

Mechanical Engineering Technician interview questions

careertips.com.au: common questions and what they're really testing

What to expect

Interviews for mechanical engineering technician roles usually combine a conversation about your technical background with practical scenarios and safety questions. Employers want to know you can read a drawing, diagnose a fault and work safely around plant.

- **Technical and CAD:** Questions about your drafting software, Australian Standards and how you check a drawing before it goes out.
- **Fault diagnosis and scenario:** You will be given a mechanical problem, often a breakdown or a tolerance issue, and asked to walk through your thinking.
- **Safety and compliance:** WHS questions are standard: permits, risk assessments, isolation and how you handle a safety concern on site.
- **Behavioural:** Past examples of working with engineers, handling conflicting priorities or dealing with a mistake in a drawing or test.
- **Process and project:** How you estimate materials, track a job or support commissioning.

Typically a phone screen with a recruiter or hiring manager, then a face-to-face or video panel with an engineer and a supervisor. Some employers include a short CAD test or a fault-finding exercise on a sample drawing or component. Site-based roles may add a walk-through and a WHS discussion. You might also meet the team you would support.

1. Walk me through how you prepare a mechanical drawing from an engineer's sketch to a final issued drawing.

Why they ask

This tests your CAD process, attention to detail and knowledge of Australian Standards.

How to structure your answer

A walk-through structure: start with the brief, then steps, checks and final issue. Keep it in order and mention the standards and software you use.

Example answer

"I start by reviewing the engineer's sketch and any existing drawings, then set up the model in SolidWorks or AutoCAD. I check dimensions, tolerances and materials, and make sure the drawing follows AS 1100 conventions. Before issuing, I run a checklist: title block, revision, surface finishes, weld symbols if needed. Then I send it to the engineer for review and incorporate any markups. Once approved, I issue it to the workshop or site and file it in the document control system."

2. Tell me about a time you diagnosed a mechanical fault on site. What did you do?

Why they ask

They want evidence you can think on your feet and not just replace parts.

How to structure your answer

STAR: situation, task, action, result. Keep the technical details clear but focused on your actions.

Example answer

"At a previous manufacturing site, a pump was overheating and tripping. I was asked to help find the cause. I checked the suction strainer, alignment and bearing clearances, and found the coupling was misaligned after a recent motor replacement. I worked with the fitter to realign it, then ran the pump"

and monitored temperature and vibration. It ran normally for the rest of the shift, and we added an alignment check to the commissioning procedure.”

3. You are on site and see a worker remove a guard to clear a blockage. What do you do?

Why they ask

Safety judgement is a core part of the role. They want to see you act without hesitation but also know the correct process.

How to structure your answer

A judgement under pressure structure: immediate action, then escalation and follow-up. Say what you do first, then what you report.

Example answer

“I would stop the worker straight away and ask them to step back from the machine. I would make sure the machine is isolated and locked out before anyone reaches in. Then I would report it to the supervisor and the WHS representative, and complete an incident report. After that, I would check whether the guard can be redesigned or a safe clearing procedure put in place so it does not happen again.”

4. How do you estimate material costs and quantities for a mechanical job?

Why they ask

This checks commercial awareness and accuracy, which technicians often need for project delivery.

How to structure your answer

A process structure: break it into take-off, pricing, contingencies and checking. Be specific about tools and review.

Example answer

“I start with a take-off from the drawings: plate sizes, sections, fasteners, pipe runs. I use the CAD model or a spreadsheet to list quantities with waste allowance. Then I get current pricing from suppliers or our purchasing team. I add a small contingency for cutting and handling, and I always have a second person check the major quantities before the estimate goes out. On one job, that check caught a missing set of flange bolts and saved a return trip to the supplier.”

5. Describe a time you had to modify a design because of a site constraint. How did you handle it?

Why they ask

Technicians often bridge the gap between design and reality. They want to see you communicate and document changes.

How to structure your answer

STAR, but highlight the engineering change process and who you consulted.

Example answer

“We were installing a support frame, but a structural beam was in the way of the original design. I took photos and measurements, then discussed options with the engineer. We agreed on a bracket that shifted the frame sideways and kept the load path. I updated the drawing, got it approved, and the fabricator made the change. The installation passed inspection and the as-built drawings were updated so maintenance had the right information.”

6. What CAD software are you most comfortable with, and how do you ensure your drawings are accurate?

Why they ask

A technical question to gauge software proficiency and quality control habits.

How to structure your answer

A direct answer followed by a mini walk-through of your checking process. Name the software, then describe your checks.

Example answer

"I am most comfortable with SolidWorks and AutoCAD, and I have used Inventor on a few projects. For accuracy, I always check the model against the engineer's markups and run a drawing checklist: dimensions, tolerances, revision, material callouts, and any Australian Standards for welding or surface finish. I also print a PDF and review it away from the screen, because that catches things I miss when I am zoomed in."