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effective way

EFFE
effective way

COMPANY PROFILE

EFFE Endustri Otomasyon A.S.

After providing industrial automation solutions for customers from various industries with the partnership of Reel s.r.l. (Italy) for more than 10 years, Reel Turk A.S. was re-established with the name of EFFE Endustri Otomasyon A.S. in 2008 due to change of activity field and title.

EFFE Endustri Otomasyon A.S. provides sustainable and innovative solutions for a wide variety of manufacturers in textile industry, from spinning to garments, to help them provide goods and services with high value added in competitive market conditions and minimize their manufacturing costs.

Thanks to its state of art and user friendly solutions for end user customers domestic and foreign machinery manufacturers and its experience in machine manufacturing, EFFE Endustri Otomasyon A.S., has become one of Turkey's and the World's leading machine and machine accessories manufacturer in a short time.

While units and equipment manufactured by EFFE can be used as individual solutions, the equipments can also be used as improvement, development and modification applications on various machines. Especially, thanks to Stenter, Drying, Compacting and Printing machine modification applications, an increase in production and quality is achieved while reducing energy costs.

EFFE Endustri Otomasyon A.S. has the vision of designing, developing and manufacturing industrial machinery and equipment which has not been designed or manufactured before in Turkey or in the World that might be needed by customers and other machinery manufacturers.

EFFE implements various projects to lift the machinery technology in Turkey to the highest level possible by carrying out R&D projects with machinery and equipment manufacturers in different industries and end users of these machines and with contributions of various multinational companies.

As of January 2013, EFFE Endustri Otomasyon A.S. continues its activities in its new and modern manufacturing facilities with high technological investments in order to produce new R&D projects, improve the product and service quality that it provides to its customers with different machine designs and a wide range of products and is on its way to becoming one of the leaders of the market.

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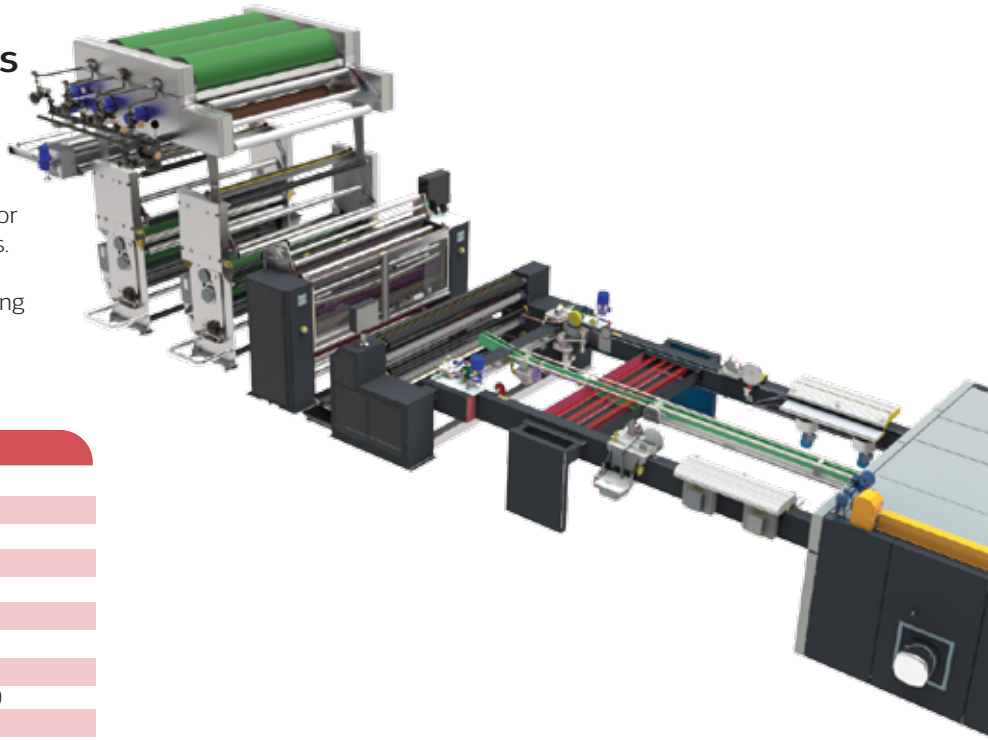
EF-RGU

Stenter Machine Accessories

Complete Stenter machine inlet and outlet accessories;
Centering and guiding units, Padders, J-Box Scray Units, Pre-Dryer Unit (Drying Cylinders), Pinning Groups, Steaming Units, Fabric Conveyor Units, Edge Gumming and Edge Trimming Units.
All equipments can be use for brand new machineries as well as can be applied for existing machines in your plant in order to increase performance of your machine, productivity and save energy.



Stenter Machine Accessories

- Centering and Guiding Units
- J-Box Scray Units
- Squeezing and Finishing Padders
- Pre-Dryer Unit (Drying Cylinders)
- Selvedge Spreading Units and Pinning Groups
- Fabric Conveyor Units
- Steaming Units
- Selvedge Gum Application and Edge Drying Units
- Selvedge Trimming Units (Disc Type or Ultrasonic Type)
- Inlet Winders and exit Un-Winder Units
- A-Frame un-winders and exit A-Frame Winder Units

EF-JBOX

J-Box Scray Units

According to the process conditions, J-Box units are preferred for non-stop operation at the inlet or exit of many finishing machines for woven or knitted fabrics.

Technical Specification

- Solid painted steel frame in "C" profile with covers
- Fabric compensating system for tension control
- AC controlled main traction roller, tape wounded
- Additional pressure roller on traction roller as an optional
- Stainless steel J-Box with vertical polythene square strips to help the slide fabric
- Fabric level control system
- All type of centering and guiding units can be applied at the inlet or outlet of unit
- Fabric tensioner unit with two stainless steel pipe, pneumatically moved
- Stainless steel guide rollers and several idler rollers

EF-BSD

Pre-Dryer Unit
Drying Cylinders

Technical Specification

- 3 pcs, 600 mm diameter teflon coated steam base cylinders
- Spiral expander rollers prior to the each drying cylinders
- Driven controlled pull in roller and compensating group for fabric tension control
- AC inverter controlled motor-gearbox drive system.
- Several idler rollers for Fabric guiding
- Strong structure frame can be easly installed on for all type of padders.

The unit is designed and produced in order to pre-drying process of knitted fabrics after single or double padder applications.
Main advantages of pre dreying unit is increase the production speed, and helping to have better fabric surface touch and start water evoparation process before drying chambers.
Unit space saving structure easly install all kinds of stenter machine and drying machine inlet.
Production range in between 1800 - 2800 mm
Thermal oil heated cylinders can be produced upon reguest.

EF-DSU

Steaming Unit

This unit is designed to eliminate the problems such as dripping, stains and marks on the fabrics, insuffi-cient steaming and unnecessary steam consumption etc., at classical type steaming units, used especially at stenter and pin chain tenter frames working with knitted fabrics.
It is ensured the steam to be sprayed over the fabric is dried up by means of the second steam and heating wall, formed up out of the unit.
Due to the special structure of holes where the steam may come out at the system, the release of the water droplets together with steam will be prevented. The unit may be manufactured at any sizes on the basis of machines where application is to be made and process conditions and used accordingly.
They may be operated with less steam consumption and at maximum efficiency according to the classic steaming systems. When used at required steam pressure, it can contribute to raise the production speed and arrangement of the shrinkage values. It may also be used for the steaming of the upholstery and knitted type fabrics.

Technical Specification

- Completely Stainless steel frame
- Adjustable steam supply feature according to the width of fabric
- With dry steam feature contributing to the shrinkage and hand touch effect
- The unit is syncronized with chain rails
- Feature of supplying dried steam by means of its special design with double walls
- It may be by-pass from the chain rails when not in use

EF-WEFT

Manuel Weft Straightener

The unit is designed and manufactured for where the scanning cameras do not required for skew and bow correction.
Bow and skew correction completely controlled by manuelly.
In some cases, the weft straightener scanners do not properly scan the fabric structure like very light net curtain fabrics, silk or some non-woven fabrics.
The unit can be used as an additional weft straightener in your machine line or can be as a single manuel controlled weft straightener.
The manuel weft straightener is completely equipped with same components of traditional weft straighteners except itsreading scanners.

