



## UFLEX EDGE

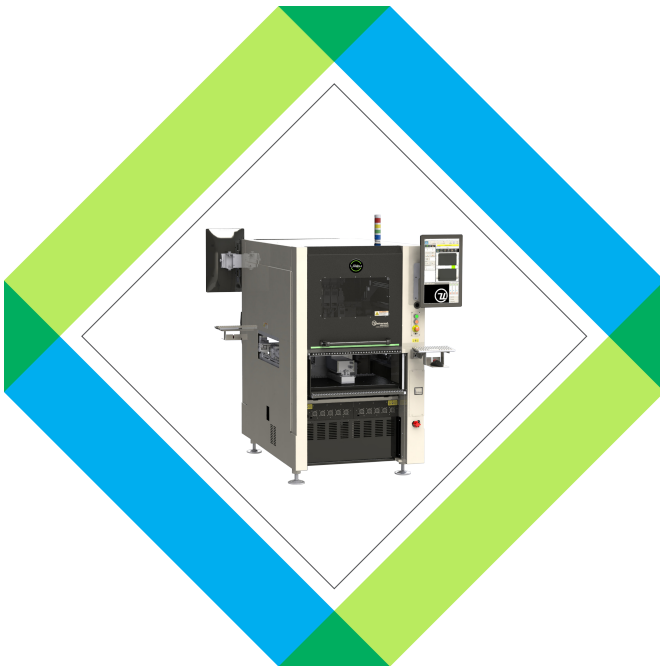
ULTIMATE FLEXIBILITY. SIMPLIFIED AUTOMATION.

The Uflex Edge™ flexible automation platform breaks traditional automation barriers with the ability to easily reconfigure for a wide range of applications. It accommodates an array of different process modules and feeding options to perform virtually any automation task, supporting up to four independent modules.

Uflex Edge is the ultimate flexible assembly cell for all forms of odd-form insertion and mechanical assembly operations, alleviating the need for dedicated, hard-tooled systems.

Features include:

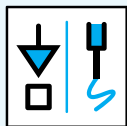
- Inserts axial, radial and press-fit components
- Easily adapts to new applications/processes
- Small footprint: only 1.0m wide x 1.7m deep
- Supports a combination of up to 4 total pneumatic grippers and/or vacuum grippers/nozzles
- Accommodates large substrates
- Handles a variety of large/heavy components
- Available offline programming



VIDEO



### BENEFITS & VALUE



**SUPPORTS A VARIETY OF PROCESSES**  
Pick-and-place, insertion, dispensing, screw driving, labeling, test handling, and more



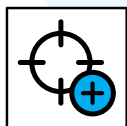
**SUPPORT FOR EXTREME APPLICATIONS**  
Large substrates up to **630mm x 508mm**;  
Components up to **127mm x 127mm, 70mm tall**  
and **450g** in weight



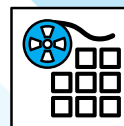
**HANDLES MOST COMPONENTS**  
Versatile tooling supports full range of radial, axial and press-fit components



**LOW COST PER INSERTION**  
Can lower the cost per insertion by **>95%** versus manual assembly while substantially improving quality and yield



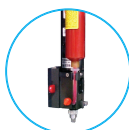
**HIGH INSERTION ACCURACY**  
**100%** vision of all leads and features before inserting



**SUPPORT FOR A VARIETY OF INPUT TYPES**  
Portfolio of reliable feeding solutions accommodate a range of components and packaging: tape, tray, tube, track, and bowl

### UFLEX VERSATILITY

DISPENSING



SCREWDRIVER



LASER INSPECTION



UV CURING



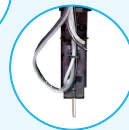
P&P SERVO THETA



CLINCH



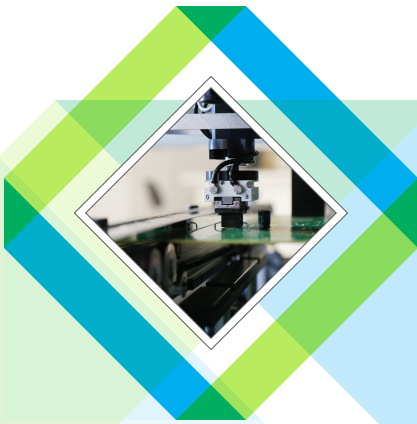
VISION INSPECTION



PRESSURE SENSE



PNEUMATIC GRIPPER



Uflex Edge Specifications	
Positioning System	Single-gantry ball screw
Heads	Supports 1 to 4 heads
Component Picking Method	Supports a combination of up to 4 total pneumatic grippers and vacuum grippers/nozzles
Cameras	1 ULC for components / 1 PEC camera for fiducials
Feeder Inputs	10 (standard), 20 (optional)
Insertion Rate	1.4 seconds/pc <sup>1</sup>
Throughput	2,570 cph
Insertion Success Rate	>99% <sup>2</sup>
Insertion Accuracy (Cpk ≥ 1.00)	±50µm
Insertion Repeatability	XY < 8µm
Max Placement Force	10kg (22lb.)
PCB Dimensions	Minimum board width: 150mm (50mm optional) Maximum size: 508mm [W] x 630mm [L] (option)
PCB Thickness	Bare board 1.2-2.0mm / Carrier ≤10mm
Max Component Size	127mm x 127mm; height: 50mm (70mm option); weight: 450g
Max Weight of PCB & Carrier	6kg (15kg option)

**Notes:**

1. Using standard components and nozzles under optimal conditions
2. PWB hole ≥ component PIN diameter 0.6mm

**Comprehensive feeder portfolio**

Uflex Edge supports a range of robust component input solutions, with many application-specific and specialized feeding options available.

- Stacking tray feeding with optional end-effector component rotation
- Pre-sequencing shuttles with vibration tables for bulk components
- Stacking feeders for thin lead frame/preform components
- Lead forming radial feeders for simple or complex lead bends

