Hi-TECH Stenter

Temperature Control Efficiency and Accessibility

HT - ASPIRE - 2100 Series

Absolute reliability

in the finishing

results and tailored

machine engineering

Solutions is fabric finishing - HITECH STENTER

Hi-TECH

PADDER WITH HIGH ENTRANCE BOWED & SKEW WEFT

- Different type of combination of padders like 3 Bowl / Inclind, 2 Bowl / Horizontal or Vertical.
- Material and hardness of roll covering can be chosen to suit the desired finishing process of the fabric
- Pressure of rolls are controlled By pneumatic cylinders, regulators and valves
- Stainless steel cladding inside the wall of padder with SS cylinder covers
- Stainless steel liquer through with rollers is of proper capacity single or double trough on request
- Drive is controlled by frequency converter and synchronised with master motor by means of mechnical compensator or pneumatic compensator. For knit fabric load cell can be provided
- Fabricated or structural high entrance provided with mechanical cloth guider, frame and scroll roll for easy feeding of cloth.
- Electro Mechanical weft and bow for correcting the disttorted fabric before the fabric enters in to the chamber.

AVAILABLE SHORE A HARDNESS FOR MANGLE ROLLERS	
100 Shore A	Ebonite (Natural Rubber)
95 Shore A	Max squeeze
90 Shore A	Max squeeze
85 Shore A	Synthetic Rubber
80 Shore A	Synthetic Rubber
75 Shore A	Synthetic Rubber
70 Shore A	Synthetic Rubber

OPTIONAL ARRANGEMENTS

- Video camera control buttons
- Static electricity eliminator
- Programable logic control system
- Pneuamatic edge spreader
- AC cooling system for electrical control panel
- Gas burners for Gas fired chambers.
- Small batch winders
- Special batching
- Extension track
- Edge Gumming and Trimming system
- Cooling Zone
- Centering Device
- J – Scray
- Special Pin Bars
- Big Display Meter Counter
- Load Cell For Knit Fabric

FABRIC INFEED SYSTEM AND PINNING DEVICE

- Sturday Fabricated Heavy Duty Feeding Compartment
- Overfeeding and underfeeding system is driven by heavy duty gear box, motor and controlled by frequency converter independantly.
- Sophisticated Cockpit having drive control system, speedometer, temperature controller, weft & skew control system for easy accessibility to operator
- E+L make photocensor to guide the fabric at entrance for proper greeping with pin bars
- E+L make pneumatic cloth guider pair with frame suitable for heavy and light fabric guiding the fabric at high speed accurately
- Heavy duty aluminium/stainless steel scroll roll for knitted fabric
- Mechanical, pneumatic pinning system with separate geared motor on both side of rail and controlled by frequency converter.
- Pneumatically Operated Selvedge Tension System, Pinning Wheel Lisfted & Lowered Pneumatically.
- Exact Overfeed & Underfeed Adjustment Range From -20% To +60% For Diff. Fabric Needs
- Controlled Fabric Guidence For Optimum Feeding For All Kind Of Delicate, Knitting To Heavy Fabrics.
- Automatic oil pump for track lubrication.



DELIVERY SECTION WITH PLAITER AND BATCHING

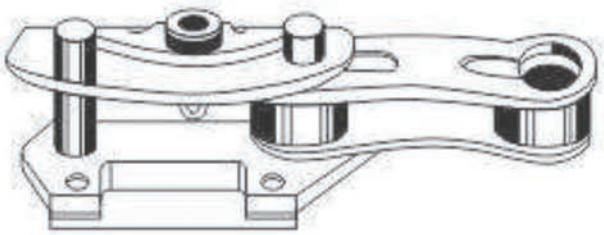
- Sturdy fabricated heavy duty delivery compartment
- The main chain is driven by the motor controlled by the frequency converter that acts as the main command unit for the whole machine
- Fabricated or structural jerk free tension regulated plaiter and batching
- Take off roll is driven by heavy duty gear box and motor controlled by frequency converter
- Conical drive system provided inside delivery compartment
- Big batching with pneumatic loaded arrangement
- Independent drive for plaiter and batching, controlled by frequency converter.