Technical Specification

- Manuel correction of bow and skew.
- Electrically driven motor-gearbox technology.
- 3 skew and 2 bow rollers, electrically adjustable
- Fabric tension control unit & Spreading unit at the inlet
- Equipped with safety panels and switches

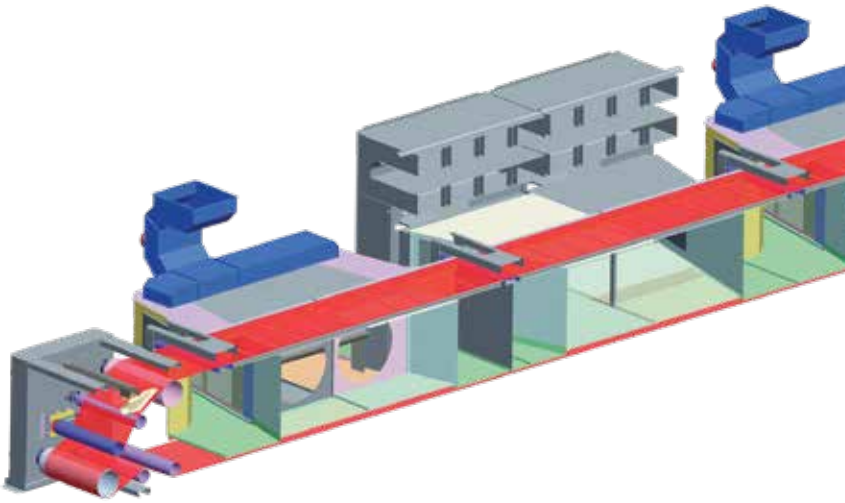
EF-STE

Anti-Static Bar

This unit is mainly used at the exit plaiter section of stenter, dryer and compacting machines enable to eliminate possible static electric from the fabric surface.

Technical Specification

- Brush type anti-static bar
- Without any power supply
- Production range between 1800 - 3400 mm
- The unit is equipped with it's ground wire



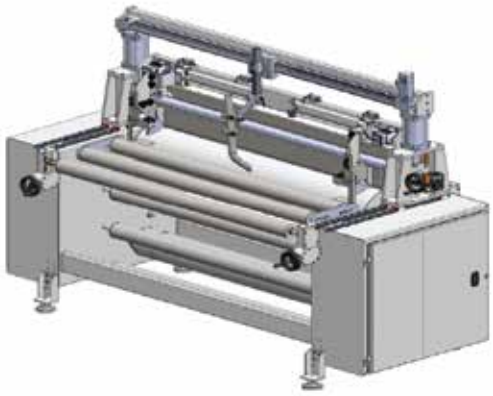
EF-ACF

Automatic Filter System

The cleaning of lint filters handle by machine's operators. If cleaning and maintenance of lint filters do not handle well, machine performance and energy consumption will be affected negatively.
Automatic filter system for stenter frame and dryer machines completely prevent energy and production loss due to the unit self clening system and Automation.

Technical Specification

- Suction unit of automatic filter system is placed outside of stenter frame
- Filter conveyor speed and suction unit speed are adjustable by PLC
- According to the machine type and fabric process, alternative Mesh filter conveyors can be used



EF-COAT/AR

Coating Machine

Integrated coating systems, knife on roll and knife on roll.
This system's purposes are capacity increasing, lower costs and higher quality.
Application Fields; production
Foam Coatings (denim gabardin, table sheet, upholstery fabric, artificial leathers, bed surface fabric, black out curtains)
Paste coatings (denim, gabardin, shirt fabrics, automotive industry fabrics, sunblind, canvas, conveyor belts, upholstery fabrics, store curtains, protective cloth fabrics)
Consist of body and inter connection profiles.
Hight level adjusted stand legs are connected on body with regularly located holes,
Sensitive hight level adjustment brings the installation adaptation advantage in different type stenter machine lines.

Technical Specification

- Knife group consists one piece of stainless knife on air and foam knife
- The up and down movement of knife group can be controlled by control panel and can be rotated on same axis by manuel gearbox
- Precisely grinded and chrome plated Ø350 mm cylinder is used in knife on roll coating method
- Double Idle Cylinder Group is used on coating on air process
- Up and down movement is manually controlled
- Chemical take off group takes off the chemical that got on Ø350 mm cylinder
- Pressure can be given to the surface of the cylinder with gearbox turning method for better cleaning
- Servo motor controlled, linear speed controlled module provides the transfer of the chemical equal and as desired
- Optimum tension control with several Loadcell rollers
- Inverter controlled Pull-in/ Driven Cylinder Group
- PLC Controlled Electrical Panel

EF-COAT/SR

Screen Coating Machine

EF-COAT/SR offers alternative features for screen coating applications.
The adhesive can be applied on fabric surface with rotation screen. Thanks to the screen coating method, consumption of adhesive would be less and fabric surface coating would be breathable structure.
Alternative fabric surface coating can be provided with alternative screen types.

EF-COAT/SR Model Coating Machine also performed well while processing foam coating due to the its homogenous transfer of foam onto the fabric surface.
Less adhesive consumption is achieved with foam coating method.
Another advantages of foam coating is the adhesive which is applied on fabric surface can be dry easily compare to the other coating applications.
All electronic functions can be easly controlled by one Joystic or with touch screen control panel. Besides all control compenents of machine is places in front of the machine for easy use purpose.
Thanks to the operator friendly design of machine, maintenance and cleaning of equipments can be done easly.

EF-ECON

Heat Recovery Unit
Air to Air

The main purpose of the system is to save energy, the process makes use of the energy potential of the condominated exhaust ait in order to heat up fresh air via heat exchanger systems.
First step is air prufication process. After filtering the used air via special design filters, this hot air can be used for heating the unit enviroment, then send away the atmosphere.
Energy saving of up to 25 % (depending on the process)
Thanks to the intelligent automation system, synchronization between the stenter machine and Heat Recovery done successfully.
Heat exchangers made of stainless steal pipes, endurance to the oxidation obtained via stainless steal pipes.

Technical Specification

- Stenter exhaust exit air temperature is 160 - 170 °C (depending on the process)
- Heat recovery unit exhaust exit air temperature 110 - 120 °C
- Air flow rate of heat recovery unit 35.000 m3/h
- Heat exchangers capacity 340.000 Kcal/h
- Total heat transfer surface 240 m2
- Air inlet temperature to heat recovery unit 30°C - 40°C
- Hot air exit temperature from heat recovery unit 130 - 140°C
- Heat exchanger pipes dia. 40 mm, AISI standards
- Maximum insulation with high density rock woll and multifibres insulation material
- System by-pass alternative
- Easy maintenance and extending re-cleaning intervals

EF-PSS

Pin Safety Bar

Pin safety bar system mainly use on stenter frames in order to keep fabric in pinning position and prevent the fabric take off due to the overfeed and high speed air circulation blower.
Well know problems of clip type protection is springs of protection bar are easly damage in very short time due to the heavy working conditions.
Safety bar is intalled on chain rails and do not give any strain on chain rails. There is no proper maintenance requirement and any consumable spare parts.

