**Premium Automatic Folders** 

# Skyline Folder





# HIGH SPEED • ACCURATE • EASY TO USE AND MAINTAIN Folding, Crossfolding and Stacking

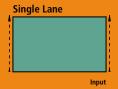
The Skyline Series is designed to take advantage of Chicago's state-of-the-art advances in electronic control technology which eliminates many of the mechanical devices use on and still requiring maintenance on other folders. It is designed for high speed folding, crossfolding, and stacking of sheets, pillowcases, tablecloths, napkins and other flatwork items. A wide variety of models and options are available for use in applications ranging from high production plants with multiple feeder/ironer/folder lines to on-premise institutional and hotel laundries where reliability, precise folds, and efficient use of floor space are essential requirements.

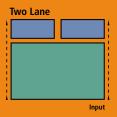
The use of the Chicago High Intelligence (CHI) microprocessor control with its vacuum fluorescent message screen and streamlined pushbutton panel makes Skyline the most advanced electronically controlled folder available, yet one which is simple for operators and maintenance staff to understand and use. It's design features a common-sense layout and excellent service access to all of Skyline's high quality heavy-duty components. Optional features such as Triple Crown three primary folding for king size sheets and the Aircumulator for stacking small pieces also help make Skyline the most versatile and value-packed folder series available.

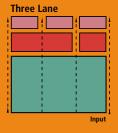
# Folding Diagram

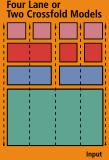
#### Multi-Lane Flexibility

**CHI** controls automatically select correct lane configuration for items being processed so operators do not have to change settings.











#### INNOVATIONS FOR TODAY . . . AND TOMORROW

Proper linen movement between feeder, ironer, folder and stacker is critical for high speed finishing quality. Skyline's variable speed drive correctly matches folder speed to ironer speed for smooth and efficient linen transfer with less wear on drive components.

Skyline is also the only folder to electronically control all crossfold and stacker conveyors, without maintenance-intense mechanical clutch/brake devices. In addition, the entire crossfold section only runs when linen is sensed to further reduce wear and possibility of jams. Skyline's soft-start electronic speed control with dynamic braking improves folding accuracy and consistency, lessens stress on rolls and shafts, and has lower maintenance requirements. Eliminating these mechanical items is another example of the improved performance and reliability made possible through the use of **CHI** technology.

### **CHICAGO HIGH INTELLIGENCE**

The **CHI** system is designed for laundry people by laundry people. It combines the full benefits of microprocessor-based message screens with common-sense switches that any operator or service person can easily follow.



During installation, **CHI** system parameters are customized to a laundry's exact needs. After that, making sure the blue **CHI**/auto button is active allows the **CHI** microprocessor to do the rest. Its advanced logic automatically determines the correct lane configuration and selects the proper number of primary folds and crossfolds for all sizes

of bed and table linen, eliminating the possibility of manual selection errors or forgetting to change the folder's settings. With the push of a button, Skyline can also be operated in a program specific folding control mode with customized air pulse and fold parameters for items of various types and thicknesses, such as heavy table linen.

All operating and diagnostic messages are in words, not codes. 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 performance, maintenance personnel can run individual test sequences for each folding function. There are no codes to memorize, complicated numeric keypads to learn, or difficult ladder logic to follow. Bilingual **CHI** panel is also available (consult factory).



#### 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.

## Chicago's Best Selling Skyline Series Features

#### **MODELS**

#### Models S1 thru S4

 1, 2, 3 or 4 lanes of primary folding only

#### Models S5 thru S8

 1, 2, 3 or 4 lanes of primary folding with two crossfolds

#### Models S9 thru S12

 1, 2, 3 or 4 lanes of primary folding with three crossfolds in one lane

#### Models S13 thru S16

 1, 2, 3 or 4 lanes of primary folding with three crossfolds in one lane with stacker and conveyor

#### Models S17 thru S20

 1, 2, 3 or 4 lanes of primary folding with three crossfolds in one lane with dual stackers and conveyer

#### Models S-10-2 thru S-16-2

 Primary folding with single and two-lane crossfolding with optional stacker

#### **Extra Wide Models**

 Extra wide (XW) models 135" (3430mm) and up are also available for processing California Kings and large round tablecloths



#### Standard Features

- Folds linen up to 120" (3050mm) wide
- Available in one, two, three or four lane models
- Automatic lane selection by size of item
- Automatically selects correct number of primary folds and crossfolds by item size
- Full bypass capability to convey items through system without any folding
- CHI panel message display with production data memory
- AC frequency inverter drive with soft start reduces stress on drive components
- Pushbutton variable speed drive allows selection of speeds from 80 to 200 FPM to match feeder/ ironer speed
- Advanced electronics analyze size and compute folds without the need for mechanical encoder measuring wheels riding over moving linen
- Slide-out receiving table allows full drop extension of larger items
- Extra wide 40" (1016mm) first crossfold roll opening easily accommodates large items and is hinged for easy access
- AC inverters perform all conveyor start/stop functions
- No clutch/brake mechanisms to maintain or adjust
- Independent first crossfold drive runs only when necessary for less component wear
- START/STOP button pauses and restarts operation without interrupting folds in progress

