

INTERVIEW GUIDE

3-Step Interview Guide for Welding & Fabrication

A practical framework for interviewing welding and fabrication candidates
— technical fit, motivational fit, and culture fit, with real questions for each.

One framework, ten roles, and a scorecard you can actually compare across candidates.

This guide gives you a consistent 3-step interview framework — technical fit, motivational fit, culture fit — plus role-specific technical questions for the ten positions commercial welding and fabrication contractors recruit for most. Use the general framework for every candidate, then pull the questions for their specific role from the reference section.

Score each step 1-5 as you go. A candidate who's strong on technical fit but weak on culture fit is a different hiring decision than one who's the reverse — the scorecard makes that visible instead of relying on a gut "good interview" feeling.

3-STEP FRAMEWORK

Technical fit. Motivational fit. Culture fit. In that order.

Most welding interviews go straight to "tell me about your experience" and never verify anything concrete. This guide gives you three structured steps, each with real questions, so you leave the interview with actual signal — not just a good feeling.

Step 1 — Technical fit: confirm certifications directly with AWS, ask process- and code-specific questions.

Step 2 — Motivational fit: understand why they're moving and how they handle failure.

Step 3 — Culture fit: safety mindset and how they work with a crew.

STEP 1

Technical fit — verify, don't assume.

Before the interview: confirm certification status directly with AWS — Certified Welder, CWI, CWS, or SCWI status is checkable, not just claimable. This takes minutes and eliminates the single most common bad-hire cause in this trade.

Ask in the room:

- "What joint types and positions have you run in *production* — not just on a test coupon?"
- "What codes have you worked to?" (AWS D1.1 structural, ASME Section IX pressure, API 1104 pipeline — listen for specifics, not a generic "all of them.")
- "Walk me through what you do when a weld fails inspection." (Listen for ownership and a real process, not blame-shifting.)
- "What's the largest/most complex job you've run start to finish?"
- For inspectors specifically: "How do you handle a contractor pushing back on a failed inspection?"

STEP 2

Motivational fit — why now, and how do they handle friction.

- "What made you start looking?" (Vague answers here are a bigger flag than an honest "the pay wasn't matching the work.")
- "Do you prefer shop work, field work, or a mix — and why?"
- "Tell me about a time a job didn't go the way you planned. What did you do?"
- "What does a bad day on this job look like to you, and what do you do about it?"

Candidates who can talk specifically about how they handle a rework, a schedule slip, or a difficult foreman tend to be far more reliable hires than candidates who only talk in generalities about "hard work."

STEP 3

Culture fit — safety and crew dynamics.

- "Tell me about a near-miss or safety concern you raised on a job. What happened?" (You want someone who speaks up, not someone who says "I've never had one.")
- "How do you handle it when a crewmate isn't pulling their weight?"
- "What's your take on PPE compliance when it slows you down?"
- "How do you like to receive feedback from a foreman or inspector?"

Red flags checklist

- Can't name specific joint types, positions, or codes when pressed — only generic terms
- Certification can't be verified with AWS, or claims a level AWS doesn't show as active
- Blames every past employer for every problem, with no self-reflection
- Dismisses safety questions as "not a big deal"

Score every candidate on the same four dimensions.

DIMENSION	1-2	3	4-5
Technical skill	Can't confirm process/position/codes	Confirms basics, vague on complex jobs	Specific on process, codes, and largest job run
Stability	Frequent short stints, vague reasons	Reasonable tenure, plausible reasons	Strong tenure or clear, specific reason for each move
Culture fit	Dismisses safety, blames others	Says the right things generically	Specific safety story, owns mistakes
Trajectory	No interest in certification growth	Open to it, no plan	Actively pursuing next AWS credential

A candidate scoring 4-5 across the board is a fast yes. A candidate scoring 1-2 on technical skill is a no regardless of the other three — verified competence is non-negotiable in this trade.

