



LIFT SYSTEMS

ENGINEERING DESIGN & CNC MANUFACTURING

For Complete Lift Systems

Zedaxis Engineering Solutions Pvt. Ltd.

2026

At Zedaxis, we believe lift engineering must be precise, reliable, and built for long-term performance. We are a global engineering design and CNC manufacturing company specialising in **lift and elevator systems**, delivering design and manufacturing services from our facilities in the **UK and India**. What began in 2017 as a small design office in Wolverhampton has grown into a full-service engineering and manufacturing partner for the **lift industry**.

Today, we are trusted by **lift OEMs**, modernisation contractors, and maintenance providers worldwide. From rapid prototyping to repeat production, and from individual safety-critical components to **complete lift assemblies**, we manufacture parts that meet the demanding requirements of vertical transportation – including load handling, alignment accuracy, durability, and safety compliance.

Our strength lies in offering true **end-to-end support for lift systems**. Whether it's converting a concept into design-for-manufacture, reverse-engineering existing lift components, or producing precision-machined parts at scale, we bring engineering design and CNC manufacturing together **under one roof**.

VISION

To deliver simple design and reliable manufacturing, every time.

MISSION

Simplifying complex engineering challenges.

VALUES

Quality First

ISO 9001:2015 certified.
BS EN 1090 structural fabrication.
ensuring every output meets international quality standards.

Integrated Workflow

Everything is synced from design to delivery, powered by Salesforce. It's how we stay fast, focused, and flawlessly connected.

Sustainability-Driven

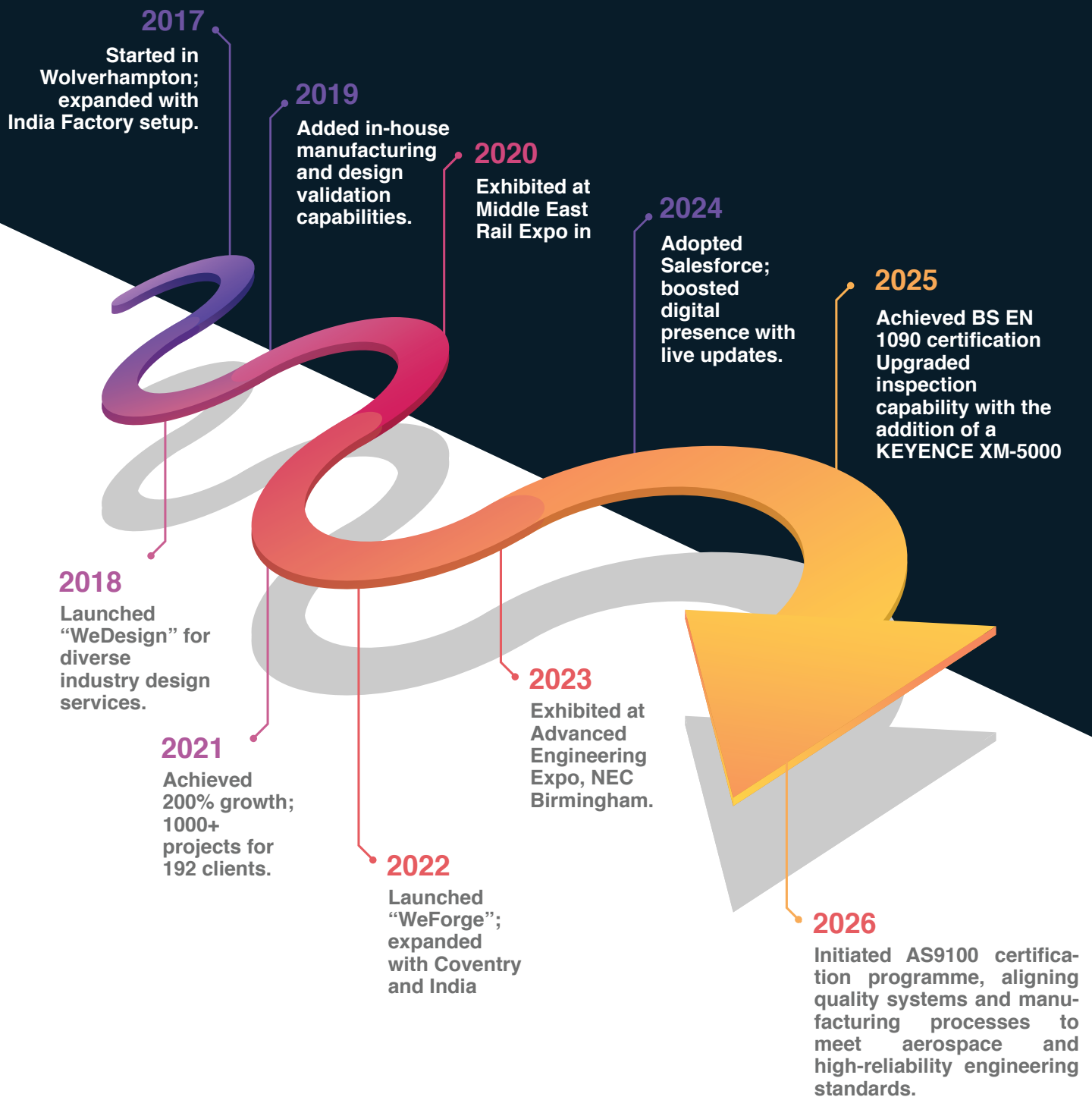
Sustainability is a journey, and we're taking real steps to reduce our footprint and build a better future.

