

TATHAM

Medical Textiles & Pilot Lines



Stewarts of America, Inc

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Company Background



Tatham has successfully been supplying medical textile lines since 1873.

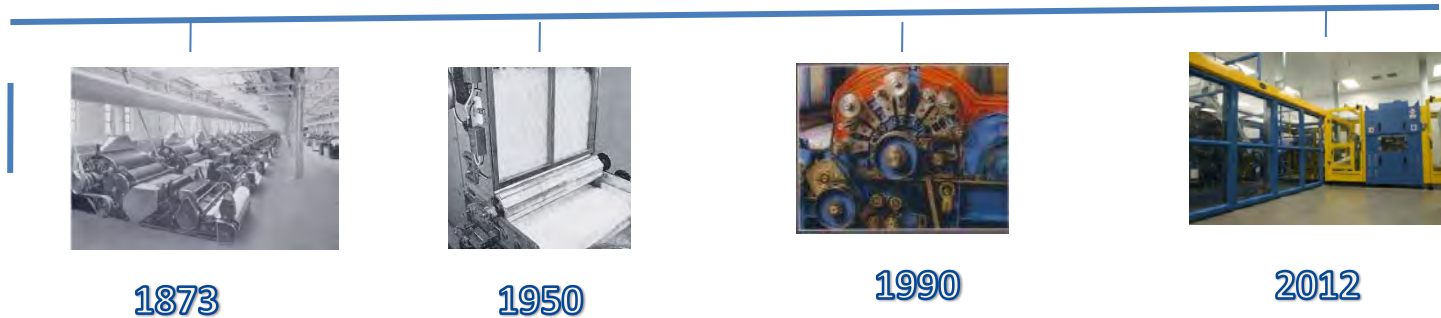
Company Operations

- Offers bespoke engineering solutions
- First alginate card line supplied in 1996
- Full range of fibre opening equipment
- 20,000 Carding machines worldwide
- Complete service and technical support

Application experience

All machinery is manufactured to conform to FDA regulations

- No natural rubber or animal derived materials
- No wood content
- Stainless steel wire
- Food grade lubricants
- Sealed for life bearings



Company Background

Reference installations;



SFM

Speciality Fibres and Materials Ltd.



Advanced Medical Solutions Group plc



Robinson
Healthcare



Medical Machinery



- Fibre Opening
- Carding
- Crosslapper
- Fibre Bonding
 - *Needlepunch Technology
 - *Thermal Bonding
- Processing Technology
 - *Weight Control Devices
 - *Machinery Drives
- Perforating Machinery
- Ancillary Equipment

Fibre Opening

Designed to suit fibre and production requirements

- Feed hopper
- Fibre opener
- Feeding system (Shirley wheel)
- TS Electrical control system



Fibre opening lines worldwide



Weighing Bale Opener – WBO1/1250/2000 c/w Bale Loading Platform



Weighing Bale Opener – WBO1/1250/2000 c/w Bale Loading Platform



Weighing Bale Opener – WBO1/1250 – Loadcell Weighpan

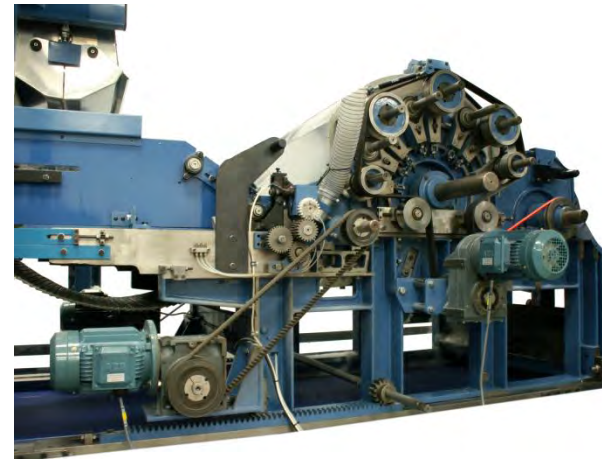


Horizontal Pre-Opener – HP02/1000

Carding

Carding Line

- Fibre Hopper
- Weigh control system
- Medical card [300mm / 1500mm]
- Crosslapper
- TS Electrical control system



Crosslapper



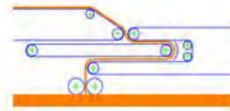
Crosslappers are designed to suit product width.