CONFIGURATION OF CHAMBER

- Compact sturdy and efficient dryer
- Uniform air velocity and temperature distribution by increse of hot air circulation through specialy designed high velocity impleller
- Multy blade radial blower impeller directly coupled with ring type AC motor for positive transmission
- Hinged type door for comfortable treatment of maintenance
- Jet nozzles are designed to obtain maximum evaporation
- Complet chamber is covered with high density mineral wool insulating panels and doors for minimum radiation losses
- Easy cleaning of filters during fabric operation this increases the efficiency of machine and operation
- Blower motor speed is controlled by frequency converter

CHAIN ASSEMBLY

- Extremely robust and low maintenance chain
- The fabric is smoothly converted either on pins, clip or combination of pinclips made out of special aluminium dye cast mounted or alloy steel graded chain fitted with sintered metal shoes. the chain glides on centiron seasoned ground rails.
- Top part can also be provided with graded MS material



BLOWER IMPELLER AND RADIATOR

Dynamically balanced, backward curved multy blade, radial blower fan.

Multy pass oval shaped spirrally wound finns heavy duty oil/steam radiators.

ELECTRICAL CONTROL PANEL

MS fabricated control panel with its readily accessible circuit house the necessary switch gears, fuses, mcbs, main switch, transformers, frequency converters, cables, cable trays, synchronizing card, chock etc... for all electric functions and is according to latest advances in electrical and electronic engineering. equiped with total current and voltage meters to access the actual consumption of power.

PLC WITH FOLLOWING FEATURES

- Over feed/ under feed
- Main motor
- Blower motors
- Selvedge Tensioning at inlet desk
- Plater/ bacthing
- Swinging arm
- Outlet roller, Exhaust motors
- Speedo meter/ meter counter
- Temprature Controller in HMI

Other accessories like
Panel A C
CCTV with monitor
Speaker with microphone
Field wiring cables
Cable trays
Can be provided on request.

PROCESS CONTROL

- Machine hour, meters run, machine speed indication.
- Drive status screen for inlet & outlet
- Selvedge tensioning at inlet device
- Outlet roller speed indication
- Blower motor rpm indicator
- Temperature controller with HMI
- Exhaust motor rpm indication
- Controlled declaration of speed to final standstill for normal shut down and emergency stop.
- Control and monitoring in the inlet and outlet area.
- 10" touch screen HMI at inlet, command input by touching the displayed range components.
- 7" touch screen HMI at outlet.
- Machine can be operated from outlet HMI.

BLOWER LOCAL OPERATION

BLOWER 1	ON OFF	0	BLOWER 6	ON OFF	0
BLOWER 2	ON OFF	0	BLOWER 7	ON OFF	0
BLOWER 3	ON OFF	0	BLOWER 8	ON OFF	0
BLOWER 4	ON OFF	0	BLOWER 9	ON OFF	0
BLOWER 5	ON OFF	0	BLOWER 10	ON OFF	0

INVERTER LOCAL OPERATION

MANUAL			BATCH	ON OFF	0
FABRIC	ON OFF	0	CHAIN	ON OFF	0
OVERFEED	ON OFF	0	PLATER	ON OFF	0
SELVAGE	ON OFF	0	ESENTRIC	ON OFF	PORT REFERENCE
TAKE OFF	ON OFF	0	COOLING	ON OFF	0

TEMPERATURE SET POINT

	SP	PV		SP	PV
TEMP. 1	200	184	TEMP. 6	200	184
TEMP. 2	200	175	TEMP. 7	200	200
TEMP. 3	200	132	TEMP. 8	200	208
TEMP. 4	200	186	TEMP. 9	200	208
TEMP. 5	200	198	TEMP. 10	200	173

PORT REFERENCE (-100 TO 100)

