

QUALITY AND COST-EFFECTIVENESS IN FEEDER SYSTEMS

DR SERIES









Laundries are constantly adjusting the services they offer in line with market developments. Duvets, kingsized sheets, new items, the DR-Series range of feeders provide the answer to the different feeding requirements of each laundry, with the quality and productivity they need and with the safety their operators deserve.





THE IMPORTANCE OF PRECISION

We can all imagine the clean smelling sensation of freshly washed linen, of impeccably ironed sheets. Yet how do we feel the effects of feeding? No doubt because the article feels gentle against our skin, without a single crease.

Feeding is a key part of the ironing process. We could have the best flatwork ironer and yet not deliver the best ironing if we disregard this process. The degree of precision with which each item's delicate nature is treated is undoubtedly associated with the way it is fed in.

DRF Automatic Front Feeder



Laundering requirements are evolving along with the market. New fabrics and new sizes require feeding systems prepared to respond to changes. King or queen-sized sheets, duvets, quilts – there are no limits in terms of feeding.

PRODUCTIVITY

The feeder's loading stations have an ergonomic design that can be adjusted to the height of each operator in order to provide maximum productivity with minimum effort. 300 items/hour can be achieved, depending on the article being fed in. With 3 positions, 900 items/hour can be achieved on one lane, and with 4 stations, up to 1200 items/hour on one lane.

RELIABILITY

All of the feeder's components have been tested individually. Once the components are certified, they are chosen to be part of the feeder, which has to undergo stringent laboratory tests. Reliability is a distinctive feature of these feeders.

QUALITY

The items of linen are positioned at high speed on the conveyor with a margin of error of less than 1 mm. The vacuum power of the suction box and the various quality systems ensure perfect feeding.

COSTS

DRF can run without constructing a pit, if the items to be fed in do not exceed 2.5 m. This improves hygiene by preventing the linen from making contact with the floor and saves the costs of the building work in your laundry.





TECHNOLOGY

TRANSFERRING CLAMPS: STRENGTH AND PRECISION

The tensioning clamps are independent from the transferring clamps, thereby allowing increased productivity. While one item is being transferred, the operator can be feeding in the next article. The transferring clamps hold the item of linen firmly. Even the thickest and heaviest items like duvets or King-size sheets remain taut in order to ensure they are fed in perfectly.

LOADING STATIONS: ERGONOMICS AND SAFETY

The DRF loading stations have been carefully studied to maximize operator comfort and productivity. Their layout allows operators to have a clear view of the article being inserted, and thus be able to control its progress. In addition, the space between work stations is wide and allows room to position the laundry trolleys easily.

The clamp arms, with a system patented by Girbau Industrial, allow a rapid transferring of the linen and a return of the clamps, without interferences, thereby increasing productivity. The height of the clamps can be adjusted to adapt them to the height of the operator, and descend easily by simply pressing them.

THE TRANSFER BAR: GENTLE CONTROL

The transferring bar, fitted with a vacuum system throughout the width of the feeder, holds the article of linen by its longitudinal end. The item is positioned and kept parallel in an extremely gentle and precise way.







SUCTION FEEDING TABLE

The DRF vacuum table holds the item while it moves towards the ironer. The belts are made from an exclusive material composed of silicones that provides an additional adhesion to the powerful suction of the table. The belts are extremely hard-wearing, thereby reducing maintenance costs.

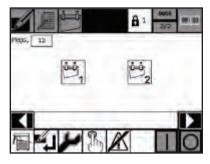
STRETCHING BOX

The bottom part of the feeding belt is a powerful suction box that draws down the underside of the articles being fed in. The combination of this box together with a system of stretching brushes helps to keep the article taut and thus increases the quality of the feeding. Its noise level is below the levels established by the most demanding regulations.

