FOAMATOMATIC

INTERNATIONAL TECHNOLOGIES

www.foamatomatic.com

Foamatomatic International Technologies Private Limited No 36/2, Raghavendra Complex, Near Mc Donalds
Indlabele Road Anekal Taluk, Attibele
Bengaluru Karnataka 562107 India
GSTIN 29AAFCF4130L1ZI

+919574000609,+919916208853

foamatomatic@gmail.com,
info@foamatomatic.com

About us

Foamatomatic International Technologies Pvt. Ltd. is a dynamic and innovative engineering and automation company specializing in the polyurethane foam and mattress industry.
With a commitment to excellence, cutting-edge technology, and a passion for innovation, we have established ourselves as a trusted partner for businesses in this sector.
At Foamatomatic International Technologies, we take great pride in our expert team support. Our directors and employees have vast experience in the foam and mattress industries, coming from the same industries, bring a wealth of knowledge and insights that help shape our strategies and solutions. Their firsthand experience enables us to provide expert guidance and support to our clients, as we understand the intricacies of their operations and can anticipate their needs.

At Foamatomatic, our mission is to revolutionize the polyurethane foam and mattress industry through state-of-the- art engineering solutions and automation. We aim to enhance efficiency, productivity, and product quality for our clients, ultimately contributing to their success.

Product Overview

Peeling Machines

- Looper machine
- Offline Looper
- Continuous winder for Looper
- Foam roll unloading system
- Foam roll loading and transfer system
- Roll compression machine
- Foam jointing machine
- Online Thickness Measurement System for Looper

Mattress Machines

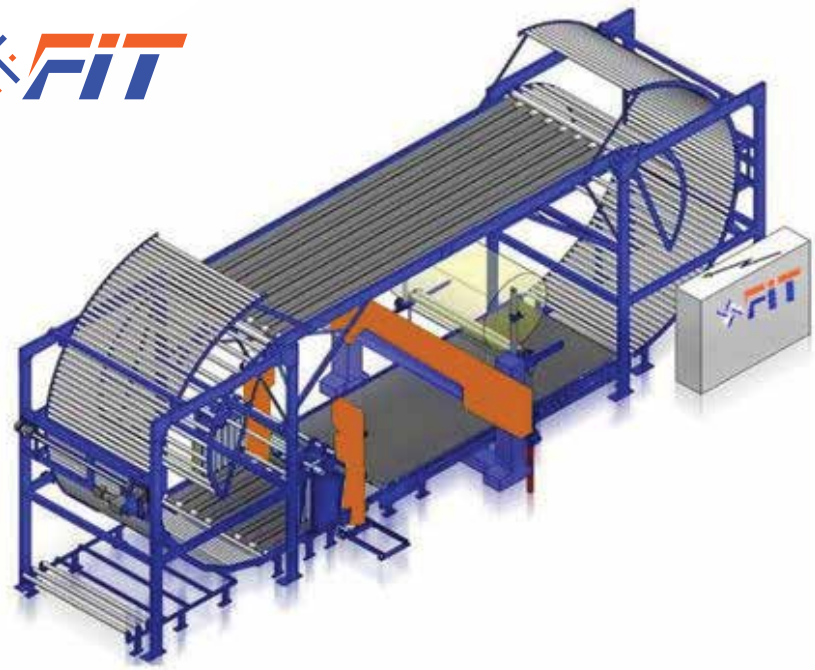
- Automatic mattress packing machine
- Glue spray line
- Center/Belly band machine
- Quality table and mattress flipper
- Mattress pick and place system
- Mattress stacker
- Mattress filling machine
- Auto Mattress Measurement and Inspection System

General Plant Machines

- Small block automation
- Small block compression machine
- Long block weighing system
- Foam skin winder
- Leftover paper winder for Foaming
- Auto silicon spray system for circular
- Hydraulic tilter and Pop-up conveyorization
- Foam sheet insertion and packing
- Chemical tank level automation and control
- Compress bailing machine
- Wireless Real Time Foam Block Temperature Monitoring System
- Powder Loading System

Specification

Block Width	2300 MM
Block Height	1200 MM
Block Length	30/60 Meter
Compressed Air Range	6-8 Bar
Cutting Angle Range	0-6 Degree
Cutting Range	2 MM to 25 MM
Cutting Tolerance	0.2 MM
Knife Size	80X0.6 mm
Max Cutting Speed	120 Meter/Minute*
Max Winding Diameter	2000 MM
Power Suppply	415 volt, 3 Phase, 50 Hz



Looper Machine

Description

First ever Indigenous Looper is designed for splitting of long blocks up to 60 meter in Roll form at a max cutting speed of 120 Meter/minute. *

Endlessly glued soft, flexible foam long blocks can be slit to rolls of 2 mm – 25 mm thickness by this machine. Cutting materials PUR foams.

The machine is equipped with a manual cutting angle adjustment of 0° – 6°.

The knife is equipped with a grinding unit with cup grinding stones for constant knife sharpening.

The machine is equipped with a grinding dust extraction unit. A casing contains a ventilator, a dust collector and a dust container.

An endless band knife running over knife wheels of 750 mm diameter is used as cutting tool. The knife running wheels are smooth and a special knife guiding system positions the knife point exactly.

“The feeding bridge in the stationary tower is electrically controlled and is used for opening and closing the circular track. It allows the feeding of the block into the long splitting machine. Moveable by motor-driven rope winches.”

A Block straightner which is adjustable by motor is installed in front of the cutting unit. It is used for an accurate guiding of the block and for fixing the block during the gluing of the long block.

Machine is eqipped with Winding unit with two winding rollers and supporting spindles, max. winding diameter 2.0 m.

“The circular knife cross cutter is positioned on the platform of the winding unit in order to be able to cut off the foil by motor after the winding process. The foil cutter works with a circular knife which is moved by a motor over the working width.”

“The machine is controlled by a high-capacity PLC. In conjunction with the latest servo and frequency inverter technology this is an optimal automation solution. All operating controls of the machine are in a control cabinet placed near the cutting unit.”

Specification

Block Width	2300 MM
Block Height	1200 MM
Block Length	30/60 Meter
Compressed Air Range	6-8 Bar
Power Suppply	415 volt, 3 Phase, 50 Hz
Variable Conveyor Speed Rang	0-15 Meter/Minute

Offline Loooper Machine

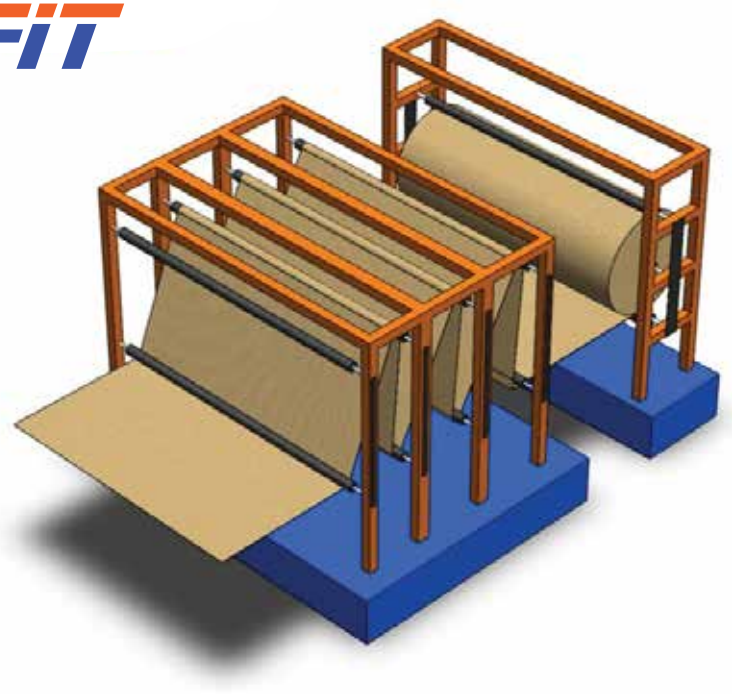
Offline Loooper Machine

Description

This loop is designed to do offline trimming of Longblocks up to 60 meter, An offline trimming system allows for the trimming process to be performed separately from the main production line, which can improve efficiency
This can save processing time by Half an hour per long block, Estimated 30 to 40 % productivity increase.
The long block to be Trimmed is fed to the trimming portal by a conveyor system equipped with rollers which is located in two reinforced semi-circular towers
A motor-driven block straightner installed in front of the trimmimg unit serves for an accurate block guiding and for trimmmig the block
Max speed to support fine trimming is 15 Meter/Minute
Max block weight is 5 ton for 60 meter version

Specification

Accumulator Height	2500 MM
Accumulator Length	1000 MM
Accumulator Width	2500 MM
Block Width	2300 MM
Block Height	1200 MM
Block Length	30/60 Meter
Compressed Air Range	6-8 Bar
Cutting Range	3 MM to 25 MM *
Cutting Tolerance	0.2 MM
Max Cutting Speed	90 Meter/Minute
Max Winding Diameter	2000 MM
Power Suppply	415 volt, 3 Phase, 50 Hz
Roll Changeover Time	10 second



Continuous Winding At Looper

Description

A continuous winder is an add-on assembly that can be used to provide a continuous winding operation on a existing Looper machine. the continuous winder can be a valuable addition to a Looper machine.

