




Press  to open Historical Fault data handling buttons including:

Scroll



Delete



NOTE: Former Critical Faults CAN be cleared from the Fault History list

Following is a list of possible Faults, with suggested resolution. Note that the Faults with the **INFO** prefix are not critical.

01 No Analog IBC Signal – Indicates that there is no IBC sensor analog signal coming from the (PST44) Sensor Junction Box. The IBC sensor(s) analog signal(s) is simply wire routed from the PST to the IBC controller. Check connections. For systems equipped with the Blue Box(es), the analog signal is multiplexed and comes from there. Check the connections and confirm there is a power LED in the upper right hand corner.

02 Low Battery Voltage - Indicates that the on-board lithium battery voltage has dropped below proper operating levels. The lithium battery will last up to 10 years with a typical minimum life of 3 years.

03 High CPU Temperature - Indicates that the internal temperature of the panel is too high to maintain proper operations. This unit will operate up to 167°F/75°C.

04 or 05 MSR Voltage Below 9.75 or Above 10.25 – For systems that are equipped with a *blower panel and MSR pot only*. This indicates that the reference voltage that is supplied to the Master Speed Reference Pot is not at the optimum 10 Volts DC. This voltage is typically supplied from the exhaust blower.

06 Info-ABB @ Min Limit - Information message, not critical. If this alarm is consistently reoccurring, there may be problems with the ducting between the die and the exhaust blower. Look for clogs, leaks and collapsed hoses.

07 Info-ABB @ Max Limit - Information message, not critical. If this alarm is consistently reoccurring, there may be problems with the ducting between the inlet blower and the die. Look for clogs or leaks.

08 Inlet Blower @ Max Speed - Indicates that the MSR (Master Speed Ref) is set too high. The operator must reduce the MSR setting to clear this fault. It may also indicate a problem with the reference voltage to the MSR speed pot. Check to make sure the MSR pot reference

voltage is 10 VDC. Indirectly, this may point to supply side issues including valve calibration and or leaks / blocks.

09 Info-Bubble Break Alarm - Informational message indicating that there was a bubble break. It will clear when the outlet blower is turned off or the bubble re-inflates.

10 Info-Layflat Deviation Alarm - Informational message indicating that the actual layflat drifted above or below the min or max specified on the operator setup screen. This fault will clear when the operator presses the ERROR box on the main operator screen.

11 No IBC Sensor on Port #1 – For systems equipped with a *Blue Box(es) only*. Occurs when there is no IBC sensor connected to the topmost port on the Blue Box position processor. Note that on systems with two Blue Boxes, this fault only pertains to the primary box (the box connected to the main controller) not 2nd in the daisy chain.

12 No Sensor Communication - Indicates that none of the sensors are communicating with the IS-IBC1 system. This fault will occur if no sensors are connected or if the communication connections are broken. For systems equipped with a Blue Box(es), check the fuse inside.

13 No Layflat Sensor – Occurs when the system cannot identify at least one functioning layflat sensor (blue label) connected to the Sensor Junction Box (PST44), or to the primary if one, or secondary if two, Blue Box if your system is equipped with this configuration. Check to make sure that these are indeed connected. This fault can also occur if the layflat sensors are fast-flashing. Fast-flashing refers to the LED indicator on the back of the sensor. If the LED is flashing 3-4 times per second, the sensor is malfunctioning. Under normal circumstances, the system will automatically correct any fast-flash conditions, but it may require removing the sensor for 15 seconds.

14 5304 Com Module Error – This fault refers to the communication between the main controller module and the 5304 analog output module. Check to make sure that the cable connecting these two components is seated properly.

15 Sensor Fault – Refers to a problem with the sensor communication system. Use the [Sensor Com Status] screen located in the Service Menu to determine which sensor is causing the problem. If no sensors are communicating, diagnose as a communication bus problem. To isolate problems with sensors or sensor cables, disconnect all of them and reconnect one at a time. After locating the sensor that is causing the problem, rule out the possibility of a faulty cable by connecting the sensor directly to the Sensor Junction Box (PST44) or Blue Box if your system is configured this way.

