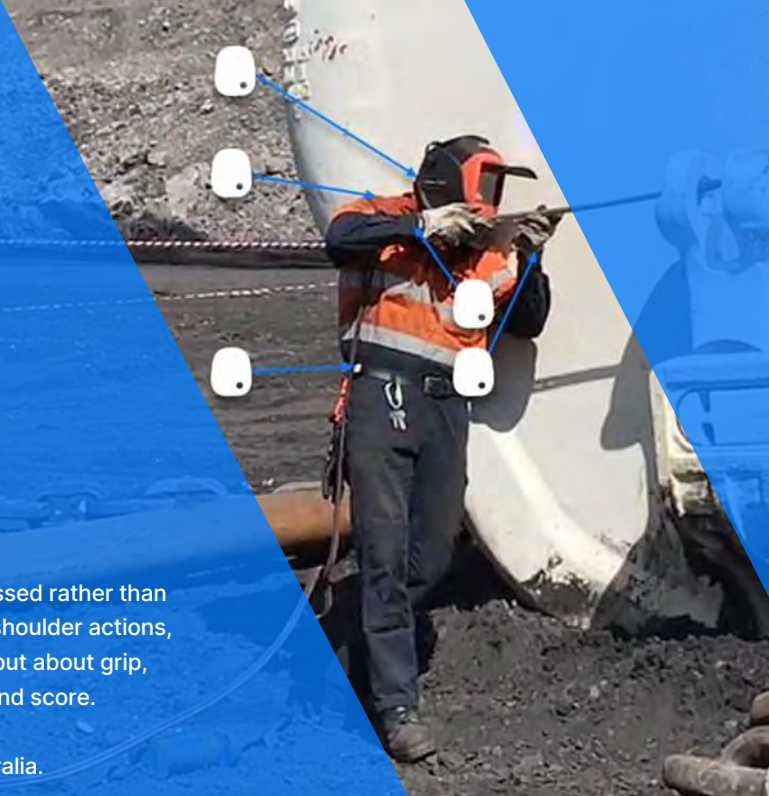


Risk Analysis Method

Risk analysis and scoring is specifically focused on the task being assessed rather than the person doing the work (i.e., task assessment). The neck, back and shoulder actions, movements, and postures (detected by the sensors), with additional input about grip, PPE and the work environment provide the input into this assessment and score.

The Consequence Score Methodology is Patented in the USA and Australia.



Summary

JAS Risk Analysis Methodology & Scoring:

The key information regarding body movements, actions, and postures with injury physical risk factor exposure in combination with consequence risk factors are calculated to provide risk scores using inputs from electronic sensors and user questions.

Movement, actions and postures

JAS uses the exposure intervals and duration definition from the Hazardous Manual Tasks Code(s) of Practice, Safe Work Australia 2016 and 2018 and their predecessor codes and standards. These meet or exceed all comparable international measures and standards.



- 1 The range of movement**
The graph lines show the movement of neck, back and arms during the assessment.
- 2 The degree of flexion, extension, rotation, and lateral flexion**
The risk assessment uses degree bounds for calculating risk score.
- 3 Shaded areas define where actions reach risk factor thresholds**
Periods of movement that are detected as repetitive or sustained are shown.

| Risk Score | Recommendation |
|------------|--|
| > 400 | Very High Risk; Discontinue Operation |
| 200 - 400 | High Risk; Immediate Correction Required |
| 70 - 200 | Substantial Risk; Correction Needed |
| 20 - 70 | Possible Risk; Attention Indicated |
| < 20 | Risk; Perhaps Acceptable |

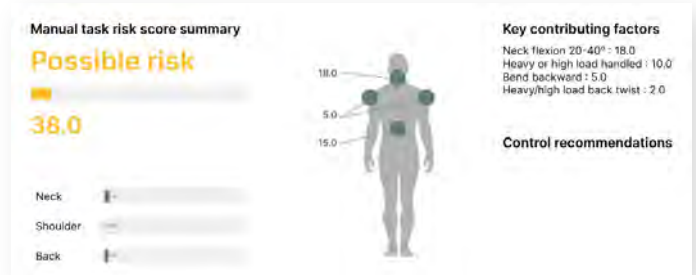
(1) Practical Risk Analysis for Safety Management, G. F. Kinney and A. D. Wiruth, Safety and Security Department U.S. Naval Postgraduate School 1975.

Risk Score

JAS risk scoring is a sophisticated risk calculation of:

- ⌚ Australian and international standardised movement, action and posture risk factors with accurate subcategorization of input factors enabled by sensor use
- ⌚ USA, international and Australian exposure and consequence standardised categories
- ⌚ Weighting inputs derived from at Australian risk industries multiyear work injury claims degree of harm and cost detailed analysis

Consequence Score



JAS uses the Kinney and Wiruth⁽¹⁾ exposure factor standardised consequence categorisation. This is the method most extensively applied to work safety risk management.

Alignment with standardised international risk assessments

JAS assess the same or more back, neck and upper limb movements, actions and postures above the wrist addressed by the following risk assessment methods:

- ⌚ HSE: Upper Limb Disorders (ULD's) in the workplace (HSG60), UK.
- ⌚ HSE: Manual Handling Assessment Charts (MAC) (INDG383), UK.
- ⌚ HSE: Assessment of Repetitive Tasks (ART) (INDG438), UK.
- ⌚ HSE: Risk assessment of pushing and pulling (RAPP) (INDG478), UK.
- ⌚ Rapid Entire Body Assessment (REBA)
- ⌚ Rapid Upper Limb Assessment (RULA)

Regarding REBA and RULA, JAS does not yet address leg movements or positions.

The revised NIOSH Lifting Equation due to its inter vertebral disc compression based methodology and functional limitations restricting it to two-handed, and symmetrical lifting tasks is not a comparative risk assessment at this stage.