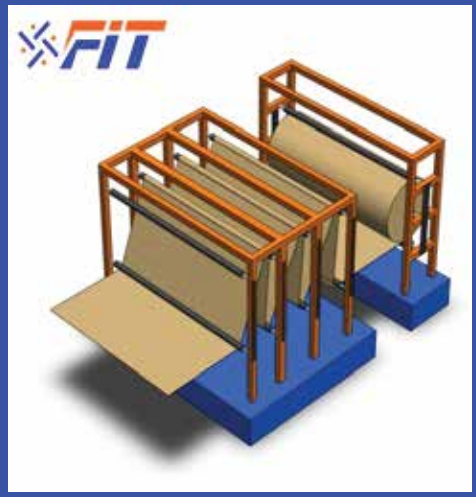
The use of a continuous winder can help to eliminate roll changeover time loss on an existing looper machine. A continuous winder allows for the seamless and uninterrupted winding of material, reducing or eliminating the need for roll changeovers. This can help to increase production efficiency and reduce downtime, as there is no longer a need to stop and change out the roll when it runs out.

Thanks to the special foam accumulator, helpful in accumulating foil during the changeover of foam rolls, potentially reducing downtime and increasing production efficiency (Estimated 10% productivity increase). The foam accumulator helps to ensure a smooth and seamless transfer of the foil material from one roll to the next, minimizing any potential disruptions or delays.

Yes, a new winder design that does not disturb the original machine can help to eliminate the need for manual roll unloading, potentially reducing the amount of manpower required. This can improve efficiency and make the process more automated.

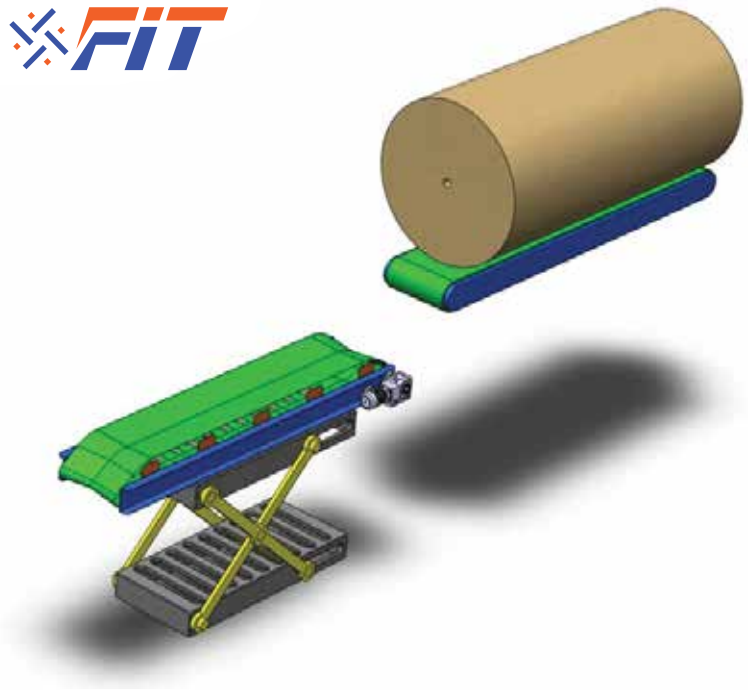
The maximum cutting speed of 100 meters per minute refers to the highest speed at which the material can be cut without sacrificing quality or causing damage to the cutting machine.

A well-designed HMI can also improve the operator's experience by providing an intuitive and user-friendly interface to ensure smooth operation of backned looper and new winder.



Specification

Hydraulic Power Pack	2 HP
Lift Conveyor Max Height	1.8 meter
Lift Conveyor Up-Dn Speed	4 meter /minute
Max Conveyor Speed	10 Meter/Min
Max Roll Width	2300 MM
Max Winding Diameter	2000 MM
Power Suppply	415 volt AC, 3 Phase, 50 Hz



Peeled Roll Unloading System

Description

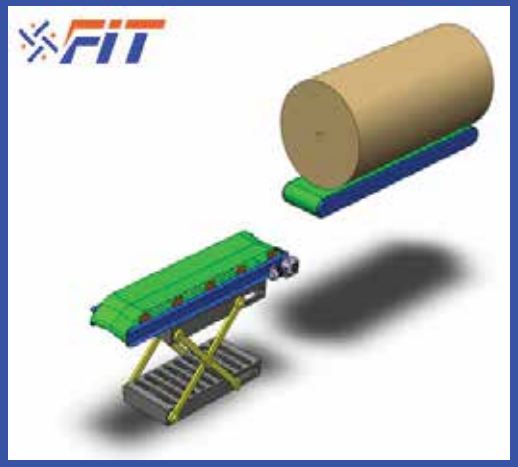
This auto roll unloading system is also add -on assembly on your existing Looper machine, the roll can be unloaded from machine winder to floor automatically

An idler conveyor designed to handle a maximum foam roll diameter of 2 meters can be used to transport large foam rolls with a diameter up to 2 meters. The idler conveyor uses a series of rollers, or idlers, to support the foam rolls and allow them to be moved from one location to another.

The combination of a hydraulic vertical lift and idler conveyor helps to streamline the process of collecting and moving foam rolls, making it a useful tool for many industrial and manufacturing applications. By lifting and lowering the rolls with ease, the hydraulic vertical lift with inbuilt idler conveyor can help to improve production efficiency and reduce the risk of injury from manual handling.

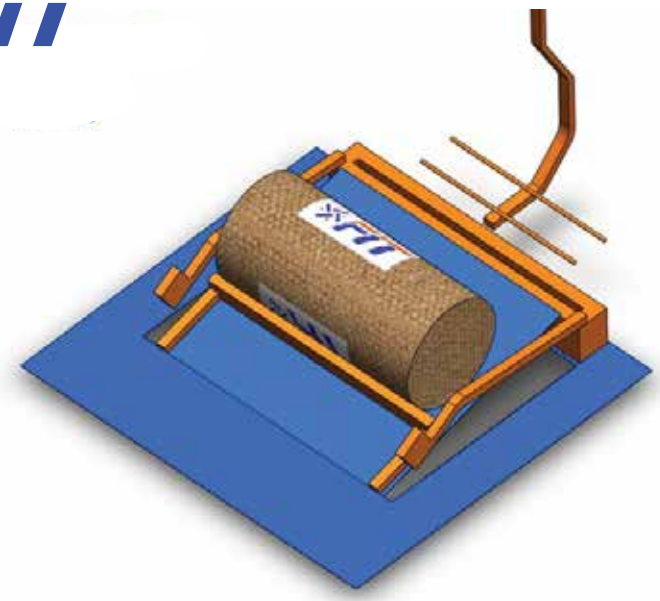
A pneumatic stopper equipped with the main conveyor can be used to hold foam rolls and prevent winded rolls from touching existing winding rolls. The pneumatic stopper is actuated by compressed air, which allows it to quickly and precisely hold the foam rolls in place.

The maximum speed of 5 meters per minute helps to complete the roll unloading cycle efficiently and in a timely manner, ensuring that the main conveyor is available to collect the next foam roll from the winder.



Specification

Auto Roll Alignment Infront Of Hanger	YES
Capacity Per Hanger	70 KG
Length	Customized
Max Conveyor Speed	5 Meter/Min
Max Roll Diameter To Be Transfered	2000 MM
Max Roll Width	2300 MM
Power Suppply	415 volt AC, 3 Phase, 50 Hz
Type	Four wheel Overhead conveyorization
Weight Hanger	22 KG



Peeled Roll Loading And Transfer System

Peeled Roll Loading And Transfer System

Description

The Foam Roll Loader is designed to lift rolls from the ground and load them onto the transfer system

The Foam Roll Loader can handle rolls up to 2300 mm in width and provides proper centering of the rolls in line with the hanger of the transfer system.

The electromechanical pusher provides a gentle push to the foam roll, allowing it to be dropped smoothly into the hanger of the transfer system.

The transfer system consists of a four-wheel overhead conveyor with multiple hangers to maintain a continuous flow of roll loading and unloading at the destination.

The hangers can handle a weight of up to 100 kg for the foam rolls, and the self-weight of each hanger is approximately 22 kg.

To transfer the foam rolls from one location to another safely, the maximum allowed speed of the conveyor system is 5 to 7 meters per minute.

Specification

Compressed Air Range	6-8 Bar
Cycle Time	2.5 Minute/Roll
Max Roll Dia (Input Material)	2000 MM
Power Suppply	415 volt, 3 Phase, 50 Hz
Roll Volume Redction	500-900 mm3
Roll Width	2200 MM
Variable Conveyor Speed Range	0-15 Meter/Minute

Roll Compression Machine

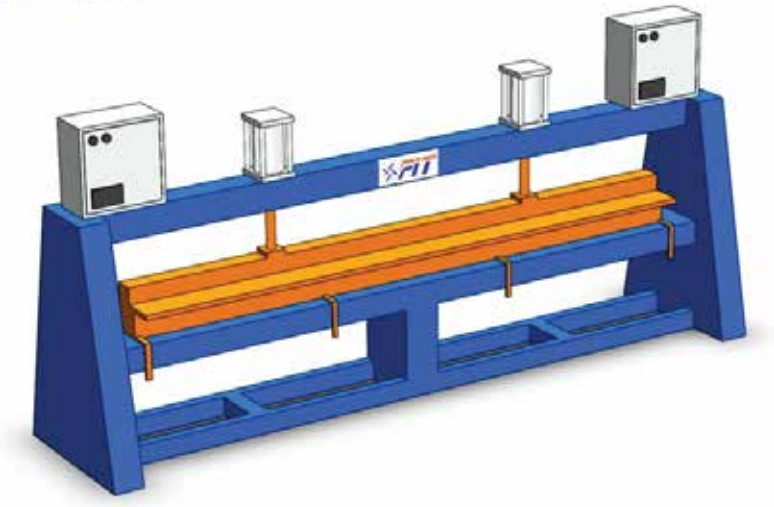
Roll Compression Machine

Description

Roll compression system for compressing the foam roll
Belt speed is 20 meter/minute
Supports foam roll width up to 2200 MM
Supports foam roll diameter up to 2000 MM
Reduction of foam roll volume from 500 mm to 900 mm depending on the type of foam.