People-Focused

We invest in the next generation of engineers, and we're committed to diversity, equal opportunity, and fair labour practices in both India and the UK.



OUR JOURNEY



Lift Engineering Solutions

PRECISION MANUFACTURING FOR SAFE & RELIABLE VERTICAL MOVEMENT

Zedaxis Engineering Solutions delivers precision-engineered components for lift and elevator systems, supporting OEMs, installers, and maintenance providers with reliable manufacturing solutions.

UNDERSTANDING THE LIFT INDUSTRY

Lift systems demand absolute precision, structural reliability, and consistent quality. Components must withstand continuous operation, load variations, and long service life while maintaining alignment and safety.

Zedaxis Engineering Solutions supports the lift industry with accurately machined components manufactured to customer drawings, tolerances, and functional requirements. Our experience in repeatable machining and engineered sourcing enables us to support both new installations and ongoing maintenance requirements.

WE SUPPORT



MAINTENANCE



OEM



INSTALLATION



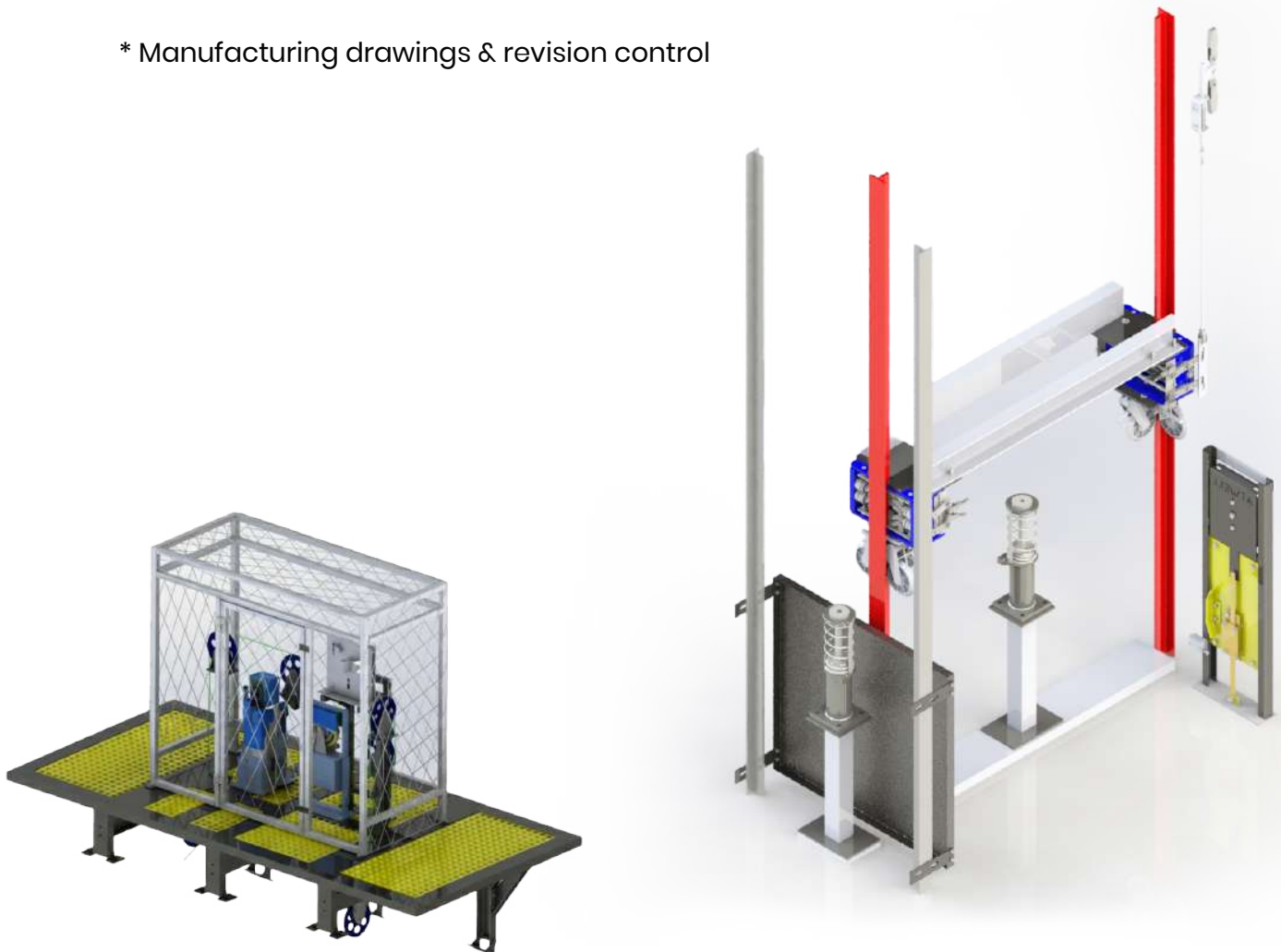
LIFT ENGINEERING & DESIGN

Zedaxis provides engineering design support specifically for lift and elevator systems, working closely with OEMs, modernisation contractors, and maintenance providers.

Our design team understands lift-specific requirements including load paths, alignment, fatigue life, safety margins, and installation constraints.

