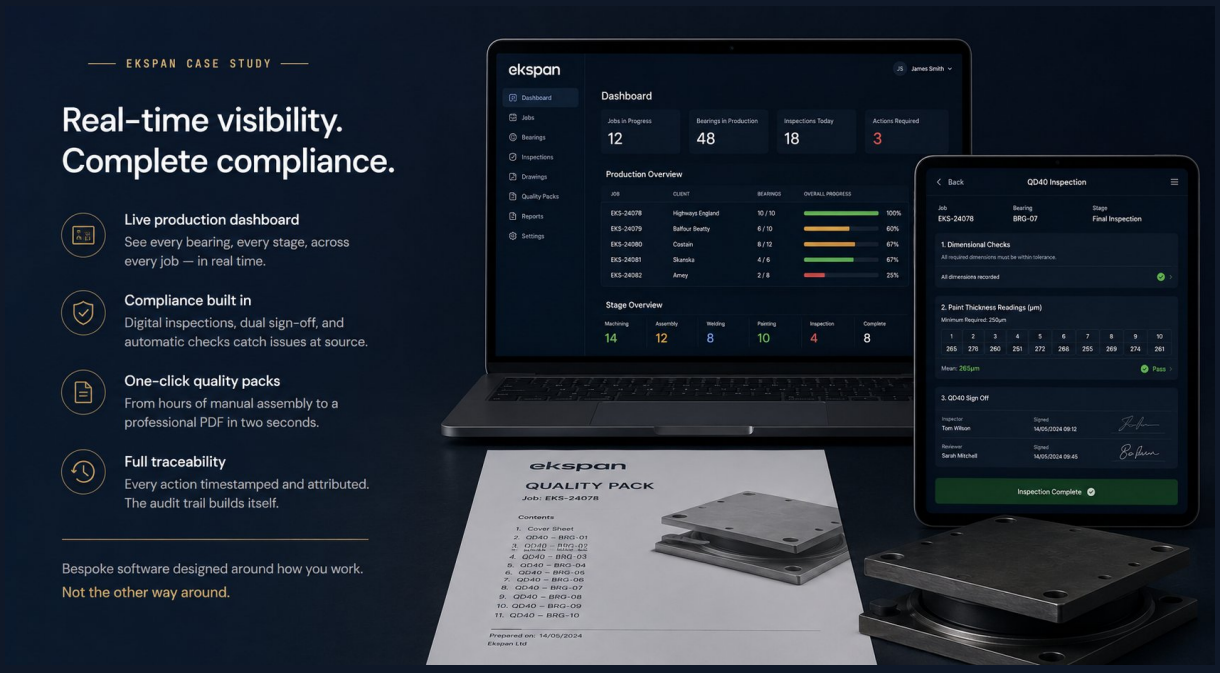
Ekspan Ltd

From Paper to Platform in Six Weeks



SECTOR	ENGAGEMENT	TIMELINE
Structural Bearings	**Replace**	**6 weeks to live**

QUALITY PACKS	PAPER REPLACED	TEAM ADOPTION
Hours → seconds	**100%**	**Day one**

THE CHALLENGE	THE SOLUTION	THE OUTCOME
Entire production workflow on paper. No visibility, growing compliance burden, hours lost to manual quality pack assembly.	Bespoke operational platform mirroring Ekspan's exact workflow — factory-floor tablets, digital inspections, one-click quality packs.	Full team adoption from day one. Quality packs generated in seconds. Complete audit trail built automatically.

MAP

Understanding the operation

Ekspan is a specialist manufacturer of structural bearings used in bridges, flyovers, and major civil engineering projects across the UK and Europe. Operating from their factory, the team machines, welds, paints, and assembles precision components to exacting standards — every bearing ships with a full quality pack proving compliance with EN 1337, EN 1090, and client-specific specifications.

Their work is safety-critical. Every bearing installed beneath a bridge or flyover carries a paper trail that must be complete, accurate, and auditable. Getting that paperwork wrong isn't just inconvenient — it can delay a project handover or raise questions during a structural inspection years down the line.

Ekspan ran their entire production workflow on paper. Job cards, inspection reports, paint reading sheets, non-conformance reports, quality packs — all handwritten, physically passed between departments, and manually compiled into client-facing document packs at the point of despatch.

No operational visibility.

The only way to know a bearing's status was to walk the factory floor and ask. Drawing revisions had to be physically distributed and verbally confirmed with every operator. If someone missed a revision, the error surfaced at inspection — when rework was expensive.

Compliance burden growing with every job.

Each bearing requires a QD40 inspection with dual sign-off, dimension checks across multiple stages, ten individual paint thickness readings with a calculated mean, and photographic evidence. For a ten-bearing job, that's ten complete document packs — all collated and checked by hand before anything could ship. The office team spent more time administering paperwork than doing their actual jobs.

Manual workarounds filling every gap.

Paper chasing, verbal handoffs, and manual reconciliation were the glue holding the process together. The same pattern we see in firms running disconnected software — except here the disconnected system was paper itself.

CONNECT

Designing the platform

A purpose-built operational platform designed around how Ekspan's team actually works. Not an off-the-shelf MES configured to roughly fit — a custom application that mirrors their exact workflow, their exact inspection process, and their exact quality pack format.

