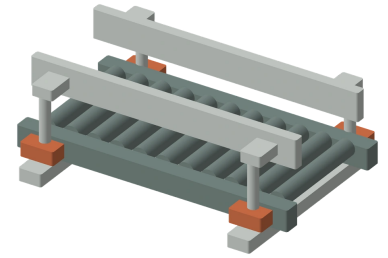


MACHINE AND ASSEMBLY DESIGN

Indexed conveyor changeover

Set three carton widths without measuring the guide rails every time.



CONCEPT ILLUSTRATION

Mechanism concept; frame dimensions needed

THE PROBLEM

Changing carton size requires an operator to loosen the guide rails, measure both sides, and adjust them until the carton runs cleanly. This project replaces that repeated setup with three defined positions on an existing conveyor frame.

SCOPE

- Design sliding rail supports with indexed stops for three carton widths.
- Keep adjustment hardware captive and make the selected position easy to read.
- Provide replaceable wear strips and access for cleaning and maintenance.

PLANNED DELIVERABLES

- Assembly models for all three carton settings
- Part drawings, wear-strip details, and a hardware list
- Setup procedure and a physical repeatability-test plan

CONSTRAINTS

Mounting

Fit a defined existing conveyor frame

Adjustment

Three repeatable width settings

Maintenance

Wear surfaces replaceable with common tools

Clearance

Preserve carton travel and access to existing equipment

VERIFICATION PLAN

Full adjustment range

Check the guides, stops, fasteners, and cartons in all three operating positions and during movement between them.

Tolerance stack

Calculate rail-position variation from stop, support, and mounting tolerances.

Operator sequence

Write the actual changeover steps and identify where a wrong setting could occur.

NEXT STEP

Set the conveyor mounting envelope, carton sizes, and required running clearance.

Changeover-time savings and long-term repeatability will require a physical trial. Neither is claimed at the brief stage.