CONTROLS

The system of graphical control icons allows easy and intuitive configuration of the feeder. The icons are common to all Girbau machines, making the learning process easy to transfer from one machine to another. The menu screens, arranged according to function, make it easy for the user to program all the possibilities for feeding the various laundry items.

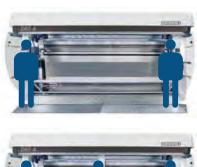


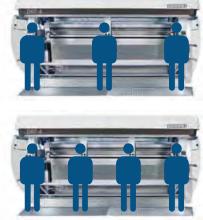


CONFIGURATION

STEP 1 (FEEDING STATIONS)

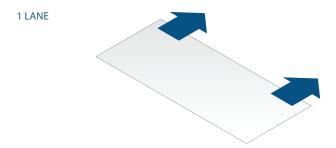
Define the number of stations planned for the feeder.

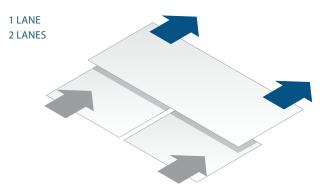


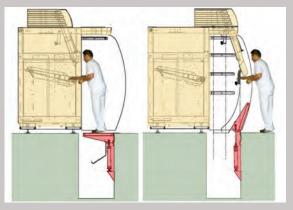


STEP 2 (AUTOMATIC LANES)

Decide whether to work with just 1 lane or with both 1 and 2 lanes equally













OPTIONS

HINGED PIT (FOS)

When the DRF offers the option of feeding small items, two different situations can arise: feeding in large items - requiring pit, or feeding in small items manually without the need for a pit. The hinged pit option automatically covers the pit when small items are being inserted. In this way, all the regulations regarding safety and ergonomics in the workplace are complied with.

HINGED TOP FOR FEEDING SMALL ITEMS (E1)

This option allows the feeder headstock to be moved with the automatic feeding stations. At the same time, the feeding conveyor descends to a height that is accessible for the operators. In this way up to 4 feeding lanes are available.

SECOND SERVER (SV2)

The feeder can be equipped with a second set of transfer clamps that move along the machine, collecting items from the loading positions, drawing them taut and passing them on to the transferring bar. This option is essential for productions exceeding 700 items/hour when the work is normally carried out on two lanes.

SPREADING BRUSHES AND BELTS (AR1)

A highly recommended option for improving feeding quality even further. Crease removing belts located above the output conveyor, together with brushes arranged on one or two lanes, depending on the feeder chosen, correct any imperfections that may have occurred.

SPREADING BRUSHES, BELTS AND WEIGHT LIGHTENING FLAPS (AR2)

In addition to the aforementioned brushing and spreading system, this option includes a system for alleviating the weight of the laundry, which is very useful when feeding in large items such as duvet covers or king-sized sheets. The system lifts up the item with a patting movement on the bottom of the garment, easing the weight of the article, smoothing out creases and making it easier to feed.

QUALITY SYSTEM FOR TABLE LINEN (AR3)

In addition to the spreading brushes and belts and the weightalleviating blades, this option incorporates a quality system for improving the feeding of table linen.

DRF-LITE Feeder



The DFR-LITE automatic front feeder either allows large items to be fed on one lane automatically, or raising the output belt to feed small items manually directly into the flatwork ironer.

PRODUCTIVITY

With 2 loading stations in the basic configuration and up to 3 optional stations, the DRF-LITE attains 650 items per hour on 1 lane. The operator only needs to insert the items by their ends into the feeder station clamps and activate a sensor for the item to be fed.

MAINTENANCE

It does not require the construction of pit for laundry items of less than 2.5m, thus improving hygiene, reinforcing operator safety and cutting the installation costs in the laundry.

Its simplicity means adjustments can be easily performed, thereby reducing maintenance bills.

QUALITY

The feeder clamps transfer the article to the server, where two clamps activated by two independent servo-motors, stretch the item completely. A suction bar picks up the stretched item on the top and transfers it to the feeder's suction belt. Anti-crease belts stretch the bottom of the item while it is being fed into the flatwork ironer.