16 Digital Output Module Fault – This fault occurs when one of the digital IO card (5407) has stopped communicating to the main controller module via the grey ribbon cable. Check to make sure that the cable connecting these two components is seated properly.

17 Emergency Stop Active – This fault occurs to make a record that the E-Stop was pressed. If it is displayed in the active faults screen, the E-Stop has not been cleared. The History screen will display former E-Stop activations. Note that an E-Stop turns off ALL outputs and removes power from all externally powered modules. The CPU remains powered at all times.

18 Both Sec Cage Inputs On – This fault occurs when both the open and close inputs from either a mechanical switch or PLC are on at the same time. This condition will prevent the

secondary cage control function from working. Check the wiring to the IBC system to verify the inputs are terminated properly.

19 No Sec Cage Sensor – This fault occurs when the secondary cage control option is on but there is no secondary cage sensor installed or communicating with the system. The secondary cage sensor has a yellow label and the part number SCn. If your system does not have the secondary cage option, use IBC Viewer to turn coil 1061 off locally or contact DRJ to turn off remotely.

20 Kundig Com Failure – This fault indicates that the communication between the IBC system and the FE-7 is not functioning properly. Check the Ethernet cable that connects the two devices. This cable should be a cross-over cable if the connection is direct or unmanaged. It should be a straight-through cable if the FE-7 is connected via a router. Also, check the large 25 pin cable between the MBI and the Measuring Bar.

21 Kundig System Failure – Either sensor reports an MBI system error. Go to the MBI and press the S4 key until the States/Errors screen is displayed. Press S3 to change the access command from NO to YES. Press S4 to access the state screens. Press S3 to scroll through the various states. You will need to refer to the MBI manual for the meanings of the states bits to resolve the problem.

22 Both IBC Min and Max Alarm – The IBC Sensors have minimum and maximum zone outputs. The minimum zone indicates that the bubble is too close to the sensor to get a good reading. The maximum zone indicates that the bubble is too small for automatic control. This fault occurs when both outputs are on at the same time.

23 FEx Outer + Inner Limits On – The Measuring Bar has four limit switches. Two are assigned to each moving film sensor, one for each of the two inner limits and one for each outer. If either sensor reports that both limit switches are on, then at least one limit switch is stuck.

24 FEx Sensor Fault – This fault occurs when the IBC system is in a stable bubble condition and the web moves to one side of the Measuring Bar. The following should be checked:

- One sensor is tracking the web and the other one is not. This can be caused by a dirty sensor or a sensor that has failed. Wipe the sensor with a soft cloth and cycle power on the MBI controller. If the sensor moves in and out to the limits but then does not start tracking the film, the sensor should be replaced.
- If the IBC system is reading a layflat that is bigger than the position of the sensor that is reading, then a sensor is out, otherwise the web is misaligned. This is an inferred error, in other words, the IBC system is indicating that the measurement from the measuring bar does not make sense with layflat that is being read by the diameter measuring sensors. This can occur if the stable bubble delay is too short and the web path is long. Increase the stable bubble delay by 60 seconds in this case. Otherwise check the maximum layflat settings in the IBC system and the measuring bar overall width settings.

25 FEx Motor Fault – This fault occurs when either film edge sensor reports a movement timeout. This would occur during power up or during an automatic reset. The MBI instructs the motor to move the sensor to the inner or outer limit and if the sensor does not trigger the

limit in the correct amount of time, this fault occurs. This could be caused by a faulty motor not moving the sensor, or a faulty limit switch.

26 Misaligned or Web Too Wide – This requires the IBC system to be in the stable bubble mode in order to be reported. The FE-7 will report a misaligned web if either film edge sensor outer limit switch is on. This can occur if the web is shifted to one side or if the outer limit switch is stuck. If the sensor is tracking the film on both sides properly and this fault is occurring, it is likely that an outer limit switch is stuck. Use the MBI CPU display to read the system states to determine which limit switch is stuck on.

27 NonIBC Excessive Inflate Time – This fault occurs if the Inflation function is active for longer than the set time limit, established in the Semi-Auto mode setup screen. Valid only in LF Sizer mode if applicable.

