



Um novo conceito em Passadores.

A new concept in Drawframes.



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"FATES reserves the right to make any necessary changes at any time without special notice."



DF-22 DRAWFRAME MACHINE

Nova linha de Passadores.
New drawframes line.

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High-Performance DF-22 Drawframe



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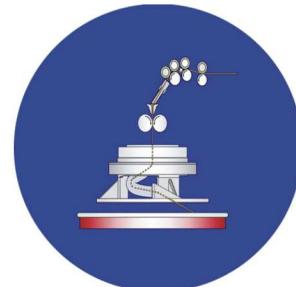
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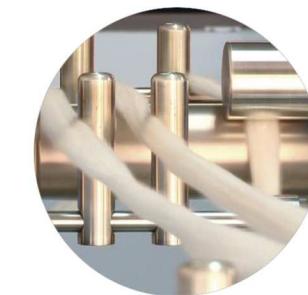


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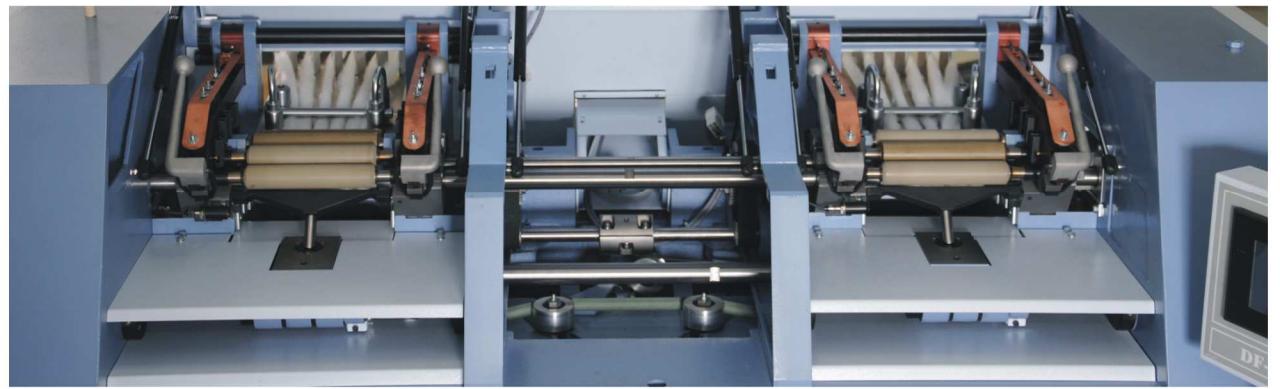


High-Performance Drawframe FATES® DF-22

We can highlight the following features among the ones that distinguish the new FATES® DF-22 High-Performance Drawframe: low power consumption, low maintenance cost, simplicity of operation, generating high productivity and profitability.

The FATES® DF-22 Drawframe was built with concept of a Computer Integrated Manufacturing. The DF-22 Drawframe system offers in its interface all the necessary operating and programming data, this ensure a high performance for your spinning mill.

The FATES® DF-22 Drawframe allows work with cotton, synthetic fibers and blend of these materials.



Main Features of the DF-22 Drawframe



The sliver formation is determinant for the yarn quality.



The Quality Center in the Spinning Mill

High quality sliver is a prerequisite to achieve a world class yarn. Although all the processes at a spinning mill are important for the yarn's final quality the sliver formation is determinant for its quality of the sliver in the roving frame and for the yarn in the ring spinning machine or at the open end.

Our starting point is that the sliver irregularity has to be prevented at the Drawframe, otherwise it can't be eliminated by the subsequent processes. Therefore a good delivery sliver of the Drawframe is fundamental for the final yarn quality.

Experience and knowledge of practical requirements in daily operation flexibility, ease of operation, efficiency - are the basis for the development of FATES® Drawframes suitable to process cotton, synthetic fibers and blends.

