

YAO LASER / LASER PROCESS

Battery laser welding acceptance checklist

Supplier-screening checklist for weld access, sample validation, fixture repeatability, inspection records, and handoff evidence.

Audience	Battery module engineers, procurement reviewers, and overseas project owners preparing weld trials or acceptance conversations.
Recommended route	Huiyao Laser equipment route
Use before	First supplier call, RFQ comparison, or internal project handoff.

1 How to use this file

Use this file before accepting a laser welding station proposal. The goal is to separate proof of sample welding from proof of production repeatability.

Field to prepare	Notes before sending
Cell format	Fill this with project-specific information or mark it as unavailable.
Tab material	Fill this with project-specific information or mark it as unavailable.
Busbar thickness	Fill this with project-specific information or mark it as unavailable.
Weld location drawing	Fill this with project-specific information or mark it as unavailable.
Sample quantity	Fill this with project-specific information or mark it as unavailable.
Acceptance method	Fill this with project-specific information or mark it as unavailable.

1 Scope to confirm before a supplier call

- Cell format, tab material, busbar thickness, nickel or aluminum coating, weld length, and expected pull-force target.
- Whether the supplier is validating single samples, pilot fixtures, or the intended production fixture.
- What inspection evidence will be shared: visual criteria, cross sections, pull-force data, NG examples, and process window notes.

2 Evidence that should be requested

- Sample trial report with settings, fixture photo, material lot, and test method.
- Cross-section images for representative welds, not only the best weld from the trial.
- Repeatability evidence across multiple parts and operators, including rejected samples and reason codes.

3 Acceptance risks to watch

- A short running video proves motion, but it does not prove weld strength, fixture stability, or inspection consistency.
- If access angle changes when the production fixture is introduced, sample welding results should be treated as preliminary.
- A price comparison is not meaningful until sample quantity, inspection depth, and fixture ownership are clear.

Checklist: Laser welding review checklist

Check item	What to ask	Evidence to request
Material stack	Are tab, busbar, plating, and thickness confirmed?	Drawing, sample list, material certificates
Weld access	Can the laser reach each weld without fixture interference?	Access-angle drawing and fixture photo
Sample plan	How many pieces and lots will be trialed?	Sample log and trial sequence
Inspection method	Which destructive and visual checks define acceptance?	Cross-section, pull-force, appearance criteria
NG handling	How are failed welds recorded and explained?	NG photos and reason codes
Production fixture	Is the production datum the same as the trial datum?	Fixture datum plan and tolerance note
Operator role	What is manual and what is automated?	Station SOP and safety interlock list
Traceability	Can trial data connect to part IDs?	Data export sample or report screenshot

Supplier reply review

Supplier claim	Evidence received	Verified by	Decision / open issue

Keep claims, attachments, and unresolved points in the same row so later decisions are traceable.

Internal routing notes

Field	Notes
Prepared by	
Project or account	
Target region	
Decision owner	
Recommended next route	
Files attached	
Open questions	

Final handoff note

Attach drawings, sample photos, target region, timeline, and decision owner before sending the inquiry onward.
If a line item is unknown, mark it openly instead of letting the supplier assume the scope.