

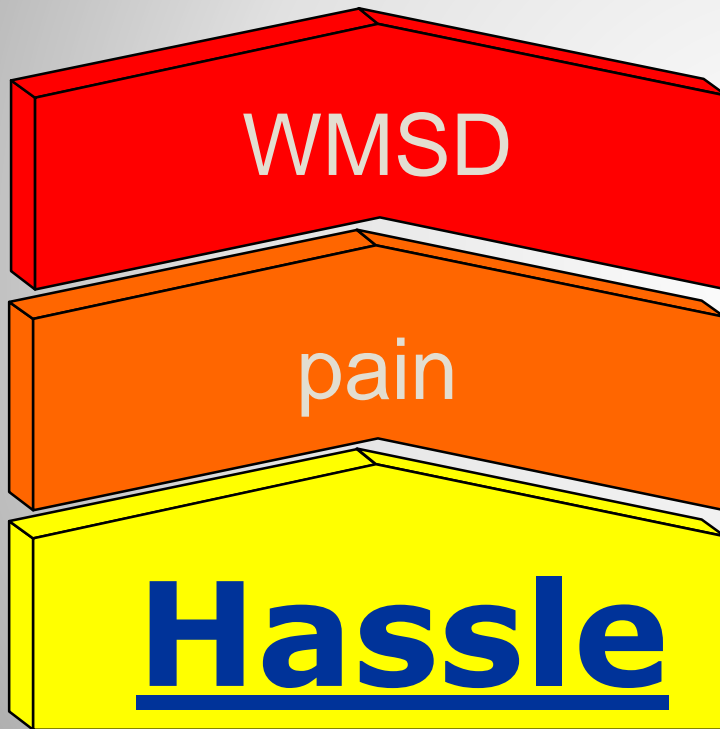


# WestRock

## Ergonomics Improvement

Feed Platform Lifting Automation  
Joplin Folding

- Manual Lifting of Feed Table
  - Strains/Sprains Potential
  - 15 Near Misses Reported



- No Injuries – Reports Only
  - Hassles can be dull aches or discomfort which disappears with rest.
  - Aching and fatigue in the affected area during working hours; settles during off hours.

## Project Background



HANDLE

**Platform was manually lifted**

		Risk Assessment					Action Results					
		A	B	C	A x B x C	R a n k i n g			D	E	F	D x E x F
		Severity of Potential Incident	Frequency of Exposure	Likelihood of Occurrence			Severity of Potential Incident	Frequency of Exposure	Likelihood of Occurrence			
		Death	5 At all times	5 Highly Likely	5		Death	5 At all times	5 Highly Likely	5		
		Disabling	4 Once / Hour	4 Probable	4		Disabling	4 Once / Hour	4 Probable	4		
		Lost Time	3 Once / Day	3 Likely	3		Lost Time	3 Once / Day	3 Likely	3		
		Recordable	2 Once / Week	2 Unlikely	2		Recordable	2 Once / Week	2 Unlikely	2		
Action or Condition	Hazard(s) Identified	First Aid	Once / Month	1 Highly Unlikely	1	Risk Factor	Recommended Countermeasure	First Aid	1 Once / Month	1 Highly Unlikely	1	Result Risk Factor
1	Lift Table Up	Strain/Sprain - Shoulder	2	4	4	32	Install Hydraulic Lift and Automate System					
2	Lower Table Down	Strain/Sprain - Shoulder	2	4	4	32		1	4	1	4	
3	Lower Table Down	Struck by - Head	2	4	5	40						0
4	Latch Safety Chain	Pinch Point	1	4	2	8						0
					Highest	40						
					Reduced to	4						
					Risk Reduction %	90%						

**Automation Video**

**Final Product**

Total Project Cost = \$13,748.83

Labor- \$7,826

Materials- \$5922.83

(includes 2 HP hydraulic motor, wiring, metal, and velocity fuse to eliminate the table falling)

**Project Cost**

Near Misses = 15  
Initial Risk Score = 40  
After Risk Score = 4

**RISK REDUCTION OF 90%**

Material Cost	\$ 13,750
Strain/Sprain Potential Cost	\$ 5,000
15 NM/Close Calls x \$5,000	\$ 75,000
OVERALL COST TO BUILD =	<u>\$ 13,750</u>

**COST AVOIDANCE = \$61,250**

**Innovation Results**