STOPPAGE RANGES BETWEEN 5 TO 7 MINUTES.

Because VisionMaster lets the operator view the condition inside each print station from one centrally located user interface, JB’s ASD design connects to a ‘Global Reset’ capability. This time saving, efficiency-enhancing feature allows users to reset all active dryer positions from the touch screen user interface instead of forcing them to waste precious production time accessing each station to locally reset dryer positions.

Dryer Inspection Mode — No Additional Lighting Needed

No auxiliary lighting is necessary with the VisionMaster system. For optimum ambient light and viewing conditions JB’s dryers reduce to 15 – 20% of full operating power when a stop condition is encountered and inspection mode is selected. This provides optimum ambient light for camera operation, viewing resolution and inspection of the print/transfer area, while allowing for sheet debris to rest on the dryer body without the fear of ignition. When a section is accessed for manual sheet removal, the dryer completely powers down to reduce the risk of injury during the removal process.

Efficiency Benefit, Bottom Line Advantage

All JB Machinery products are engineered to provide maximum safety and efficiency, ease of use, low cost of ownership and environmental sustainability. While the total time saved per incident will vary depending on machine configuration, the average time saved per stoppage ranges between 5 to 7 minutes. Based on that time savings alone (excluding any potential waste saving) ROI on the typical installation ranges between 4 and 10 months. □

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