● **Unmatched Productivity:**

The DF-22 Drawframe has two delivery head, which work to speed (mechanical) up to 800 m / min, ie being able to produce a total up to 1,600 m / min of sliver. This allows to DF-22 feed two second passage autoleveller Drawframe (DF-2A) with one delivery head.

● **Simplicity of Operation:**

The simplicity of operation is its main characteristic of the DF-22 Drawframe and enables users to adjust its operational settings without help of experts. All the operational functions can be easily modified by commands on the touch screen display with no additional calculation or change of pulleys or gears.

● **Compact:**

Compared to its competitors, the Drawframe DF-22 is more compact and requires less floor space in your manufacturing plant, providing space savings with high productivity.

● **Low energy consumption:**

Thanks to the new drive belts system and a reduced number of motors, we guarantee low energy consumption, which contributes for competitiveness and profitability for your spinning mill.

● **Robust Structure:**

The new structure of the DF-22 Drawframe was projected to ensure maximum strength and easy maintenance. DF-22 Drawframe has a modern design and was built with and highest quality material to ensure long durability, and to maximize the return on your investment.

● **Low maintenance:**

We made special effort to project a low maintenance equipment. The frequency of maintenance was reduced by shielding several drives, the use of drive belts system, replacement of mechanical driven systems by inverter controlled systems and the use of a very well calculated suction in the critical points of the machine. The lubrication intervals and the number of lubrication points were determined through constructive principles of maintenance optimization.

● **Silent operation:**

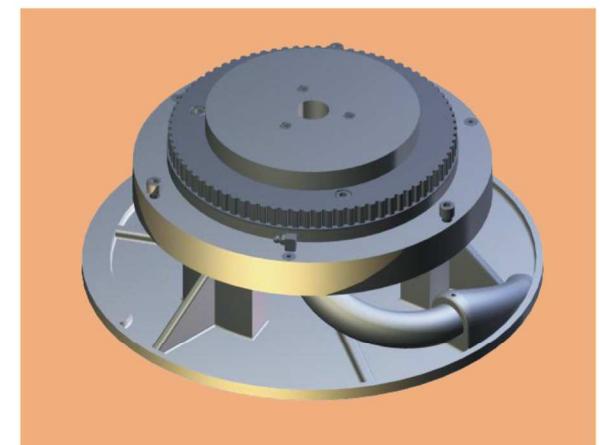
The operation of Drawframes at high delivery speed normally requires noise control. However the High-Performance Drawframe DF-22 FATES® operates very silently thanks to rectified gears, flat and toothed pulleys and some other features which contribute to a very silent operation of the Drawframe.

Optimized Draft System

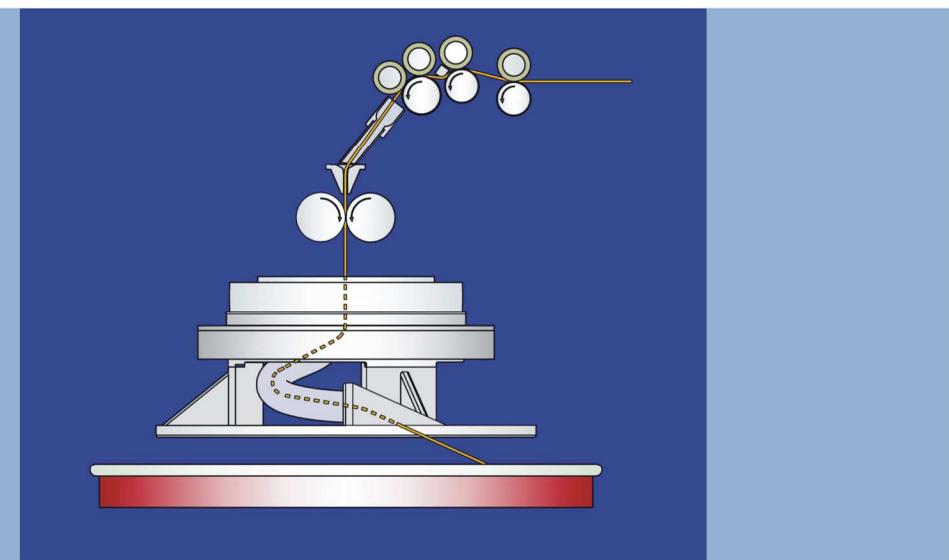
The Drawframe DF-22 - with an already approved 4-over-3 roller drafting system with the ideal sliver withdrawing geometry and sliver diversion in direction of the calendar roller has a decisive influence on the production. Advantages of this system are low speed of rotation of the top rollers with are subject to less strain and which thus do not need to be reground so frequently. The bottom rollers were projected with a larger diameter than the one at our competitor's equipment and have double special bearings at their extremities, all this factors make that the top rollers do not become as hot during the Drawframe operation. However DF-22 Drawframe drafting system main advantage lies in the high degree of flexibility and ease of operation. The 4-over-3-roller drafting system is able to process all staple lengths from short cotton fibers to 40 mm blends without the need for adjustment. If the drafting system needs to be reset for longer staples, the pairs of rollers can be shifted without a great deal of effort. The drafting range varies between 25 and 80 mm. The drafting system is also easy and uncomplicated to operate and guarantees high delivery speeds with great regularity of the sliver.