Specification

Control Type	Button
Joint Thickness Max	0-20mm
Joint Width Max	2150mm
Total Power	2kw
Warm Up Time Adjustment	Yes



Foam Jointing Machine

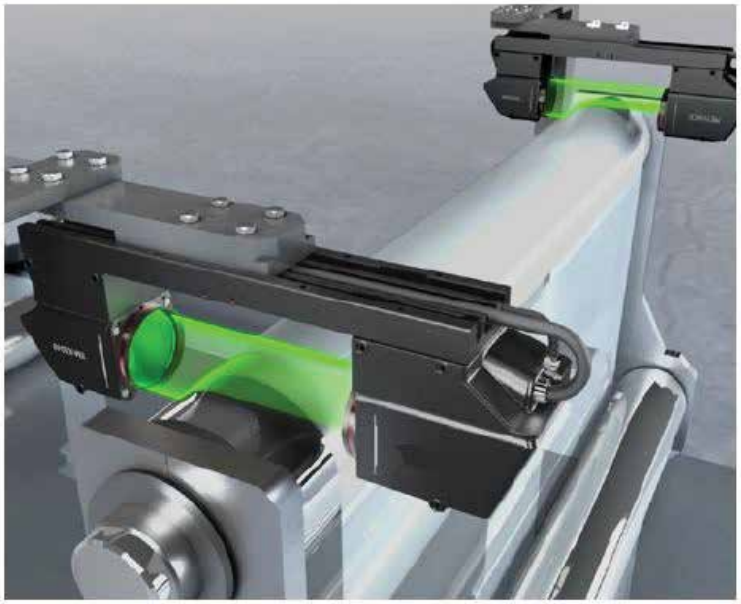
Foam Jointing Machine

Description

This machine joints the foam sheet of up to 20 mm
It consists impulse heat seal technique and pressure range of 6-8 bar which helps to bond the foam proper.
Operator can adjust the heating and cooling time with digital timers

Specification

Power	500 watt, 220 -240 VAC, 50 HZ
Measuring Range	2 to 25 MM
Accuracy	0.1 to 0.2 MM
Distance light source to receiver	100 to 500 MM as per site condition
Measuring Rate	2.5 Khz
Light source	Semiconductor laser 670 nm (Red)
Protection class	Ip67
Material	Aluminium Housing
Laser Class	Laser class 1



Online Thickness Measurement System for Looper

Description

Non-contact Optical Micrometer Technology – Uses a high-precision optical micrometer system (source & receiver) to measure foam thickness.

Real-time Thickness Monitoring – Continuously measures foam thickness during production, ensuring accuracy within ±0.1 mm (100 microns).

Wide Thickness Range – Supports 1.8 mm to 25 mm foam thickness measurement for various market requirements.

User-defined Tolerance Settings – Customers can set thickness tolerance between 0.1 mm to 0.2 mm based on production needs.

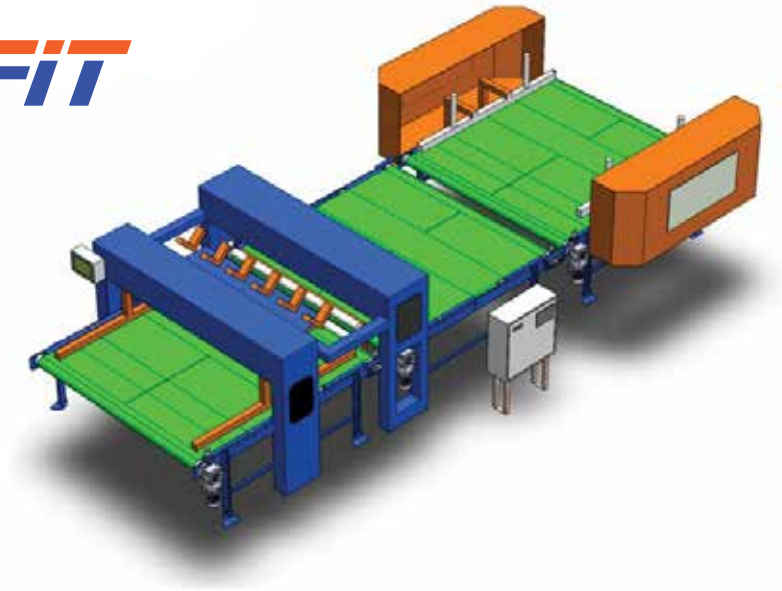
Instant Alerts & Alarm System – Triggers alarms if thickness variation exceeds the specified tolerance, helping operators take immediate corrective actions.

Data Logging & Reporting – Automatically records thickness data for process analysis, quality control, and traceability.

Advanced Dashboard & Software – Provides real-time visualization of thickness trends, historical data, and alerts on a dedicated interface. Seamless Integration – Can be integrated with existing Looper Machine control systems for automation and process optimization.

Specification

Compressed Air Range	6-8 Bar
Cycle Time	2 mattress/minute
Ldpe Film Thickness	70 -150 Micron
Ldpe Film Width	2520 mm
Maxmattress Size	82X84 Inch
Max. Mattress Height	15 Inch
Min.Mattress Height	2 Inch
Min. Mattress Size	36X60 Inch
Power Suppply	415 volt AC, 3 Phase, 50 Hz, 22 KW



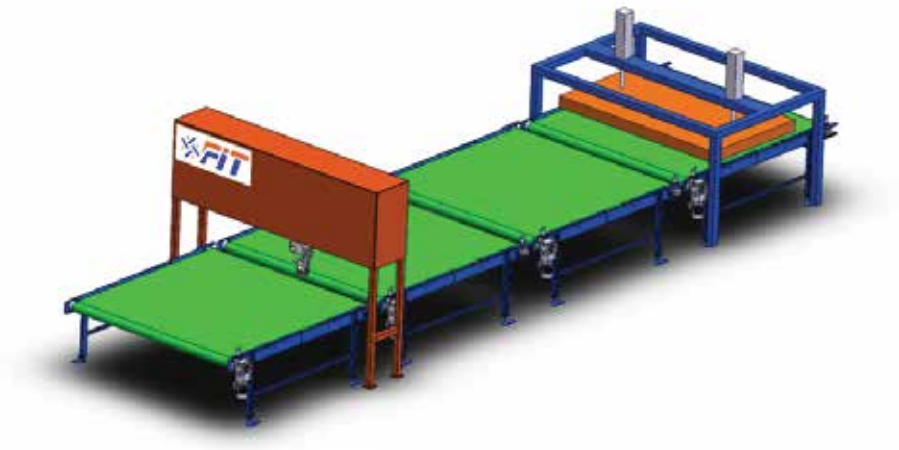
Automatic Mattress Packing Machine

Description

Product Size Range: The machine can handle mattresses with a maximum size of 82 x 84 Inch and a minimum size of 36X60 Inch.
Wrapping Speed: The machine can wrap up to 2 wraps per minute, indicating a relatively high wrapping efficiency.
Self-Adjustment: The machine is capable of adjusting itself to accommodate different sizes of mattresses. It likely has an automated length-width-height measuring system, allowing it to adapt to various mattress dimensions without manual adjustments.
Flexibility: The machine's high flexibility enables it to pack a wide range of products without the need for frequent adjustments. This feature allows for efficient packaging of different items without significant downtime. Vertical or Horizontal Feeding: The machine offers the option to feed the mattresses either vertically or horizontally, providing flexibility in accordance with specific requirements.
Automatic Side Compression: The machine employs an automatic side compression system to ensure that the wrapped mattresses are tightly secured with film. This feature helps in maintaining the integrity and stability of the packaged products during transportation.
Energy-Saver Cold Sealing Technology: The machine utilizes an energy-saving cold sealing technology, which eliminates the need for wiring and reduces seal problems commonly associated with heat-sealing methods.
Automatic Side Film Trimmers: The machine includes automatic side film trimmers that cut the excess film from the wrapped mattresses, resulting in neat and tidy packaging.
Double Sealing System: The machine incorporates a standard double sealing system to enhance the security and durability of the wrapped mattresses.
Automatic Side Compression System: In addition to the side compression mentioned earlier, the machine includes an automatic side compression system specifically designed to achieve tight wraps.
Unique Plastic Tightening System: The machine offers a specialized plastic tightening system for products that are not easily compressible. This feature ensures proper wrapping even for items with irregular shapes or sizes.
Servo Driven Motion System: The machine utilizes a servo-driven motion system, which provides precise control and smooth operation during the packaging process.
Easy Adaptation and Integration: The machine can easily adapt to existing production lines and ERP systems, allowing for seamless integration into the manufacturing process.
Online Maintenance and Training System: The machine likely provides an online maintenance and training system, allowing for remote assistance, troubleshooting, and training to ensure optimal performance and efficiency.
Quick and Easy Communication: The machine supports quick and easy communication with existing machines on the production line, facilitating smooth coordination and workflow.