Model: CM1



Technical details

Card web width:	1m-2.5m
Maximum doffer speed:	Up to 70m/mim
Laying width:	Up to 12m
Profile capability:	No
Options:	Double sided delivery, FDA approved materials

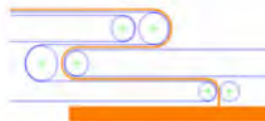


Model: CM2



Technical details

Card web width:	2.0m-3.0m
Maximum doffer speed:	Up to 100m/mim
Maximum laying speed:	
Laying width:	Up to 7m
Profile capability:	Yes, with TSX technology
Options:	Double sided delivery, FDA approved materials

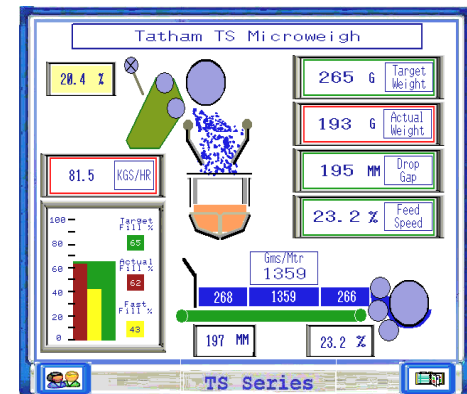


Weight Control



Microweigh TS

- New controls for simple design
- High speed communication protocols
- 'Reactive fill control'. The spiked lattice is controlled relative to the chute level.
- User friendly HMI screen with on-screen help assistant
- Built in diagnostics
- Ease of maintenance



Machinery Drives



TS Electrical control system

- New control and logical components
- The latest high technology inverter drives
- TFT graphics displays
- Innovative remote diagnostics support
- Energy efficient designs
-



Fibre Bonding



We can offer fibre bonding to suit product requirements.

- **Needlepunch Technology**
- **Thermal Bonding**

Needlepunch Technology



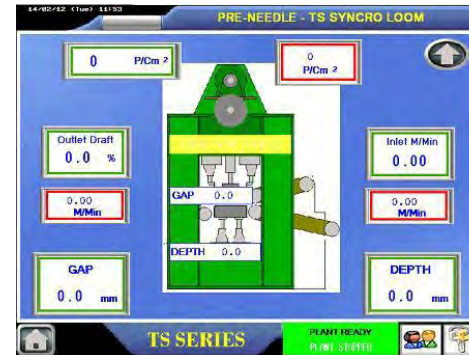
Feeding system FS1

Working width 1200mm
Framework to support inclined conveyor and compression conveyor
Grooved steel rollers with soft knurling
Set of plastic (PA) fingers



Upgrade to include :

Stripper plate adjustment by AC geared motor
Penetration depth adjustment by AC geared motor
Controls to existing upper/lower penetration depth and gap adjustment
Digital display of Needle board positions
Top dead centre fix
10" Colour touch screen control for all parameters and settings



