

# AIR CHICAGO

America's Most Popular Small Piece Folder

CHICAGO®



## THE ORIGINAL

### AIR INDUCED RESPONSE FOLDER SERIES

For those who demand the best in folding precision, dependability, and state-of-the-art control, Air Chicago is as precise and consistent folding pool towels for five star hotels as it is for blankets and patient apparel in healthcare facilities. In addition to the standard Air Chicago model which has been America's best selling towel folder since its introduction, the series now has five models to meet the needs of healthcare, hospitality, and commercial laundries by processing the widest variety of items in the industry.

**Air Chicago**  
**Air Chicago XL and XXL**  
**Air Chicago Slim**  
**Air Chicago Triple Sort**

Chicago revolutionized French style folding when it developed and patented the original Air Chicago design in 1991. Customer satisfaction has fueled the growth in demand for Chicago-style Air Induced Response folding. That demand has led to the creation of the models you see in the table below. Today, these

automated labor-savers handle everything from hand towels to bathmats to large thermal blankets. Because each model builds upon the original Air Chicago concept, you're assured of the maximum speed, accuracy and reliability that has made Air Chicago #1 in its class – regardless of which model you choose.

Textiles		Piece Size	
		Minimum	Maximum
<b>AIR CHICAGO</b>	Towels (Bath, Hand and Pool), Pads, Bathmats, Baby Blankets, Gowns, Scrubs and Apparel	16 x 20" (400 x 500mm)	36 x 72"* (915 x 1830mm)
<b>AIR CHICAGO XL</b>	Same as standard Air Chicago plus Bath/ Thermal Blankets up to 96" (2400mm) long	16 x 20" (400 x 500mm)	36 x 96"* (915 x 2400mm)
<b>AIR CHICAGO XXL</b>	Same as XL Air Chicago plus Bath/ Thermal Blankets up to 108" (2740mm) long	22 x 24" (560 x 600mm)	36 x 108"* (915 x 2740mm)
<b>AIR CHICAGO SLIM</b>	Bath and Hand Towels, Bib Aprons	15 x 18" (375 x 450mm)	30 x 52" (750 x 1300mm)
<b>AIR CHICAGO TRIPLE SORT</b>	Bath and Hand Towels, Bathmats	16 x 20" (400 x 500mm)	40 x 72" (1020 x 1830mm)

\*Optional Extra-wide (XW) width available - 48" (1200mm)

**Piece size and item type guidelines** This chart is to be used as a reference for understanding the capabilities of each Air Chicago model. Please consult your local Chicago professional or the factory for processing other item sizes or types.

**Samples** Because the range of available item fabrics, sizes, and specifications is always changing, if there is a question as to which Air Chicago model will most efficiently process a particular item, you are invited to send samples to the factory where they will be folded and returned to demonstrate the results and confidence we have in the Air Chicago series.

## Standard on All Air Chicago Models: A Complete Package of Convenience and Efficiency Features

- Split input conveyor allows faster, easier and more accurate feeding than ever
- Switch allows operator to select continuously running feed input conveyor or special auto pacing feed input conveyor with automatic pause
- Crossfolds items once or twice into halves, thirds, or quarters
- Primary folding may be bypassed for direct crossfolding of items such as bathmats or surgical pants
- Folded items are stacked on delivery conveyor which can be installed in a choice of discharge directions
- **CHI** microprocessor with alpha-numeric message screen for set-up, operating, testing, and diagnostic functions
- Powered item width adjustment
- All measurements made by reliable photosensor with LED status indicator
- Total piece counts displayed by item category on **CHI** message screen
- Stop buttons, interlocked panels, 24 volt controls and bilingual/pictorial safety labels
- Stain/tear reject button discharges these items separately
- Auto jam shutdown with audible jam alarm and jog reverse features
- Air pressure regulators for each folding section assure peak performance
- Locking casters allow unit to be easily moved for maintenance access
- Optional red/green production pacing lights can be programmed to desired feed rate for easy monitoring of operator efficiency





# The Original Air Chicago

## Air Induced Response – A Better Idea

Folders have traditionally formed a French (one-third primary) fold by moving the towel or other item over a mechanical slide mechanism which directs it into a folded configuration. This method is not consistently accurate on all item sizes and thicknesses because it is dependent on a changing relationship between mechanical components, and is always working against gravity, friction, and the natural geometry of each item. These limitations cause the inconsistencies, jamming, and “fishtail” effect often found on French folders using mechanical blades.