ROLE-SPECIFIC QUESTIONS

Structural Welder & Pipe / Pipeline Welder.

Structural Welder: "What's the thickest plate you've run structural welds on, and in what position?" · "How do you handle distortion on a large weldment?"

Pipe / Pipeline Welder: "What pipe codes have you qualified to — API 1104, ASME Section IX, something else?" · "Walk me through a 6G qualification test." · "How do you handle a root pass on a job where you can't see the backside?"

Combo Welder & Certified Welding Inspector (CWI).

Combo Welder: "You're cross-trained structural and pipe — which do you actually prefer, and why?" · "Tell me about a job that required switching between the two mid-shift."

CWI: "Walk me through how you document a failed weld." · "How do you handle a contractor who disputes your inspection?" · "What visual inspection criteria do you check first, and why those?"

Fabrication Shop Foreman & Structural Ironworker / Erector.

Fabrication Shop Foreman: "How do you sequence a shop floor when three jobs are competing for the same equipment?" · "Tell me about a time you had to pull a welder off a job for quality reasons."

Structural Ironworker / Erector: "What's the tallest structure you've worked erection on?" · "How do you handle a connection that doesn't line up as-drawn?"

Robotic / Automated Welding Technician & Welding Engineer.

Robotic Welding Tech: "What robotic welding cells have you programmed, not just tended?" · "Walk me through troubleshooting a cell that's producing inconsistent welds."

Welding Engineer: "Walk me through writing a WPS from scratch." · "How do you qualify a new procedure (PQR) before it goes to production?"

Fabrication Project Manager & Estimator.

Fabrication PM: "Tell me about a bid-to-build job where the schedule slipped. What did you do?" · "How do you coordinate fabrication scope with erection scope on a live project?"

Estimator: "Walk me through a takeoff on a structural steel package." · "Tell me about a bid you lost and what you learned from the debrief."

MAKING THE OFFER

Move fast once verification is done — this market doesn't wait.

Once you've verified certifications with AWS and the candidate scores well across all four scorecard dimensions, don't let the offer sit. In a replacement-driven market with real competition for the same certified candidates, a strong candidate who scored well in your process is very likely in someone else's process too.

If you're building this pipeline continuously rather than per-opening, this is exactly the stage where a standing, credential-verified bench pays for itself — you're not starting the search from zero every time a seat opens.

Four ways this interview goes wrong before it starts.

- **Taking "AWS certified" at face value.** Verify with AWS before the interview, not after the offer — this is the single most common source of a bad hire in this trade.
- **Asking only about testing experience.** Passing a certification test and holding a bead in production for eight hours straight are different skills — ask about production specifically.
- **Skipping the safety conversation because the resume looks strong.** A technically excellent welder with a dismissive attitude toward safety is still a liability risk.
- **Making the offer slowly.** In a scarce-credential market, a strong candidate rarely stays uncontacted for long. Compress the time between a passing scorecard and an offer.

Veterans with welding MOS/rating training are an underused pool.

Navy, Army, and Air Force welding training programs produce candidates with real production hours, discipline around procedure, and — often — an active or easily-renewed civilian-equivalent credential. Interview questions should focus on translating military terminology to civilian codes: ask what they welded, on what material, and in what position, rather than assuming military experience doesn't transfer. It usually does, directly.

The eight questions to ask every candidate, regardless of role.

What joint types and positions have you run in production — not on a test coupon?

What codes have you worked to?

Walk me through what you do when a weld fails inspection.

What's the largest or most complex job you've run start to finish?

What made you start looking for something new?

Tell me about a time a job didn't go as planned.

Tell me about a near-miss or safety concern you raised.

How do you like to receive feedback from a foreman or inspector?



Every hire from zero is a **tax** on your team.

My Trade Talent maintains a live, credential-verified pipeline of welders and fabricators on a flat monthly retainer — so open seats fill with qualified people, not guesses.

Schedule a Discovery Call

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