



Chicago Laser Line

13-16-20-24 Mid-Range Flatwork Ironers



- Laundries
- Drycleaners
- Restaurants
- Banquet
- Hotel
- Motel
- Hospital
- Nursing Home
- Club
- Party Rental
- Shipboard

State-of-the-Art Flatwork Finishing with patented Eagle Eye™ temperature control for the best in efficiency, ironing performance, and reliability

Chicago LASER LINE mid-range ironers offer more power and performance than ever with the latest features developed from Chicago's experience as the world's largest and most experienced manufacturer of heated roll ironers. Gas (GO), steam (SO), and electrically (EO) heated models are available in a choice of 13" (330mm), 16" (400mm), 20" (500mm) or 24" (600mm) diameter ironing rolls. Standard ironer roll width is 120" (3050mm) and roll widths from 60" (1524mm) to 136" (3453mm) are also offered to process any size linen including larger size banquet cloths and table linen for party linen applications.

Why Iron?

There are two reasons why ironing is more popular than ever for all types of linen—quality and efficiency.

Quality

For the very finest operations where all-cotton linen is used, ironing is obviously required. When using blended or VISA® linen, there is still no substitute for the appearance and feel that only a crisply ironed tabletop, napkin, pillowcase, or sheet can provide. Ironed linen conveys a message of quality and cleanliness: that an establishment is "first class" all the way. This is especially true where linen is exposed to constant usage and washings which quickly take a toll on its appearance. "Tumble dried only" linen often gives the impression that it has already been used by a previous guest and may not be as clean as it should be.

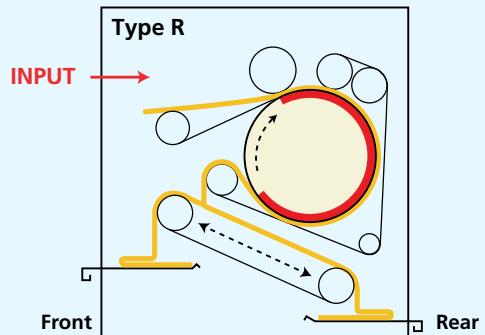
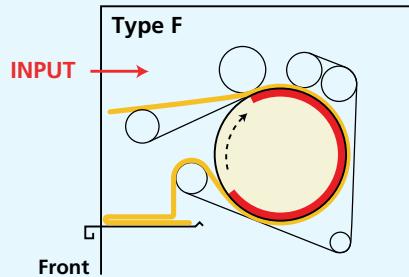
Efficiency

Ironing is the most efficient method of removing moisture from flatwork. CHICAGO equipment is economical because it is designed to finish linen directly from the washer-extractor, thus eliminating or reducing the time, energy consumption, and extra handling required by tumble drying. Chicago ironers actually perform three functions on wet linen in one continuous process: drying (removing moisture), ironing (removing wrinkles), and finishing (creating a fine gloss finish). An ironer uses moisture left in extracted flatwork in order to remove wrinkles and create a "finished look" on linen. When ironing, wet linen does not have to be tumble dried first, so there is no chance for wrinkles or creases to set in while dried linen waits in a dryer or laundry cart before folding. The labor time, capital expense, and extra BTU's consumed by tumbler dryers can also be eliminated when ironing. Maximum efficiency comes from using Chicago's exclusive Power Burner which also reduces emissions.

Why Chicago?

Chicago ironers are designed to dry and iron sheets, pillowcases and table linen made from polyester/cotton, cotton, and other quality flatwork fabrics, including VISA®. No commercial ironer will produce a finer quality finish because ironing is performed by continuous contact between wet linen and Chicago's revolving heated cylinder, compression roll and return ribbons. These diagrams illustrate the path of linen through the ironer. Flatwork is placed on the feed ribbon conveyor and carried under the spring tension compression roll (which smoothes and flattens it) and into contact with the revolving ironing cylinder.

The key to the Chicago ironing system is that the padded compression roll and return ribbons run faster than the revolving heated cylinder and feed ribbons. As the heated cylinder continues to move, the faster running return ribbons create a stretching action which pulls linen tight to remove wrinkles and improve flatwork finish. Return ribbons hold flatwork in firm contact with the heated cylinder until the discharge point is reached at the other end of the circumference of the heated cylinder for a total linen-to-roll ironing contact of approximately 300°. This sliding contact of linen with the highly-polished revolving heated cylinder creates a fine gloss finish comparable to hand ironing.