To eliminate these problems, Chicago developed and patented the first French folder that works in a totally different way. When an operator selects the items to be processed, the **CHI** microprocessor takes over and determines the correct number, type, and width of primary fold and crossfolds, as well as proper stack height. As the item is fed by the operator onto a conveyor field, **CHI** tracks it and directs a series of precise air pulses through an air permeable barrier to perform a French or one-half primary fold. Because the item is flat and fully extended when folds are made, all primary folds are crisp and straight. The item then continues to the crossfold section where air pulses automatically make the correct number of crossfolds before discharging neatly folded items onto the stacker and conveyor for delivery to desired discharge point at front, rear or side of folder.

After the pre-determined stack height is reached, **CHI** advances the completed stack towards the end of the conveyor for operator removal or direct transfer to a master conveyor system. Air Chicago's continuous monitoring system and blade-free air pulse folding ensure that pieces are accurately folded so that costly refolding is not required.



*AIR CHICAGO will crisply and accurately French fold and crossfold bath, hand or pool towels and gowns of all sizes into quarters, thirds, or halves. (Rear return configuration shown)*

## Chicago High Intelligence (CHI)



**CHI** is the first finishing control that successfully integrates the power of an advanced microprocessor with a message display and operator panel that anyone can easily use. During installation, a library of factory-programmed item descriptions is used to set up the correct number and style of folds for each item type to be processed. **CHI** stores all folding variables, including air pulse patterns,

air pressure, speed, conveyor movements, and stack heights to produce the best finished package for each item type. With the push of a button, Air Chicago can also be manually controlled at any time.

Item description, folding functions, category piece counts, and testing/diagnostic functions are clearly displayed on **CHI's** bright vacuum fluorescent message screen to guide both operators and maintenance staff. If there is a problem, **CHI** pinpoints the area and alerts operators audibly and through the message screen so prompt action

can be taken. To analyze its performance, maintenance staff can run individual test sequences for each fold function and make needed adjustments through the message screen. There are no codes to memorize, complicated numeric keypads to learn, or difficult ladder logic to follow.

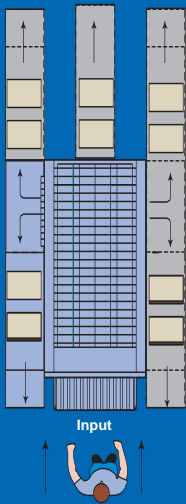
To ensure the system's integrity and ease of operation, Chicago designs and manufactures its own electronic hardware and software. Superior processing power makes **CHI** faster, more versatile, and “smarter” than off-the-shelf PLC's used by manufacturers without the capacity to design and build their own electronics. **CHI** features include the power to customize folding parameters and speed for each item type to increase the quality and volume of finished pieces.

**CHI** control is also used on Chicago's other high production feeders, ironers and folders so operators and maintenance staff only need to learn one simple system to manage the laundry's entire finishing area.

**Air Chicago  
XL**

**Air Chicago  
XXL**

All Air Chicago models may be set up in the field for front or rear discharge. Arrows in diagram illustrate possible stack flow directions.



## Air Chicago XL and XXL – Large Piece Folding

In addition to towels and gowns, Air Chicago XL and XXL will also efficiently fold a wide variety of larger and thicker hospital and institutional items such as bath and thermal blankets and pads.

To fold a wider range of larger items, Air Chicago XL and XXL use an extended folding platform, a sophisticated timing and switching sequence, and a sectionalized air delivery system to process larger items. Using XL or XXL, one person can fold and stack bath or thermal blankets that require a folding field larger than 36 x 72" (915 x 1830 mm). XL model folds items up to 96" (2400 mm) long, while the XXL folds items up to 108" (2740 mm) long. When processing items that are wider than the 36" (915 mm) folding field, the operator folds the item once lengthwise when feeding. All Air Chicago models are also available in Extra Wide (XW) models to accommodate items up to 48" (1200 mm) wide, [96" (2400 mm) wide before prefolding]. Two operators may also be used to feed XL or XXL in an alternating pattern to achieve folded blanket production rates comparable to the fastest automated feeder/folder combination.

