Pharmaceutical

Regulated, high-mix drug production runs short batches through fragile primary containers and validated steps that resist fixed automation.

Pharmaceutical lines run small, high-mix batches under strict regulation: every movement is traceable, every change revalidated, every container fragile. Vials, syringes, and ampoules crack under clumsy handling; aseptic zones tolerate no improvised fixtures. Serialization and audit demands make each part change costly. The contact-rich, dexterous tasks between filling and palletizing resist fixed automation that can't justify retooling for a batch of a few thousand.

Relling deploys one cell that learns a library of skills and reconfigures in software per product, not rebuilt for each SKU. Every cell is qualified at Relling HQ before it ships, then tuned to your containers, trays, and cartons on-site, running in two weeks or less. Motion and handling are logged for the audit trail. Reconfiguration is a validated software event, keeping qualification and traceability intact.

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

Fragile primary containers

Glass vials, prefilled syringes, and ampoules demand force-limited grasps and controlled placement that avoid cracks, scratches, and cosmetic rejects.

B

Aseptic-aware handling

Cells operate within cleanroom constraints, minimizing particulate generation and contact with product-facing surfaces during transfer and load.

C

Small high-mix batches

Short runs across many SKUs require per-product reconfiguration in software rather than mechanical retooling for each presentation.

D

Serialized traceability

Every unit carries serialization and lot data; handling must preserve label legibility and DSCSA-compliant code alignment through packaging.

E

Validated change control

Each process adjustment is a documented, repeatable software event, so requalification stays bounded and the audit trail stays intact.

02 Why now

THE CASE FOR MOVING NOW

Skilled labor is scarce

Aseptic and inspection roles demand trained, gowned operators who are hard to recruit and retain. Cells absorb repetitive contact-rich handling, freeing scarce staff for judgment-heavy work and reducing variability at the line.

Serialization mandates compliance

DSCSA and global serialization rules require unit-level traceability through packaging. Software-reconfigurable cells log every handling step and preserve code legibility, making serialized, audit-ready packaging repeatable across products.

Batches keep shrinking

Personalized therapies and clinical supply drive ever-smaller, higher-mix runs. Fixed automation can't justify retooling per batch, while a cell that reconfigures in software switches products without mechanical changeover or lost qualification.

OEMS WE WORK WITH

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

03 What we automate in pharmaceutical

TASKS ON THE LINE

A — Vial handling
Transfer filled glass vials between trays, nests, and inspection stations without scratches or breakage.

B — Syringe nest loading
Load prefilled syringes into nests and tubs with force-limited, aseptic-aware placement.

C — Ampoule transfer
Move fragile ampoules from filling to inspection and packaging with controlled, gentle grasps.

D — Blister packing
Place tablets and capsules into blister cavities and load filled blisters into cartons.

E — Labeling and serialization
Apply and verify serialized labels, checking code legibility and DSCSA alignment per unit.

F — Trial kitting
Assemble high-mix clinical trial kits, picking varied components into patient-specific packs.

G — Inspection handling
Present containers for fill-level, particulate, and defect inspection, segregating rejects by reason.

H — Cartoning and palletizing
Load cartons into cases and stack finished cases onto pallets for shipment.

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