Are Robotics Right For My Line?

Evaluate Your Options For Upgrading

If you answer "yes" to many of these questions, robotics is worth a deeper evaluation for your line. If you're answering mostly "no," consider a traditional machine or dedicate yourself to improving manual operations.

- ☐ Yes ☐ No Are my changeovers frequent enough, limiting what my line is capable of?
- ☐ Yes ☐ No Are my changeovers hard to replicate?
- ☐ Yes ☐ No Is staffing manual positions a persistent constraint for my line?
- ☐ Yes ☐ No Are jams, reworks, and speed derates chronic because of my product mix?
- ☐ Yes ☐ No Are injuries and ergonomic risk disrupting operations or increasing costs?
- ☐ Yes ☐ No Does my packaging have uneven weight, inconsistent orientation, or flexible material?
- ☐ Yes ☐ No Do I expect SKU or format complexity to increase over the next 1-3 years?
- ☐ Yes ☐ No Am I committed to training, spares, and ownership for a robotic cell?
- ☐ Yes ☐ No Can I make upstream conditions stable enough for a robot to perform effectively?

If you are considering robotics, here are the most common robots used in secondary packaging, and the lines they're suited for:

Robot Type	Best-Fit Operations and Functionality
Delta	Pick-and-place of lightweight items into trays and cases (usually through vision capabilities)
Articulated Arms (4/6-axis)	All-around for case packing and palletizing heavier and mixed products
SCARA (Selective Compliance Assembly Robot Arm)	Small, fast, and precise horizontal movements (often involving feeding and sorting mechanisms)
Gantry/Cartesian	Spanning large work areas or handling heavy loads (often with layer handling)
Cobots (Collaborative Robots)	Speed is lower, space is tight, and you're aiming for quality but simplistic use (often used for lower throughput lines)