- Audible jam alarm stops crossfolder for prompt item removal
- "Quick Draw" crossfold reset button reduces processing interruptions
- Jog reverse for ease of operation and maintenance
- All measurements made by state-of-the-art photosensor with LED indicator
- Test mode for all photosensors
- Heavy duty V-belt and chain drive
- Powered static eliminator bar
- Low voltage 24 volt control circuitry
- Full safety guards, interlocks, and stop buttons
- Heavy-duty motors with overload protection
- Individual air pressure regulators with gauge and auto-drain feature
- Quick disconnect air connections
- Self-cleaning upward photosensors for reduced maintenance
- Input conveyor can be matched to any ironer discharge height and clearance
- Heavy duty locking casters
- Crossfold delivery side is field reversible within four hours
- Feed ribbon ends are permanently thermal sealed for improved quality and longer wear
- Approved and labeled by a recognized testing agency
- U.S. designed and manufactured

#### Stacker/Conveyor

For added labor savings, models S-13 thru S-16 include large piece drop stacker and conveyor at either end of folder which is also controlled by **CHI** panel. Models S-17 thru S-20 include two stacker/conveyor units which automatically sort linen by size.



### Folding Method

#### 1st Primary Fold:

Full 90° vertical drop allows linen to drape straight down without contacting folder structure. This reduces static accumulation and wrinkles as the first primary fold is made by air pulse through pinch rolls.

#### **2nd Primary Fold:**

Converging roll design allows smaller items to receive two primary folds without extra wheels or fingers to hold items in place as the second primary fold is made. If operators do not feed linen evenly, unique **CHI** electronics automatically compensate by adjusting primary folds to cover loose edges for a neater folded package. The result is more accurate primary folding, eliminating the tendency of some folders to drop small pieces at the second primary fold station.

#### 1st Crossfold:

Performed by air pulse through pinch rolls. Pinch rolls are operated by a separate motor which runs only when a sheet is present. Full 40" wide crossfold opening accommodates king size sheets and other extra-large items with ease and allows other items to more easily clear the crossfolding section if they were not fed

correctly. Proving photosensors, air assist, and automatic jam alarm/shutdown minimize folding interruptions. Hinged panel for easy maintenance access. Heavy duty stainless steel blade is optional for special table linen or light weight applications.

#### 2nd Crossfold:

Performed by "pick up and drop" method. Leading and trailing edges can be matched to user's exact requirements through the **CHI** panel. If there is a jam anywhere in the system, Chicago's Quick Draw button quickly resets the crossfold section to high speed folding mode.

#### 3rd Crossfold:

Chicago is the only manufacturer that has successfully designed and built systems utilizing a positive air blast to perform the final crossfold. This method improves both accuracy and consistency, delivering a high-quality finished package with selvage edges hidden. Because it uses no chop blade or moving parts, Chicago's third crossfold is less susceptible to jams and mechanical problems. Bypass is also automatically performed without extra lifting conveyors, fingers, or chop blades.

#### **Optional Features**

#### **Chicago Auto Reject Processor**

Operators at front of feeder or ironer signal **CHI** to track stained or torn items through the ironer and folder before **CHI** electronically discharges these items for separate rewash or sewing.

#### **Triple Crown Folding**

A valuable feature for laundries processing king size sheets or other large items, Triple Crown enables Skyline to perform three primary folds, instead of the two primary folds traditionally made on large pieces. This extra fold can be performed automatically to produce a more manageable and compact folded item that is easier for operators to handle. This is particularly desirable on king size sheets which will fit better on laundry carts or shelf storage systems. The ability to perform one or two primary folds on items is not affected by this added feature. Triple Crown means that hospitality laundries can now offer a wider choice of finished item sizes to make their supply services more valuable to their finished linen users.

#### **Folder Production Signal Light**

Three color light indicates current folder status – full production, stain/tear bypass or production interruption.

# Optional Equipment & Specialized Models

#### **Optional Equipment**





# **Specialized Models**





#### **AIRCUMULATOR**

#### **FOR SMALL PIECES**

Labor-saving accumulator system allows one person to receive and handle multiple lanes of flat napkins or pillowcases automatically draped by simple air pulse and clamp onto collector bars at rear of folder. No extra floorspace is required nor does it interfere with operation when in folding mode. **CHI** panel displays pieces per lane and shift, alerts operators by light when individual lane stack count is reached, and resets lane counter when linen is removed.