EF-FCU

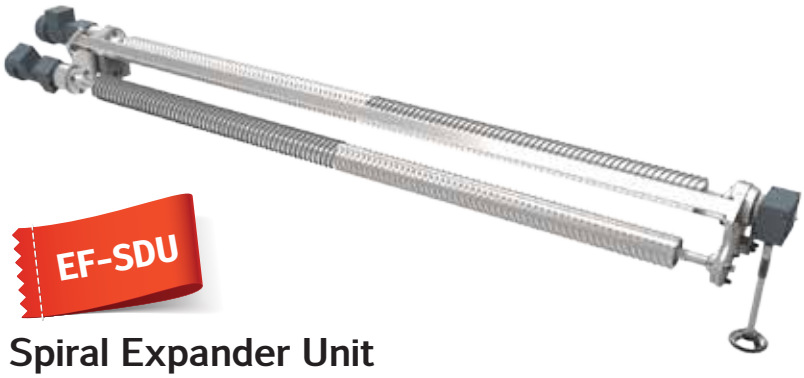
Fabric Centering and Guiding Unit

While processing of knitted fabrics in different machines, due to the effect of various processes, Fabric lose is loosing of it's natural structure.
Slat type of fabric centering unit is completely state of art technology which is eliminate possible tension on the fabric also quiding and centering Fabrics while transfer to the following unit. Alternative fabric centering units are mainly use at the inlet of Stenter, Compacting, Dryer and Rotary Printing Machines inlet frames.

Technical Specification

- Stainless steel main frame, driven rollers and connection frames
- 9 pcs reinforced aluminum base slats
- One-way bearing structure
- 230 mm diameter main drum, maximum fabric contact surface
- Silicon coated slats for wet fabric
- Moher coated slats for dry fabrics
- Double side (left-right) controlled pneumatic piston for correction of central defects
- 1.1 kW capacity AC motor-gearbox driven system

Centering unit is equipped with full optical sensor band which completely covering with transparent tube. The structure of sensor is endurable to very heavy working conditions like steam, water and sun lights. The sensor dedects both side of fabrics and send the referance signal to the PLC unit in order to activate slats of centering unit in correc-tion way is not required manuel adjustment for different fabric types.
Slat type of fabric centering units can be used with success for non-woven fabrics, knitted and woven fabrics in order to guide, center and transfer of the fabric throughout the the following units.



EF-SDU

Spiral Expander Unit

The unit with individually driven 2 expander rollers and angle adjustment feature of unit eliminates all of the problems experienced with the belt and gearing systems. The surfaces of expander roller are wrapped with specially finished expander profiles. Expander profiles wrap and cover the stainless steel clinder with high quality wrapping methods that wellding at the ages only.

Alternative Slats

Technical Specification

- AC inverter controller, 0.5 kW capacity two motor control for each expander rollers
- Speed can be adjusted according to the type of fabric weight and process
- By-Pass feature of single expander roller
- The height of the expander profile is 7 mm and Radius is 3 Ø mm for standard knitted fabric
- The height of the expander profile is 5 mm and Radius is 5-6 Ø mm for woven fabric
- Exoander rollers can be worked as fabric direction or oppsite way
- Alternative expander rollers and profiles are available with special feature height and angle

EF-CGU

Technical Specification

- Stainless steel side frames and support profiles
- Both side pneumatic piston controlled cradling movement
- Equipped with Fabric edge control sensor
- Unit is equipped with EF-SDU Model, Spiral Expander Unit
- Two pcs of stainless steel idler rollers, self driven, tape wounded
- Transparent safety covers with sliding rail system, and safety switches for both side of unit.

Cradle Type Centering Unit

Fabric guiding and centering unit which is used mainly for woven and warp knitted wider width fabrics.
The unit works by means of two pcs of coated or tape-wounded cylinder that are not driven and allows the cradling movement with pneumatic piston located between the left and right frames.
It's not required manuel fabric width adjustment. Both sensors read fabric edges and send this information to the control panel. Accordingly, pneumatic piston gives cradling movement to the two rollers and fabric is centering by this movement.

EF-CGU/C

Cradle Type Centering Unit
Carpet Finishing Machines

The unit is mainly used in carpet finishing machines in order to center and transfer kinds of very heavy fabrics to the next unit while finishing and coating processes.

Technical Specification

- 2 pcs, tape wound, solid structure cylinders
- Non-driven cylinders for standart applications, driven one upon request
- Placed in paralled with the floor
- Equipped with fabrice edge sensor and limit switches
- Unit's horizontal angle system with electric motor – gearbox and support bearing

EF-FCU/W

Fabric Centering and Guiding Unit
Continue Washing Machines

The unit is designed and manufactured aiming to center and guide of fabrics inside the continue washing and bleaching machines. Unit components are designed and manufactured as water resistant against to chemicals, water and steam.

Technical Specification

- Stainless steel main frame, driven rollers and connection frames
- Working width range in between 1800-3400 mm
- Unit installation with pin bolt inside the washing chambers
- Chemical, water and steam-resistant structure centering and quiding slats'
- 300 mm dia. main drum, maximum fabric contact surface for wet fabrics
- Double side diameter controlled lineer motor-gearbox driven system
- Left and right side movenemts, fabric centering and uncurl to both side
- Inverter controlled, 1.1 kW capacity AC motor-gearbox driven system

EF-FCU/B

Fabric Centering and Spreading Unit
Printing Machines

Mainly unit is designed and manufactured for transfer the fabrics to printing machine's blanket without any tension, centered, both side of fabric edge uncurled.
It is designated to work compatible with sensors and servo-motor unit that is required for referral of fabric from desired point to the printing blanket.
In applications that will be worked out with knitted fabrics, highly recommended to use pneumatic type of edge decurler unit (EF-MED/F) in order to get maximum fabric edge uncur success prior to the fabric centering and quiding unit.
Driven roller application can be used as required prior to centering unit.

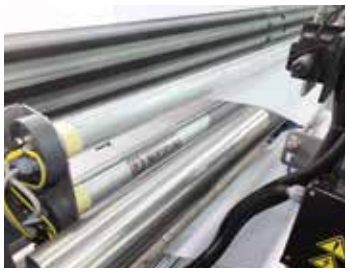
Technical Specification

- Working width range 1800-3400 mm
- Stainless steel main frame, driven rollers and connection frames
- Servo-motor driven control system, one side or double side driven system is an optional
- 18 pieces of centering lathes, 9 right - 9 left side
- Moher coated slats for dry fabrics, better fabric hold
- Skew distance of lathes 40 mm max.
- The unit can used along with or without EF-ECU Model edge control sensor
- Control panel can be used left or right side
- 1.1 kW capacity AC motor-gearbox driven system

EF-FCS

Fabric Centering Sensor

Most of the fabric centering units are equipped with full band fabric centering sensor. Optic fabric sensor reads referance signal from the both side of fabric and transfers this information to the control unit. Thanks to the referance signal reading by optic full band sensor the centering unit is activated in desired way enable to guide and center of fabric.
The sensor is placed in transparent pipe tube which can be used in wet and humid areas.
Production range 1000 – 3400 mm.



EF-FCS/W

Fabric Centering Sensor
Continue Washing Machines

Fabric Centering Sensor (Continue Washing Machines)
Fabric centering unit which can be operated at very heavy working conditions like wet and humid areas.
Sensor is used in Continue washing and bleaching machine processing chambers.

Technical Specification

- It's not necessary to make fabric width adjustment for each fabric
- Optic sensor is used in very heavy working conditions like wet and humid areas.
- 2 pcs of reading sensors placed in transparent tubes and stainless steel frame
- Working width range is 1000 – 3400 mm

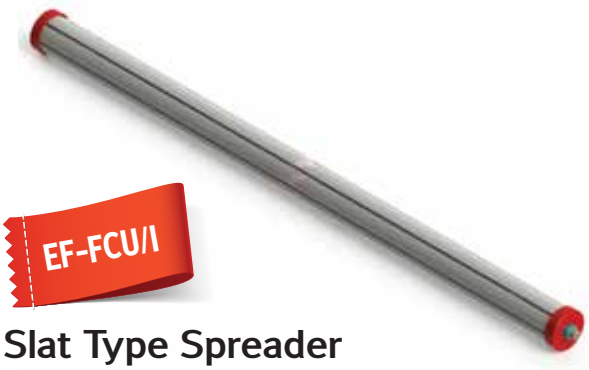
EF-FCU/A

Slat Type Spreader
Perforoted Slats

The unit is mainly used for centering and spreading of fabric edges before fabric roll-up or A-Frame winder unit of Stenter frame, Compacting, Quality Control, Inspection and Roll-Up Machines. It can be used where the fabric surface and edges need to be stable.