Sliver Coiling

A Universal Rotating Coiler made in aluminium alloy and with curved channel in stainless steel, guarantee the correct and neat can coiling without mistreating the material. This rotating coiler is driven by flat belt and supported by bearing with larger diameter than that found in others Drawframes, which leads to greater stability, which together with the exclusive coiler geometry allows to achieve a high delivery speed and a significant improvement in the quality of the delivery sliver.



Low operating cost and high quality are key to achieve a world class yarn



Sliver Condensation

After the draft system the sliver is formed through a veil guide (new condenser design). This condensation occurs through the funnel AP and the compressor calenders. The new tongue and groove Z type calender, essential for a good processing performance of synthetic or blended fibers, additionally improves the cleaning effects on the Drawframe itself and it is very useful during the subsequent production stages specially when processing combed cotton. The compression system - that can be adjusted within a range of 40/60/80 or 100 Kg - results in improved sliver compaction, providing more adherence to the fibers, decreasing the volume in up to 25% of higher can filling weight.

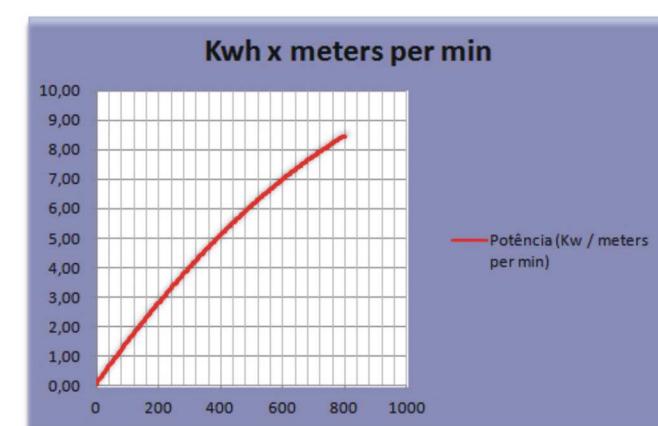
Drive System

Drafting and Break Draft System Drive:

Anti-friction bearings are used for all bearing points of the drafting system. The system was designed to use interchangeable toothed pulleys with a large number of teeth. This means that is possible make fine adjustments in break draft. A change in break draft does not affect the delivered sliver count so that the optimum setting of the break draft is independent of the delivered sliver count.

Power Electricity Consumption:

Lower power consumption and a profitability unmatched by any other not autoleveler Drawframe. The power consumption of the DF-22 Drawframe is greatly reduced due to: a reduced number of motors, massive use of pulleys-belts drive, and drive motors controlled by inverter. Energy consumption is approximately 0.018 to 0.023 kWh per kg of produced sliver, depending on the use of the machine.



