![Universal Instruments – A Delta Group Company]

PLATFORM FEEDER
SOLUTIONS

ROBUST COMPONENT INPUT SOLUTIONS TO IMPROVE PRODUCTIVITY AND PROVIDE RELIABLE PICK PERFORMANCE FOR COMPONENTS IN TAPE, TUBE, MATRIX TRAY, WAFFLE, WAFER, AND BULK PACKAGING.

![Universal Instruments – A Delta Group Company]

www.uic.com
email: universal@uic.com

AMERICAS
Tel. 1-800-432-2607 or
Tel. +1-607-779-7522

CHINA, SHENZHEN
Tel. +86-755-2685-9108

CHINA, SHANGHAI
Tel. +86-21-6495-2100

PENANG, MALAYSIA
Tel. +60-4-644-7067

EUROPE
Tel. +421-2-4930-96-60

MC-7115A 12/25

contact us:

www.uic.com

VERSATILE AND RELIABLE
COMPONENT HANDLING SOLUTIONS
FROM UNIVERSAL INSTRUMENTS

In the early 1990's, Universal Instruments developed the GSM Platform – a modular platform-based surface mount technology machine that quickly became the industry standard. Today that leadership continues with Universal's Fuzion® Platform.

A modular design enables Fuzion to handle a wide range of components and quickly respond to changing products and applications. A critical element of this flexibility is the ability to provide alternative methods of component presentation.

Universal's cost-effective feeder solutions provide reliable pick performance for components in tape, tube, matrix tray, waffle, wafer and bulk packaging. These feeders improve component presentation, reduce feeder replenishment and changeover time, increase feeder capacity, and improve flexibility, tact time and throughput. Feeder support products provide additional benefits, such as offline setup, storage and organization of idle feeders.
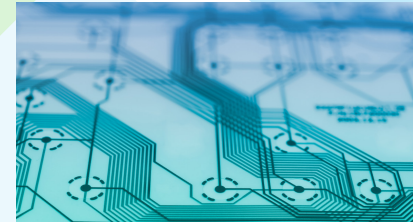
Universal's assembly and automation platforms support the widest variety of input types in the industry, including strip tape NPI and tube feeders, high-volume continuous-splice tape feeders, random-access matrix tray feeders, odd-form feeders, and more.

WIth an extensive portfolio of standard tooling and available custom design and implementation services, Universal's experts will help you take on virtually any automated assembly challenge.

Solutions for Every Application

Our global customer base employs a wide range of processes and technologies to build the most advanced products in the world. Universal's years of experience and applications knowledge coupled with the industry's broadest technology portfolio enables us to provide solutions that help our customers **build better**.
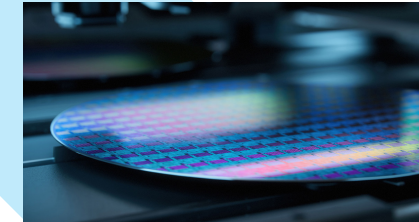
PRECISION AUTOMATION SOLUTIONS

Applications requiring high-accuracy alignment, flex handling, cutting and forming. May combine inspection, placement and bonding technologies.

• Large & high-part count PCB & SSD modules
• IoT, High-Reliability Industrial, Medical & Mil-Aero PCB & modules
• Mobility (Phone, Watch, Earbud) modules
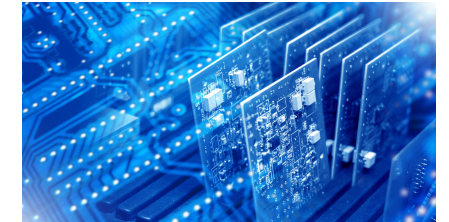• Automotive, Lighting & Sensing modules

ADVANCED PACKAGING SOLUTIONS

2D, 2.5D and 3D semiconductor applications requiring high accuracy and efficient die handling. From direct die and flip chip to multi-die heterogeneous integration.