Factory-floor-first design.

Tablets on the shop floor, desktop in the office. Large touch targets for gloved hands, high-contrast interface readable under strip lighting, PIN-based login so operators authenticate in seconds. The same mobile-first, environment-aware approach we bring to every Replace engagement.

Real-time visibility from one screen.

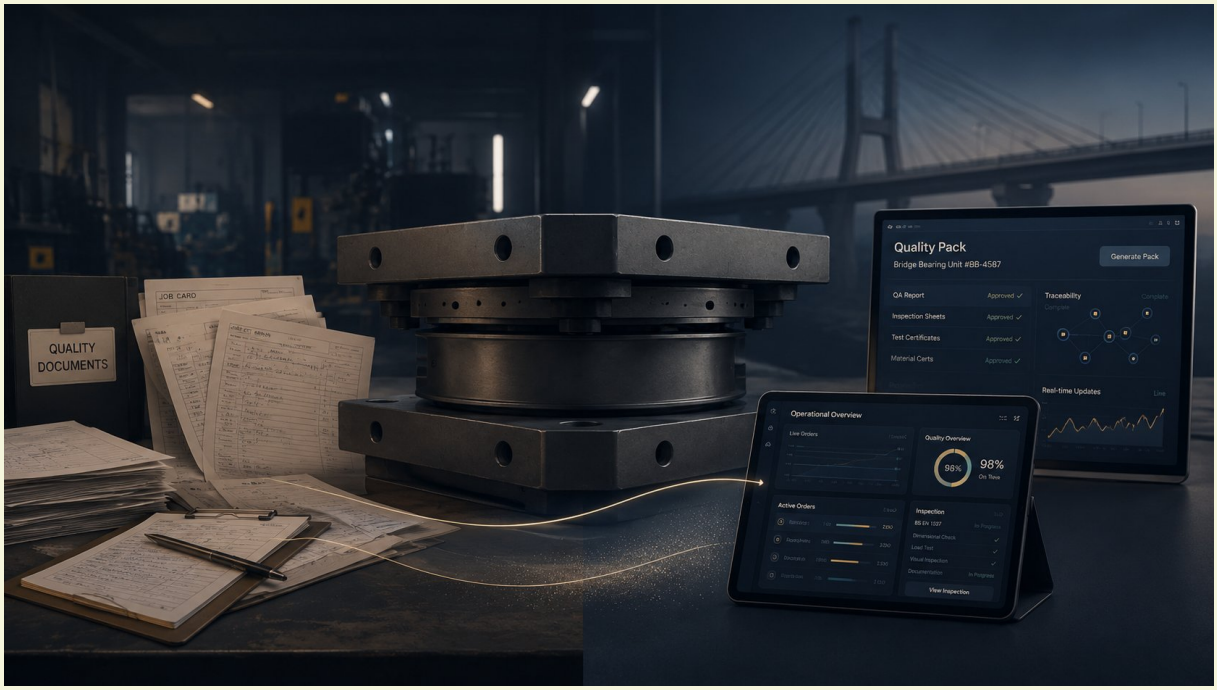
A live dashboard showing every bearing's stage across every job — replacing the daily walk-the-floor-and-ask routine. Drawing revision alerts that persist until every affected operator individually acknowledges them. The MD and office team see the full picture without making a single phone call.

Compliance automated, not administered.

Digital inspection forms enforce completeness — you cannot progress without filling every required field. Paint readings are automatically evaluated against the job's minimum threshold. Dual sign-off is enforced by the system, with instant notification to the second signatory. The audit trail builds itself as a natural byproduct of using the platform, not as a separate administrative task.

One-click quality packs.

What previously took hours of manual compilation — collating inspection cards, chasing signatures, formatting document packs — now takes one click and two seconds. A professionally formatted PDF with cover sheet and individual QD40 reports for every bearing, ready to send to the client.



FORGE

The outcome

Office time recovered.

Hours previously spent chasing paper, tracking signatures, and compiling quality packs were eliminated entirely. The office team went from administering the process to managing it.

Errors caught at source.

Digital forms enforce completeness at each stage. The kind of problems that previously surfaced at despatch — a missing reading, an unsigned inspection, an overlooked drawing revision — are now caught at the point they happen, not weeks later.

Full traceability without the filing.

Every action is timestamped and attributed automatically. Who machined which component, who signed off which inspection, who acknowledged which revision. The audit trail that used to require careful paper filing now exists by default.

Why bespoke beat off-the-shelf.

Ekspan evaluated generic manufacturing systems before engaging us. The consistent problem was fit: no platform supported their specific dual sign-off process, their exact QD40 inspection format, or their standard bearing type library without significant configuration. The cost of licensing, configuring, and training on a system that still wouldn't quite match their process was comparable to building something purpose-made.

With a custom platform, Ekspan's team didn't change how they work — they changed the medium. The same five-stage inspection, the same bearing families, the same quality pack format their clients expect. Adoption was immediate because the software matched the work, not the other way around.

Ekspan owns the platform, the data, and the code. No per-seat fees. No vendor lock-in.

Alden Foundry builds bespoke operational platforms for UK companies. We replace fragmented processes — whether paper or disconnected software — with systems designed around how your team actually works.

If your business runs on manual workarounds, we should talk.

aldenfoundry.com/contact