Specification

Compressed Air Range	6-8 Bar
Cycle Time	2 mattress/minute
Glue Pattren	Perimeter and center gluing
Glue Type	Solvent based spray
Max Core Size	78X84 Inch
Max. Core Height	12 Inch
Min. Core Height	2 Inch
Min. Core Size	48X36 Inch
Power Suppply	415 volt, 3 Phase, 50 Hz, 15 KW



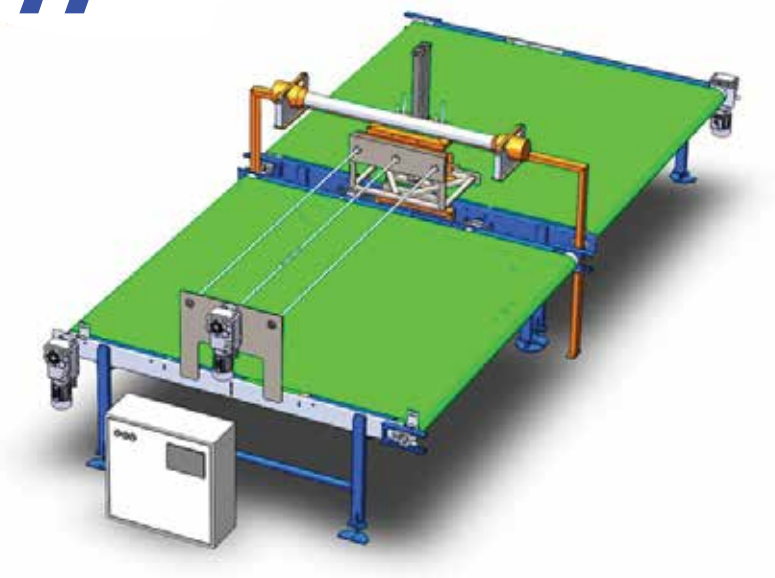
Glue Spray Line

Description

Oscillating Center Glue Heads: The machine utilizes oscillating glue heads positioned at the center, ensuring uniform glue application across the mattress surface for improved bonding strength.
Self-Aligning Infeed Conveyor: The machine features a self-aligning infeed conveyor that automatically adjusts to accommodate different mattress sizes, streamlining the workflow and reducing the need for manual adjustments.
Enhanced Bonding Strength and Reduced Glue Consumption: The machine incorporates a mattress press, resulting in higher bonding strength between layers while minimizing glue consumption.
Intermittent Gluing Capability: The machine offers intermittent gluing capability, allowing for precise and controlled application of glue, which further reduces glue consumption while maintaining optimal bonding quality.
Tailor-Made Projects: The machine can be customized for specific project requirements, ensuring a perfect fit for individual manufacturing needs.
Self-Detection of Mattress Sizes: The machine is equipped with advanced sensors that can detect the width, length, and height of the mattress automatically, eliminating the need for manual adjustments.
Advanced Offset System: The machine utilizes an advanced offset system, eliminating the need for adjustments when working with different mattress sizes, thereby reducing human error and mess during operation.
Servo Motor Driven Conveyors and Glue Guns: The machine incorporates servo motor-driven conveyors and glue guns, providing precise and efficient movement and application of glue for consistent results.
Laser Sensors for Color Insensitivity: Equipped with laser sensors, the machine is not affected by color variations in the mattresses, ensuring consistent and accurate glue application regardless of the material's color.
Reliable Control System: The machine is equipped with a reliable control system known for its high efficiency, ensuring smooth operation and precise control throughout the manufacturing process.

Specification

Compressed Air Range	6-8 Bar
Cycle Time	35 seconds /mattress
Laminated Band Width	100 -500 MM
Ldpe Laminated Band	70 -150 Micron
Maxmattress Size	78X84 Inch
Max. Mattress Height	15 Inch
Min.Mattress Height	3 Inch
Min. Mattress Size	72X36 Inch
Power Suppply	415 volt AC, 3 Phase, 50 Hz, 5 KW



Center / Belly Band Machine

Center / Belly Band Machine

Description

Fully Automatic Operation: The Belly Band machine eliminates the need for manual application of belly bands on mattresses by utilizing automated processes.

Sealing Position: The sealers of the machine are designed to accurately position the belly band on the mattress while ensuring high- quality sealing.

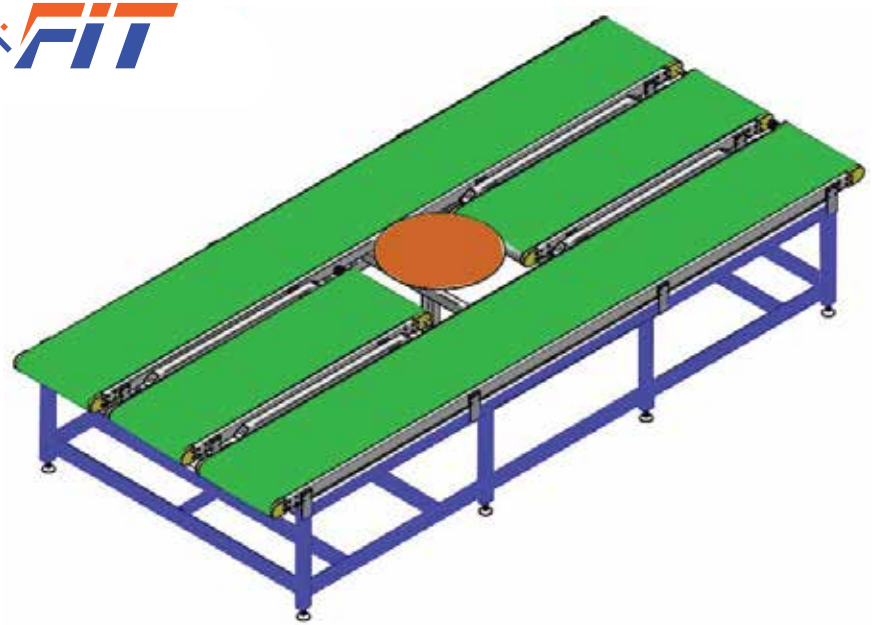
Operator-Friendly and Integration Capable: The machine is user- friendly and can be easily synchronized with a quality station conveyor, allowing for seamless wrapping of the belly band on quality- approved mattresses.

Automatic Start and Stop Function: The infeed conveyor of the machine automatically starts and stops based on the availability of mattresses on the conveyor, optimizing the production process.

Quick Product Changeover: The machine features three belly band holders at a single station, enabling swift changeover between different product ranges, reducing downtime.

Specification

Air Pressure	6-8 bar
Max Productheight	40 CM
Max Product Size	215X215 CM
Max Product Weight	100 KG
Power Requirement	415 Volt AC, 3 Phase, 50 HZ, 1.5 KW



Quality Table And Mattress Flipper

Description

Automatic Mattress Centralizing System: The Quality Station machine is equipped with an advanced automated system that ensures precise centralization of mattresses. This feature eliminates the need for manual adjustments and guarantees consistent alignment throughout the production process.

Able to Integrate into Any Line: The Quality Station machine is designed to seamlessly integrate into various production lines. It is compatible with different manufacturing setups, allowing manufacturers to incorporate it into their existing systems without significant modifications or disruptions.

4 Arms Flipping for Smooth Mattress Lowering: With its innovative design, the Quality Station machine is equipped with four arms that facilitate the flipping process. These arms work in unison to ensure a smooth and controlled lowering of the mattresses. By minimizing abrupt movements, the machine helps prevent any potential damage to the mattresses.

Heavy Duty Conveyor System: The Quality Station machine features a heavy-duty conveyor system that is built to withstand rigorous and demanding production environments. This robust system enables the seamless transportation of mattresses, ensuring efficient workflow and minimizing downtime.

Heavy Duty Flipper: The flipper mechanism of the Quality Station machine is specifically engineered to handle heavy loads. It is designed to withstand the weight and size of mattresses commonly encountered in mattress manufacturing. This heavy-duty flipper ensures reliable performance and durability over extended periods of use.

Able to Work with One or Two Operators: The Quality Station machine offers flexibility in terms of operation. It can be efficiently operated by either one or two operators, depending on the production requirements and workflow preferences. This adaptability allows manufacturers to optimize their workforce allocation and maximize productivity.

Specification

Compressed Air Range	6-8 Bar
Cycle Time	30 Seconds /mattress (Inline with glue line)
Max Core Size	78X72 Inch
Max Weight Core	35 KG
Max. Core Height	8 Inch
Min. Core Height	3 Inch
Min. Core Size	72X36 Inch
Power Suppply	415 volt, 3 Phase, 50 Hz, 6 KW
Type Of Grippers	Needle gripper

Mattress Pick And Place System

Description

Customizable Configuration: The system can be customized according to the specific requirements of each customer, allowing for tailored adjustments and adaptations.

Cut Sheet Handling and Transfer: The system facilitates efficient pick and place operations for cut sheets, enabling seamless transfer of mattress components from one location to another. This significantly reduces reliance on manual labor, leading to improved productivity and elimination of manual handling risks.

Integration with Glue Line: The system seamlessly integrates with the glue line, effectively eliminating the need for manual core pasting activities on glue machines. It ensures automatic synchronization, optimizing the overall mattress manufacturing process.

Automated Precise Alignment: Through its advanced automation capabilities, the system achieves precise alignment of the fresh core onto the pasted core, ensuring a seamless fit without causing any damage or misalignment.

Single-Operator Efficiency: The add-on system empowers a single operator to manage the entire glue line, including the pick and place system. This consolidated operation minimizes manpower requirements and streamlines the production process. Furthermore, the system can be easily integrated into existing glue lines, enhancing their functionality.

