

Plastics Fabricator interview questions

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What to expect

Plastics fabricator interviews mix practical trade questions with safety and judgement scenarios. Employers are usually checking whether you can read a drawing, hold tolerance on one-off work, and work safely around heat, fumes and machinery without being supervised every minute.

- **Technical and trade skills:** Questions about welding methods, material selection, machine setup and finishing. Interviewers want to hear specific methods and materials, not generalities.
- **Drawing and measurement:** How you read a technical drawing, check dimensions and work to tolerance, especially on one-off parts where there is no second chance.
- **Safety and compliance:** Machine guarding, fume extraction, hot work, confined spaces and stop-work judgement. Common in workshops that run to Work Health and Safety Act duties.
- **Scenario and problem solving:** What you do when a machine is booked, a drawing is unclear or a part fails inspection close to a deadline.
- **Behavioural and teamwork:** Past examples of working with supervisors, trades and customers, including how you handle being told a part is wrong.
- **Site and client-facing:** Fitting components on site, dealing with site inductions and explaining fabrication limits to a customer or project manager.

A typical process starts with a short phone screen covering tickets, licences and availability, then a face-to-face or workshop interview with the supervisor or leading hand. Many employers also run a practical trial, where you cut, weld or form a sample part while they watch your setup and safety habits. The final conversation is usually about pay, shift pattern, site travel and start date.

1. Walk me through how you take a job from a technical drawing to a finished component.

Why they ask

This is the core test of whether you actually work from drawings or just follow instructions. It reveals your order of operations, your checking habits and where you catch mistakes.

How to structure your answer

A walk-through in sequence. Move through set-out, material check, cutting, welding or forming, checking, finishing and dispatch, and name the points where you stop and verify.

Example answer

"I start with the drawing, checking the material spec, thickness and the finish the customer wants, then I mark out and confirm the critical dimensions before anything gets cut. If it's sheet, I nest the parts to get the best yield, cut on the router or the panel saw, then deburr and check the first one against the drawing before running the rest. If it's pipe, I set up the jig, face the ends square and check alignment before I weld. After welding I inspect the joint, trim and finish the part, and measure it again against the drawing. If something is out, I sort it there rather than send it through to the next stage."

2. Tell me about a time a part came out of tolerance or failed inspection. What did you do?

Why they ask

Everyone makes a mistake eventually. Employers want to see that you own it, fix it and change something so it does not repeat.

How to structure your answer

STAR. Situation, task, action, result, with the result stated as rework avoided, a process change or a relationship kept intact rather than a number.

Example answer

"We were building a set of tank liners and the client had issued a revised drawing that hadn't made it to the workshop. My first panel was welded before I picked up the difference in the outlet position. I stopped, tagged the panel and told the leading hand straight away rather than trying to patch it. We remade the section, and I set up a sign-off sheet at the workshop printer so anyone collecting a revised drawing had to initial it. We got the liners out on the original date and the client never saw the problem."

3. What's the difference between butt fusion and hot air extrusion welding, and when would you use each?

Why they ask

This separates people who have only done one type of poly work from those who can be moved around the workshop. It also tests whether you match the method to the joint and the service conditions.

How to structure your answer

A direct technical comparison, then one practical example for each, then a caveat about following the procedure for the material and application.

Example answer

"Butt fusion is for joining pipe end to end. You face both ends square, bring them together under pressure with a heating plate between them, and you finish with a joint that's essentially as strong as the pipe itself. I'd use it on pressure lines, water mains and slurry pipe, and it's the standard method on polyethylene pipe work. Hot air extrusion welding is for sheet and fabricated assemblies, things like tank walls, bunds and chute liners. You heat the parent material and feed a rod through the welder to lay down a bead, and you usually do a tack pass then a capping pass. Which one I use comes down to the joint geometry and the spec, and I follow the welding procedure for the material rather than guessing."

4. You're asked to weld on site and the fume extraction isn't set up properly. What do you do?

Why they ask

Safety judgement questions are standard in fabrication workshops because the wrong answer can injure someone. Employers are listening for stop-work thinking, not a workaround.

How to structure your answer

Judgement under pressure. State the risk, say what you stop doing, who you raise it with, and what needs to be in place before work restarts.

Example answer

"I'd stop and not start the weld. Plastic welding puts off fumes that you don't want to be breathing in a closed space, so without extraction and, if it's a confined space, gas monitoring and a spotter, the job doesn't go ahead. I'd raise it with the site supervisor and explain what's needed before we start, and I'd offer to move the work to a better ventilated area or bring the extraction unit over if that's possible within the schedule. If the answer is that we push on anyway, I'd escalate it. No deadline is worth a lung full of welding fume."

5. A customer needs a one-off acrylic guard cut and formed by end of day, and the CNC router is already booked. How would you handle it?

Why they ask

This is a realistic pressure test in plastics work, where one-off jobs land on top of scheduled production. It shows whether you can problem solve without cutting corners on quality or safety.

How to structure your answer

Scenario answer. Clarify the requirement, weigh your options out loud, pick one, and say how you would manage the risk if the deadline cannot be met.

Example answer

"First I'd check the drawing and confirm what actually has to be formed and what tolerance matters. If the router is booked, I'd see whether the guard can be nested in with the job already on the machine, since that costs almost no extra time. If not, acrylic that size can usually be cut on the panel saw and finished on the router table, then bent over a jig with the strip heater, so I'd go that way and keep the router free. If the bend radius is too tight for acrylic, I'd say so rather than force it and risk crazing, and suggest polycarbonate instead. If it still can't be done properly by end of day, I'd tell the customer early with a realistic time rather than send out a part that cracks in a week."

6. Describe a time you had to explain a fabrication limitation to a customer or supervisor.

Why they ask

Fabricators deal directly with customers, builders and project managers. Employers want someone who can explain a technical limit clearly without either caving in or being difficult about it.

How to structure your answer

A short narrative: the request, why it would not work, how you explained it, the alternative you offered, and how it landed.

Example answer

"A builder asked us to bend a run of acrylic panels to a very tight radius for a balustrade cover. It would have crazed along the bend and failed outdoors within a season. I showed him a couple of offcuts I'd bent at different radii so he could see what the material would actually do, and explained that polycarbonate would take the tighter bend and handle UV better, at a higher material cost. He took the polycarbonate option, and we didn't get a callback on that job. Showing him the offcuts worked far better than just telling him no."