

Tunneller interview questions

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What to expect

Tunnelling interviews focus on safety, technical competence and your ability to work in a team underground. Employers want to know you can follow procedures and stay calm under pressure.

- **Process and technical:** Questions that ask you to walk through how you complete a task, such as setting up a heading or maintaining alignment.
- **Safety and risk:** Scenarios that test your response to ground movement, equipment faults or ventilation issues.
- **Behavioural:** Questions about past experience working in confined spaces, remote locations or with different crews.
- **Teamwork and communication:** How you coordinate with surveyors, engineers and other trades underground.

Typically a phone screen with a recruiter, then a site-based interview with a superintendent and safety advisor. You may be asked to complete a practical assessment or site walkthrough. The interview often includes technical questions and scenario-based safety questions.

1. Walk me through how you would set up and advance a tunnel heading from survey setout to ground support.

Why they ask

This tests your understanding of the full cycle and your ability to follow procedures.

How to structure your answer

A step-by-step walk-through: start with reviewing the survey setout, then drilling, loading, blasting, ventilating, mucking out, scaling, and installing ground support. Mention safety checks and communication at each stage.

Example answer

"First, I check the survey setout with the surveyor and confirm the alignment and grade. Then I inspect the face for loose rock and scale it down. I set up the drill rig and drill the shot holes according to the pattern. After loading and blasting, I wait for the ventilation to clear the fumes and dust. Then I muck out the broken rock, check the profile, and install rock bolts, mesh and shotcrete as per the ground support plan. I always communicate with the crew and the shift supervisor at each step."

2. You notice a section of unsupported ground showing signs of movement. What do you do?

Why they ask

Safety is critical underground. They want to see you can assess risk and act.

How to structure your answer

A judgement-under-pressure structure: stop work, assess the area, barricade if necessary, report to supervisor, and follow the site's ground control procedure.

Example answer

"I would immediately stop work in that area and warn anyone nearby. I would not approach the moving ground. I would assess from a safe distance, barricade the area if I can do so safely, and report it to the shift supervisor and geotechnical engineer. I would follow the site's procedure for ground support, which might involve additional bolting or shotcrete. The priority is always to keep people safe."

3. Tell me about a time you had to work in a confined or remote location for an extended period. How did you manage?

Why they ask

This assesses your resilience and ability to handle the conditions of tunnelling.

How to structure your answer

STAR: describe the situation, the task, the action you took to manage physically and mentally, and the result.

Example answer

"I worked on a remote water tunnel project for six months, with long shifts underground. The situation was challenging because of the heat and isolation. My task was to keep up with the heading advance while staying safe. I made sure to stay hydrated, take regular breaks, and keep in contact with my crew. I also focused on the job at hand and maintained a routine. As a result, I completed the project without any safety incidents and was asked to stay on for the next stage."

4. What steps do you take to maintain tunnel alignment and ensure you are following the survey setout?

Why they ask

This checks your technical knowledge and attention to detail.

How to structure your answer

A technical explanation: describe how you use the total station and survey markers, check for deviation, and communicate with the surveyor.

Example answer

"I start by checking the survey setout and the markers on the tunnel walls. I use the total station to shoot the face and compare it to the design line. If there is any deviation, I adjust the drilling pattern or the machine position accordingly. I always record the readings and communicate with the surveyor if I need a new setout. I never advance the heading without confirming alignment."

5. Describe a situation where you had to coordinate with other trades or contractors underground to keep the project moving.

Why they ask

Tunnelling involves many teams. They want to see you can work with others.

How to structure your answer

STAR: situation, task, action, result. Focus on communication and problem-solving.

Example answer

"On a road tunnel project, the electrical crew needed to install cables before we could shotcrete a section. The situation was that we were on a tight schedule. My task was to get the ground support done without delaying them. I coordinated with the electrician to find a window when they could work, and I arranged for the shotcrete crew to be ready immediately after. As a result, we finished the section on time and no one was held up."

6. A piece of equipment breaks down mid-shift. How do you handle it?

Why they ask

This tests your problem-solving and ability to keep the job safe.

How to structure your answer

A judgement-under-pressure structure: assess the fault, make safe, report, and find a solution or workaround.

Example answer

"First, I would stop using the equipment and isolate it to make it safe. I would report the breakdown to the supervisor and the maintenance team. If there is a spare machine available, I would switch to that to keep the heading advancing. If not, I would use the time to do other tasks like inspecting ground support or housekeeping. I would not try to fix the machine myself unless I am trained and authorised."