RELIABILITY

All the components have been tested previously. The machine has also been subjected to stringent laboratory tests simulating extreme conditions









TECHNOLOGY

FEEDING STATIONS

Their layout allows operators to have a clear vision of the inserted item, thus enabling them to detect stains and/or tears in time.

The work area is spacious and allows the positioning of laundry carts, aids the mobility of the operator and reduces downtime between the feeding in of articles of linen.

TRANSFERRING CLAMPS (SERVER)

The transferring clamps hold the items to be fed firmly but gently, leaving them completely stretched.

THE TRANSFERRING BAR

The transferring bar is fitted with a suction system across the full width of the machine. The item is held along its entire length for the transfer to the flatwork ironer, providing a precise positioning of the laundry item and higher quality in terms of feeding.

SUCTION FEEDING BELTS

The suction table that keeps the article stretched while it moves towards the flatwork ironer. The composition of the belts, made from a silicone-based material, provides additional adherence together with the powerful suction of the table.

SPREADING BELTS

A number of opposing spreading belts ensure good feeding quality.

OPTIONS

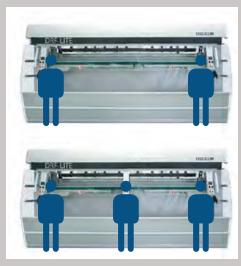
DISCHARGE CONVEYOR (XL)

The discharge conveyor can be raised, leaving 700 mm free space between the feeder and the flatwork ironer. As an option, the feeder can be configured with an extra-long discharge conveyor that increases this distance up to 1,500mm free space, giving the operators more room to insert the linen in manual mode.



LOADING STATIONS

The feeder can be configured for 2 (standard) or 3 (optional) loading stations.



DR-1 Feeder



A very straightforward automatic feeder for feeding in articles automatically on 1 lane. It also allows manual feeding of items of all sizes on 1, 2 or 4 lanes.

PRODUCTION

It has a clamping mechanism that allows a single operator to feed in up to 300 large items per hour on one lane, and a program designed for 2 operators, enabling them to feed in up to 450 sheets per hour.

MAINTENANCE

The straightforward operation prevents complications in functioning and aids maintenance operations.

SAFETY

The feeding clamps can be halted by simply pressing them by hand, providing maximum operator safety.

QUALITY

Automatic feeding ensures that all the articles are lined up, centred, drawn taut and stretched perfectly.









CONTROL

The DR-1 Control is intuitive and easy to manage thanks to the colour touch-screen, which allows the operator to change the flatwork ironing system's program. In this way control of the feeder, the flatwork ironer and the folder is automatically synchronised.



FEEDING CLAMPS

In automatic mode, a series of front feeding clamps draw the linen taut and feed the article onto the suction table accurately.



MOVEMENT RAILS



ITEM SUPPORT TRAY



CART PROTECTION (BT)

The steel rail prevents the laundry transporting carts from hitting the feeder and helps the operators to ac-cess the carts and their loads.

DRM Manual Feeder



The DRM feeder is ideal for laundries requiring simple, economic manual feeding with minimum maintenance. Designed to feed in articles of all sizes, it can work on 1, 2 or 4 lanes. Simplicity and efficiency are the two main features of the DRM.

SIMPLICITY

Simplicity does not mean less results. The DRM increases the productivity of your laundry with simplicity in mind. Your operators will find it very easy to handle.

MAINTENANCE

The great structural accessibility makes for easy maintenance.

PRODUCTIVITY

With this manual feeder production is increased by between 30% and 40% compared with direct feeding to the flatwork ironer.

COSTS

The DRM allows you introduce the automation of the feeding process economically, thereby gaining in productivity and ironing quality without having to make major investments in equipment.