Type F models can be placed directly against a rear wall because all finished linen is discharged to a front receiving shelf. Type R models allow the user to select front or rear discharge by turning a switch. In rear mode, a lower conveyor delivers finished flatwork to a rear shelf or optional automatic folder. Type R models are desirable for laundries with adequate space behind the ironer, where load demand requires increased production and justifies rear operators.

Traditional Quality Features

Highly polished revolving heated cylinder for efficient heat transfer and excellent finish quality

Built-in exhaust system with full-size canopy (blower and motor not shown)

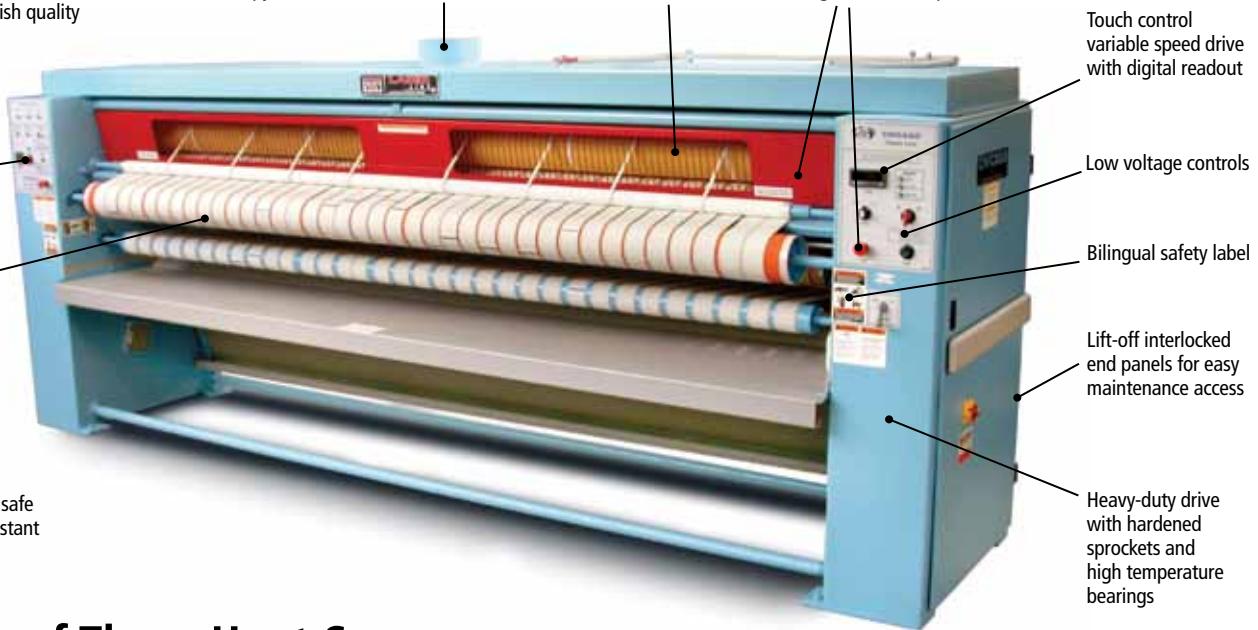
Safety finger bar protects across full width of ironer

Complete protection by safety guards and stop buttons

Electronic temperature control

Extended life, longer lasting, polyester no-stretch ribbons

Environmentally safe temperature-resistant textiles



Choice of Three Heat Sources

SO Series Steam Heated Models

- Ideal for installations with existing boiler providing 90 to 125 psi (6.2 - 8.6 bar). (Less pressure provides proportionally less drying power)
- Simple design provides uniform heat across entire ironing surface
- ASME certified and stamped welded heated cylinder meets insurance and local code requirements (Chicago factory is an ASME approved welding facility)
- Dependable heavy-duty rotary union admits steam and discharges condensate
- Furnished with flexible inlet/return hoses, all internal piping, and steam trap
- Full exhaust canopy with blower and motor is a recommended option

EO Series Electrically Heated Models

- Electric heating elements with reflectors mounted inside revolving cylinder for smooth, trouble-free switching
- Adjustable thermostat automatically cycles current to heating elements to maintain ironing temperature while conserving electricity
- Used where electricity is best energy source
- Three phase operation normally required
- Full exhaust canopy with blower and motor is a recommended option