Design Capabilities Include

- Design-for-Manufacture (DFM)
- Reverse engineering for upgrades & replacements
- Structural and load-bearing design
- Assembly design with tolerance control
- * Manufacturing drawings & revision control



LIFT COMPONENTS WE MANUFACTURE INCLUDE (BUT ARE NOT LIMITED TO)

Guide Rail & Shaft Components

Guide rail brackets (standard & heavy-duty) - Fish plates & joint plates - Rail clips and mounting blocks - Shaft fixing brackets

Car Frame & Cabin Structure Components - Car frame side members - Crossheads - Sling plates - Cabin mounting brackets - Structural support plates

Counterweight System Components - Counterweight frames - Counterweight filler plates - Guide shoes & guide shoe brackets - Counterweight brackets

Machine & Drive-Related Components - Motor mounting plates - Gearbox mounting brackets - Brake brackets - Drive unit support frames

Door System Components - Door operator brackets - Door track supports - Door hanger plates - Door linkage components

Safety & Mechanical Components - Safety gear brackets - Governor rope tension brackets - Buffer mounting plates - Mechanical locking components

Machined & Wear Parts - Shafts, pins & spacers - Bushings & sleeves - Precision blocks & housings - Custom wear and replacement parts

From simple brackets to complex machined and welded assemblies, we manufacture lift components strictly to customer drawings and specifications — supporting prototypes, small batches, and repeat production.