IN DETAIL

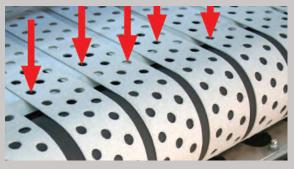
- The suction outlets have fibrin retention filters to maintain the air quality of the work environment.
- The space below the feeding conveyor allows room for a laundry cart, thus improving the ergonomics and productivity of the operators.
- Extensive free space on the feeding conveyor ensures a safe and ergonomic feeding with a very good visibility of the article being inserted.



• The suction box is fitted with accessible covers that aid maintenance work.



 An electronic speed inverter automatically synchronizes the feeder with the speed of the flatwork ironer.







ACCESSORIES

SUCTION COLLECTOR WITH SIDE OUTPUT AND COLLECTING BAG (C1S1)

The suction system is fitted with a collector that draws the air output towards the sides and enables easier access for cleaning the filters.

SUCTION TABLE (ASP1)

The suction on the feeder table makes the work easier for the operators. It holds the article and prevents it from moving, and thus increases the productivity.

STRETCHING BRUSHES (BRUSH)

The stretching brushes spread the linen out at the sides and improve the feeding quality.

MOVEMENT RAILS (T1)

This option is essential for aiding access to the feeder and for cleaning and maintenance work, both on the feeder and the flatwork ironer.

CART PROTECTION (BT)

The steel rail prevents the laundry transporting carts from hitting the feeder and helps the operators to access the carts and their loads.

ITEM SUPPORT TRAY (AU)

Concealable tray that aids the insertion of small items.

MULTIPLE WHEEL ASSEMBLY (RIND)

Assembly consisting of free wheels, especially useful when there is no suction available in the feeder table. The wheels hold the laundry items while they are being inserted

GIRBAU INDUSTRIAL FLATWORK IRONING SYSTEM









AUTOMATIC LINEN SEPARATOR

Its function is to break up the 'cake' from the extraction press and separate each sheet in order to deposit it on a conveyor belt which transports it to the feeding positions.

FEEDERS

A wide range of feeders allow you to automate the process of feeding linen into the flatwork ironer, thereby increasing the productivity of your laundry and the quality of the ironing.

FLATWORK IRONERS

A wide range of feeders allow you to automate the process of feeding linen into the flatwork ironer, thereby increasing the productivity of your laundry and the quality of the ironing. From manual feeding equipment to fully automated systems, they all are designed according to criteria of productivity, ergonomics and safety.

FOLDERS

Designed to satisfy folding requirements ranging from the most basic to the most demanding, Girbau's range of folders makes it possible to customise folding easily using the intuitive controls.

OTHERS

We have a range of solutions available for transporting the stacks of linen to a central outlet, as well as for packaging systems.

WE MANUFACTURE EQUIPMENT. WE PROVIDE SOLUTIONS.

THE COMPLETE LAUNDRY SOLUTION

Girbau Industrial delivers the total laundry solution to medium- to high-volume laundries around the world. As the developer of a proven line of batch tunnel washers, presses, dryers, ironers, feeders, folders, stackers and loading and unloading systems, Girbau Industrial serves the complete laundry production and efficiency needs of virtually any application. Proven durable and reliable, Girbau Industrial laundry systems are in place at hospitals, hotels, casinos, resorts and industrial laundries across the globe.

SIZING AND CONFIGURATION

Every laundry operation is unique, with a distinctive set of production and efficiency goals. Uniquely, the Continuous Batch Washing System offers the flexibility and configurability to meet any need—boosting production and lowering labor, water and energy usage. Our team of Girbau Industrial experts will help you, every step of the way, to properly size, design, configure and install your System.

WARRANTY

Girbau Industrial DR SERIES Feeders components are backed by an industry-leading IndustrialCare[™] warranty.

