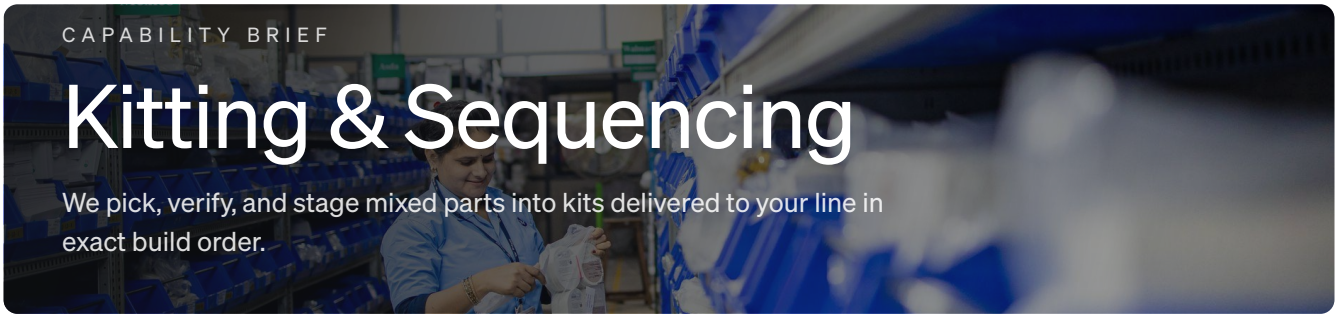

CAPABILITY BRIEF

Kitting & Sequencing

We pick, verify, and stage mixed parts into kits delivered to your line in exact build order.

Line-side kitting eats labor and breeds errors. A picker pulls from dozens of bins, and one wrong or missing part stops the line downstream, where it costs the most. High-mix work multiplies the failure modes: more part numbers, more BOM variants, more chances to grab the wrong fastener or skip a component. Manual pick-to-light helps but still leans on people to be perfect, shift after shift.

A Relling cell picks the correct parts into each kit and stages them in build sequence, verifying every part by vision before it lands in the tray. It reads the BOM for the unit on deck and reconfigures in software, no retooling per variant. Wrong and missing parts are caught at the cell, not on the line. Every cell is qualified at Relling HQ before it ships and tuned on-site.

AT A GLANCE

Footprint	~2 × 2 m
Payload	12.5 kg
Reach	1.3 m
Placement	±0.05 mm
Power	Single-phase
Install	≤ 2 weeks

01 The work we take on

THE TASK PROFILE

A

Vision verification

Each part is confirmed by part number, geometry, and count before placement, so a mispick is rejected at the cell rather than reaching the line.

B

BOM-driven picking

The cell reads the per-unit BOM and selects the correct parts and quantities, reconfiguring picks in software when the variant on deck changes.

C

Sequence staging

Kits are built and ordered to match line consumption, so trays arrive in the exact sequence the assembler installs them.

D

Multi-bin reach

One cell picks across dozens of presented bins and totes, handling mixed part geometries, weights, and packaging without dedicated tooling per SKU.

E

Full traceability

Every pick is logged by part, kit, and timestamp, giving a verifiable record of what went into each kit and when.

02 Why now

THE CASE FOR MOVING NOW

Wrong parts stop the line

A missing or incorrect part surfaces at assembly, where a stoppage idles the whole line and the fix costs far more than at the bin. Verifying every pick at the cell keeps defects from ever reaching the operator.

High-mix breaks manual kitting

More variants mean more part numbers, more BOMs, and more ways to err. People can't hold every sequence in their heads shift after shift; a cell reconfigures per BOM in software and picks the right parts every time.

Labor and traceability

Kitting is repetitive, hard-to-staff work, and audits demand proof of what shipped. A cell runs it consistently and logs every pick by part, kit, and timestamp, turning a labor sink into a traceable record.

OEMS WE WORK WITH

BECKHOFF · Rockwell Automation · SIEMENS · FANUC · KUKA · ABB · YASKAWA

03 What the service covers

TASKS ON THE LINE

A — Kit to BOM
Assemble each kit to the unit's bill of materials, correct parts and counts.

B — Verify parts
Confirm part number and quantity by vision before placing into the kit.

C — Sequence to line
Stage kits in build order so trays reach the line as consumed.

D — Multi-bin pick
Pick mixed parts across many presented bins and totes in one cell.

E — JIT/JIS build
Build kits just-in-time and in-sequence to match live line demand.

F — Error-proof picks
Replace pick-to-light and manual checks with vision-verified picking.

G — Load trays
Place verified parts into trays, totes, and dunnage in fixed positions.

H — Replenish kanban
Pull from replenished bins and flag low stock for kanban refill.

WHAT A CELL HOLDS

≤ 2 wk	±0.05 mm	100%
Install to running on your floor, not months of integration	In-hand placement for fit- and safety-critical parts	Inspection on every part — checked, not sampled

Representative configuration. Final specs are issued with the proposal.

04 Working with us

FROM YOUR PART TO A QUALIFIED CELL, IN ~TWO WEEKS ON-SITE

A · SCOPE & PO

We start with your part

We work from your part, volumes, takt, and the line you'd deploy on. A short scoping engagement confirms fit, defines acceptance criteria, and puts a fixed scope and price in writing — capital purchase and robotics-as-a-service, side by side.

B · PRE-BUILD AT RELLING HQ

We build & qualify it first

We build the cell on our own production floor and run it against your parts until it meets the acceptance criteria. The trial-and-error happens here, not on your line — so what ships is already proven.

C · ON-SITE CONFIGURATION

It arrives pre-built

The qualified cell shows up ready. On-site work is tuning, not assembly: under two weeks to integrate with your line, MES/ERP, and safety, followed by a supervised run on real product.

D · ACCEPTANCE & FIRST UNIT

Proven, then handed over

We run supervised until your safety engineer signs off and the cell hits its numbers. Your technicians operate it day to day; maintenance and software updates are covered.

05 Let's talk

We started Relling to help this country make more of what it needs. If you have a task that's hard to staff or hard to automate, send it over — we'll tell you straight whether a cell fits, and scope it if it does.

Talk to us: jai.relan@rellingsystems.com · rellingsystems.com

EXCEPTIONAL ENGINEERING, TEAM FROM

SPACEX · NASA · BOEING · TESLA · RIVIAN · ANYSIGNAL · coinbase