GO Series Gas Heated Models

- Direct gas heating offers the highest production and greatest efficiency of all heat sources and Chicago's Power Burner is the most efficient in the industry
- Models available for all types of natural and LP gas
- Adjustable thermostat automatically cycles pre-purge, blower, and gas to match production rate, moisture, and speed, while minimizing gas consumption
- Specially balanced blower circulates combustion air to ensure the most efficient mix of air and gas at burner ports to create a hot and consistent flame
- Electronic temperature controller displays both actual temperature and ironing set point
- Flame is proven by non-contact UV scanner (without touching the flame) so there is no flame rod or flame rod wire to maintain
- High maximum BTU input when additional drying power is required
- Full exhaust canopy with blower and motor removes excess moisture and combustion by-products
- Electronic ignition and flame safeguard protection for instant shutdown in event of a problem
- Multiple testing laboratory approvals

	GO Max. BTU/hr.*	SO Boiler HP	EO kW
MODEL 13	210,000*	3.6	27
MODEL 16	260,000*	5.6	27
MODEL 20	420,000*	4.8	40
MODEL 24	596,000*	12	n/a

*Measurements are for standard 120" units at start-up. Average use can be up to 60% less. Consult factory for details.



Laser Line Flatwork Ironer Series

Laser Line – offering more value to the customer through faster processing, greater reliability, higher efficiency, and simpler service than ever before.

For over 100 years, Chicago has been designing equipment to dry and finish linen. During this time, Chicago pioneered the development of the heated cylinder ironer and has been the acknowledged leader in this field for over 80 years. The knowledge gained from thousands of Chicago installations around the world helps Chicago's engineers continuously improve products to maintain the Company's position as the leading innovator in flatwork finishing.

Laser Line's state-of-the art gas burner system brings new levels of reliability to the end user, while maintaining the optimum drying performance levels of Chicago's gas heated ironers which are legendary for their dried linen output. As the most powerful ironers in their size range, they offer up to twice as much drying power as models with atmospheric (natural draft) burners used on low production ironers while keeping gas consumption low and efficiency high. Chicago's extra drying power means that wet linen can be ironed at faster speeds so operators finish sooner. FTE hours are reduced for a faster equipment pay back period, and less gas is consumed per pound of dried and ironed linen.

The Power Behind the Power Production Series

Correct quantities of air and gas are injected and mixed to create a richer flame which delivers more effective BTU's per square inch of ironing surface so that the ironing cylinder heats and recovers faster as wet linen is processed. Peak combustion efficiency and a hotter flame enable the evaporative capacity of the ironer to match the strong cooling effect of wet linen at higher speeds, while also consuming as little gas as possible relative to the amount of drying and ironing performed. The result is up to 100% more production than atmospheric burners used on light-duty ironers relying only on random air flow with limited BTU input.

The power burner system also burns more cleanly and removes combustion by-products from the laundry room through a canopy blower vented to the outside. This commitment to operator safety and comfort is another reason why Chicago is the only manufacturer whose entire gas-heated product line has earned the certification labels of testing laboratories accepted throughout the United States, Canada, and other countries. Our experience ensures that burner size, cylinder diameter, and speed ranges are properly matched for maximum drying capacity and efficiency.

All models feature high efficiency AC frequency variable speed drive with these important advantages:

- Touch-control speed dial for smooth speed changes with extended speed ranges to suit today's wide variety of fabrics and moisture retentions
- Soft-start ramps up to desired ironing speed with less stress on drive components - including sprockets, bearings, shafts, and chain
- Digital speed indicator for accurate speed setting and monitoring
- Jog forward/reverse for flexibility and easier maintenance
- Streamlined drive reduces chain and sprockets by 50%
- No variable speed pulley, handle, or motor brushes to require service or replacement
- Dynamic braking - no brake shoes, linings, or discs to maintain

Output Speeds:

Model 13	8 to 36 FPM (2.5 to 11 m/min)
Model 16	8 to 45 FPM (2.5 to 14 m/min)
Model 20	8 to 50 FPM (2.5 to 15 m/min)
Model 24	12 to 70 FPM (4 to 21.5 m/min)

Eagle Eye™

Chicago's Exclusive Touchless Temperature Control



Chicago has designed and built more gas heated ironers than anyone in the world and now redefines gas temperature control with its patented Eagle Eye touchless temperature control system. This electronic technology eliminates mechanical contact shoes, high temperature limit switches, and temperature fluctuations due to excessive wear, wax/lint buildup, or lack of maintenance. There are no mechanical parts to wear out because all temperature measurement and control is performed electronically from outside the heated cylinder without touching the ironing surface or coming in contact with lint, wax, chemicals, or moving mechanical parts.