28 NonIBC Excessive Deflate Time – This fault occurs if the Deflation function is active for longer than the set time limit, established in the Semi-Auto mode setup screen. Valid only in LF Sizer mode if applicable.

29 Remote Emergency Stop – This fault occurs when E-stop detection is enabled and the remote E-stop circuit is de-energized. All controller operations (except communication processes) will stop.

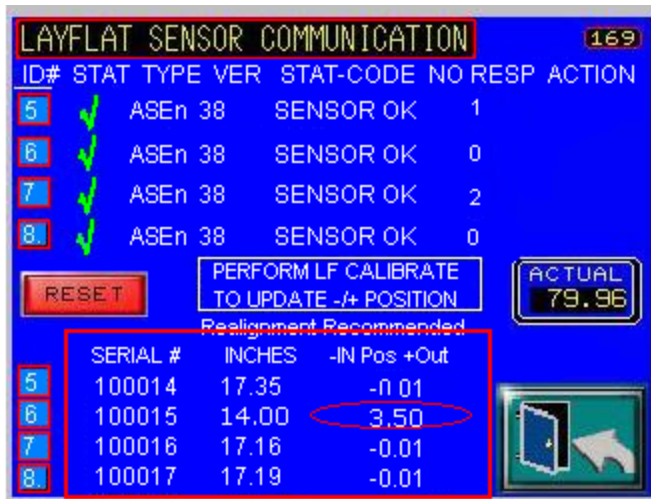
30 Inlet Drive Fault – Inlet drive has failed to start when requested or has reported an internal fault. Check the inlet variable speed drive for internal faults and wiring issues.

31 Outlet Drive Fault - Outlet drive has failed to start when requested or has reported an internal fault. Check the outlet variable speed drive for internal faults and wiring issues.

32 Layflat Sensor(s) Missing – The system detects the maximum number of layflat sensors detected and updates an internal parameter to this value. If the system loses communication with one or more layflat sensors (blue label), this fault will occur. Correct by inspecting the layflat sensors and communication cables and connections.

33 Auto AVC Failed; Run Manually – When the Auto Valve Calibrate (AVC) system is run automatically during startup of the machine, the operator is given a go/no go indication. If the operator gets the no go indication, the old valve calibration values are maintained and the AVC process is aborted. The operator can proceed running the line, but to get a better understanding of what went wrong, a technician needs to run the AVC process within the SERVICE section of the HMI. This will generate detailed messages about what the issues are causing the failure.

34 LF Sensor Position Wrong – This error occurs when the entered layflat target cannot be achieved with the current position of layflat sensors. Go to SERVICES – HARDWARE CHECKOUT – LF SENSOR COMM STATUS. The distance each sensor should be adjusted is shown on this screen (see below): For example, in order to accommodate the established full range of layflats as set in **LAYFLAT SETUP section 2.3.3**, sensor ID6 (serial number 100015 highlighted) will need to be physically moved OUT, or away from the bubble, 3.5"



35 IBC Sensor(s) Missing – This notification fault warns that the system detects less than the expected number of IBC sensors, set in Layflat Setup, are active.

36 GEO Sensor(s) Missing – This notification fault warns that the system detects less than the expected number of GEO sensors, set in Layflat Setup, are active.

39 Change Pneumatic Filter Fault – Notification fault to warn that the Filter Change timer has expired. Default is 180 days, set in Configure Pneumatics – Valid only in LF Sizer mode if applicable.

40 Cage Height Sensor Input Missing – Notification of missing hardwired analog input for the Cage Height Sensor – Valid only for systems with the Auto Cage Height feature.

41 Cage Up/Down Reversed – Fault is the result of the tracking vs sensor feedback discrepancy – Valid only for systems with the Auto Cage Height feature.

42 Cage Up/Down Motor Fault – Fault is the result of a lack of response as should be seen from the sensor feedback input – Valid only for systems with the Auto Cage Height feature.

43 Cage Height Sensor Noise – Fault showing excessive noise on the height sensing circuit – Valid only for systems with the Auto Cage Height feature.

44 Neck Height Sensor Missing – Fault shows that the system does not currently detect a Neck Height Sensor necessary to detect the frostline – Valid only on systems with the Neck Height feature.