Why Automation is the Clear Choice for Safety and Cost Benefits

Safety Benefits

The numbers below represent the total annual estimated amount of times an operator will get on or off the forklift in a year dependent upon the number of loads. At a miniscule 25 loads a day, the operator will get on or off the forklift between 13 000 and 26 000 times a year. At least 13 000 times, the operator will be required to stoop for an extended period of time to attach the film to the pallet or cut the film.

Loads/Day		(# Times Off	+	# Times On)		5days x 52weeks		Annual Total
25	X	(1 or 2	+	1 or 2)	X	260	=	13,000 - 26,000
50	X	(1 or 2	+	1 or 2)	X	260	=	26,000 - 52,000
75	X	(1 or 2	+	1 or 2)	X	260	=	39,000 - 78,000

What does this mean for the Operator?

- **Musculoskeletal disorders** (MSDs) are injuries or pain in the body's joints, ligaments, muscles, nerves, tendons, and structures that support limbs, neck and back. MSDs are degenerative diseases and inflammatory conditions that cause pain and impair normal activities.
- A study done by *WorkSafe Victoria*, an Australian Government Organization states that, “One in three forklift-related injuries occurs when an operator gets on or off a forklift, often resulting in muscoskeletal back injuries”.
- Now combine this with US Labour Statistics, which show over 51 000 people that missed work in 2013 due to musculoskeletal disorders, caused by simple motions such as bending and twisting. Such motions that one does for manually attaching and cutting the film at the bottom of a load.
- These musculoskeletal disorders do not include the larger miscellaneous group of injuries such as hundreds of falls and rolled ankles which can result in fractures and torn ligaments or the 37 820 reported sprains, strains and tears that occurred from this bending and twisting motion.

What does this mean for the Company?

- As stated earlier, these are very serious conditions, ones which often lead to hefty compensation claims
- Both forklift and bending injuries usually result in back or trunk issues and this is not irregular considering over 30% of all injuries requiring time away from work are injuries to the back
- On average the cost of a low-back associated compensation claim is nearly $8500, this is double the American average compensation claim
- Adding these injuries up results in over 1 million reported days missed

These numbers really just skim the surface. After adding in unreported injuries and the thousands of injuries that occur regularly which are handled by the individual or dealt with by the company, the safety benefits of the Switch A-Arm become unquestionable!

Cost Benefits

In addition to the safety benefits of the A-Arm, it also boasts impressive labor savings. At only 25 loads a day at a rate of $15/hr you can save over $4000 in one year, meaning the A-Arm will pay for itself in less than 8 months.

Loads/Day		Attaching/starting machine (1.5min) Cutting film (1 min)		Mins/Hour		Days/Week		Hourly Rate		Annual Savings
25	x	2.5	÷	60	X	260	X	$15	=	$4,062.50
50	X	2.5	÷	60	X	260	X	$15	=	$8,125.00
75	X	2.5	÷	60	X	260	X	$15	=	$12,187.50

These numbers are labor savings of a semi-auto compared to the fully-auto A-Arm. But compared to handwrapping you have the additional benefit of powered pre-stretch, resulting in film savings, allowing the machine to pay for itself in its entirety in less the 16 months (@ 25 loads/day).

The estimates are based on 2 ½ minutes average length of time it takes an operator to get on and off the lift truck to attach, cut and start the machine. Estimates are approximate, and although the operator can be quicker, more often than not time is wasted. In many cases the operator stands by waiting for the cycle to finish and then cuts the film before removing the load. If this is occurring, your lost time ratio increases significantly!

Comparing a semi-auto with the A-Arm begs the question, why replace old technology with old technology? The A-Arm is the most advanced technology in turntable style stretch wrap machinery, capable of huge safety and cost benefits.

References

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*All other statistics are from the United States Department of Labor, Bureau of Labor Statistics 2013