Technical Specification

- Special structure, eloxal coated spreading slats, movement from center toward to the edges
- Moher coated spreading slats, maximum surface hold
- Driven system with fabric movement
- Minimum friction surface assembled on an oxidizing-proof aluminum roller



EF-FCU/I

Slat Type Spreader
Stainless Steel Slats

The unit is mainly used for centering and spreading of fabric edges before fabric roll-up or A-Frame winder unit of Stenter frame, Compacting, Quality Control, Inspection and Roll-Up Machines.

Technical Specification

- Special structure, eloxal coated spreading slats, movement from center toward to the edges
- Stainless steel spreading slats, maximum surface hold
- Driven system with fabric movement
- Minimum friction surface assembled on an oxidizing-proof aluminum roller

EF-SFU

Squeezing and Finishing Padders

Universal Padders with special vertical roller arrangement for high squeezing- water extraction and finishing-impregnation. Fabric Working range is 1800 - 2800 mm.

Liquid / Padder Tank

- Stainless steel liquid tank
- Steam base indirect heating system for liquid tank as a standart scope of supply
- Stainless guiding roller in liquid tank
- Pneumatically position adjustable liquid tank for easy cleaning and maintenance
- Overflow and water level control system with 2 pcs easy and fast discharge valves system
- Liquid or water filling system

Main Features of Padder

- Stainless steel main frame, upper frame, safety panels and doors
- Pressure obtained via pneumatic bellows
- Stainless steel tie-bars and pneumatic system generating the pressure for the squeezing rollers
- Flexible coupling system with direct connection to lower roller
- Rollers made of solid shaft extra-thick special steel
- 1 pcs, driven scroll roller placed in front of the the nip (prior to the squeezing rollers)
- 1 pcs, driven scroll roller placed in front of the liquid reservoir enable to uncurl fabric edges
- Functional control panel and control buttons
- Emergency stop feature, upper roller raise-up in case of emergency stop
- Sliding transparent plexiglass safety covers
- By-pass transfer rollers if required
- 7,5 kW AC short circuit rotor motor inverter controlled, with built-on fan
- Pneumatic compensating tension control system, Linear potantiometer group

Squeezing Rolls

- Vertical roller arrangement, 290 mm, diameter of 2 pcs squeezing rollers
- Hypalon - Rubber coated squeezing rollers
- Upper roller is bow, and lower roller is flat shape for homogenous squeezing effect
- Rubber cover hardness, 92 - 95 SHORE A squeezing padder
- Rubber cover hardness, 85 - 88 SHORE A finishing padder
- Linear pressure, 500 N/cm
- Water spraying pipe to clean the fabric before entering squeezing rollers
- Water shut-off system via selanoid valve when machine stop

Technical Specification

- Complete stainless steel construction
- Uniform linear liquor application by two deflection controlled rollers throughout to entire batch.
- The mechanical speed of operation up to 50-60 m/mins.
- Simple operation and control due to the operator friendly design
- No side-to-center shading thanks to the smooth treatmanet of the selvedges
- Padding mangle consist of two Hydraulic swimming rolls, higher deflection correction.
- Parameters can be controlled with small tolerances by hydraulic and pneumatic pressure
- Balanced dyeing effect, no side-center-side difference
- Double Wall construction chemical reservoit, pneumatic moveable up and down
- Through capacity 186 lt, 3200 mm working width
- Uniform squeezing pressure over the entire working width
- Minimum consumption of chemicals and dyestuff
- Automatic level control and metering pump
- Constant level regulation achived by transducer, constant controller, pneumatic stainless control valve

EF-SR2

DyePad with Hydraulic S-Roll System

EFFE Dyepad unit with its state-art design and flexible Hydraulic S-Roll technology can dye knitted and woven cotton fabrics. The right concept for every kind of fabrics by appropriate roll coverings, throug design, expanding and spreading devies.

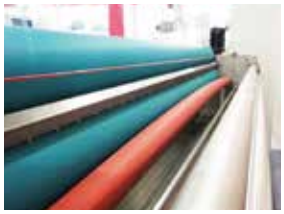
EF-TTM/SR

Finishing Padder
Hydraulic Type

It is used for finishing and dyeing process of net curtains and similar fabrics. As used in the narrow width fabrics thanks to the upper of the roller with hydraulic system, it is especially preferred due to edge - the middle - edge pressure gradient can be completely destroyed at even to be made squeezing-finishing or dyeing operations in working width of 3200 - 3400 mm. In standard applications, the bottom roller is manufactured as rubber, ebonite or chrome-plated, the upper pressure roller is manufactured as a floating roller with hydraulic system. In the optional applications, 2 pcs hydraulic roller applications that are working side by side, can be done.

Technical Specification

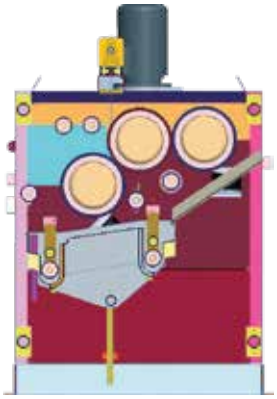
- The working width range 2400 - 3400 mm
- Line pressure 50 N/cm
- The nonoxidizing wing mirror that is thick of 30 mm, especially made of stainless steel and the connection traverses
- The diameter of top movable and hydraulic roller is 290 mm (accoroding to machine width)
- The diameter of bottom support rubber, ebonite and chrome-plated roller is 340 mm
- The dyeing and finishing liquid tank that are made from stainless sheet steel
- The diameter of finishing liquid tank guiderd roller is 150 mm, internal bearing
- Liquor distribution pipe, liquid tank lifting device with pneumatic control
- Indirect heating system of liquid tank. This has been designed as unpressurised heating system. The maximum steam pressure is 2 bar. At the same time, the tank can also be used as a cooling system
- The output tension control dancer system for synchronization with other units
- Control panel, that is equipped with all the necessary controls and indicators for safety device
- The power plant units that is necessary to floating roller, is included in solenoid valve, pump and plumbing



EF-F3C/3

Integrated Padder Unit
Squeezing and Finishing

It is designed for squeezing and finishing process of knitted and woven fabrics at a single padder unit. Mainly the padder is preferred due to less space requirement, working with appropriate energy costs and easy operate padder unit at inlet of stenter or dryer machines.



Technical Specification

- Stainless body, chemical finishing tank and side casing sheets
- Spiral expander rollers prior to each nip rollers
- The separate overflow system for squeezing and finishing liquid tanks
- Electrical panel and pneumatic system equipments mounted to main frame of padder
- The diameters of squeezing, finishing and support roller is 395 mm
- Squeezing roller is bow, rubber coated 92 to 95 Shore
- Support driven roller is flat and ebonite coated
- Squeezing roller for finishing padder is bow and rubber coated 85 Shore
- Linear squeezing pressure is 50 N/cm
- The terms of use with max. 6 bar air pressure by means of pneumatic bellows system
- The main drive group with direct coupling and flexible system
- Transparent, preservation and safety caps
- 11 kW 3000 rpm A.C motor drive system
- The finishing liquid tank is moveable up-down with pneumatic piston, with indirect steam heating system
- Idle roller in liquid tank, with special bearing
- Overflow, level control, filling and discharge system
- Spraying system before squeezing roller
- Tension control dancing roller unit with pneumatic system, two idler roller, linear potentiometer system
- 2 pcs of finishing liquid tanks
- Stainless idler transfer rollers.