• Large & high-part count electronics
• IoT, Hi-Reliability Industrial, Medical & Mil-Aero modules
• Mobility (Phone, Watch, Earbud) modules
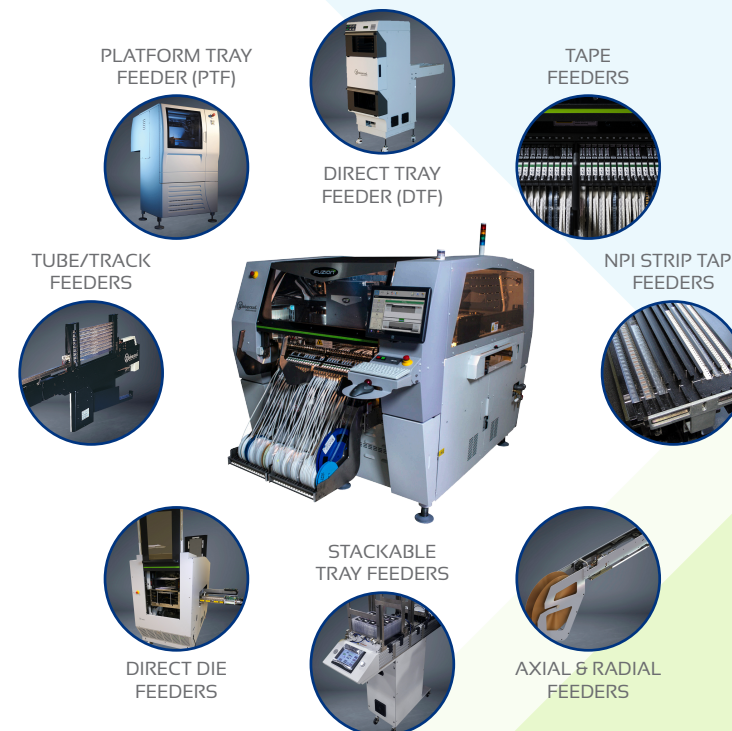• Automotive modules

PCB ASSEMBLY SOLUTIONS

Traditional printed circuit board assembly, including standard surface mount placement and through-hole component insertion.

• Large & high-part count PCBA
• IoT, Hi-Reliability Industrial, Medical & Mil-Aero PCBA
• Mobility (Phone, Watch, Earbud) PCBA
• Automotive, Lighting

Productivity Enablers

Our comprehensive feeder portfolio features capabilities that maximize utilization and production efficiency.

• Dynamic feeder exchange with quick-change banks
• Splice detection and feeder hot swap
• Automatic feeder and reel marriage via barcode scanning
• Offline Feeder Setup Station enables parallel setup
• Consumption tracking and integrated auto-replenishment
• Automated tray feeders with non-stop replenishment and automatic exchange

PLATFORM TRAY FEEDER (PTF)

TAPE FEEDERS

DIRECT TRAY FEEDER (DTF)

NPI STRIP TAPE FEEDERS

TUBE/TRACK FEEDERS

STACKABLE TRAY FEEDERS

DIRECT DIE FEEDERS

AXIAL & RADIAL FEEDERS

UniversaL ®
Instruments
A Delta Group Company

HIGH-PERFORMANCE TAPE FEEDERS

Our tape feeder solutions deliver precise presentation of a full range of tape-packaged components. These continuous-splice tape feeders feature easy loading, quick-change banks, flexible reel management, and feeder hot swap.

