High Capacity Feeder Module - Stack Height

Stack Height Sensing

Stack height (at a point six to seven inches from the lead edge of the stack) is maintained at either of three distances from the acquisition surface of the feed head. The required distance is based on the basis weight of the currently programmed stock: 15mm (light), 12.5mm (medium) or 10mm (heavy).

The stack height measurement process takes into account numerous variables that affect how the stack is responding to fluffing, ensuring optimum stack height for all conditions.
When the slide motor returns the feed head to the home position, the cam on the outboard end of the motor shaft releases the stack height arm.

The calibrated spring presses the arm down into the stack, compressing it. (The amount of compression will depend on the current height of the stack, the force of the fluffer air, the basis weight of the stock, and to some extent, the tilt.) While the arm is down, the control logic checks the state of the two optical sensors to determine if the tray should be raised. At the same time, the Tilt Sensor is checking the height of the top sheet at the lead edge, without regard to the effect of fluffing. The actual height is compared to the targeted height range (0-3, 3-6 or 6-9mm) for the currently programmed stock.
If the stock is curled, the lead edge may not be in the correct position, even if overall stack height is correct. If an adjustment is required, the left and right elevator drive motors will operate as required to raise and/or tilt the tray to maintain overall stack height and lead edge stack height at the proper values. (Over-travel switches, prevent the tray from tilting too far.)

RETURN TO PREVIOUS MENU