EF-PBD

Cold Pad Batch Unit

EFFE Dyepad unit with its state-art design and flexible Hydraulic S-Roll technology can dye knitted and woven cotton fabrics.
Thanks to the unit unique design and construction EFFE CPB Unit, any class and types of dyes can be pad without variation throughout width and lenght of fabrics. The mechanical speed of operation up to 50-60 m/mins.
Padding mangle consist of two Hydraulic swimming rolls, higher deflection correction.
Parameters can be controlled with small tolerances by hydraulic and pneumatic pressure
Balanced dyeing effect, no side-to-center shading thanks to the smooth treatmanet of the selvedges
Uniformity throughout the process
Minimum consumption of chemicals and dyestuff
Automatic level control and metering pump

Designe Of Line

- Fabric centering and guiding unit at the inlet for knitted fabrics
- Constant fabric tension control by compensating roller or loadcell application
- Functional control panel mounted on inlet frame
- Double wall construction cooling roller at the inlet for both side cooling of fabrics
- Complete stainless steel dyepad
- AC inverter controlled spiral expander rollers
- 2 pcs hydraulic swimming rollers, balanced dyeing effect, no side-center-side difference
- Double Wall construction chemical reservoit, pneumatic moveable up and down
- Teflon coated several idler rollers
- AC inverter controlled, rubber coated, main traction roller of A-Frame station

EF-HC

Hydraulic Cylinders
S-Roll

The Hydraulic S-Roll technology is the heart of the overall system enables accurate reproduciple results thanks to the unit user defined capability, to define pressure application possibilities two the two hydraulic S-Rolls. Linear pressure success with hydraulic S-Rolls absolutely even across the full width.
With the unique design of cylinder, smart soft-ware support system, a uniform dyestuff application can be achieved.
Low energy consumption and short retun on investment.Balanced squeezing effect, no side-center-side difference
Uniform squeezing pressure over the entire working width
Adjustable Linear pressure between 12-50 N/cm

Technical Specification

- Cylinder dimensions 220mm for 1600-2600mm working width.
- Cylinder dimensions 300mm for 2400-3600mm working width.

EF-MED

Mechanical Edge Spreader

The unit is mainly used enable to uncurl of knitted fabric edges. In order to have maximum pinning success on stenter machines, dryers, compacting machine etc. mechanical edge spreading unit is one of the best solution where can be uncurled fabric edged before pinning.
According to the fabric type, weight and structure the gap between upper and lower plates can be adjusted. Operator friendly design do not required any energy and maintenance. Easy cleaning due to the speciall alloy stainless plates.

Technical Specification

- The upper and lower plates are made of stainless steel
- Can be adaptable and syncronize for any brand fabric edge sensor
- Moduler design that can be applied on horizontal and vertical chain rails
- State of art cross grodual spreading system
- The unit can be used wet and dry fabrics
- Maximum fabric weight for operation is up to 300 gsm
- Protective system for sewings and looms
- Hinged system upper plate for easy use and control
- Spreading materials are made of special allow for long term use
- Speading materials are fixed with pin bolts for easy maintenance and change

EF-MED/F2

Pneumatic Edge Spreader
Double Plate Nozzle

The unit is designed and produced in order to uncurl fabric edges of very sensitive and delicate textile fabrics.
Stable bottom plate and moveable upper plate is equipped with nozzle system.
The unit can be used for delicated dry and damp fabrics

EF-MED/F

Pneumatic Edge Spreader
Single Plate Nozzle

The pneumatic edge spreader is used for enable to open fabric curled edges without any mechanical friction. Fabric edge curls can be opened with compresses air which comes from nozzle structure on expander unit's surface. Mainly used in Rotation and Filmdruck printing machine inlet sections, Stenter machine pinning groups, Compacting and Dryer Machine with Pin Chain Tenter Frame. The uniy is supplied with it's own blower unit.

Technical Specification

- Anodized coated, lightweight special aluminium structure
- Maximum fabric edge uncurl success wihout any mechanical friction
- Bottom plate is equipped state art technology nozzle system
- Hinged system upper plate for easy use and control
- The unit can be used for delicated dry and damp fabrics

EF-MED/T

Mechanical Spreader
Tubular Fabric Sewing Machines

The unit is designed and produced in order to uncurl of fabric edges before fabric edge sweing process. Unit is placed prior to the sweing machine.
Mechanical spreader unit is consist of 3 pcs spreading plates in order to uncurl both side of lycra fabrics before sweing machine.

EF-MED/S

Narrow Type Edge Spreader
Printing Machines

Fabric edge curls adversely affects printing quality and cause incease of fabric wastage.
Thanks to the spreader unit which is placed prior to the pressure roller where the fabric completely fix on machine's blanket, both edge of fabric can be un-curl with success.
Spreader units where placed on sides of stainless profiles can be adjusted according to the fabric width seperately.

EF-FS

Narrow Type Edge Spreader
Padder Inlet

Most of the knitted fabric edges are curling in between padder liquid tank and scroll roller. In order to uncurl fabric edges, special designed mechanical edge spreader can be used as additional decurler. Homogenous squeezing effect is achived thanks to the completely uncurled fabric edges, besides padder squeezing rollers are being protected by negative effect of uncurl fabric edges

Technical Specification

- Availability to install any brand/type of padder unit
- Manuel working width adjustment
- Non-wear off synthetic spreading material
- Pressure adjustment can be done with upper spreading plate
- Upper spreading plate can be by-pass if not required to use

EF-PMT/K

Pinning Guider
Beltless System

The special pinning guider unit is designed to avoid problems arising from traditional belt type pinning guiders. Mainly used for stenter, pin chain tenter frames of compacting machines and drying machines.
Thanks to the special feature of unit, the fabric is guiding and passing without uncurling to the final pinning.
The unit is also prevent many problems cause by traditional belt systems.

EF-PMT

Pinning Guider
Belt with Mini Decurler

This unit is designed for the full edge uncurl of most twisty fabrics that are coming from mechanical edge spreading unit or finger type edge decurlers especially on edges before entry into pinning groups.
The unit entirely opens the edges of all sorts of knitted fabric and guarantees the pinning and totally eliminate all problems that may be experienced in similar systems. It is able to open all sorts of edge curles by means of the last curl opening with its mechanically opening channels and used preferably under necessary circumstances. Since it is made of synthetic material that does not give any harm to chain needles even under circumstances arising from possible mechanical problems

EF-PMT/S

Pinning Guider
Belt with Mini Spreading Unit

This unit is designed for selvedge spreading and guiding of polyester fabrics, net curtains, synthetic and knitted fabrics prior the the final pinning.
Mini spreading unit can easly unclurl both side of fabrics with top and bottom spreading plates. Spreading plates are not easly wear out made of special material. Easy to change and maintenance.

EF-FEE

Infeed System
This is designed for best pinning the fabric into the pins at the chain inlets of the stenter and pin chain tenter frames for compacting or dryers.

Technical Specification

- Having pneumatic lifting and lowering system
- A.C. inverter controlled electric motor and reducer group 1.1 kW
- Available with the EF-PMT model pneumatic and mechanic trigger unit
- A feeding capacity of + 50 %
- To be functional synchronously with the chain speed
- Right and left units to provide separate feedings when necessary
- Upper coating of the feeding roll is HYPALON coated and easily replacement feature

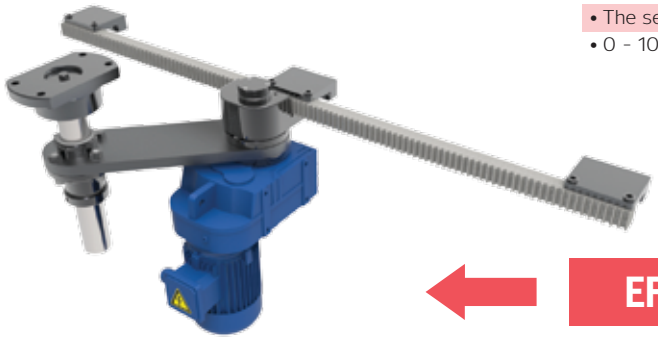
EF-ECU

Infrared Edge Control Sensor

In order to gain desired pinning success at the inlet of stenter machines or any pin chain tenter frames IR edge control sensor is used as a state of art technology.
The EF-ECU model sensor permits Infrared scanning of the fabric edges in accordance of the reflection principle the fabric is used as a reflector. The correct distance to the fabric is 35 mm is always ensured by EFFE mechanical spreading unit adjustment.
Chain rails activation speed can be adjusted by PLC accoring to the desired level.