NPI STRIP TAPE FEEDER
High-mix tape feeding
- Single-lane, single-slot
- Multi-lane, multi-slot, matrix tray style

iON FEEDERS
High-performance tape feeding
- Precision accuracy (27μm @ Cpk>1)
- Easy/fast loading
- 4mm tape compatibility
- 4/8mm dual-lane and 12/16mm single-slot

GOLD PLUS FEEDERS
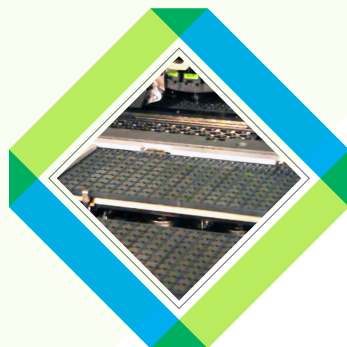*Value-driven tape feeding*
- 8–104mm tape widths, multi-pitch
- 8mm feeder for paper or embossed packaging
- Single feeder supports a variety of pitches
- Load times of less than 30 seconds

RANDOM-ACCESS TRAY FEEDERS

Whether feeding a single part or managing multiple parts in tray, we have a solution to enhance your production. Our tray feeders range from stationary options to automated options with non-stop replenishment and automatic exchange.

DIRECT TRAY FEEDER (DTF)
High-performance tray feeding
- Components picked directly from tray (supports OF)
- Up to 58 different part numbers
- JEDEC or non-standard vacuum formed matrix trays
- Exchange, Concurrent, and Job Changeover modes

STATIONARY MATRIX TRAY FEEDER
Single-part tray feeding
- Single-tray, single-part number tray feeder
- Adjustable tray and component height

STACKABLE JEDEC (JTF) & VACUUM TRAY FEEDER (VTF)
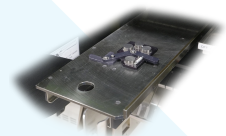*Automated tray feeding for continuous production*
- JTF supports JEDEC trays; VTF supports vacuum
- Single part number, 40-tray capacity
- Occupies only 19 feeder slots to maximize capacity
- Non-stop 20-tray replenishment

SPECIALTY & SYSTEM INTEGRATOR FEEDERS

For specialized part presentation, we have a versatile portfolio of high-speed solutions. Our feeders support radial, axial, DIMM, tube and track, and even multi-part semiconductor die feeding.

HIGH-SPEED WAFER FEEDER
The ultimate multi-die solution for heterogeneous integration
- Maximum die size range & thinnest die
- 14 high-precision servo-driven pick heads
- High-precision servo-driven ejector
- Up to 16K cph with dual tables; Up to 52 unique wafers

DIMM FEEDER
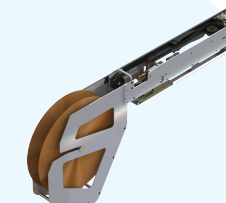*High efficiency for challenging DIMM automation*
- Supports DIMM connector applications
- Dedicated trays or vacuum-form trays supported
- Auto-eject of trays
- Single or dual tracks supported

RADION & RADIONX TAPE FEEDERS
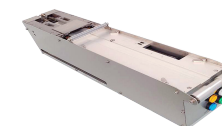*High-speed radial component feeding*
- Enables placement of ecaps, LEDs, boxcaps, MOVs, other radial lead components
- RadionX offers precision lead forming and cutting
- Index of 12.7mm or 15mm; Single, dual or triple-index
- Components up to 20mm diameter and 30mm tall

AXIAL FEEDER
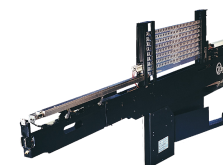*High-speed axial component feeding*
- Enables placement of high-density 5mm & 10mm axial-lead components
- Components up to 8mm in diameter & 20mm long
- Lead pitches from 8mm to 30mm
- Supports ammo pack or axial reel packaging

TRACK & MULTI-TUBE FEEDERS
Versatile tube & track feeding
- Adjustable & multi-input track, single-input multi-tube
- Multiple-input track; tubes with parts up to 28mm tall
- Four-lane track feeder supports up to 4 part numbers
- Multi-tube, single-input ejects empty tubes while picking

LABEL FEEDERS
Flexible adhesive-backed media presentation
- Automatically peel and present labels, shields and masks
- Supports liner tape from 3mm to 58mm wide
- Adjustable for media size and liner tape change
- Integrated reel holder, scrap tape collection wheel options

HOVER-DAVIS THIRD-PARTY FEEDERS

Hover-Davis original design feeders have exclusive features that reduce costs, improve performance, and extend the life of the feeder. Solutions include basic and premium tape feeders, axial feeders, label feeders and more.

