



KLH TECHNOLOGIES GROUP

Singapore & Malaysia customer support · Johor Bahru manufacturing

SUPPLIER CAPABILITY PROFILE

Precision welding & machine frame fabrication.

TIG/MIG welding, fit-up, finishing and mechanical assembly.



Johor Bahru manufacturing facility

In-house

Welded frames, fit-up, finishing, assembly and QA.

Managed external processes

Sheet metal, CNC machining, specified coatings and painting.

Engagement

Supplier qualification, RFQ, first article and prototypes.

ISO 9001:2015 · Certified entity: KLH Technologies Sdn. Bhd.
KLH Technologies Pte. Ltd. (Singapore) · KLH Technologies Sdn. Bhd. (Malaysia)



SUPPLIER POSITIONING

A focused manufacturing partner.

Focused capability, direct technical leadership and transparent process boundaries.

KLH is a Singapore–Malaysia precision fabrication business specialising in welded structural frames, mechanical fit-up and assembly for semiconductor equipment, industrial automation and precision machinery.

01 Semiconductor experience

Technical leadership with 11+ years of prior high-precision semiconductor fabrication experience.

02 Precision weldments

In-house TIG/MIG fit-up and structural welding, distortion correction, grinding and assembly.

03 First-article support

Experience-led process development, manufacturability review and repeat-production readiness.

04 Johor manufacturing response

Johor Bahru manufacturing and QA, with direct management involvement in qualification support.

05 Quality discipline

Drawing and revision review, inspection checkpoints, NCR segregation and controlled release.

06 Transparent external processes

External sheet metal, CNC and finishing are identified, specified, received and verified by KLH.

CUSTOMER SUPPORT IN SINGAPORE & MALAYSIA

Both entities handle enquiries, NDAs, quotations and account management. Customers may engage either entity directly, with billing terms stated in the quotation.

Singapore**KLH Technologies Pte. Ltd.****Customer & project support**

Commercial enquiries and customer liaison.
Engineering and project coordination.
Regional account support.

Johor Bahru**KLH Technologies Sdn. Bhd.****Customer support, manufacturing & QA**

Enquiries, quotations and account support.
Fabrication, finishing and assembly.
Incoming, in-process and final QA.
External-process coordination.



EXPERIENCE-LED CAPABILITY

Technical experience behind the work.

11+

YEARS

Prior hands-on experience of KLH's technical leadership.

Personnel experience. Applied at KLH today.

Prior experience in high-precision semiconductor equipment manufacturing. These are the technical team's capabilities—not a claim of KLH corporate project history.

01 Precision welded frames

Large-frame fit-up, fixture control, TIG/MIG sequence planning and post-weld dimensional recovery.

02 FAI / new product introduction

First-article builds, initial process establishment, issue closure and repeat-production readiness.

03 Production industrialization

Process definition, workholding methods, inspection checkpoints and operator guidance.

04 Post-weld finishing & alignment

Controlled grinding, blending and dimensional recovery to drawing requirements.

05 Manufacturing troubleshooting

Investigation of fit-up, welding, dimensional and assembly issues; controlled rework and corrective action.

06 Multi-model manufacturing

Structural-frame configurations, changeovers and disciplined repeat-build manufacturing.

HOW THIS IS APPLIED AT KLH

Direct involvement in drawing and manufacturability review.

Early identification of high-risk dimensions and process dependencies.

Fixture-led preparation before welding.

Verify, record and close first-article issues before repeat production.



CAPABILITY RESPONSE

Manufacturing scope.

Clear process boundaries for supplier qualification and drawing-led RFQ review.

Performed in-house		KLH manufacturing & QA
Structural frame fabrication	TIG/MIG fit-up and welding, distortion correction, grinding, assembly and final inspection.	
Mechanical assembly	Fit-up, fastening, alignment and bracket/panel installation to released customer drawings.	
Grinding / polishing	Weld-flush grinding, deburring, radius blending and cosmetic surface preparation.	
Final QA inspection	Revision checks, applicable incoming checks, in-process verification and final dimensional/visual review.	
KLH-managed external processes		External processing
Sheet metal fabrication	Laser cutting, bending and related fabrication through selected external processors.	
Precision CNC machining	Externally sourced CNC milling, turning and precision components to project requirements.	
ESD powder coating	External ESD coating to drawing/finish requirements, with applicable return verification by KLH.	
Painting / coating	Externally processed wet painting and other specified coatings to project requirements.	

PROJECT SCOPE

External requirements are flowed down and returned components receive applicable verification. Commitments remain subject to drawing, material, tolerance, quantity and manufacturability review.



IN-HOUSE PRODUCTION

Frame fabrication & fixturing.

Workholding discipline and controlled workflow at the Johor Bahru facility.



Actual KLH fit-up and fixture setup on a cast-iron grid table.

Fit-up

Establish geometry and key references before welding. Cast-iron grid tables, fixture blocks and clamps support fit-up.

Sequence

Plan TIG/MIG weld progression to manage heat input and distortion.

Verify

Check critical dimensions during fabrication—not only at the final inspection stage.

Recover

Apply controlled correction, alignment and finishing where required by the drawing.

CONTROLLED MANUFACTURING WORKFLOW

01 Drawing & revision review

02 Material / traceability check

03 Fit-up & fixture setup

04 TIG/MIG welding

05 In-process dimensional check

06 Correction & finishing

07 Mechanical assembly

08 Final inspection / FAI release



EQUIPMENT CONTROL

Production equipment & asset control.

Installed assets are identified and maintained in KLH's operational asset register.