Single Board Needle loom DP1

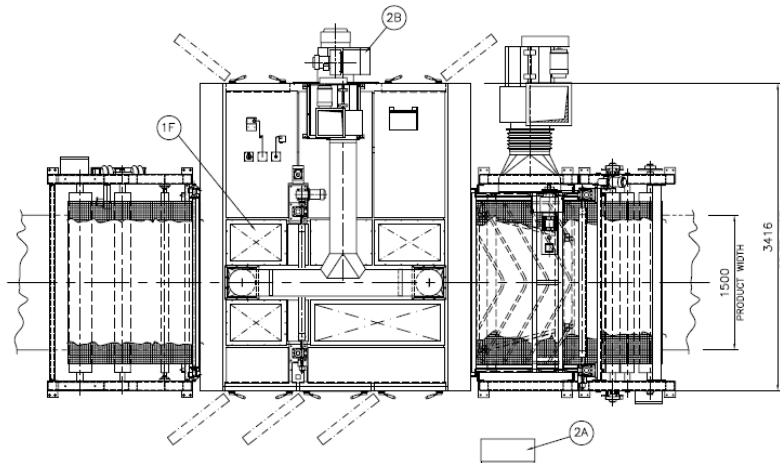
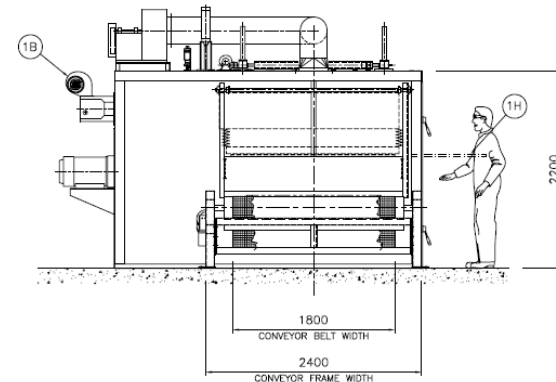
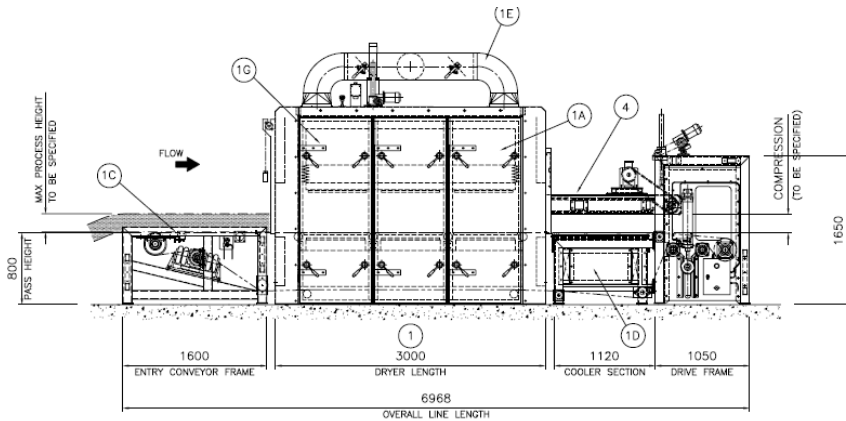
4,000 needles/lin.m.
Down punch
1200mm working width
40mm stroke
800rpm stroke frequency
11kW main drive motor
0.75kW draw motor
0.75kW feed motor
Manual adjustment (by wheel) between bed and stripper plate
Scale indicator for bed & stripper plate position
Draw roller with pneumatic lifting

Simple electrical control system

Floor Standing Control Panel wired the following equipment:-
1 - 11Kw AC Inverter Drive
2 - 0.75Kw AC Inverter Drive
1 - Braking resistor
All contactors and necessary overload devices for above
Pushbuttons and displays
E-stop circuit

Thermal Bonding

High Performance Thermal Bonding Equipment, flat bed thermal bonding equipment provides advanced technology for the processing of medical textiles.



- 1) SINGLE ZONE THERMAL BONDING OVEN
- 1A) AIR DISTRIBUTION CHAMBER (optional height adjustable)
- 1B) GAS BURNER UNIT
- 1C) PRODUCT TRANSPORT CONVEYOR
- 1D) PRODUCT COOLER
- 1E) BALANCED EXHAUST SYSTEM
- 1F) EXPLOSION RELIEF ROOF PANELS
- 1G) INSULATED OVEN ACCESS DOORS
- 1H) DISTRIBUTION / NOZZLE PLATES (easily removable for cleaning)
- 2A) OVEN CONTROLS
- 2B) GAS BURNER CONTROLS
- 4) OPTIONAL PRODUCT COMPRESSION BELT SYSTEM

Rev.	No.	To	Date
Prints issued			

Roll up / Slitting



Range of equipment could be supplied according to product requirement.



Perforating



We also specialise in the field of Perforation. Our expertise allows us to offer various methods of perforating all types of medical material.



