

# CTL



## Manufacturing Value Leader

The *CTL* is the affordable solution to advanced research and process development applications. The modular work cell offers consistent vision-driven accuracy, flexible configurations, linear motion technology, 1000 UPH speed and an impressive work envelope. *CTL* can be configured as a stand-alone instrument or integrated with your production line for performance at a value that's virtually unmatched.

### Price and Performance

The *CTL* is the answer to demanding applications and tight budgets. Fully configured with state-of-the-art linear motion and vision systems, the *CTL* is capable of delivering high quality process assembly at an entry-level price.

### Modular x Flexible

Utilizing a single pick-and-place head with a vision registration and inspection system, this platform can be configured to perform a wide variety of module and package assembly processes. With a flexible design and an extensive range of standard peripherals, custom configured systems can be delivered with minimal engineering time and expense.

### Workspace x Floor Space

A total footprint of only 1.3m encloses a large configurable work envelope. An overhead gantry design allows for a fully accessible worktable, while making efficient use of production or lab floor space.



**ARCon Parts, LLC**

## CTL Specifications

*Assay Miniaturization  
Biochip Development 384  
to 1536 wells Colony  
Picking Slide Handling Gel  
Excisions*

### Transfer/Placement Heads

<b>Options</b>	1 head configuration Placement pressure range 0.22lbs (0.1 kg) to 4.4lbs (2.0 kg) Programmable Z-speed, pressure and dwell time Optional end-of arm tooling equipment LaserAlign optical in-flight alignment of components up to 32mm (1.26") Vacuum nozzles, die collets, custom tools Spring loaded compliant tips are used for lower force requirements
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### Tray/Process Carriers/Substrate Handling

<b>Dimensions (x, y)</b>	3" x 2" (75mm x 51mm) up to 18" x 20" (457mm x 508mm) Subject to process configuration
<b>Types</b>	Auer, JEDEC (or similar design), BGA, graphite boats, custom carriers, lead frames, strips, PWBS, clipping, and custom part securing, microslides, microplates Bi-directional conveyors (single or dual)

### Components

<b>Dimensions Minimum:</b>	0.01" x 0.01" (0.25mm x 0.25mm) from waffle pack, 0.04" x 0.04" (1.02mm x 1.02mm) from wafer
<b>Maximum:</b>	3" x 3" (75mm x 75mm) Consult factory for specific size and weight > 1 kg

### Performance

<b>Placement Accuracy</b>	X, Y +/- 0.001" (0.025mm) Z Normally compliant All values are 3 sigma values using local fiducial vision tools
<b>Encoder Resolution</b>	X, Y 0.000008" (0.002mm) Z 0.000004" (0.0010mm) Theta 0.005 degrees
<b>Placement Rate</b>	400 - 1200 UPH (subject to process)

### Standard Component Handling and Feeding Systems

Pallet stacker/destacker
Wafer die ejector
Tray feeders (waffle pak, gel pak, custom)
Label feeders
Static platforms
Tape and reel feederbanks

### Options

Auto vacuum tip change rack
Barcode reader and writer
Custom under-board support
Epoxy and adhesive dispense heads
Flux applicators

### Dimensions and Weight

<b>Footprint</b>	41.3" W x 45.5" D x 65.0" H (1.04m x 1.16m x 1.65m)
<b>Work Envelope</b>	(X, Y, Z) 22" x 26" x 3.5" (559mm x 660mm x 89mm) Subject to process configuration
<b>Weight</b>	2500 lbs (1134 kg)

*For more information:  
Contact us at 1-919-212-1279*