FABRIC PORT	0	TAKEOFF PORT	60
OVERFEED PORT	0	PLATER/BLITCH PORT	10
SELVADGE PORT	0	COOLING PORT	0

FAST SLOW START STOP

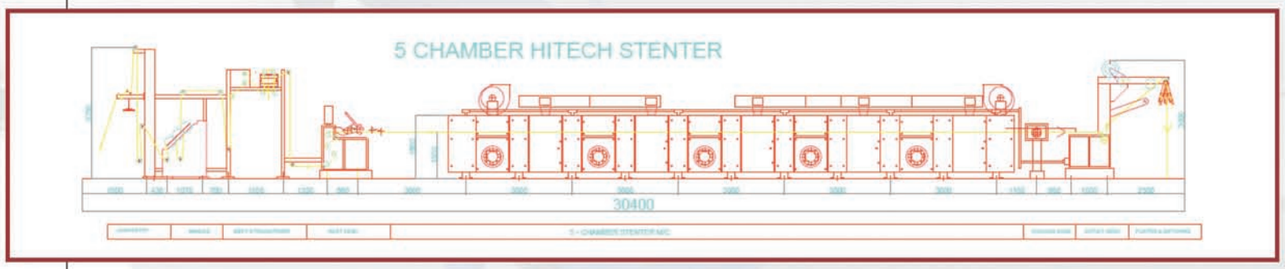
32

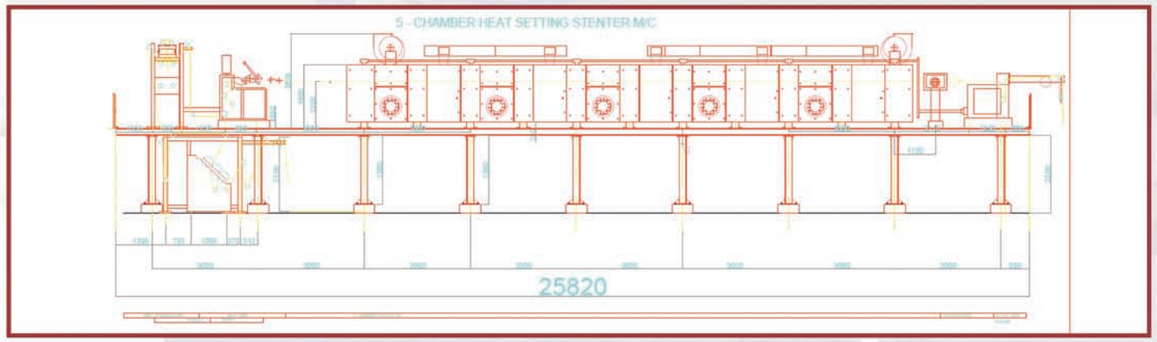
BLOWER SET POINT

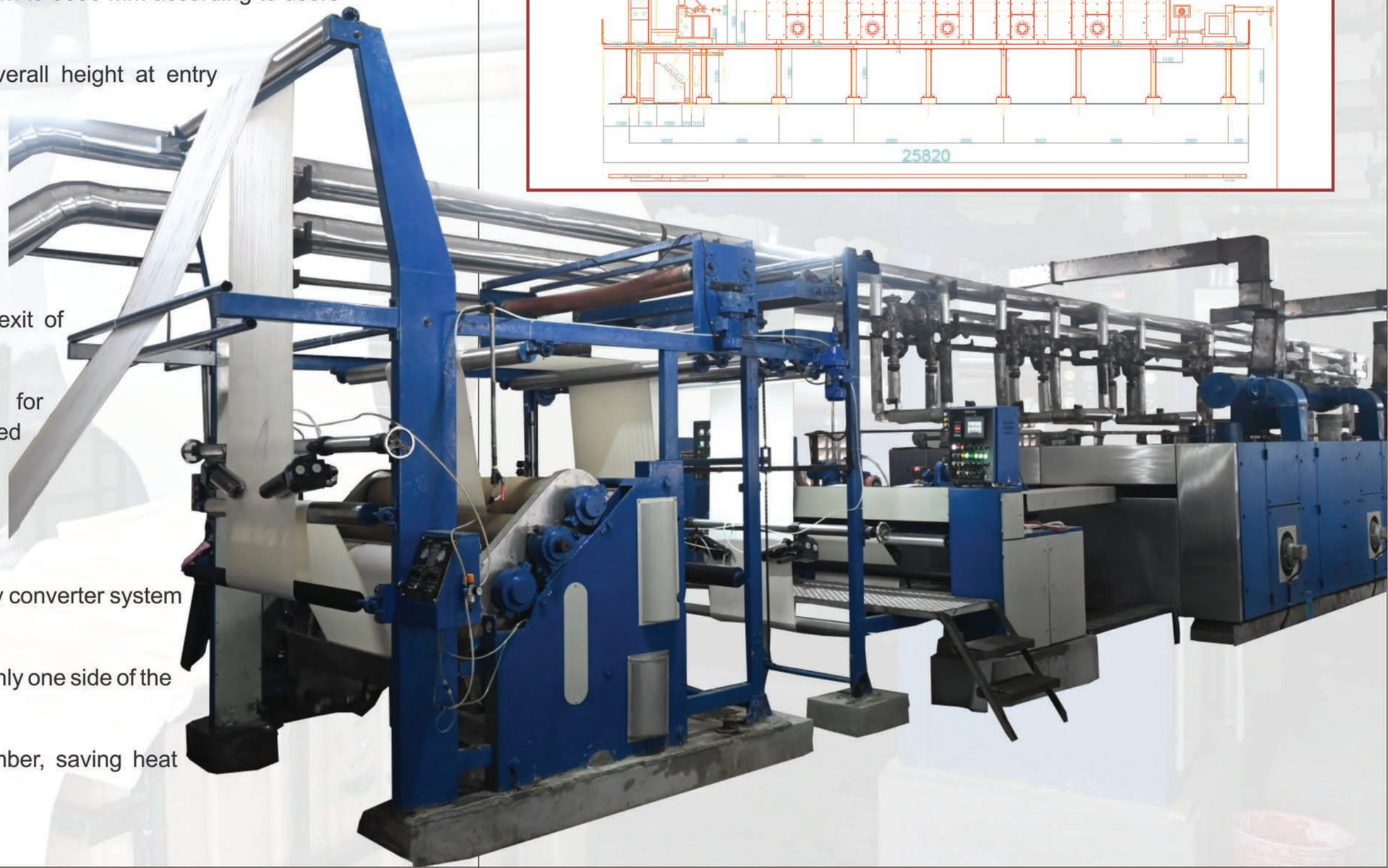
BLOWER-1 SP	30	BLOWER-6 SP	100
BLOWER-2 SP	100	BLOWER-7 SP	100
BLOWER-3 SP	100	BLOWER-8 SP	100
BLOWER-4 SP	100	BLOWER-9 SP	100
BLOWER-5 SP	100	BLOWER-10 SP	100

NEW GENERATION HI-TECH HI- EFFIENCY HOT AIR STENTER
HT - ASPIRE - 2100 SERIES

- Proper heat setting and width control, high velocity closed circuit chambers
- Stretch the fabric widthwise and to recover the uniform width
- With a variety of heat sources such as heat conduction oil, gas and steam
- Highest drying performance due to the well engineered air circulation system
- Normal width changes from 1200 mm to 3600 mm according to users choice
- Space saving construction with overall height at entry 1650mm.
- Perfect conveyeing system offers lowest residual shrinkage.
- Machine speed designed according to quality of fabric
- Air lock system at the entry and exit of chamber to prevent beat loss.
- Each rail width setting arranged for adjusting independately and adjusted by means of push buttons.
- Guide rollers are made from stainless steel material
- To control the movements frequency converter system has been adopted.
- Minimum pipeline network located only one side of the machine
- Maximum pipeline will inside chamber, saving heat losses.







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