REGISTERED WELDING EQUIPMENT

MEGMEET DEX DM3000

Welding equipment

GREEWELD MultiTIG 315 AC/DC

2 units

GREEWELD MultiMIG 350P

Welding equipment

MIGATRONIC PILOT 1500HP

Welding equipment

Fit-up & tables

T-slot / cast-iron grid tables, welding workstations, portable fixture blocks and clamps.

Compressed-air system

Air Compressor 10A-10HP, Air Dryer 10AC and compressed-air receiver tank.

Dust & ventilation

AN MI XIN dust collector, wall-mounted fans and local extraction support.

Material handling

2.5T forklift with controlled movement aisle and parking area.

ASSET REGISTRY			
Assets			
Manage registered assets across your organization.			
Q Search by code, name, type, or location...		Asset type All types	Status All
ASSET CODE	ASSET NAME	ASSET TYPE	STATUS
KLH-AIR-001	Air Compressor 10A-10HP (Serial: 26012433)	Air System Equipment	Active
KLH-AIR-002	Compressed Air Dryer 10AC (Serial: 20251426)	Air System Equipment	Active
KLH-AIR-003	Compressed Air Receiver Tank	Air System Equipment	Active
KLH-AREA-001	Grinding Zone	Facility Area	Active
KLH-DST-001	AN MI XIN Dust Collector (Serial: CCQ-5000#)	Dust Extraction Equipment	Active

KLH digital asset register · Selected entries

DIGITAL CONTROL

Identify. Record. Track status.

Asset code, equipment identity, type, serial/reference details and recorded status.

Project-specific maintenance, inspection and calibration requirements are linked to the applicable asset-control process as required.

QUALITY CONTROLS

Quality control & first-article process.

Inspection checkpoints and physical segregation support controlled release.

01 Drawing / revision control

Confirm the current drawing, specifications, customer notes and inspection requirements before release.

02 Incoming verification

Check externally processed or partner-supplied components where applicable before integration.

03 In-process checks

Verify fit-up, key dimensions, alignment, weld condition and required visual characteristics.

04 Final release

Complete dimensional and visual review to agreed criteria. Segregate non-conforming items for disposition.



KLH NCR holding area with physical segregation.

Non-conforming items are held for disposition.

A designated holding area separates items awaiting review from released work.

FIRST-ARTICLE / NPI APPROACH

Review

Drawing, tolerances, material and special processes.

Plan

Sequence, fixtures, checks and external needs.

Build

Controlled fabrication with in-process verification.

Verify

Inspection to agreed criteria and report format.

Close

Resolve deviations and prepare the repeat-build process.

Project-specific FAI documentation, acceptance criteria and report templates are agreed with the customer during drawing review and first-article planning.



INSPECTION & WORKHOLDING

Inspection scope & workholding.

General shop-floor checks, with project-specific verification defined during review.

Current shop-floor checks

- + Fit-up checks
- + General dimensions
- + Gap verification
- + Level and alignment checks
- + Assembly verification

Defined for your project

- + Drawing and tolerance requirements
- + Required calibrated instruments and measurement methods before FAI
- + External dimensional verification where required
- + Customer-specified inspection report format

METROLOGY POSITIONING

Fit-up first. Verify to the drawing.

Customer-specific tolerances, calibration requirements and additional precision metrology are confirmed during RFQ and first-article planning.



Organised fixture blocks, clamps, magnets and workholding components.

The photograph shows workholding resources. External dimensional verification can be arranged where the project requires it.



INTEGRATED SUPPLY CHAIN

Managed processes & workshop controls.

External processing with Johor-based integration, verification and final review.

KLH-MANAGED EXTERNAL PROCESSES

Sheet metal

Laser cutting, bending and related fabrication.

CNC machining

Milling, turning and precision-machined components.

ESD powder coating

External coating to drawing and finish requirements.

Painting / coating

Wet painting and other specified coating systems.

KLH CONTROL MODEL

01 Requirement review	Review drawings, revisions, material, tolerances, finishes and certification requirements.
02 Specification flow-down	Issue relevant specifications and acceptance criteria to the selected external processor.
03 Return / incoming check	Complete applicable checks before integration or release.
04 KLH integration	Fit components to the welded frame or mechanical assembly under KLH control.
05 Final QA	Review the assembly to agreed dimensional and visual requirements.

WORKSHOP CONTROL HIGHLIGHTS

Production zoning

Dedicated welding/grinding stations, curtains and ventilation support.

Material flow

Marked forklift aisle and controlled handling/parking areas.

Quality segregation

Inspection area and physically segregated NCR holding zone.

EHS & storage

Gas-cylinder control, extinguishers, first aid, PPE storage and flammable-liquid cabinet.



QUALITY MANAGEMENT

Certification & engagement.

Supplier qualification, RFQ review, first-article work and production planning.



ISO 9001:2015

KLH Technologies Sdn. Bhd.

Certification body	QFS Management Systems LLP
Certificate no.	SCC/INT/2606KE/29022
Initial certification	06 June 2026
Certificate expiry	05 June 2027
Re-certification due	05 June 2029

Certified scope as stated

Provision of high precision mechanical fabrication and welding services, customized fabrication of semiconductor equipment frames and structures, process development and prototyping services.

ISO 9001:2015 certificate · KLH Technologies Sdn. Bhd.

CUSTOMER ENGAGEMENT WORKFLOW

- | | |
|--|-----------------------------------|
| 01 NDA & initial discussion | 02 Drawing / specification review |
| 03 Capability & risk assessment | 04 RFQ / quotation |
| 05 Facility audit, if required | 06 First article / prototype |
| 07 Inspection review & production planning | |

Contact KLH in Singapore or Malaysia.

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