Machining & Manufacturing Capabilities

LIFT COMPONENTS MANUFACTURING

Zedaxis manufactures precision lift components using CNC machining processes, supported by experienced engineering teams with a clear understanding of lift tolerances, alignment, and repeatability.

Processes:

CNC Turning · CNC Milling · 4th-Axis Machining · Drilling & Tapping · Sub-Assemblies

Materials:

Mild Steel · EN8 / EN24T · SS 304 / 316 · Aluminium 6061 / 5083 · Bronze & Copper Alloys

Finishing & Heat Treatment (as specified):

Zinc Plating · Black Oxide · Powder Coating · Hardening & Tempering

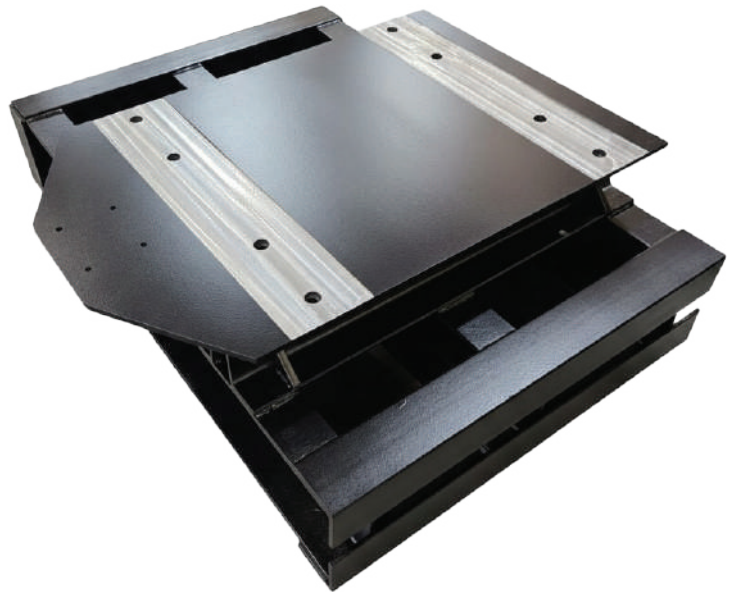
From prototypes to repeat production, we deliver consistent, reliable output for lift OEMs, modernisation, and maintenance programmes.



COMPONENTS WE DESIGN AND MANUFACTURE

(BUT ARE NOT LIMITED TO)





MANUFACTURING, WELDING & FABRICATION EXCELLENCE.

(CERTIFIED 25 EN 1090)

Zedaxis Engineering Solutions operates as a dedicated lift-industry engineering and manufacturing partner.

Our teams understand the real-world demands of lift systems, including structural loading, alignment accuracy, safety-critical tolerances, and consistent repeatability across production batches.

We manufacture and fabricate lift components with a deep understanding of vertical transport dynamics, ensuring every part performs reliably throughout its service life.

Why lift manufacturers choose Zedaxis:

- Lift & elevator component expertise (OEM & modernisation)
- CNC machining with integrated welding & fabrication
- Complete lift assemblies and precision individual parts
- Structural fabrication for frames, brackets, and baseplates
- Tight control of tolerances, alignment, and fitment
- Scalable production for OEM and maintenance programmes
- Cost-efficient manufacturing without compromising safety or quality
- UK & India operations for responsive supply chains

QUALITY & INSPECTION

CONSISTENT QUALITY YOU CAN RELY ON

Quality is embedded at every stage of our lift component manufacturing process. All parts are produced strictly in accordance with approved drawings, technical specifications, and defined inspection plans.

Inspection capabilities include:

- Dimensional inspection using calibrated measuring instruments (Vernier, micrometer, and height gauge verification)
- Visual and surface finish inspection
- CMM inspection using KEYENCE XM-5000 (handheld probe) for critical dimensions, alignments, and tolerances.

