

Mechanical Engineer interview checklist

Manufacturing and engineering companies usually run a written or online technical test for freshers, a technical interview with a plant, quality or design manager, and a final HR round covering shifts and location.

10 QUESTIONS TO PRACTISE OUT LOUD

1. Explain annealing, normalising, hardening and tempering.

What it checks: Whether you understand the purpose and basic procedure of common heat treatments and how they change steel properties.

2. Tell me about a major breakdown you handled during production.

What it checks: Whether you stay calm, prioritise safety and output, and prevent recurrence after the immediate fix.

3. Are you comfortable working in rotating shifts at the plant?

What it checks: Whether you understand shop-floor working patterns and will stay reliable in night and weekend shifts.

4. What is GD&T, and why is it better than plain plus-minus tolerancing?

What it checks: Whether you understand how geometric tolerancing communicates functional requirements and whether you can read common symbols and datums.

5. Describe a customer complaint you resolved.

What it checks: Whether you respond quickly to customers, contain the problem and fix it properly, with clear communication.

6. Why do you want to join our manufacturing company?

What it checks: Whether you know the company's products and processes and can link them to your experience and ambitions.

7. How do you carry out an FMEA for a new process?

What it checks: Whether you can run a structured risk analysis with a team and turn it into actions, not just fill in a spreadsheet.

8. Tell me about a disagreement between design and production that you helped resolve.

What it checks: Whether you can work across departments and find technical solutions that satisfy both function and manufacturability.

9. What are your salary expectations, and what is your notice period?

What it checks: Whether you have a reasonable, justified figure and are clear and honest about when you can join.

10. What are clearance, transition and interference fits? Give an example.

What it checks: Whether you understand limits and fits and can pick the right fit for a functional requirement.

TIPS FOR THIS INTERVIEW

- Revise core subjects that plants and design teams still test: strength of materials, materials and heat treatment, manufacturing processes, thermodynamics, and machine design basics.

- Learn to read a drawing with GD&T symbols and be ready to explain datums, position tolerance and a few common fits like H7/g6.
- Prepare two or three problem-solving stories using 8D or 5 Why, with measurable results such as rejection rates, cycle time or downtime reduced.
- Be honest about software levels: say which CAD or FEA tools you can use independently and which you have only seen in training.

THE DAY BEFORE

- ☐ Confirm the time, venue or video link and the interviewer's name
- ☐ Plan your route and leave time for traffic, or test your camera, microphone and internet
- ☐ Keep copies of your resume, ID proof, certificates and photographs in a folder
- ☐ Iron your clothes and charge your phone and laptop
- ☐ Do one final run-through of your introduction, then stop and rest

ON THE DAY

- ☐ Arrive 15 minutes early, or log in 5–10 minutes early for a video call
- ☐ Greet everyone politely, including the receptionist or coordinator
- ☐ Listen to the full question, pause, then answer in a clear structure
- ☐ Take brief notes of names and key points
- ☐ Ask your prepared questions and confirm the next steps before you leave