Ancillary Equipment



Metal Detection

Advanced detection of metal contamination for Medical process application



Stainless steel card wire

Tatham are the only suppliers of stainless steel card wire for medical applications worldwide

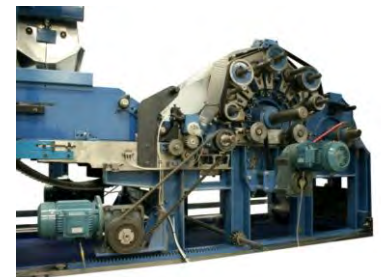


Web / Scrim Handling

Designed to suit end-user requirements

Dust Extractions

Integrated dust extraction system



Project Management



Product Sampling

Assessment Of Machine Specification

Commercial Arrangements

Technical Data

Preparation Of Factory Plans For
Foundation/Civil Engineering Drawings

Delivery And On-Site Installation/
Commissioning Programmes

Start-up & Production schedules

Full After-Sale Service



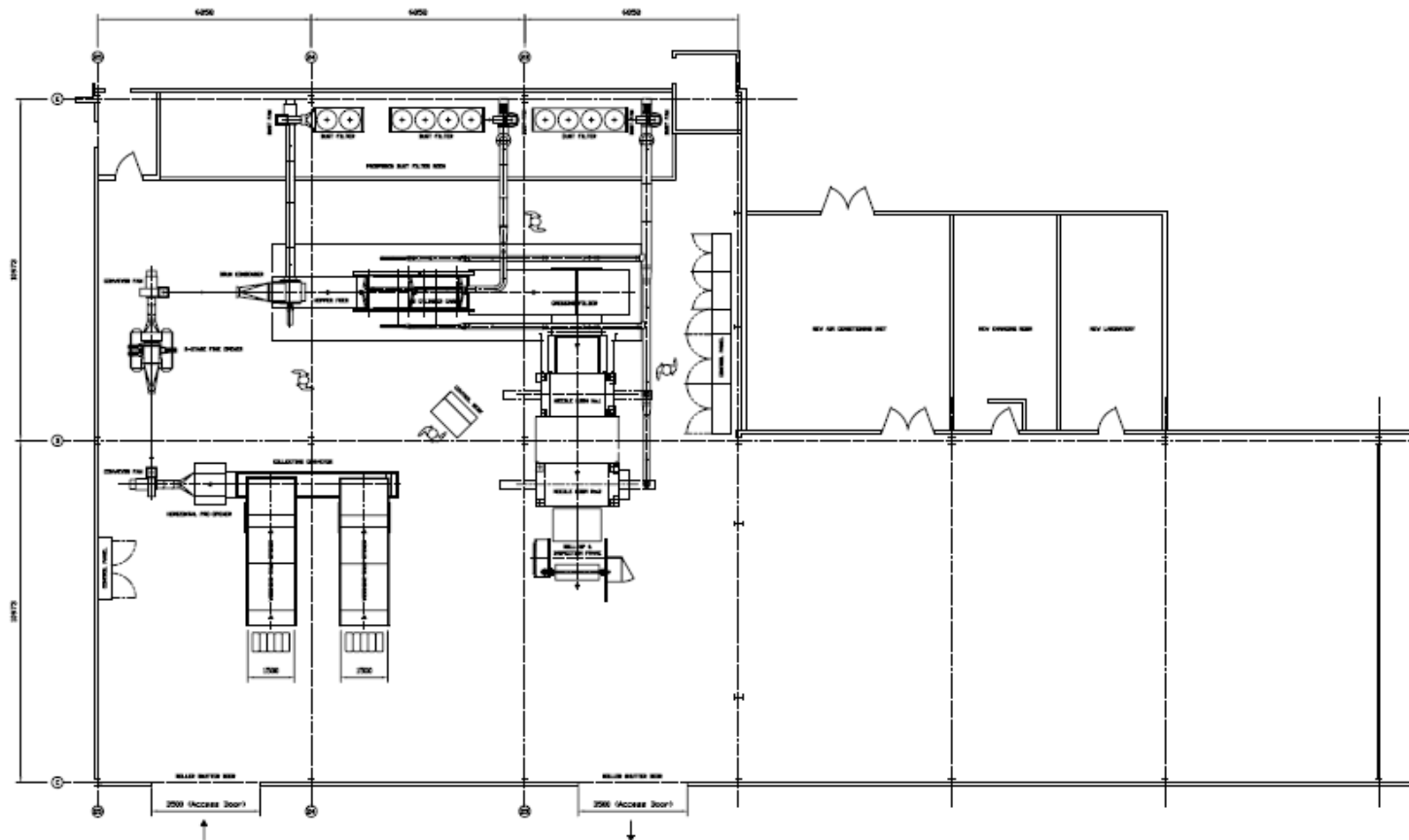
Project Management



Tatham are experienced in all types of medical fibre processing.

Your benefit:

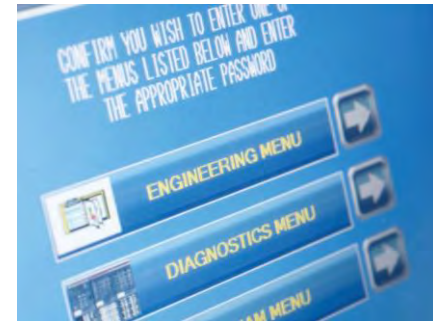
- Medical fibre processing knowledge
- Flexible and individual solutions
- Proven and successful plant references



