



Functional Capacity Evaluation

The following table outlines the components and details of the Mines Rescue Functional Capacity Evaluation (FCE).

The FCE is an assessment of an individual's physical ability to perform representative tasks that are typically encountered in a rescue situation. It also provides an opportunity to address manual handling techniques.

Please bring your steel capped boots on the day to ensure your comfort. It is also recommended you wear your work attire, and for your own comfort, bring your own belt and hard hat.

Grip strength		
Assessment	Procedure	Comments
Hand grip strength	<p>Your arm by your side and elbow flexed at 90 degrees, the JAMAR hand grip tool assesses your strength.</p> <p>Three measures are taken and the average will be compared against a table of norms for age and gender.</p>	<p>This assessment ensures you have enough strength to complete the rest of the functional assessments including ladder climb and manual handling.</p> 
Cardiovascular fitness		
Chester step test	<p>Your heart rate is recorded as you step up on a 30cm box continuously at increasing speeds until your heart rate reaches 80% of its predicted maximum. Every two minutes you will be asked how hard are you exercising by the assessor to ensure you are coping with the intensity, before moving on to the next level.</p>	<p>The test usually lasts for 6-10 minutes, depending on your fitness, and measures your heart and lungs ability to transfer oxygen in your blood to the working muscles in your body.</p> 

Musculoskeletal

You will be asked to complete several tasks that assess the joint range of motion, flexibility, balance and muscular endurance.

Assessment	Procedure	Comments
Single leg stance	Three repetitions of stalk stand on each leg.	Measures general stability and balance.
Forward bend at hips	Flexion at hips	Assess flexiity.
Dynamic lunges	10 repetitive lunges per leg.	Assesses muscular strength and endurance.
Straight leg raise	Flexion at the hips while maintain- ing knee extension.	Assesses flexibility.
Cobra	Lying prone, pushing up with hands, extending back without taking pelvis from the ground.	Assesses the range of motion.
Hover followed by push ups	15 second hover hold followed by 10 push ups.	Assesses abdominal strength, stability and muscular endurance.
Posture check		Assesses general postural alignment while standing.

Dynamic activities

You will be required to wear the following:

- Steel capped boots (please bring your own if available to ensure your comfort)
- hard hat
- Miners belt and light with self rescuer
- 15kg backpack
- Gum boots for rescue duties



Assessment	Procedure	Comments
Kneeling/CPR	Three minutes of continuous CPR while in a kneeling position.	Assesses muscular and cardiovascular fitness.
Ladder climb	Climbing up and down a ladder continuously for one minute.	Assesses movement patterns, handgrip strength (ability to support part of body weight), muscular and cardio fitness.
Stair climb	Climbing up and down stairs continuously for one minute.	Assess cardio fitness, balance, stability and motor control.
Crawl	Crawling on hands and knees for five metres.	Assesses mobility under load; hip/ knee/shoulder range of motion and stability.
Uneven ground walk	Walking continuously on uneven ground for three minutes	Assesses stability over uneven ground under load

Manual handling activities

While wearing the above mentioned PPE, you will be required to perform manual handling tasks up to 30kg in weight (if deemed safe by the assessor) with a safe and correct technique. Such tasks include, but are not limited to, waist height to floors lifts, above head height lifts and one handed carries.

To assess your knowledge on manual handling, you will be asked to:

- Explain correct manual handling techniques.
- Demonstrate correct techniques using an empty box.
- Use the correct technique at all times where necessary.
- ½ weight trial, progress trial weights to full weight as assessor determine safe.
- Three lifts of full weights

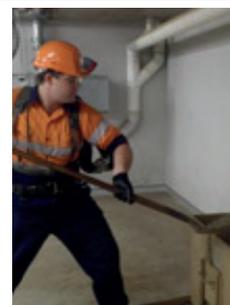


Assessment	Procedure	Comments
Bench to floor height Bench to overhead	Lift 30kg from waist height shelf, to floor three times. Lift 15kg from waist height shelf, to overhead shelf three times.	Assesses manual handling techniques in conjunction with lower and upper limb strength and coordination.
Unilateral carry Bilateral carry	Unilateral carry of 20kg across even and uneven ground covering 65m. Bilateral carry of 20kg across even ground covering 50m.	Assesses manual handling techniques in conjunction with lower and upper limb strength and coordination.

Job simulation task

You will be required to wear the following:

- Steel capped boots (please bring your own if available to ensure your comfort)
- Hard hat
- Miners belt and light with self rescuer
- 15kg backpack



Body drag	Dragging a 55kg dummy 25m	Assesses manual handling techniques in conjunction with lower and upper limb strength
Cable drag	Dragging a cable 100m	Assesses manual handling techniques in conjunction with lower and upper limb strength and coordination and hand grip strength.
Shovelling	Shovelling continuously for three minutes	Assesses posture, technique, cardiovascular fitness and muscular endurance.