FEEDER SUPPORT PRODUCTS

Our feeder support products enable offline setup to streamline changeovers and drive efficiency. They also support an orderly work environment by accommodating storage and organization of idle feeders.

LABEL FEEDERS
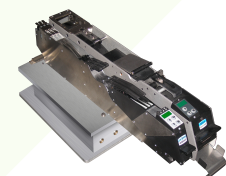### *Flexible material automation solutions*
- Automated feeding of shields, labels and masks
- Uses SMT nozzles, placement process
- Plug-and-play on an existing machine
- Robotic Interface for custom machines

RADION & RADIONX TAPE FEEDERS
High-speed radial component feeding
- Enables placement of ecaps, LEDs, boxcaps, MOVs, other radial lead components
- RadionX offers precision lead forming and cutting
- Index of 12.7mm or 15mm; Single, dual or triple-index
- Components up to 20mm diameter and 30mm tall

REMOVABLE FEEDER BANKS
Convenient feeder configuration
- Quick-change option
- Products can be set-up offline
- Allows feeders to be preconfigured on all banks
- Ideal for easy and fast product changeovers

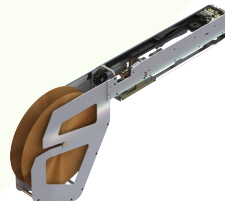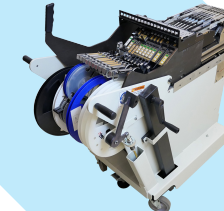## MULTI-TUBE FEEDERS
Versatile tube & track feeding
- Adjustable & multi-input track, single-input multi-tube
- Multiple-input track; tubes with parts up to 28mm tall
- Four-lane track feeder supports up to 4 part numbers
- Multi-tube, single-input ejects empty tubes while picking

FEEDER BANK CHANGE CART
Streamlined product changeover
- Easy to maneuver
- Guides assist loading to machine
- Simple transportation from setup table to machine
- Enables full bank to/from machine exchange

FEEDER STORAGE RACK
Organized feeder storage
- Store tape, track or tray feeders in one convenient location close to your line
- Streamline product changeovers
- Holds 141 x 8mm single input feeders
- Improve manufacturing efficiency

OFFLINE FEEDER SETUP STATION FOR RADIAL & AXIAL
Efficient product setup for through-hole components
- Production feeder setup for through-hole components
- Reduces production changeovers
- All locations have power to assist in feeder setup

SA SERIES TAPE FEEDERS
Advanced communication protocol for expanded integration capabilities
- 8mm to 56mm single-lane for ANSI/EIA 481 pocket tape
- Low-profile design augments integration options
- Faster and more accurate, with optional slow speed for sensitive components
- Open source 8-bit ASCII communication & control and signal protocol

QF SERIES TAPE FEEDERS
Simple control for easy integration
- 8mm to 120mm; Paper or embossed ANSI/EIA 481 pocket tape
- Integrated holder options for reels up to 27"
- Deep pocket, large tape window options for odd-form
- Simple signal control for PLC integration

OFFLINE FEEDER SETUP STATION
Efficient product setup
- Production feeder setup
- Allows full-bank or single-feeder replenishment
- Reduces production changeovers
- Top-loading tape compliant
- All locations have power to assist in feeder setup

Field Calibration Fixture

FEEDER SETUP CART
Easily prepare feeders offline
- Feeder Setup Station available with or without cart
- Field Calibration Fixture available separately
- All locations have power to assist in feeder setup
- Top-loading tape compliant