The flexibility to fold blankets as well as towels, gowns, and pads makes Air Chicago XL and Air Chicago XXL the most versatile folders available. For laundries with large quantities of bath/thermal blankets, one person can fold blankets using one-third the floorspace and capital investment of a separate feeding device and folder. Their flexibility also makes XL and XXL ideal for laundries without enough blankets to justify an automatic folder, but that do have sufficient work to achieve real cost savings when the volume of towels, gowns, pads, and blankets is combined and folded by one machine. This makes the pay-back period of these models extremely attractive for more users than ever.



### Bridge the Gap...

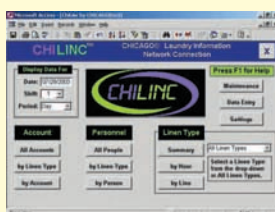
to Smoother Linen Flow, Reduced Manual Handling and Better Stack Quality



The Bridge linen transition conveyor neatly transfers stacks of folded linen from a large piece or towel folder onto a master linen conveyor system. After receiving stacked linen directly from a folder's discharge conveyor, the Bridge's motor-driven roll advances the stack across its heavy duty mini-conveyor. A belt drive system moves the stack and mini-conveyor to a position extended slightly above the master conveyor. Linen is moved forward by motor-driven ribbons and automatically unloaded onto the master conveyor as the Bridge retracts to its original position – ready for the next stack. The result is neatly and correctly positioned stacks successfully merged into the flow of the master conveyor without tipping or colliding with stacks from other production lines.



### CHILINC (Chicago Laundry Information Network Connection)



Using the **CHI** Panel microprocessor and proven networking technologies, CHILINC is an automatic data recording and reporting system that connects a laundry's management team to all of its flatwork finishing equipment. Current and historical production data, piece counts, operator efficiency rates, and individual machine utilization factors give managers the information they need about their equipment and their people so that high-quality finished linen of all types can be consistently produced as cost-effectively as possible.







## Air Chicago Slim Towel, Gown, Apron Folder/Stacker

Now there is a compact member of the Air Chicago family specifically designed for aprons, in addition to towels and other small items normally processed through a towel folder.

Air Chicago Slim has the ability to fold and crossfold aprons, as well as towels and other items with a minimum piece size of 15 x 18" (375 x 450mm) and a maximum piece size of 30 x 52" (750 x 1300mm). Slim offers a narrower machine footprint than the market-leading "standard" Air Chicago for laundries with limited space while still being able to accommodate and process pieces up to 30" wide. Items may be primary French folded (one-third), or with a half primary fold with up to two crossfolds. Slim also has the ability to bypass primary folds and perform crossfolds only, if desired. Like the "standard" Air Chicago, all folding, programming and diagnostic functions on Slim are controlled by **CHI** microprocessor for effortless use by operators and maintenance staff.

To handle the difficult job of folding aprons, Slim offers specially designed reversing conveyors and the ability to tuck apron neck and strings into the fold while the item is

moving or briefly paused for a neater finished package. Aprons as well as other items can be inspected/graded by the operator using the pushbutton stain/tear reject system to separately discharge items for reprocessing.

Slim also features a special retracting stack transfer conveyor that smoothly moves folded stacks of items from the drop conveyor to the discharge conveyor for a consistent 90° item transition.

In the field, it is also possible to use multiple machines (up to four across) on the back of an ironer to automatically receive and fold ironed small pieces (including aprons) for folding/stacking.

*AIR CHICAGO SLIM is the newest model of the Air Chicago family specifically designed for aprons, towels, and other small to medium sized items, as well as laundries with limited floorspace.*



## Triple Sorting Flexibility

For laundries that desire automatic post-sorting ability, Air Chicago Triple Sort combines the convenience of automatic three way sorting with the folding accuracy, speed, and dependability for which the Air Chicago Series is well-known. Air Chicago Triple Sort enables an operator to randomly feed up to three different size towels or gowns for folding. As items are loaded, the folder's input ramp can pause briefly (without interrupting other folding and conveyor functions), before **CHI** advances the item to the automatically adjustable folding bed for a crisp and accurate French fold. **CHI** microprocessor automatically determines the item type, chooses and performs the correct fold pattern, and directs the folded item to one of three internal drop zones for stacking with like items in pre-selected stack heights. (Consult factory for stack size limitations.)