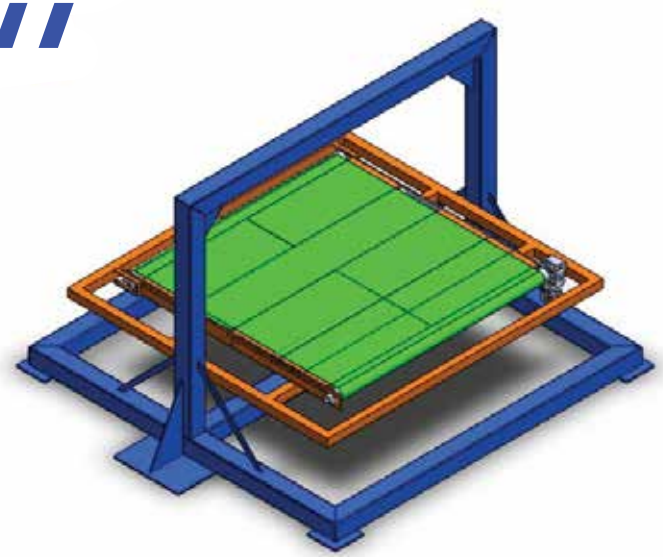
Flexible HMI for Mattress Size Selection: The system incorporates a Human-Machine Interface (HMI) that offers flexible options for selecting the mattress size. This feature enables smooth pick-up operations using specifically designed needle grippers, tailored to the chosen mattress dimensions.

Enhanced Operational Speed: The system operates at an accelerated pace, matching the cycle time of your current glue line. This improved speed ensures efficient workflow synchronization, maximizing production output and minimizing bottlenecks in the manufacturing process.

Indigenous Developed dedicate Needle grippers for foam cut sheets to transfer without damage to the foam.

Specification

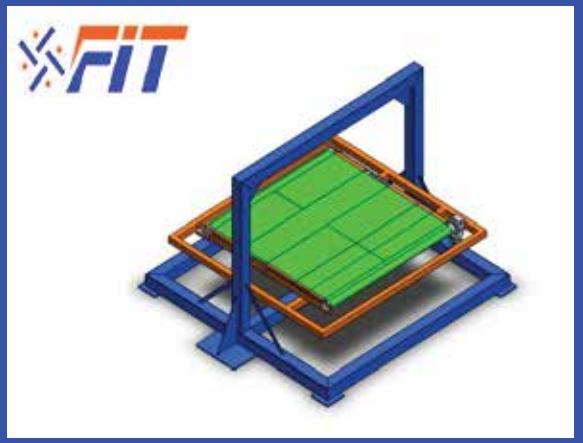
Capacity	30 seconds per stack
Max Producttheight	40 CM
Max Product Size	210X210 CM
Max Product Weight	100 KG
Power Requirement	415 Volt AC, 3 Phase, 50 HZ, 5 KW



Mattress Stacker

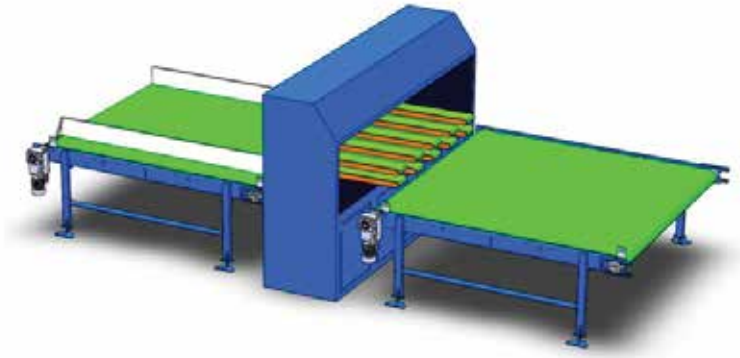
Description

Automated Product Placement on Pallets: The mattress stacker system offers an efficient and automated way to place mattresses or other products onto pallets, eliminating the need for manual labor and speeding up the stacking process.
Optimized Space Utilization: The system is designed to make the best use of available space by stacking the products in a compact and organized manner. This maximizes storage capacity, simplifies inventory management, and facilitates the movement of products to different areas of production.
Operator and Forklift Elimination: By automating the stacking process, the system eliminates the need for operators or forklifts to manually lift and stack the mattresses. This reduces labor costs, minimizes the risk of injuries or accidents, and improves overall operational safety.
Gentle Handling of Products: The mattress stacker system employs gentle handling mechanisms to ensure the mattresses are stacked without damage. This protects the integrity of the products, preserving their quality and reducing waste.
Integration with Conveyor Systems: The system seamlessly integrates with existing conveyor systems, enabling smooth and continuous movement of mattresses from the production line to the stacker for automated stacking.
Precise Positioning and Alignment: The stacker system utilizes advanced positioning and alignment mechanisms to ensure accurate placement of mattresses on the pallets. This helps maintain stability and uniformity in the stacked loads.
High-Speed Stacking: The system is designed for efficient stacking at high speeds, contributing to increased productivity and throughput in mattress production or distribution facilities.
User- Friendly Interface: The stacker system features a user-friendly interface that allows operators to easily configure stacking parameters, monitor the stacking process, and make adjustments as needed.
Safety Sensors and Emergency Stop Features: The system incorporates safety sensors and emergency stop features to ensure safe operation. These mechanisms detect potential hazards or obstructions and halt the stacking process to prevent accidents.



Specification

Air Pressure	6-8 bar
Capacity	30 -50 seconds (based on product type & operator skills)
Max Productheight	40 CM
Max Product Size	215X215 CM
Max Product Weight	100 KG
Min Height	10 CM
Min Product Size	80X150 CM
Power Requirement	415 Volt AC, 3 Phase, 50 HZ, 5 KW



Mattress Filling Machine

Mattress Filling Machine

Description

Automatic mattress zipper cover filling machine
Robust conveyorized feeding forks for filling heavy mattresses effectively
Auto width and height adjustment system for mattresses:
Height adjustment range: 10 cm to 40 cm
Width adjustment range: 80 cm to 215 cm
Motorized controls for height and width adjustment
Heavy-duty conveyorized stretching forks for reliable performance
Mattress and cover protection sensors to prevent product damage
Automatic height measurement function for enhanced accuracy and efficiency

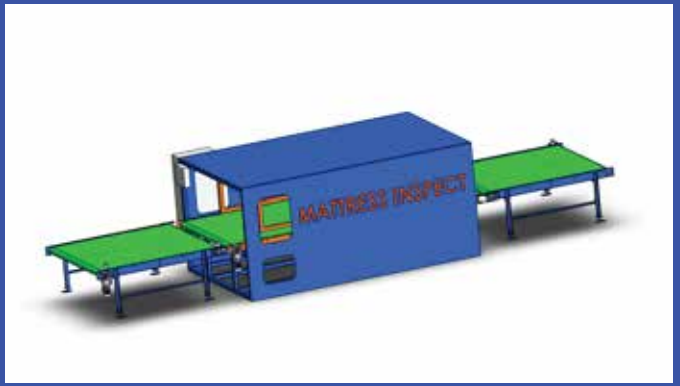
Specification

Conveyor Size 2.2 x 2.5 mtr (Mattress size supported 84X84 Inch)
Conveyor with auto centering aligners
Special Purpose measurement Sensors - Qty 5 nos
Cycle time - less than 30 seconds
Accuracy - +/- 5 MM
Vision Camera - Qty 1 nos
Label Printer - Qty 1 nos
Computer / Desktop with GPU unit - Qty 1 nos
Software for report & Label Generation
Power 1.5kw 415VAC
System control Panel -Qty 1 nos

Auto Mattress Measurement and Inspection System

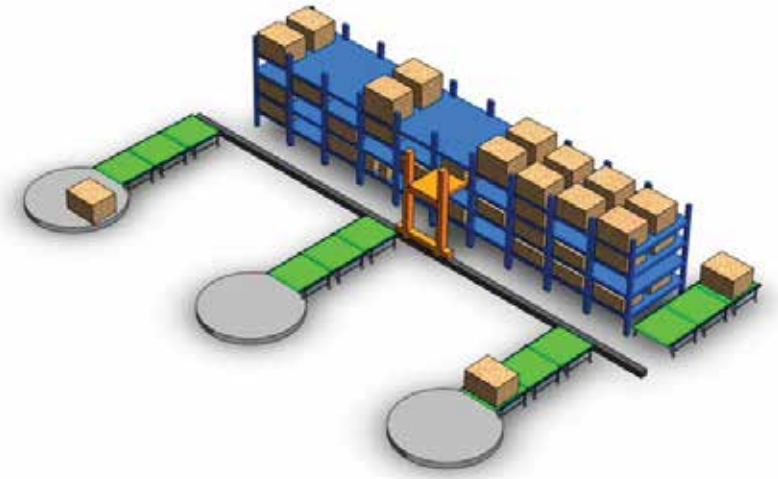
Description

Urethane Band Driven Roller Conveyor - Ensures smooth and controlled mattress transportation for accurate measurement.
Automated Mattress Center Alignment - Precision alignment through guided aligners for consistent measurement results.
High-Precision Laser Sensors - Special-purpose laser sensors provide accurate mattress length, width, and thickness measurements.
Smart Conveyor with Auto Start/Stop - Seamless mattress feeding with automated start/stop functionality for efficiency and safety.
Electro-Pneumatic Length Sensor Actuation - Automatic up/down adjustment of length sensors for dynamic and precise detection.
AI-Powered Vision Camera System - Identifies mattress models using quilt patterns and color recognition based on master data.
User-Friendly Dashboard & Reporting - Intuitive interface for tolerance settings, real-time monitoring, and automated report generation.
Integrated Label Printing - Prints quality control stickers and MRP labels instantly based on measured parameters for seamless tracking.