Feeding Creel

Positively driven feed rollers are important to reduce the frequency of slivers breakage and to avoid false draft. The precise conduction of the sliver in this sector has importance mainly at high delivery speeds. The creel structure and the articulated transmission, allow to adjust the creel height for cans with up to 40" diameters and 48" height. The standard version predicts a doubling 6 fold. However, according to the client's order it can be made with a doubling 8 fold.

Automatic Can Changer

The new FATES® DF-22 Drawframe comes with a new automatic can change based on pneumatic principle, whose installation is simple (over the floor) and requires little floor space. The automatic changer replaces the full cans by the empty ones in a fast and effective way. As all the cans movements are linear, this system do not damage the cans in case of an accident as in the traditional carousel system. The can centralization is done by casters. It can be used for cans with diameters ranging from 12" to 20" and heights from 36" to 48".



fates
Quality, low maintenance cost, the simplicity of operation combined together for high productivity and efficient operation.

Suction Box

The new FATES® DF-22 Drawframe suction system was designed to guarantee that all the components in the material passage area always clean, an important condition for high efficiency. A controlled air flow inside the enclosed drafting area effectively eliminates micro dust and loose fibers. Additionally cleaners and wipers made of special rubber do not allow loose fibers from depositing on the top and bottom rollers. All waste generated is exhausted into the suction box at the backside of the Drawframe which can be extracted at long intervals of time.

Touch Screen Panel - All Information Available Using Only Fingers

For safe and fast operation of the DF-22 FATES® High-Performance Drawframe, the control panel was designed considering ergonomic principles and with a friendly man-machine interface. One of its important aspects is the machine's dialog service, which allows communication with the system in different languages and provides several information about production, anomalies, guiding the operator about how to operate the Drawframe. The change of the delivery speed can be electronically altered without the need of substituting pulleys or gears.

DF-22 Drawframe Specification

DF-22 Floor Plan Dimensions

Material Processing Specification

Raw Material (Type and Length)	mm	Cotton / Synthetic / Viscose up to 80 mm
Sliver Feed Weight	Ktex (g/m)	Up to 50
Sliver Delivery Weight	Ktex (g/m)	3,3 - 6,3