Temperature control is not affected by lane configuration or mechanical adjustments because Eagle Eye constantly monitors digital temperature signals from a wide band of the ironing surface to ensure the most accurate control possible in a gas heated ironer. Precise burner control and quicker response time also mean higher efficiency because the burner can closely mirror the exact heating requirements called for by the speed, moisture retention, and handling patterns of linen being processed.

Laser 13-16-20

Available cylinder widths:

60", 85", 100", 110", 120", 136"
(1524mm, 2160mm, 2540mm,
2794mm, 3050mm, 3453mm)

Determining the correct Chicago model for a specific installation requires a detailed analysis of piece counts and sizes, moisture retention, labor costs, floor space, utilities, potential future growth, and budget guidelines. With an unequaled selection of heat sources, cylinder sizes, and Type R (front or rear) or Type F (front) models to choose from, there is a Chicago model perfectly matched to the needs of any size laundry.

Laser 13 is the basic ironer for laundries requiring economical full width ironing. Laser 16 offers 23% more ironing contact and drying power to handle items at more efficient speeds. Laser 20 offers 25% more ironing surface contact and BTU drying power than the Laser 16 for faster processing of sheets, table linen, or pillow cases with higher moisture retention.

The 60", 85", 100", and 110" widths are used primarily for table linen or where floor space is limited. The 120" width is our most popular size and is recommended for laundries processing sheets of any size from twin to king, large table cloths, or two lanes of smaller table tops. For laundries processing oversized items such as special size king sheets, large banquet cloths, other large table linen, the 136" width is available.

When considering a Type R ironer, rear operators are added if the ironer's drying power can keep up with the higher speeds and production required to justify the incremental cost. A Chicago professional is the best source of reliable sizing help. Optional Premium Model with heavy duty chrome plated cylinder and upgraded Hi-Lyfe ironing and feed ribbons for wax-free operation and substantially longer textile life is also available.

Laser 24

Available cylinder widths:

110", 120", 136"
(2794mm, 3050mm, 3453mm)

Laser 24 offers over 60% more BTU drying power, 20% more ironing contact, and a heavy-duty drive system twice as powerful as that of the Model 20 for higher speed processing of sheets and table linen. Type R ironers are capable of delivering ironed linen either to the rear (receiving shelf or automatic folder) or to the front for handling by feed operators when smaller pieces are being processed or load conditions are light. Type F models return linen to the front only.

At the middle of Chicago's complete ironer range, Laser 24 is normally the smallest Chicago ironer for which a separate automatic folder is recommended to maximize production, labor savings, and quality. Optional Premium Model with heavy duty chrome plated cylinder and upgraded Hi-Lyfe ironing and feed ribbons for wax-free operation and substantially longer textile life is also available.