Inspection reports and quality documentation are provided as per customer and project requirements.



CASE STUDY

CASE STUDY 1:

Bedplates for Motor & Gearbox — Precision Foundation Manufacturing

Client Type: Lift OEM

Challenge:

Vibration and misalignment were appearing after installation due to inconsistent bedplate machining from different suppliers.

Scope:

Manufacture precision-machined steel bedplates with strict flatness and hole-position tolerances.

Our Solution:

- Redesigned the bedplate structure for better load distribution
- Machined mounting faces in a single setup to maintain perfect parallelism
- Added alignment slots to allow fine-tuning during installation
- Designed to comply with safe distance and entrapment clearances
- Provided repeatable production fixturing for consistency batch-to-batch

Outcome:

Alignment problems disappeared.

The OEM now relies on Zedaxis for standard and custom bedplates, citing repeatability and clean fit-up as the biggest wins.

CASE STUDY 2:

World's First Composite Lift on a Single Mounting Rail

Client Type: Lift Innovation / Advanced Lift System

Challenge:

Develop a structurally sound lift system using composite materials, mounted on a single rail, while meeting strict load, alignment, and safety requirements.

Scope:

Complete lift system engineering & design

Our Solution:

- Engineered the complete lift concept around a single mounting rail
- Designed load paths and structural interfaces for composite materials
- Optimised weight, alignment, and installation footprint
- Integrated design-for-manufacture principles for scalable production

Outcome:

- World's first composite lift designed on a single mounting rail
- Reduced system weight and installation complexity

CASE STUDY 3:

Safety Gear & Governor Bracket Assemblies

Client Type: Lift Safety System Supplier

Challenge:

Safety-related components required high confidence in strength, alignment, and repeatability without unnecessary over-design.

Scope:

CNC machining of safety gear brackets and governor rope tension assemblies with Dimensional inspection and documentation

Our Solution:

- Designed and machined components with focus on load-bearing paths
- Maintained consistent tolerances across batches
- Supplied inspection reports as per requirement

Outcome:

- Reliable integration into safety systems.
- Confidence in repeat production
- Long-term supplier partnership established

CASE STUDY 4:

Machine Room Guarding — Safety Upgrade for Existing Lifts

Client Type: Modernisation Contractor

Challenge:

Older lift machine rooms lacked compliant guarding. Multiple suppliers quoted sheet-metal covers that were difficult to install and required site cutting — unsafe and non-standard.

Scope:

Design and manufacture modular machine guarding systems suitable for retrofit environments.

Our Solution:

- Measured existing layouts and designed bolt-on modular guarding
- CNC-fabricated frames with precise mounting slots for easy alignment pads for backup lifting points.
- Added inspection doors and quick-release access panels
- Designed to comply with safe distance and entrapment clearances
- Powder-coated finish for corrosion resistance

Outcome:

Installation teams reduced fit-out time from 2 days to a few hours.

Client adopted the guarding design as their standard safety upgrade kit across multiple sites.

OUR GLOBAL PRESENCE AND CLIENTS



Ai ATWELL INTERNATIONAL **Stannah**

**AMCO
GIFFEN**

GRANTA
ACHIEVE WITH AUTOMATION

HAYLEY 247
DEXIS

Pharma
Packaging Systems

**Environment
Agency**

DCE DIGITAL
CONCEPTS
ENGINEERING

AEY
AE YATES GROUP

ACCU
Building Tomorrow.

R3E

Varlowe
Industrial Services

**Ministry
of Defence**

ARBIL

millboard
Live Life Outside.



Let's Discuss Your Lift Component Requirements

Whether you need prototype parts, repeat production, or ongoing support,
Zedaxis Engineering Solutions is ready to support your lift projects.

Zedaxis Engineering Solutions Pvt. Ltd.

✉ sales@zed-axis.co.uk 🌐 www.zed-axis.co.uk ☎ +44 (0) 2477 350151