Technical Specification

- Suitable for servo-drive or AC controlled system
- The sensor is equipped with digital and Infrared reader
- 0 - 10 Volt output



EF-PLC

EF-ECU/C

Actuators
Rail Position Control

The tenter edge control and complete guider systems sets new standards for best and precision fabric pinning at high speed operations. Fine-tuning gearbox actuators with AC motor system provides to stable and quick respond/activation on chain rails. The signals are transmitted through the optical reader and activate the system with AC motors.
The actuator corrects the position of chain rail and in this way ensures correct the fabric acquisition with rack gears
Chain rails activation speed can be adjusted by PLC accoring to the desired level.

Complete System Equipments

- 2 pcs Infrared fabric edge control sensors (EF-ECU)
- 2 pcs precision adjustment system for Infrared fabric control sensors
- 1 set left-right rack drive system
- 4 pcs safect limit switches
- 2 set actuator drive motor-gearboxes and chain connection parts
- AC controlled system
- 0 - 10 V output

EF-HKS

Servo Controlled Actuators
Rail Position Control

The tenter edge control and complete guider systems sets new standards for best and precision fabric pinning at high speed operations. Fine-tuning gearbox actuators with Servo motor system provides to stable and quick respond/activation on chain rails. The signals are transmitted through the optical reader and activate the system with servo motors.
The actuators correct the position of chain rail and in this way ensures correct the fabric acquisition with rack gears
Chain rails activation speed can be adjusted by PLC accoring to the desired level.

Complete System Equipments

- 2 pcs Infrared fabric edge control sensors (EF-ECU)
- 2 pcs precision adjustment system for Infrared fabric control sensors
- 1 set left-right rack drive system,
- 4 pcs min.- max. limit switches
- 2 set actuator drive motor-gearboxes and chain connection parts
- PLC controlled panel

EF-PC

Pipe Type Conveyor Unit

The pipe type conveyor unit ensures the transfer of fabrics from overfeeding roller to the inlet of chambers without any tension and stable form.
The unit is made of 2 line custom polished stainless steel pipe. Mainly used at the inlet of stenter frames, pin chain tenter frame of compacting machines and dryers.

EF-DCB

Driven Fabric Conveyor Unit

The unit is designed and produced fabric transportation from feeding roller to next unit without any mechanical friction and less tension. Generally use inlet of Stenter machines and pin chain tender frames of dryers and compacting machines.
Flat type belt or rope type conveyor pipes driven by motor-gearbox independently and prevent the fabric without any tension and mechanical friction.

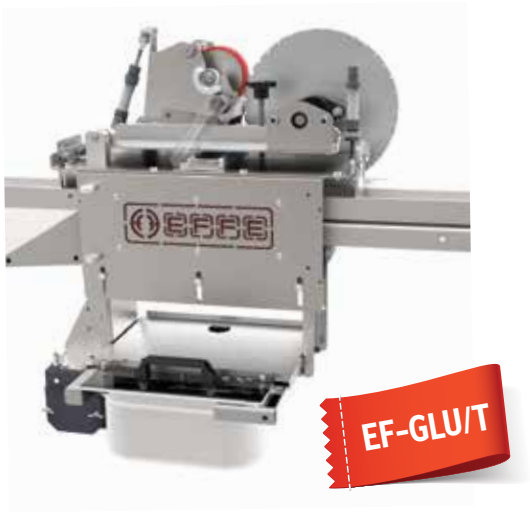
Technical Specification

- Made of stainless steel and synthetic materials agains to corrosion
- Syncronized with machine speed or independent speed control
- Driven by 1.1 kW capacity motor-gearbox

EF-FBC

Fabric Conveyor Unit

The unit can be provide fabric transfer from feeding roller to the pinning brushes without any tension and stable position. The unit keep fabric in center position after fabric leave feeding roller and helps the performance of pinning groups like edge control sensor, mechanical edge spreader and pinnind wheels. Machine can be operated non-stop due to the stable pinning success.



Top Gum Application Unit
Stenter Machines

Most of the traditional systems apply gum to underside of fabric nearly 8-10 mm away from the stenter pin levels.
In typical gum application units, glue application wheel is placed under the fabric and chain rails, support wheel of glue unit is placed on the fabric.
EF-GLU/T model top gum application unit applies gum to upper surface of fabrics 6-7 mm away from the pin level. Thanks to the closer trimming at the exit with 8-9 mm or more total reduction in selvedge waste.
Gum is applies upper surface of fabric and thanks to the this feature machine required less cleaning and gum is getting dryer more faster.
The unit can be applied both horizontal and vertical chain rails.

Technical Specification

- Manuel adjustable amount of gum
- Easy cleaning gum storage tank and circulation parts
- In order to keep gum in certain viscosity gum circulation pump and storage tank system
- Made of stainless steel and synthetic materials agains to corrosion
- Cross-cut gear gum wheels for minimum gum consumption
- Easy to installation and dismantling
- Can be applied for all stenter machines

Top Gum Application Unit
Dryer Tenter Frames

Technical Specification

- Manuel adjustable amount of gum
- Easy cleaning gum storage tank and circulation parts
- In order to keep gum in certain viscosity gum circulation pump and storage tank system
- Made of stainless steel and synthetic materials agains to corrosion
- Cross-cut gear gum wheels for minimum gum consumption
- Easy to installation and dismantling

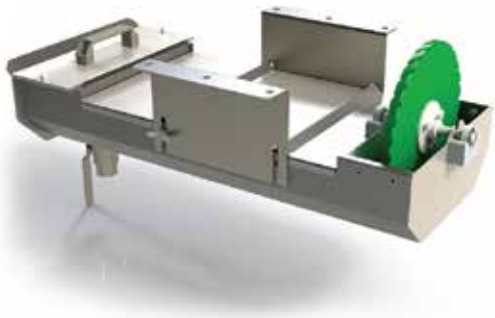
EF-GLU/V

Gum Application Unit
Vertical Chain Rails

The unit is mainly used in stenter machines with vertical chain rail system. Fabric edge gum application processing with fabric driven gumming wheel. Suitable for all type of vertical chain rails.

Technical Specification

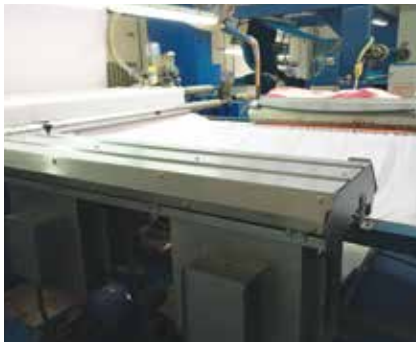
- Gum levelling system and filling pipe
- Pressing roller pneumatic or mechanical system
- Gum application wheel and bearing system is mounted outside of gum reservoir
- 13 mm width gum application wheel for minimum gum usage
- Alternative width gum application wheels are available
- Stainless steel gum reservoir which is suitable for all type of horizontal chain rails
- Oxidation resistant gum application and pressing wheels
- Easy maintenance and cleaning feature



EF-GLU/H

Gum Application Unit
Horizontal Chain Rails

The unit is mainly used in stenter machines with horizontal chain rail system. Fabric edge gum application processing with fabric driven gumming wheel. Suitable for all type of horizontal chain rails.



EF-EDU/IR

Edge Drying Unit
With Infrared & Air Blowers

The unit is preferred where the gum application proces is done for stenter, dryer and pin chain tenter frames.
The hot air is supplying with IR Infrared elements and heating resistants where the hot air continiously circulation on fabric edges with fan blowers. The machine speed is increasing with the effect of edge drying unit positively and fabric is dry homogenous while processing in chambers without selvedge-center difference.