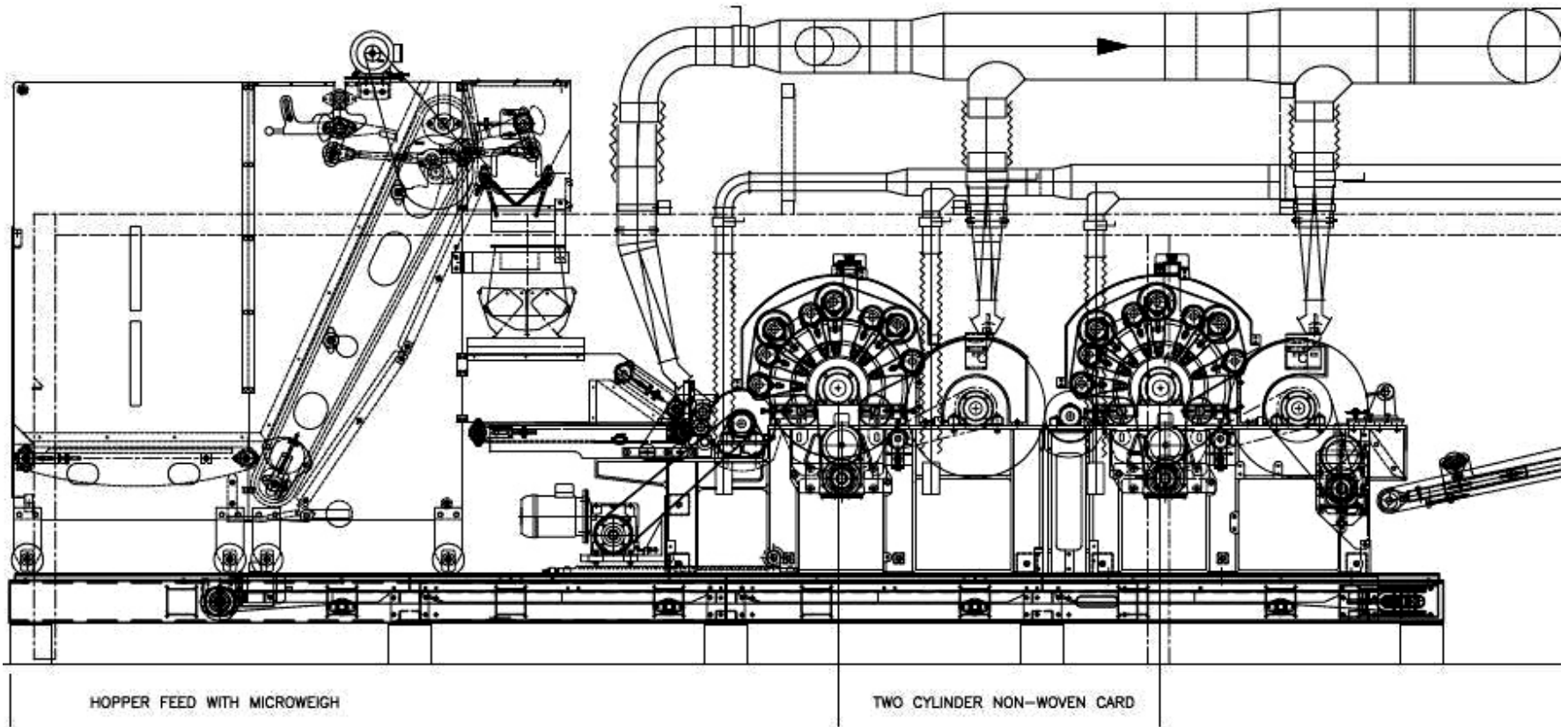
Spares



- Technical support
- Spare parts
- Textile engineering
- Needleboards
- Spiked lattices to FDA specification
- Geared motors



Typical card layout for alginate fibres



Typical pilot line card

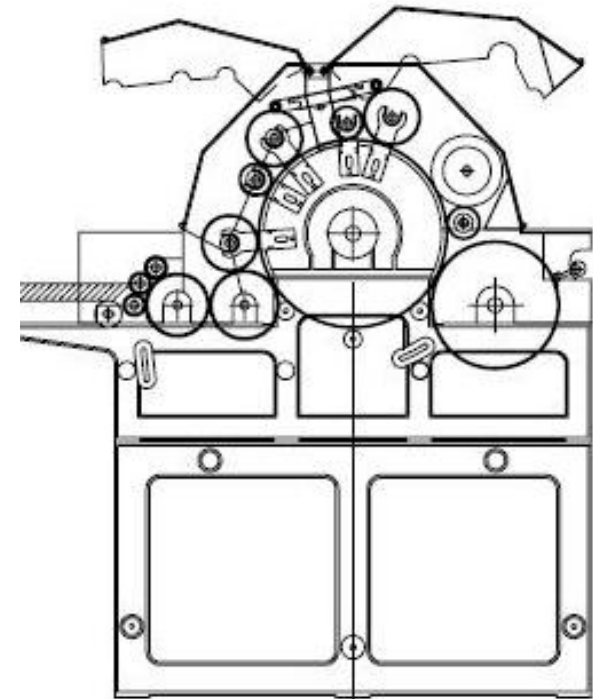
TATHAM

Specification;

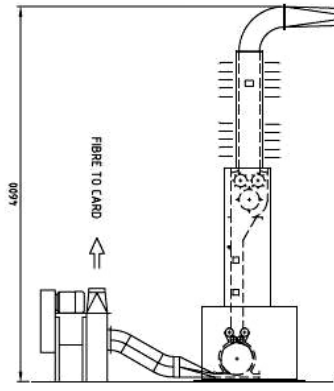
*Card can be designed to suit any width from 300mm to 1500mm

Standard roller configuration;

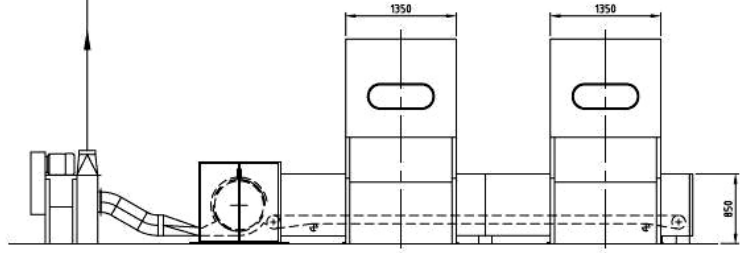
- 3-Intersecting feedrollers 40mm dia.
- 1-Taker- in 130mm dia.
- 1-Tummer 130mm dia.
- 1-Main Cylinder 400mm dia.
- 1-Tummer Worker 115mm dia.
- 2-Workers 115mm dia.
- 2-Strippers 65mm dia.
- 1-Fancy 100mm dia.
- 1-Flystripper 65mm dia.
- 1-Doffer 270mm dia.