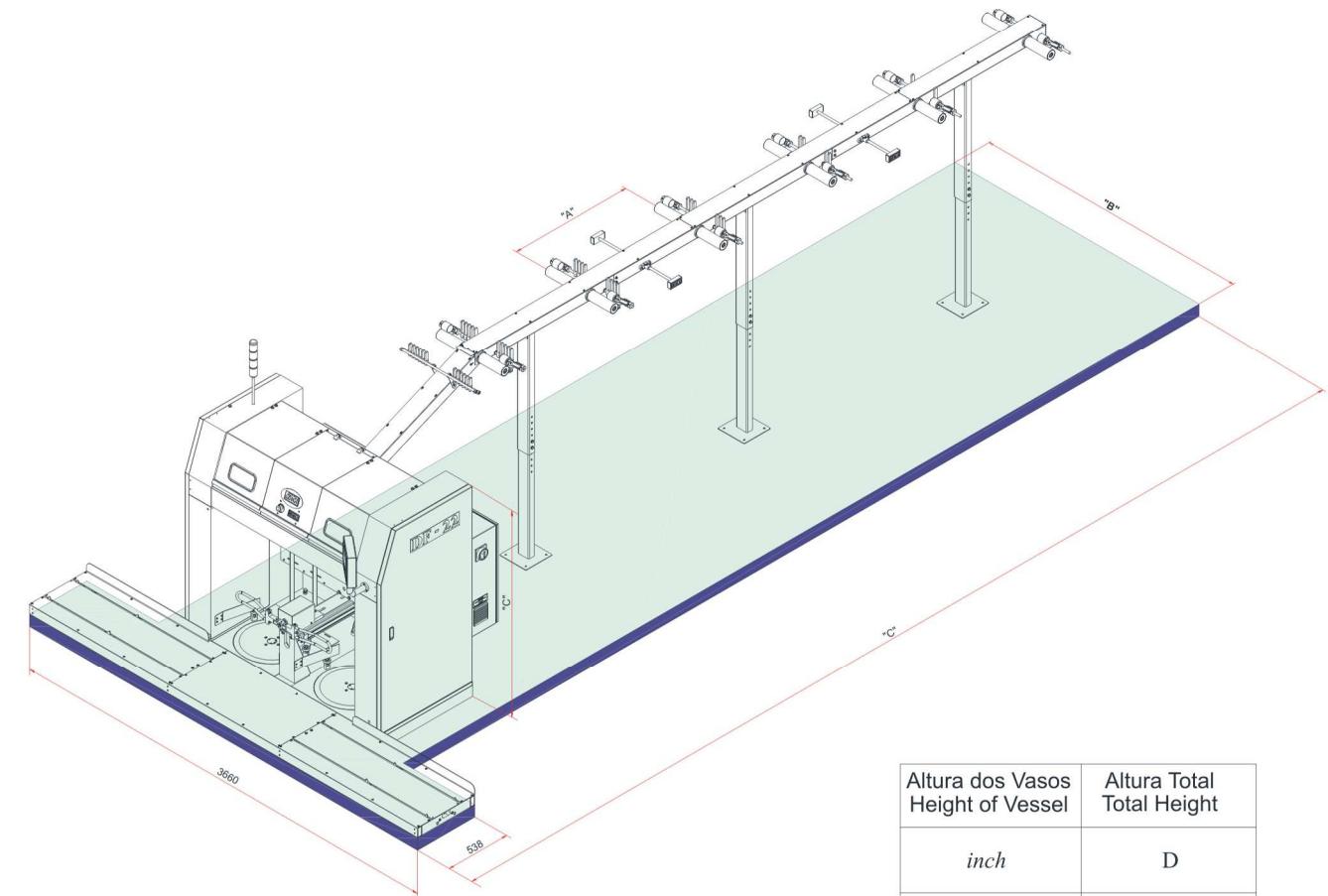
Technical Specification

Delivery Point	m/min	2
Delivery Speed		Max. 800 (mec.)
Delivery Speed Adjustment		Electronic
Doubling	X	6 or 8
Execution of Creel		Positively Driven and Vertically Adjustable
Draft	X	2 until 10 (Mechanic)
Drafting System		4 over 3
Draft Compression System		Adjustable by Spring
Coiler Diameter	Inch	14" until 20"
Sliver Cutter		Mechanic
Delivery Can Height	Inch	Up to 48"
Can Charger		Pneumatic
Set-up of Feeding Cans		* Up to 4
IHM Type		Friendly Touch Screen Color Display
Autoleveller Range	%	N/A
Scanning Roller		N/A
Autoleveller Sensor		N/A
Quality Monitor Sensor		N/A

* Dependant on Specification

Machine Specification

Compressed Air Consumption	L/h	500
Compressed Air Pressure	Bar	6 a 7
Main Motor	KW	5,5
Suction Motor	KW	2,2
Drawframe Weight	Kg	2800



Altura dos Vasos Height of Vessel	Altura Total Total Height
inch	D
36"	1570
40"	1670
42"	1720
45"	1800
48"	1870

DIMENSÕES DA PRATELEIRA							
d Ø Interno d Ø Internal		D Ø Externo D Ø External		Bitola Gage	Largura Total Total Width	6 Acoplamentos 6 Ends	8 Acoplamentos 8 Ends
mm	inch	mm	inch	A	B	C- máx.	C- máx.
600	24"	630	24,8	630	1700	6845	7475
900	36"	930	36,6	1030	2000	7795	8825
1000	40"	1030	40,5	1030	2110	7845	8875