INDUSTRIAL CARET BUY WITH COMPLETE CONFIDENCE INDUSTRY-LEADING FACTORY WARRANTY

ENVIRONMENTALLY FRIENDLY

A division of Continental Girbau Inc., Girbau Industrial laundry products meet rigorous environmental and safety standards established by the International Organization for Standardization (ISO). Ever focused on laundry efficiency, Continental Girbau, the North American subsidiary of Girbau S.A., is a member of the U.S. Green Building Council (USGB), a 501(c)(3) nonprofit that developed the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.





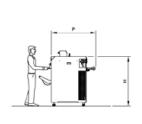


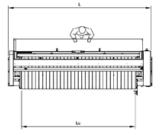




DR SERIES FEEDERS

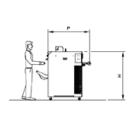
DR-1 SINGLE STATION AUTOMATIC FRONT FEEDER





Power installed	KVA	2.8 to 3.2	
Consumption for 100 items	m³	0.78	
Operating pressure	bar	6 - 10	
Length L / Useful length Lu	mm (inch)	L=3.475 (136.8) / Lu 3.000 (118)	
		L=3.975 (156.5) / Lu 3.300 (130)	
		L=3.975 (156.5) / Lu 3.500 (138)	
Height (max) H	mm (inch) 1.300 (51.2)		
Depth P	mm (inch)	1.250 (42.2)	
Conveyor speed	m/min (ft/min)	5 to 50 (16 to 160)	
Noise level	dBA	76	
Net weight	Kg (lbs)	1.300 (2.866)	

DRF AUTOMATIC FRONT FEEDER

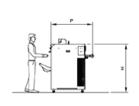


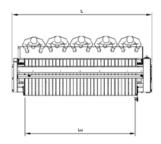


KVA	2.8 to 3.2	
mm (inch)	inch) L=3.475 (136.8) / Lu 3.000 (118)	
	L=3.975 (156.6) / Lu 3.300 (130)	
	L=3.975 (156.5) / Lu 3.500 (138)	
mm (inch)	1.300 (51.2)	
mm (inch)	1.250 (42.2)	
m/min (ft/min)	5 a 50 (16 to 160)	
dBA	76	
Kg (lbs)	1.255 (2.766)	
	mm (inch) mm (inch) mm (inch) m/min (ft/min) dBA	

^{*} Please contact Girbau Industrial for shipping dimensions and weights. All product specifications are subject to change without notice. For the most current and complete product specifications and warranty information please contact Girbau Industrial or visit www.girbauindustrial.com.

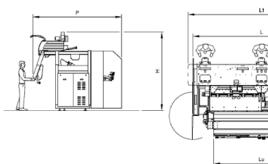
DRM MANUAL FEEDER





Power installed	KVA	2.8 to 3.2	
Length L / Useful length Lu	mm (inch)	L=3.475 (136.8) / Lu 3.000 (118)	
		L=3.975 (156.6) / Lu 3.300 (130)	
		L=3.975 (156.5) / Lu 3.500 (138)	
Height (max) H	mm (inch)	1.300 (51.2)	
Depth P	mm (inch)	1.250 (42.2)	
Conveyor speed	m/min (ft/min)	5 a 50 (16 to 160)	
Noise level	dBA	76	
Net weight	Kg (lbs)	1.255 (2.766)	

DRF-LITE AUTOMATIC FRONT FEEDER



Power installed	KVA	21.89
Consumption for 100 items	m ³	10
Supply pressure	bar	6 - 10
Length L	mm (inch)	4,850 (191)
Length L1	mm (inch)	5,080 (200)
Length Lu	mm (inch)	3,000 (118) 3,300 (130) 3,500 (137)
Height (max) H	mm (inch)	2,613 (102.9)
Depth P	mm (inch)	2,800 (110.2)
Conveyor speed	m/min (ft/min)	5 to 50 (16 to 160)
Noise level	dBA	76
Net weight	Kg (lbs)	2,500 (5.5115)

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