



## 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 &amp; 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.

**Dust & ventilation**

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

**Compressed-air system**

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

**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                | Status |
|                                                    |                                              | All types                 | 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 &amp; 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

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

[sales@klh.com.sg](mailto:sales@klh.com.sg)

[klh.com.sg](http://klh.com.sg)

## Singapore · Customer &amp; project support

**KLH Technologies Pte. Ltd.**

No. 22 Sin Ming Lane, #06-76  
Midview City, Singapore 573969  
UEN: 202610248R

+65 9783 8881

## Malaysia · Customer support, manufacturing &amp; QA

**KLH Technologies Sdn. Bhd.**

No. 25, Jalan Waja 2  
Kawasan Perindustrian Pandan  
81100 Johor Bahru, Johor  
Company No.: 1622531-H

+60 7-686 8257 · +60 13-788 2188