The unit is preferred enable to dry fabric edges if fabric edges are curling too much prior to the drying chambers. Fabric is dry homogenous while processing in chambers without selvedge-center difference.
Fabric edge drying unit can be used either on inlet chain rails or exit chain rails in order to get maximum drying effect while gum application process is done.

Technical Specification

- Oxidation resistant structure for steamy and humid environments
- Inverter controlled fan blower speed
- IR Infrared elements and heating resistants' capacity is adjustable
- Different dimentions of edge drying units are available, standard unit lenght is 1350 mm

EF-CTR

Fabric Edge Trimming Unit

The unit is design and produce enable to trimming of fabric edges as desired on exit chain rails of stenter, compactor and dryer machines. Whether gum application done or not, trimming unit fallow the fabric edge with photocell sensor and edge trimming is done according to the pinning level.
The unit works with synchronization of chain speed or independently.

Edge trimming process done while fabric left the chain rails in order to have smooth trimming fabric surface and to avoid any damage cause by fabric wastage.
Edge trimming wastage success up tp 3-4 mm (without adge gum application), 8-10 mm fabric edge wastage (with gum application).

Technical Specification

- Complete stainless steel frame
- 75 mm stroke, fabric edge follow-up with photocell
- Upgrated trimming unit blades (diamong base)
- Automatic blade lubrication system
- Final decurler group prior to the blades
- Blade cooling unit
- Adjustable fabric edge trimming amount
- PLC controlled control panel, AC inverter controlled, blade driven system
- Fabric wastage suction unit (optional)

EF-CTR/C

Edge Trimming Unit
Carpet & Technical Textiles

The unit is preferred for edge trimming purpose of carpets, similar raw fabrics and coated fabrics while processing on stenter frames or prior to the fabric roll-up in order to get required edge trimming. Trimming unit speed can be worked with syncronization of machine speed or controlled by seperately. Edge trimming process for carpet is done when the carpet take off the chain rails. Left and right trimming units can be move and work seperately. Edge trimming operation for both side of fabric can be adjusted by independent controlled units.

Technical Specification

- Stainless steel construction
- DC Motor controlled Linear system
- Automatic lubrication for trimming blades
- Blade cooling unit
- PLC Controlled control panel, interver controlled a-syncronized motor

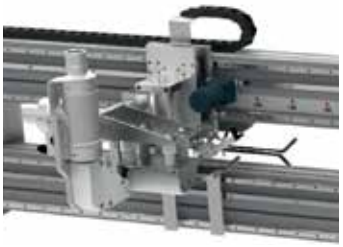
EF-CTR/ULTR

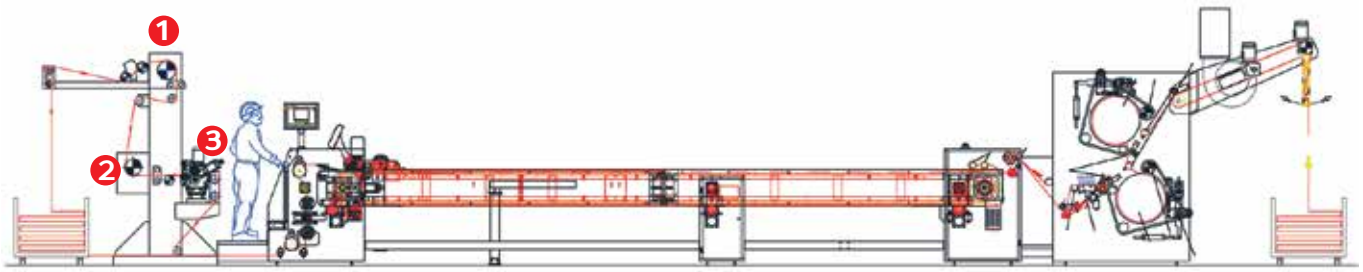
Ultrasonic Edge Trimming Unit

The unit is specially designed and preferred for edge trimming process of polyester fabrics on stenter frame and compacting machines.. Edge fibers of polyester fabrics are strengthened and prevented edge fibrillation thanks to the ultrasonic edge trimming technology.
The unit can be installed for any types of pin chain tenter frames or stenter machines.
According to the desired speed and production capacity, alternative ultrasonic heads and transformers can be provided.

Technical Specification

- The unit is moveable with photocell controlled linear system
- Left and right stroke is 75 mm
- Fabric edge spreading unit before ultrasonic trimming head
- PLC controlled, functional control panel
- Fabric selvedge waste suction unit





EF-CTR/S

Edge Trimming Application
Compacting Machine Inlet

The unit designed and used in order to complete fabric edge trimming process before pin chain tenter frame of compacting machines.
If both application edge gumming and drying is completed with dryers, fabric edge trimming application can be done at the inlet of pin chain tenter frame of compacting machines.
There are several advantages of this application like, the drying machine can be operated in high speeds also compacting machine felt is protected by negative effect of gum application.

Equipments For Application;

1. **EF-FCU** Fabric Centering Unit (Pneumatic System)
2. **EF-FCU/B** Fabric Centering and Guiding Unit (Servo Motor Controlled)
3. **EF-CTR** Fabric Edge Trimming Unit (Sensor Controlled)

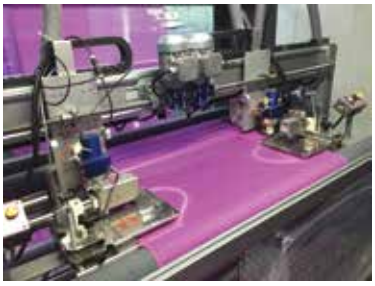
EF-ULTR/M

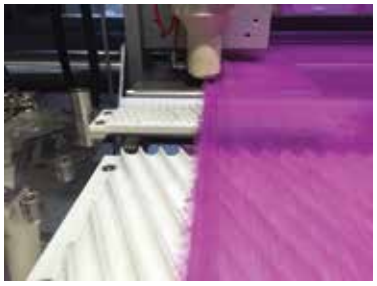
Ultrasonic Edge Trimming Machine

The unit is specially designed and preferred for edge trimming process of polyester fabrics. Edge fibers of polyester fabrics are strengthened and prevented edge fibrillation thanks to the ultrasonic edge trimming technology. According to the desired speed and production capacity, alternative ultrasonic heads and transformers can be provided.

Line Design

- Inlet from fabric carrier or A-Frame
- Operator platform
- EF-FCU/A model fabric spreading unit
- Ultrasonic edge trimming units (left-right)
- 2 pcs tracking roller before trimming unit, AC interter controlled
- Mechanical edge spreading unit EF-MED Model prior to the trimming unit
- 2 pcs driven controlled tracking rollers after trimming unit, AC interter controlled
- EF-ECU Model Infrared Edge Control sensor
- Suction unit for trimming wastage
- Set of suction blower left-right





Technical Specification

- Driven tracking rollers and compensation system for tension free operating
- Plaiter or A-Frame inlet and exit combinations
- PLC Controlled Panel

