

## **GATE CLEARING**

**GATE CLEARING IS AN OPTIONAL FEATURE ON ROYSON VIBRATORY BOWL FINISHERS. THIS FEATURE ALLOWS THE UNLOAD RAMP TO BE RAISED TO THE FRONT EDGE OF THE SCREEN DECK WITHOUT TRAPPING PARTS BETWEEN THE RAMP AND THE BOTTOM OF THE SCREEN. THE RAMP IS RAISED BY AN AIR CYLINDER. THIS FUNCTION IS CONTROLLED BY A TIMER IN THE CONTROL PANEL, AND HAS A TOTAL DURATION OF 5-10 SECONDS. THIS FEATURE CLEARS THE GATE BY MECHANICALLY MOVING THE MEDIA AND PARTS IN THE OPPOSITE DIRECTION THEY NORMALLY MOVE DURING PROCESSING. THE CHANGE IN DIRECTION IS ACCOMPLISHED BY REVERSING THE DIRECTION OF THE ECCENTRIC SHAFT, AND CHANGING THE POSITION OF THE TOP ECCENTRIC WEIGHT. THESE CHANGES ARE DONE AUTOMATICALLY AS PART OF THE COMPLETE PROCESS CYCLE.**

**GATE CLEARING IS A NECESSARY FEATURE IF PARTS COULD BECOME DAMAGED DUE TO BEING CRUSHED BY THE UNLOAD RAMP. LONGER PARTS MAY NOT CLEAR THE GATE IN THE SHORT TIME CYCLE USED BY THIS FUNCTION. GATE CLEARING IS ESSENTIAL IN THE ATTEMPT TO ACHIEVE 100% SEPARATION OF PARTS FROM THE MEDIA.**

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