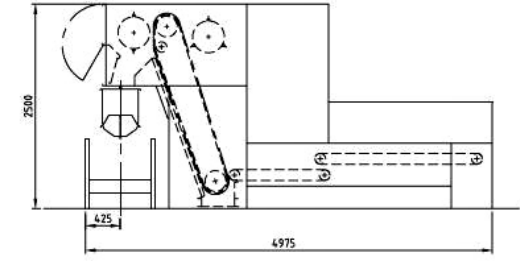
Typical blending line



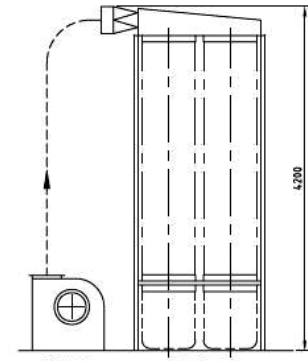
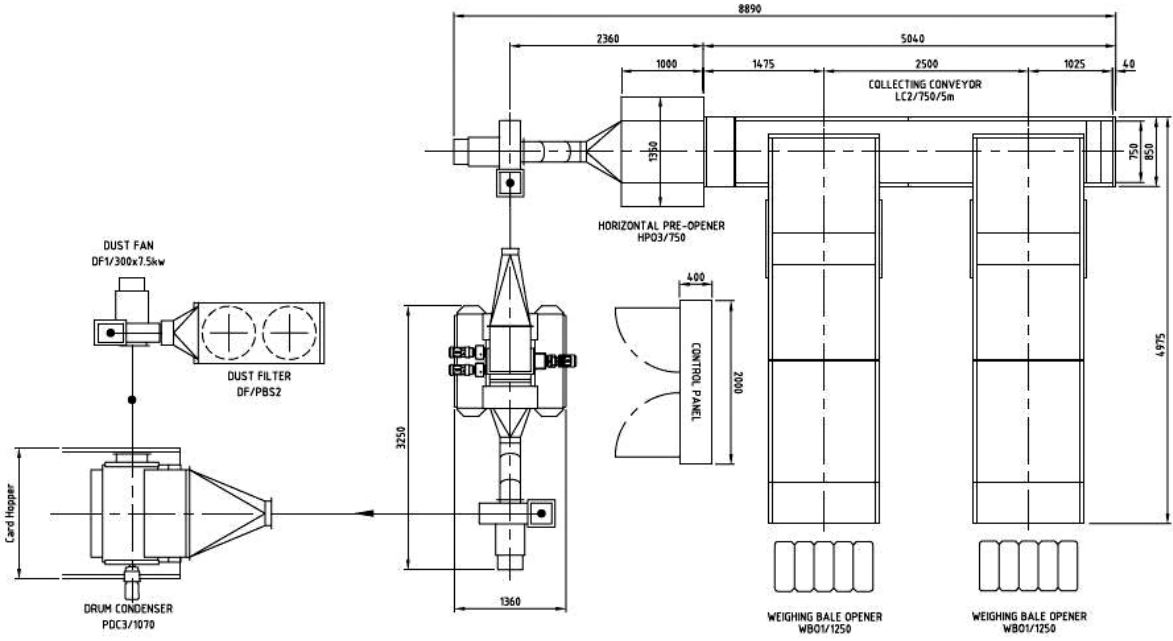
ELEVATION ON FINE OPENER



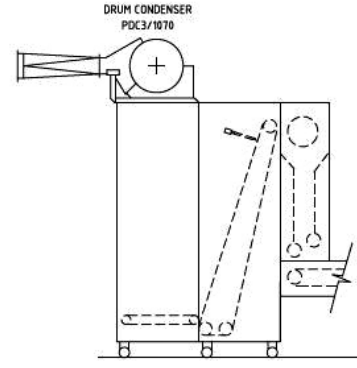
ELEVATION FROM LOADING SIDE



SIDE ELEVATION WEIGH HOPPER c/w FEED TABLE & BALE TIPPER



SIDE ELEVATION ON FAN & FILTER



SIDE ELEVATION ON CARD HOPPER