

## VIDESIGN PROJECT

# REMOVAL OF ASPHALT PAVER TYRE

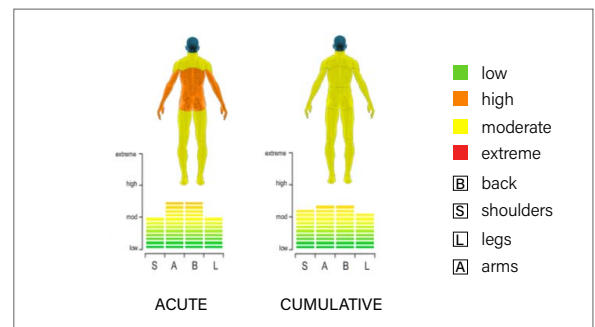
### BEFORE

- » Removal of Asphalt Paver tyres are conducted up to 4 times per month, as per preventative maintenance schedules.
- » Task requires two persons to manoeuvre the tyre (approx. 200kg w/o water and 400kg w/ water) to allow the forklift to lift and transport the tyre.
- » Removal: 45min to 60min per tyre.
- » Working with restricted access within the wheel arch & access to the hub of the tyre.



### HEALTH ISSUES AND INITIAL ASSESSMENT

- » Awkward postures in the back, neck when kneeling.
- » High force required when lifting/manoeuvring tyre and using hand tools.
- » Repetitive use of hand tools while in sustained static postures.
- » Exposure to low levels of hand-arm vibration with use of rattle gun.
- » Risk of crushing injury and sudden forces from tyre imbalance during manoeuvres.
- » High acute risk to the back and arms and hands; moderate risk of cumulative injury.



### AFTER

#### CONTROL STRATEGIES: ROLLRUNNER TROLLEY

- » Implemented the use of a manual wheel remover: Levanta with clamp on top of tyre and narrow wheel base.
- » Knee pads were also procured for use by workers on hard flooring.
- » Training was provided for new work procedures and safe work methods with new equipment.



#### COST BENEFITS AND PROJECT TIMES

- » Eliminated the need for forklift and operator.
- » Eliminated the need to release the tyre from the paver to another work area.
- » Reduced the labour required from 3 staff to 2; billable at \$95/hr up to 4 times per month, approx. \$380/mo.

#### ANALYSIS AFTER IMPLEMENTATION

- » Removed the risk of imbalanced loads and reduced overall exposure to manual handling.
- » Overall reduction resulted in low risk for both acute and cumulative risk.

	Risk Reductions	
	Acute	Cumulative
Shoulders	50%	53%
Arms	50%	53%
Back	33%	50%
Legs	33%	50%