#### **BRIDGE**

#### LINEN TRANSITION CONVEYOR

Neatly transfers and merges stacks of folded linen from the 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 conveyors and automatically unloads neatly and straightened stacks onto the master conveyor. The results are neat and correctly positioned stacks. Optional traffic control feature also eliminates tipping or colliding with stacks from other production lines as stacks are merged and advanced on the master conveyor.

#### **SKYLINE MINI**

# ONE OPERATOR FOLDING FOR A VARIETY OF TUMBLE-DRIED ITEMS

With all the features of other Chicago Skyline Automatic Folders, this smaller sized edition is designed for laundries that need a dedicated machine for high volume, operator-fed, tumble-dried items such as bath towels, thermal blankets, or knitted fitted sheets that do not require French-style folding.

#### **SKYLINE SP**

#### MULTI-LANE SMALL PIECE FOLDING/STACKING SYSTEM

For ironing/folding lines dedicated to high volume production of precision folded and stacked or flat stacked small pieces, this versatile multi-lane folder will process and stack small ironed flatwork items such as pillowcases, napkins or surgical wear with a choice of zero, one or two primary folds.

# Skyline Models

# Dimensions and Utilities

#### NOTE:

- Specifications subject to change without notice.
   Consult factory for certified construction floorplan.
- 2. Millimeter dimensions are in [ ].
- 3. All dimensions are +/- 1/2".
- 4. Utility connections are located as shown.
- Order left or right side discharge as viewed from INPUT (ironer) side of folder.
- 6. Discharge may be reversed in the field within four hours.
- 7. For export boxing, add 300 lb (140kg).
- 8 . Consult factory for information on sizes and costs for shipping disassembled to laundries with limited access.

#### **Skyline Models**

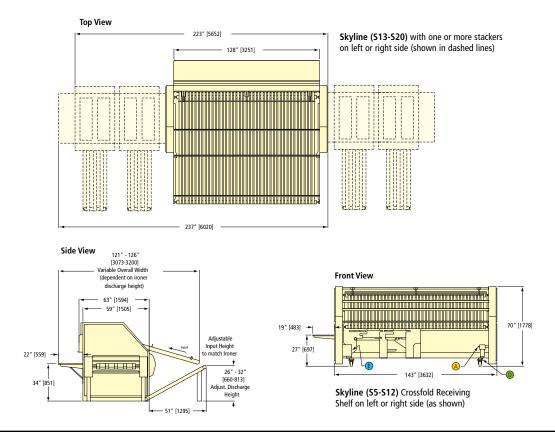
Primary folding only					
S-1 S-2	Single Lane Two Lane				
S-3	Three Lane				
S-4	Four Lane				
Primary folding with two crossfolds					
S-5	Single Lane				
S-6	Two Lane				
S-7	Three Lane				
S-8	Four Lane				
Primary folding with three crossfolds					
S-9	Single Lane				
S-10	Two Lane				
S-11	Three Lane				
S-12	Four Lane				
Primary folding with three crossfolds, stacker and conveyor					
		Dual Stackers			
S-13	Single Lane	S-17			
S-14	Two Lane	S-18			
S-15	Three Lane	S-19			
S-16	Four Lane	S-20			

#### **Utility Requirements**

S1-S4	S5-S8	S9-S12	S13-S16	S17-S20
1 (.8)	1.6 (1.2)	1.9 (1.4)	2.9 (1.9)	2.3 (2.4)
3.5	5	6	7.5	8
(100)	(140)	(170)	(210)	(224)
3300	3800	3800	4530	5260
(1500)	(1730)	(1730)	(2060)	(2390)
	1 (.8) 3.5 (100) 3300	1 (.8) 1.6 (1.2) 3.5 5 (100) (140) 3300 3800	1 (.8) 1.6 (1.2) 1.9 (1.4) 3.5 5 6 (100) (140) (170) 3300 3800 3800	1 (.8)     1.6 (1.2)     1.9 (1.4)     2.9 (1.9)       3.5     5     6     7.5       (100)     (140)     (170)     (210)       3300     3800     3800     4530

For models S-10-2 thru S-16-2, utility requirements are the same as models S10-S16 above. Contact the factory for further information.

CONNECTIONS	DIA.	HEIGHT	
Air Connection	1/2"	15" (381)	
Compressed Air Drain	1/4"	8.5" (216)	
Electrical Connection	-	14" (355)	



A Complete Range of Separating, Feeding, Ironing, Folding, and Sorting Options Because Chicago specializes only in flatwork finishing equipment, we offer the world's widest range of high production feeding, ironing, folding, and sorting equipment. Complete flatwork finishing systems range from multi-roll models 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 hotel 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 our factory sales assistance office.



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