Specification

Block Loading To Circular	Through telescopic conveyors
Design	Customized
Max Block Size	78X84 Inch
Pop Up And Stacker	Pneumatic pop-up and electric stacker



Small Block Automation System

Small Block Automation System

Description

Customized solution according to plant layout and requirement of automation.
Small block system consists of block stacker shuttle , pop-up and telescopic conveyors to feed blocks on circular machines.
This will help to reduce the touch points and no need to roll out the blocks on floor from vertical cutting to circular machine, results improving yield.

Specification

Air Pressure	6-8 Bar
Compression %	65 to 80 % of total height (60 KG/M3)
Ldpe Film Thickness	0.09 MM
Ldpe Film Width	2500 MM
Max Lifting Distance From Base	1350 mm
Max Product Height	1300 MM
Max Product Size	78X84 Inch
Power Supply	415 VAC, 50 Hz , 3 Phase, 60 KW
Pressure	100 T
Worktable Size	2600X2300 MM

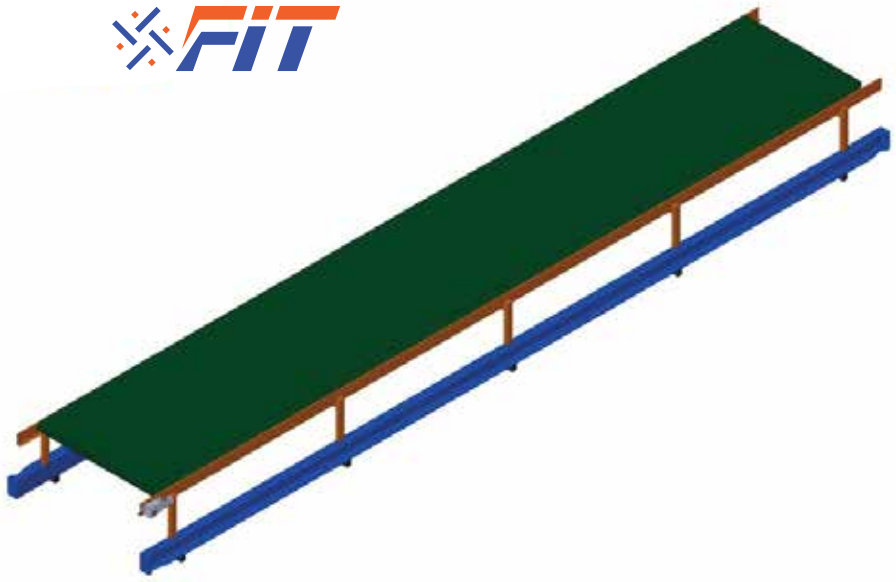
Small Block Compression Machine

Description

Robust Worktable: The foam block compression machine is equipped with a sturdy worktable, providing a spacious area measuring 2600 x 2300 mm for placing and compressing foam blocks.
Large Foam Block Size Capacity: The machine can accommodate foam blocks with a maximum size of 78 x 84 inches, allowing for compression of relatively large foam products.
Adjustable Compression Level: The machine offers the flexibility to adjust the compression percentage, ranging from 65% to 80% of the total height of the foam block. This feature enables customization based on specific compression requirements.
High Pressure Capability: With a pressure capacity of 100 KG/Cm2 the foam block compression machine can exert substantial force during compression, ensuring effective compaction of foam blocks.
Suitable Compression Density: The recommended compression density for foam blocks is up to 60 kg/m3, which helps achieve the desired compactness and stability of the compressed foam blocks.
The foam block compression machine is designed to work with LDPE (Low-Density Polyethylene) film. It requires LDPE film with a width of 2500 mm and a thickness of 0.09 mm for effective compression of foam blocks.
The foam block compression machine operates on a 415 VAC, 50 Hz, 3 Phase power supply, with a power consumption of 60 kW, providing ample energy for the compression process.

Specification

Accuracy	5 KG
Design	Customized
Display	Digital wireless display
Earthing	Separate chemical earth pit is required
Load Cell Footing	10 Ton
Max Product Width	2300 MM
Power Supply	230 Volt AC, 50 Hz
Type	30 Meter/60 Meter



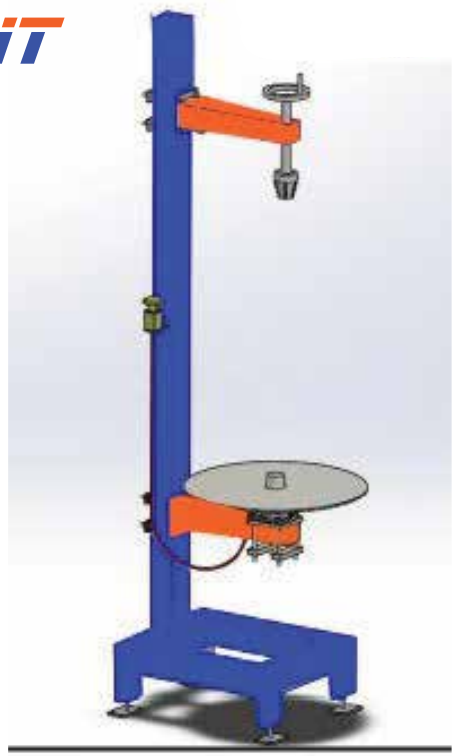
Long Block Weighing System

Description

High-Performance Load Cells: Incorporates advanced and highly accurate load cells specifically designed for heavy-duty weighing applications in the foam industry.
Multiple Length Options: Available in two length variations – 30 Meter and 60 Meter– to accommodate different production line layouts and requirements.
Sturdy Construction: Built with durable materials and a robust structure to withstand the demanding environment of the foam industry and ensure long-term reliability.
Easy Integration: Designed for seamless integration with existing foam production lines, allowing for efficient and streamlined weighing processes.
Real-Time Data Monitoring: Provides real-time weight data that can be monitored and recorded, enabling operators to track production metrics and ensure quality control.
User-Friendly Interface: Features an intuitive and user-friendly interface for easy operation, calibration, and adjustment of weighing parameters.
Data Logging and Reporting: Offers the capability to store and export weighing data, facilitating traceability, analysis, and reporting for quality assurance purposes.
Remote Access and Control: Allows remote access and control of the weighing system, enabling operators to monitor and manage the process from a centralized location.
Error Detection and Alarm System: Equipped with an intelligent error detection system that alerts operators in case of anomalies or deviations from predefined parameters.
Compliance with Industry Standards: Meets relevant industry standards and regulations, ensuring accuracy, reliability, and safety in foam block weighing operations.
Scalability: Designed to accommodate future expansions or modifications, providing flexibility to adapt to changing production needs.

Specification

Block Height	1300 MM
Max Dia Of Skin Roll	1 Meter
Motor Power	0.5 HP
Power Supply	400 V AC, 50 Hz,
Rewinding Speed	Variable
Torque	5 NM
Type	Torque Motor controlled



Foam Skin Winder

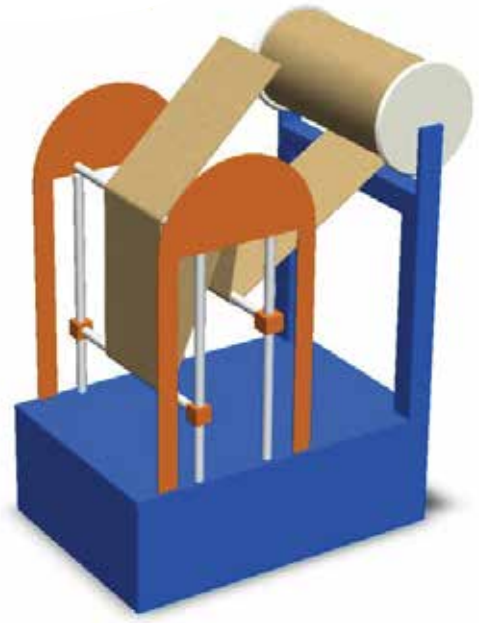
Foam Skin Winder

Description

Incorporates advanced torque motor to wind the waste foam skin while trimming.
It can accommodate waste foam skin up to 500 mm diameter, customize options are also availabYloeu.r paragraph text
Significantly eliminate the need of manual collection of waste foam skin, results reduction in manpower.
It can be easily integrated with your existing block trimming system
Pneumatically operated paper tube holder for ease of work

Specification

Max Dia Of Paper Roll	500 MM
Motor Power	0.5 HP
Power Supply	415 V AC, 50 Hz,
Rewinding Speed	Variable (Based on type)
Torque	5 NM
Type	Torque Motor controlled/Accumulation
Vfd Controlled	yes