After each stack is completed, it is advanced to an attached discharge conveyor set up to deliver completed stacks to the front or rear of unit at the left or right side. An optional second discharge conveyor can be added to allow two-way work flow to front or rear.

**More Speed When You Need It** *When auto sorting is not required because only one size is being processed, Air Chicago Triple Sort may be operated in a continuously running "non sort" mode (like a standard Air Chicago) to maximize speed and output. Most importantly, items are accurately folded to the precise tolerances that have made Air Chicago the standard by which all towel and gown folders are judged.*

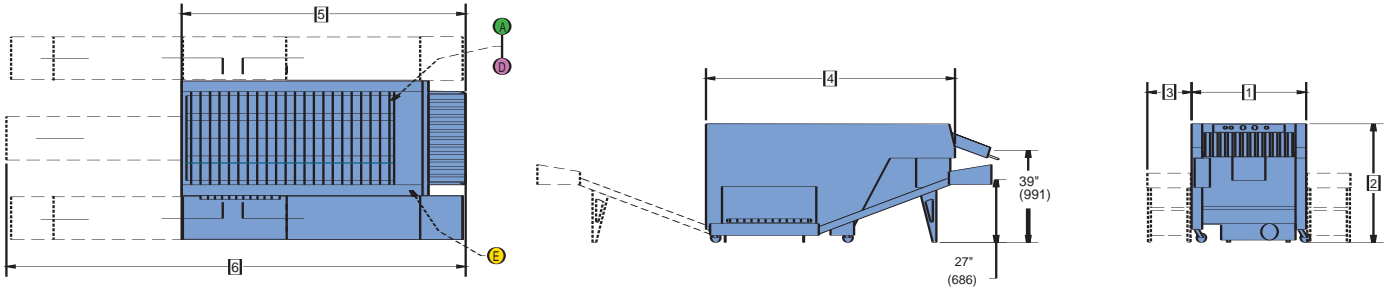


# Dimensions

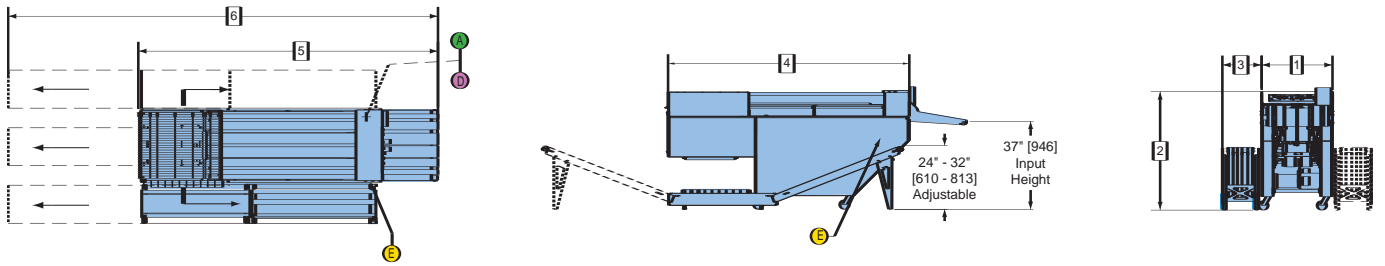
## NOTES

1. Conveyor discharge (shown in top view) can be arranged for left, center or right rear discharge, or a choice of left or right front discharge.
2. Millimeter dimensions in parenthesis.
3. Specifications subject to change without notice. Consult factory for certified construction floor plan.