Tri-Star and Tandem Series

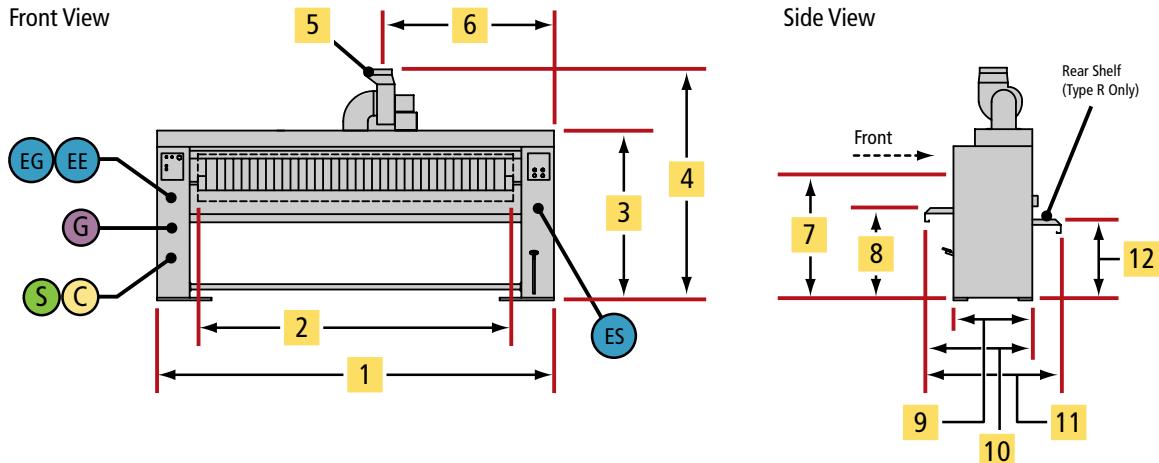
Ironing with built-in folding

Where floor space is limited, but production needs call for automated folding, the Tri-Star and Tandem Series offer the same ironing sections as the Laser ironers described in this brochure along with built-in microprocessor-controlled automatic folding to efficiently iron and fold large pieces. Space-saving, all-in-one unit models with primary folding, crossfolding and stacking options are available. Consult a Chicago professional for more detailed information.

Chicago Laser Line Dimensions and Utilities

Notes:

1. Specifications subject to change without notice. Consult factory for certified construction floor plan.
2. Millimeter dimensions are in [].
3. All dimensions are $\pm 1/2$ ".
4. Utility connections are located as shown.
5. Spec information and floor plans are for standard machines. Different width models available. Consult factory for details.



Gas Steam Electric Heated Models

	GO / SO / EO 13		GO / SO / EO 16		GO / SO / EO 20		GO / SO 24	
	120"	136"	120"	136"	120"	136"	120"	136"
Electrical - Gas	(EG)	AT 36" HT. [914]		AT 36" HT. [914]		AT 36" HT. [914]		AT 56" HT. [1422]
Electrical - Steam	(ES)	AT 36" HT. [914]		AT 36" HT. [914]		AT 36" HT. [914]		AT 56" HT. [1422]
Electrical - Electric	(EE)	AT 34" HT. [864]		AT 36" HT. [914]		AT 36" HT. [914]		--
Gas Connection	(G)	1" AT 32" HT. [813]		1" AT 32" HT. [813]		1" AT 33" HT. [838]		1-1/2" AT 7" HT. [178]
Steam Inlet	(S)	3/4" AT 31" HT. [787]		3/4" AT 24" HT. [610]		3/4" AT 24" HT. [610]		1" AT 30" HT. [762]
Condensate Return	(C)	1/2" AT 17" HT. [432]		1" AT 16" HT. [406]		1/2" AT 16" HT. [406]		3/4" AT 20-1/2" HT. [521]
1	157" [3988]	172" [4369]	163" [4140]	178" [4521]	163" [4140]	179" [4534]	165" [4191]	181" [4597]
2	120" [3048]	136" [3454]	120" [3048]	136" [3454]	120" [3048]	136" [3454]	120" [3048]	136" [3454]
3	59" [1499]		62" [1575]		64" [1626]		72" [1829]	
4	81" [2048]		84" [2137]		86" [2181]		94" [2391]	
5	10" VENT [-]		10" VENT [-]		10" VENT [-]		10" VENT [-]	
6	69" [1752]	76" [1930]	71" [1803]	79" [2007]	72" [1829]	80" [2032]	73" [2108]	81" [2057]
7	45" [1149]		43" [1092]		43" [1092]		47" [1187]	
8	27" [692]		27" [692]		27" [692]		30" [762]	
9	30" [762]		35" [889]		38" [965]		45" [1149]	
10	41" [1041]		46" [1168]		49" [1245]		56" [1422]	
11	52" [1321]		57" [1448]		60" [1524]		67" [1702]	
12	25" [635]		25" [635]		26" [648]		25" [635]	

Complete Range of Separating, Feeding, Ironing, Folding, and Sorting Options

Because Chicago specializes only in flatwork finishing equipment, it can offer 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, hospitality, health care, textile rental, institutional, and on-premise laundries all over the world. 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's customer service department offers full technical and service support by telephone and on our website. We also offer overnight service for quick parts availability. Visit our website, www.chidry.com, to learn more about our complete line of flatwork finishing systems including video of Chicago® equipment in action.