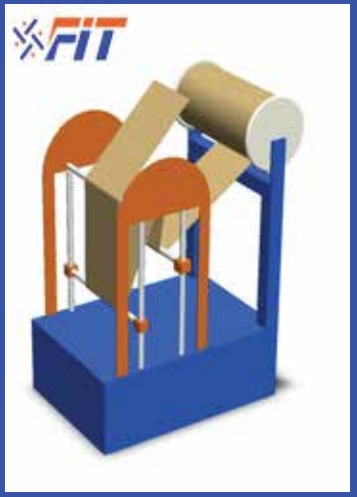


Paper Winder For Foaming

Paper Winder For Foaming

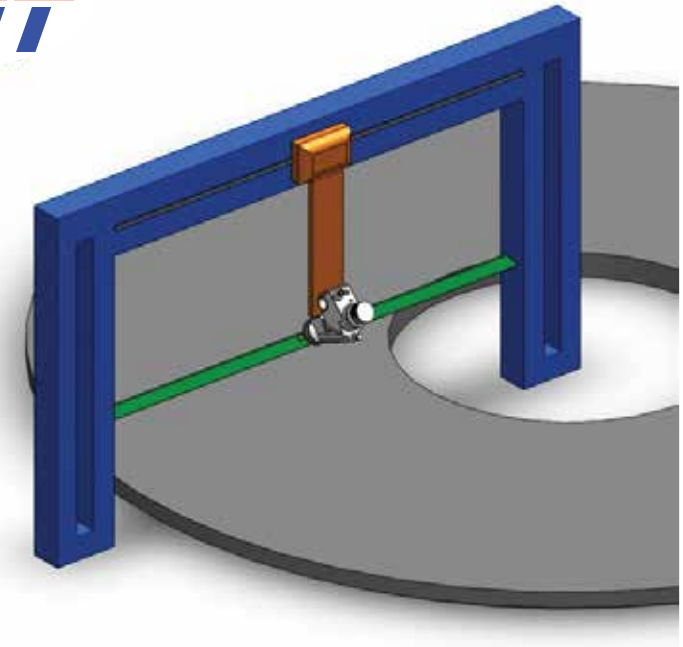
Description

Incorporates an small accumulator with small winder to wind the waste leftover top paper while foaming. leftover paper range: 25 mm to 300 mm
Thanks to the accumulator, don’t need to adjust the winding speed with respect to any change in your foaming conveyor speed.
Significantly eliminate the need of manual collection of waste paper, results reduction in manpower and also avoids sudden paper tearing and related foaming failures.
It can be easily integrated with your existing foaming machine



Specification

Air Pressure	1-2 Bar for Tank
Auto Spray Gun	0.8 mm Nozzle
Geared Motor	0.5 HP
Max Air Pressure	5-6 Bar for Gun
Power Supply	415 Volt, 50 Hz
Pressurized Silicon Agent Tank	2.5 Litre

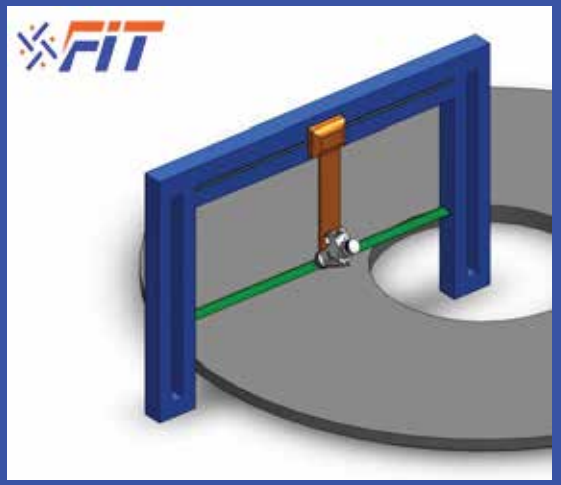


Auto Silicon Spray System At Circular

Auto Silicon Spray System At Circular

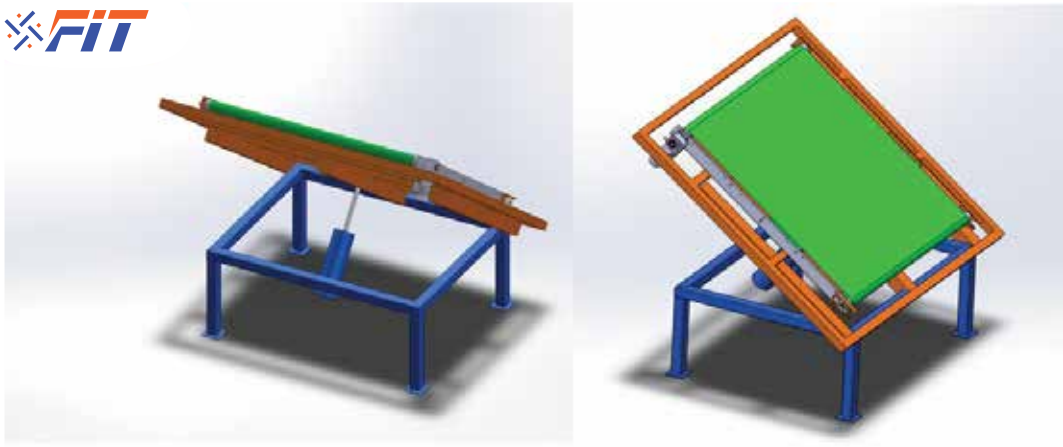
Description

Silicon spray system consists of pneumatically operated spray gun and a pressurized tank of 2.5 Litre capacity to store the silicon safely in it.
The system spray silicon automatically on blade guide for smooth foam cutting operation at circular machines. At any height of the cutting head this system can perfectly spray the silicon on blade guide.
It can be easily integrated with your existing circular machine to improve the safety of your operators, the operator can spray the siliconas and when required without going near the blade guides.
It can be controlled directly from the machine panel.



Specification

Air Pressure	6-8 Bar For Pop-up
Pop-Up Conveyor Size	2500X2500 MM (Cutomize options available)
Power Supply	415 VAC, 3 Phase, 50 Hz
Tilter Angle	80 Degree
Tilter Power Pack	2 HP (Hydraulic)
Tilter Size	2500X2500 MM (Cutomize options available)
Type	Electric/Pneumatic/Hydarulic

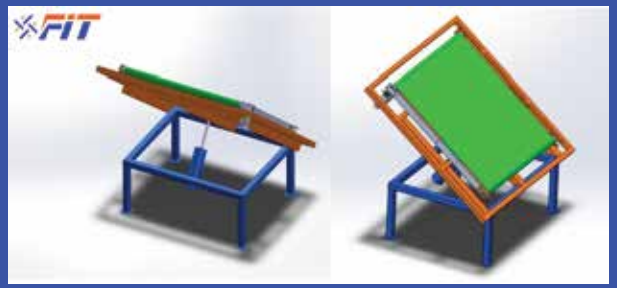


Hydraulic Tilter And Pop-up Conveyrization

Hydraulic Tilter And Pop-up Conveyrization

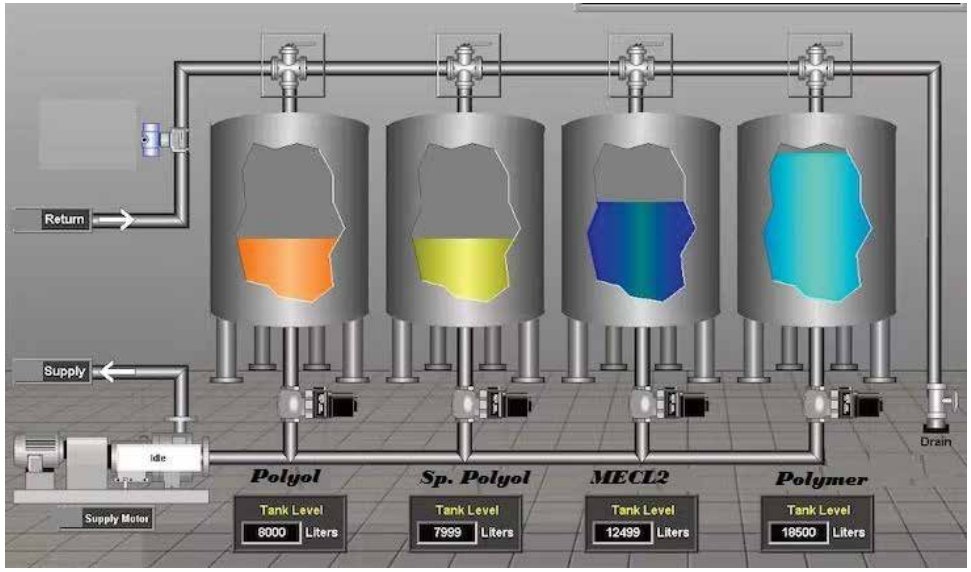
Description

Hydraulic tilters are useful in case you operate Goliath cranes for long block handling, or when you need clear space to move blocks/any material in other directions.
Hydraulic tilters will be used as a bridge between two conveyors and it gives path to the equipment or material as and when required.
These are easy to operate and able to customize as per the need of customer , tilting range is up to 85 Degree.
Conveyor length : 2 meter to 5 meter according the layout needs



Specification

Control Type	Closed loop control
Cut Off System	Low and high level cut off
Display	HMI at Chemical Loading and Foaming machine plateform
Temperature Display	Yes
Power Supply	230 Volt AC/ 24 VDC
Type	Loadcell/Transducer



Chemical Tank Level Automation And Controls

Chemical Tank Level Automation And Controls

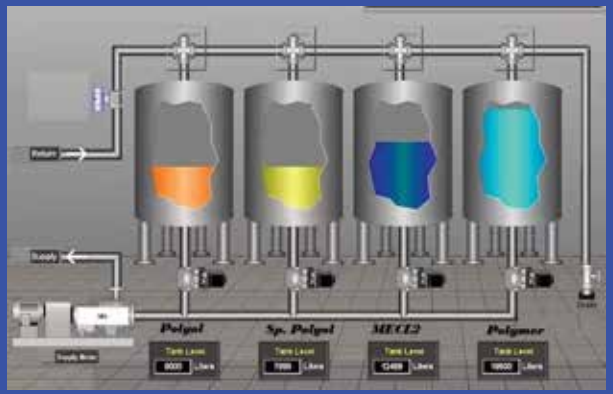
Description

System makes you able to track your tank level real time, provides the control to stop overflow and eliminate admission pressure fault in your machine.