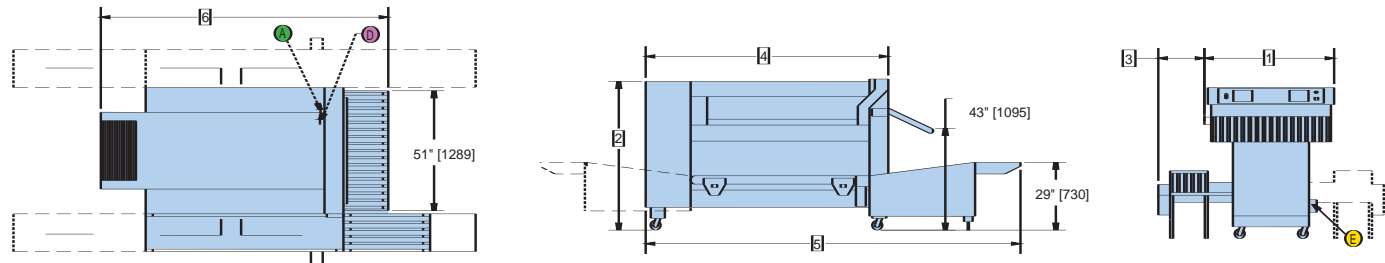
## Air Chicago • Air Chicago XL • Air Chicago XXL • Air Chicago XW



## Air Chicago Slim



## Air Chicago Triple Sort



Connection(s)	Diag.	Height	Height	Height	Height	Height	Height
	All Models	Air Chicago	Air Chicago XL	Air Chicago XXL	Air Chicago XW	Air Chicago Slim	Air Chicago Triple Sort
E Electrical Connection		31" (787)	31" (787)	31" (787)	31" (787)	35" (889)	16-1/2" (419)
A Air Connection	1/2"	29-1/2" (749)	13" (330)	13" (330)	29-1/2" (749)	25" (635)	13" (330)
D Compressed Air Drain	1/4"	23" (584)	7-1/2" (191)	7-1/2" (191)	23" (584)	20" (508)	10" (254)

Dimensions	Air Chicago	Air Chicago XL	Air Chicago XXL	Air Chicago XW	Air Chicago Slim	Air Chicago Triple Sort
	1	50" (1270)	50" (1270)	50" (1270)	57" (1448)	30" (762)
2	49" (1245)	49" (1245)	49" (1245)	49" (1245)	50" (1270)	64" (1626)
3	19" (483)	19" (483)	19" (483)	19" (483)	16" (406)	20" (508)
4	105" (2667)	125" (3175)	139" (3531)	105" (2667)	102" (2596)	103" (2616)
5	119" (3023)	139" (3531)	153" (3886)	119" (3023)	115" (2921)	160" (4064)
6	194" (4920)	215" (5453)	228" (5796)	194" (4920)	183" (4640)	123" (3124)

Shipping Dimensions
Air Chicago - 128"L x 59"W x 57"H @ 2256 lbs.
Air XL - 148"L x 59"W x 57"H @ 2500 lbs.
Air XXL - 157"L x 59"W x 57"H @ 2700 lbs.
Air XW - 148"L x 71"W x 59"H @ 2300 lbs.
All conveyors for above - 128"L x 26"W x 40"H @ 350 lbs.
Air Slim - 128"L x 44"W x 57"H @ 1800 lbs. w/conveyor - 128"L x 23"W x 40"H @ 350 lbs.
Air Triple Sort (ships as one piece - with the conveyor under the machine) - 120"L x 77"W x 68"H @ 2500 lbs.

## A Complete Range of Feeding, Ironing and Folding Solutions

Because CHICAGO specializes only in flatwork finishing equipment, it offers the world's widest range of high production separating, feeding, ironing, folding, and sorting equipment. Complete flatwork finishing systems range from automated multi-roll systems producing over 2000 pounds per hour to compact ironers for small on-premise laundries.

Chicago's performance record is unmatched in thousands of installations in commercial, textile rental, institutional, and on-premise laundries. An experienced Chicago professional will be pleased to make an objective equipment recommendation based on your production, space, utility, and budget requirements. Contact your local Chicago distributor or the factory sales assistance office for a no-obligation analysis of your needs.



CHICAGO DRYER COMPANY  
2200 North Pulaski Road  
Chicago, Illinois 60639-3737 USA

Phone • 773.235.4430  
Fax • 773.235.4439  
Web • www.chidry.com  
Email • chicago@chidry.com