Provides the real time chemical temperature as well.

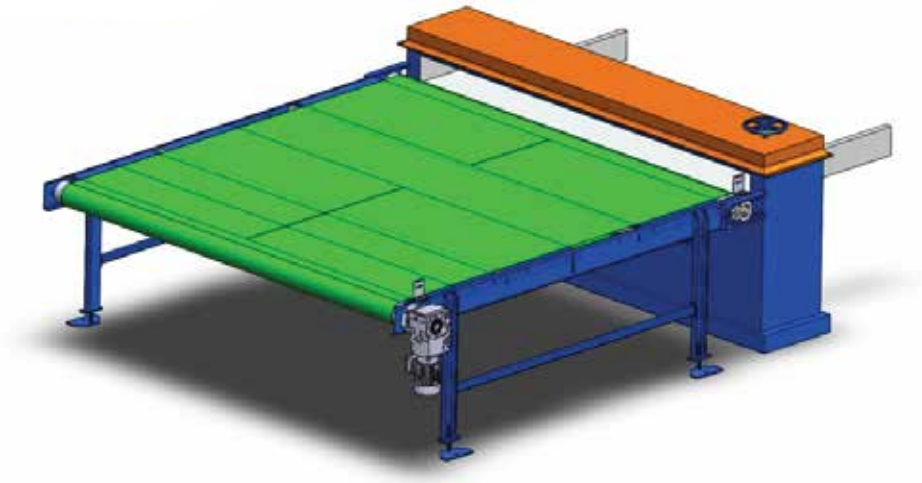
The system is able to integrate with local area network and can deliver all required information timely on your phone .

Precise measurement allows the Foamer to track inventory and control the daily production plan accordingly



Specification

Air Pressure	6-8 bar
Capacity	30 -40 seconds (based on operator skills)
Max Product Height	20 CM
Max Product Size	48X78 Inches
Max Product Weight	35 KG
Min Height	5 CM
Min Product Size	27X48 Inches
Power Supply	415 Volt AC, 3 Phase, 50 HZ, 5 KW



Foam Sheet Insertion And Packing System

Foam Sheet Insertion And Packing System

Description

Automatic sheet instertion machine
Robust conveyorized feeding forks for filling heavy sheets effectively Auto width and height adjustment system for sheets
Height adjustment range: 5 cm to 20 cm
Width adjustment range: 27 Inches to 48 Inches
Motorized controls for height and width adjustment
Heavy- duty conveyorized stretching forks for reliable performance
Mattress and cover protection sensors to prevent product damage

Specification

Control Type:	Automatic Electric Control.
Lifting Space:	0 ~ 800mm
Maxworking Size:	L2100mm*W600mm*H1100mm
Oil Hydraulic Pressure:	60Ton
Oil Tank Capacity:	300L
Total Motor Power:	7.5kw
Weight Of Bails	100 KG
Working Effiency:	25 ~ 30 Bails/8Hours
Working Speed:	0 ~ 15m/min

Compress Bailing Machine

Compress Bailing Machine

Description

Compress bailing machine prepared bails of scrap foam to save space and reduce transport cost

Operator can easily operate the machine through a control panel provided near the machine

Max pressure range is 60 Ton and the machine can prepare up to 100 KG bails

A pneumatic strapping gun is provided to seal the strap to secure the bail in compressed state.

Specification

Power adapter - Input 200-240 V, Output 5 V
Probe Length - 500 to 600 MM
Probe Dia - 4 to 5 MM
Probe tip -Sharp end to easily enter in foam
USB charging point option available

Wireless Real Time Foam Block Temperature Monitoring System

Description

Compact & Precise Temperature Probe - Battery operated probe with a diameter of less than 5mm and a standard length of 600mm (customizable based on requirements).

Wireless Connectivity – Built in Wireless signal receiver for seamless data transmission.

Cloud-based Monitoring – Real time temperature data is transferred to the cloud, accessible through a dedicated web portal with secure login credentials.

Rechargeable & Replaceable Battery – USB charging option for convenience and extended usage.

Multi-level Alarm System – Configurable up to three levels of temperature thresholds, sending SMS alerts to predefined mobile numbers.

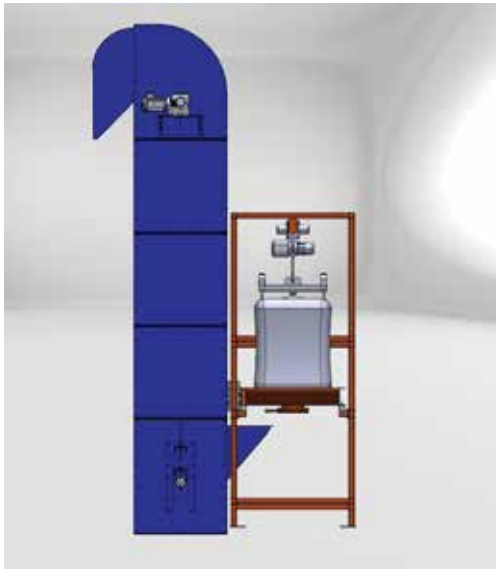
User-defined Alarm Settings – Customize temperature alerts for different foam grades to prevent overheating or inconsistencies.

Data-driven Decision Making – Enables process optimization by understanding curing temperature variations for different foam formulations.

Enhanced Safety & Risk Mitigation – Helps eliminate potential fire hazards by providing continuous monitoring of foam block temperature during curing.

Specification

Material Handling Capacity – 100 kg/min to 120 kg/min.
Lifting Height – Adjustable 5 meters to 6+ meters.
Belt Speed – 0.5 to 2 meters/second (adjustable).
Drive Type – Belt-driven for smooth operation.
Power Supply – 415V, 3-phase AC.
Bucket Material – MS Powder-coated for durability.
Feed/Discharge Type – Gravity-fed with optional enclosed discharge spouts.
Chute Angle – Adjustable 50° to 60° based on process requirements.
Control System – Pendant push-button
Emergency Stop System – Ensures operational safety.



Powder Loading System

The Calcium Carbonate Powder Loading System is designed to eliminate manual powder handling and improve productivity in PU foam manufacturing. Traditionally, operators manually lift and cut 25 kg HDPE bags or use forklifts to unload jumbo bags into the mixing tank, which is time-consuming and labor-intensive.

Our system automates this process using:

1. Jumbo Bag Dumping Station – Equipped with a chain hoist to lift and unload jumbo bags efficiently, eliminating the need for forklifts or manual lifting.
2. Bucket Elevator – Transports CaCO powder from the dumping station directly into the mixing tank without requiring workers to climb or manually transfer material.

This system allows a single operator to prepare a 10-ton batch in less than one hour, drastically reducing labor costs and ensuring dust-free, contamination-free material transfer.

Description

Jumbo Bag Handling Without Cutting – Designed to work with jumbo bags equipped with a bottom discharge neck to prevent contamination from bag fibers and reduce material loss.

Automated Powder Transfer – Eliminates manual powder loading by directly transferring material from the jumbo bag to the mixing tank via the bucket elevator.

No Forklift Required for pwder loading in tank– Integrated chain hoist system lifts and unloads jumbo bags, making forklifts and additional handling equipment unnecessary.

Single-Person Operation – One operator can efficiently manage batch preparation, significantly reducing labor dependency.

Increased Productivity – Enables preparation of a 10-ton batch in under an hour, compared to the traditional labor-intensive method.

Eliminates Climbing Risks – Since the bucket elevator is connected to the tank, there is no need for workers to climb on top of the tank to load powder manually.

Dust-Free & Contamination-Free Operation – Prevents contamination from HDPE bag fibers and reduces dust dispersion, ensuring a cleaner and safer working environment.

Heavy-Duty & Low-Maintenance Design – Built with corrosion-resistant materials, ensuring durability in continuous industrial use.

Our Reference

flexipol PU FOAM

Shakti

Säfari WORLD OF COMFORT
A Product Of Shakti Foams Pvt. Ltd.

IPF

Centuary MATTRESSES
INDIA KA SLEEP SPECIALIST

SHREE MALANI FOAMS PVT. LTD.

Libra MATTRESS

Nilkamal

duroflex

Our Services

Plant Layouts

- **Optimal Plant Design:** Tailoring the plant layout to maximize efficiency and productivity in foam and mattress production.
- **Space Utilization :** Analyzing and recommending ways to make the best use of available space for machinery, storage, and workflow.
- **Ergonomics and Safety :** Ensuring that the plant layout promotes a safe and comfortable working environment for employee.
- **Material Flow Optimization :** Designing layouts that streamline the movement of materials, minimizing bottlenecks and delays.
- **Expansion Planning:** Assisting in planning for future growth and expansion, allowing for seamless scalability.
- **Scope of Automation :** Figuring out possible automation to reduce manpower and offers way-out to optimize the overall processes.

Green Field & Brown Field Projects

- Facility Design
- Technology Integration
- Production Optimization
- Equipment Upgrades
- Cost Efficiency

Foamatomatic International Technologies Private Limited No 36/2, Raghavendra Complex, Near Mc Donalds
Indlabele Road Anekal Taluk, Attibele
Bengaluru Karnataka 562107 India
GSTIN 29AAFCF4130L1ZI

+919574000609,+919916208853

foamatomatic@gmail.com,
info@foamatomatic.com

THANK YOU!