EF-PM

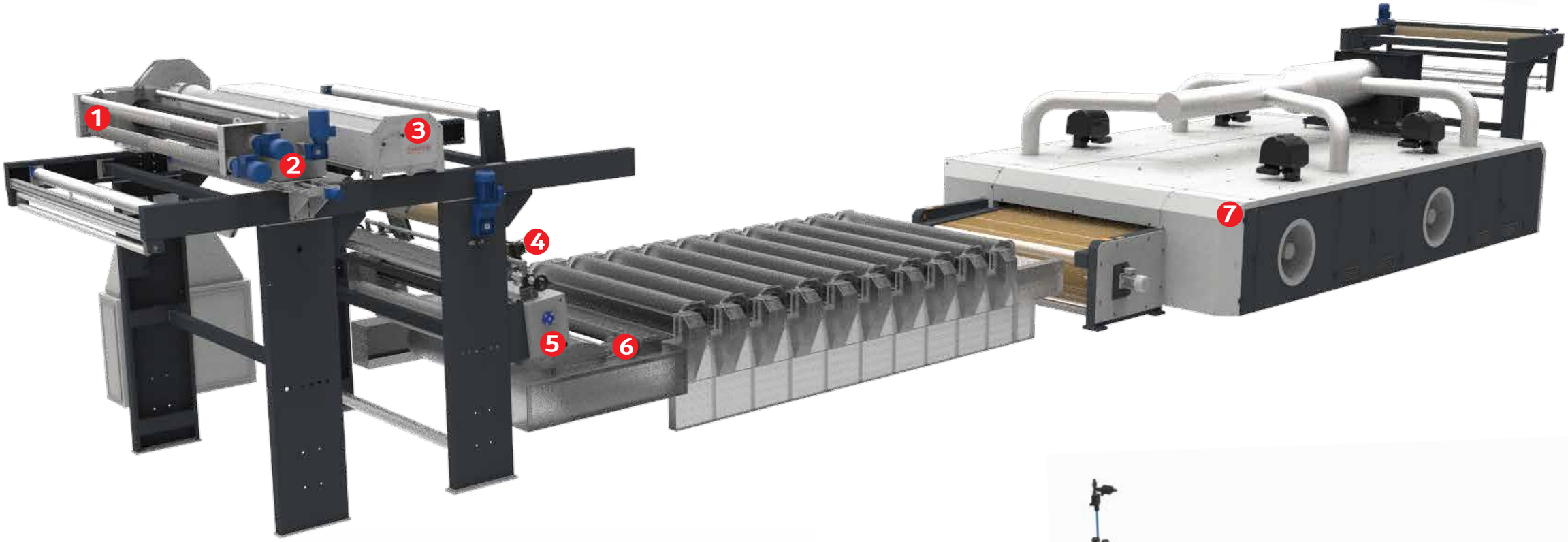
Tuft Edge Sewing Machine

While processing digital printing, the edge of woven fabrics are tufting and caused quality problem of final pirinting. Tuft Edge Sewing Machine is designed and manufactured enable to solve classical problems preparation of woven fabrics for printing process. First fabric edges trim with edge trimming unit and sewing with special overlock sewing machine in order to prevent tufting again before printing process.
Machine inlet and outlet combination can be design as from fabric carrier to carrier, un-winder to winder or fabric carrier.

1 EF-SDU
Spreading Rollers

2 EF-FCU
Fabric Centering & Guiding Unit

3 EF-FTE
Brushing & Dust
Collection Unit



4 EF-MED/F
Pneumatic Edge Spreader

5 EF-FCU/B
Fabric Centering and Spreading Unit
Printing Machines

6 EF-MED/SP
Pneumatic Edge Spreading Unit
Printing Machines

7 EF-CB
Drying Chambers
Digital or Rotary Printing Machines

EF-RBG

Applications for Rotary Printing Machines

Applications which are made for rotary and filmdruck printing machine's fabric inlet provides better fabric position, better fabric width and better fabric tension uncurled and stable fabric tension knitted and woven fabrics.
The main purpose of complete application units are to provide stable fabric inlet, less tension on the fabric and uncurl the fabric edges prior to the printing blanket.

FABRIC INLET APPLICATION

EF-FCU
Fabric Centering Unit (Pneumatic System)

The fabric centering unit (EF-FCU) is quiding and centering of fabric from fabric carrier to second fabric centering unit (EF-FCU/B) which is servo drive controlled. Most of the fabrics come from fabric carrier un-stable conditions due to the stenter machine plaiting process.
The unit can be fixed and make correction to mis-alignments of fabric and increase the performance of servo-drive controlled fabric centering unit (EF-FCU/B).

EF-FCU/B
Fabric Centering and Spreading Unit (Printing Machines)

Mainly unit is designed and manufactured for transfer the fabrics to printing machine's blanket without any tension, centered, both side of fabric edge uncurled. It is designated to work compatible with sensors and servo-motor unit that is required for referral of fabric from desired point to the printing blanket.

EF-BLR
Pneumatic Compensation Roller

Desired fabric tension is controlled by EF-BLR model pneumatic compensating roller. According to the fabric type and desired tension fabric tension is controlled pneumaticall with linear potantiometer.

EF-FTE
Brushing and Dust Collection Unit

The unit can be used for final cleaning of fabric surface before printing process. First fabric surface brush / clean up afterwards, wastage dusts is collecting by suction unit. Thanks to the brushing and dust collection unit, fabric surface ensure optimal clean surface for printing as well as prevent the machine's screens against the harmful effects of dust

EF-MED/SP
Pneumatic Edge Spreading Unit

Fabric edge curls adversely affects printing quality and cause incease of fabric wastage. Thanks to the pneumatic edge spreading unit which is placed prior to the pressure roller where the fabric completely fix on machine's blanket, both edge of fabric can be un-curl with success.
Pneumatic edge spreading unit is equipped with special nozzle system that provide compressed air enable to open fabric edges. The unit use plant comressed air. If compressed air is not required, the unit can be used without compressed air.
Spreading units where placed on sides of stainless profiles can be adjusted according to the fabric width seperately.

Brushing Dust Collection Unit

This unit is designed for brushing and cleaning of fabric surface while processing on printing machines, raising machines, shearing machines and singeing machines.
The unit is mainly preferred for printing machine where the fabric surface is brushed and clean-up before printing operation, the unit also preferred for singeing machine and continue washing machines where the both side of fabrics requied brushing and dust collection.

Technical Specification

- Manuel adjustment of unit according to fabric width
- AC inverter controlled brushing roller
- Moduler design suction group
- Stainless steel suction and dust collection equipment
- Flexible suction pipes between suction unit and dust collection storage
- Stainless steel frame and connection parts

Pneumatic Edge Spreading Unit

Printing Machines

Fabric edge curls adversely affects printing quality and cause incease of fabric wastage. Thanks to the pneumatic spreader unit which is placed prior to the pressure roller where the fabric completely fix on machine's blanket, both edge of fabric can be un-curl with success.
Pneumatic edge spreader unit is equipped with special nozzle system that provide compressed air enable to open fabric edges.
The unit use plant comressed air.
If compressed air is not required, the unit can be used without compressed air.
Spreader units where placed on sides of stainless profiles can be adjusted according to the fabric width seperately.

EF-SBU

A-Frame Winder

A-Frame winder unit is manufactured for winding process or knitted and woven fabrics at the exit of stenter frame, sanforizing machines, technical textile applications and dryers.

Technical Specification

- Strong steel construction frame
- 2 pcs pneumatic lifting pistons
- Banana roller application before traction roller
- Fabric changer system in order to have stable fabric edges while winding
- Several idler rollers for fabric transfer and quiding
- Emergency stop system for safety working conditions

EF-MT

A-Frame Winder
Center Driven

This unit is mainly used to keep stable tension while winding or un-winding of knitted or woven. Center Driven Winding unit is used for Stenter machines, continue washing machines and some other technical textile lines.

Technical Specification

- Steel construction frame with stable or moving design
- Sensor of setting distance
- 5.5 kW capacity motor-gearbox system
- Dial shaft with hinged application
- Min. – Max. operating speed 10-100 m/min.
- Fabric tension control with Compensating roller or Loadcell

EF-MT/DJB

A-Frame Un-Winder
Digital Printing Machines

The unit is designed and manufactured for sensitive and tension free un-winding for digital printing machine inlet. Un-winder unit is installed on A-Frame cylinder with mobile hanging system and driven by servo motor-gearbox group. Fabric tension is controlled by sensitive compensating system in between Digital Printing machine and Un-Winder unit.

EF-MT/DJS

A-Frame Winder
Digital Printing Machines

The unit is mainly used at the exit of digital printing machines where the fabrics are drying in chambers and then winding to the A-Frame with stable tension. A-Frame Winder works with the referance of sensitive compensating roller system.

- A-Frame Winder unit is installed onto A-Frame cylinder with mobile hanging system and driven by servo motor-gearbox group
- Fabric tension is controlled by sensitive compensating roller system in between Digital Printing machine and A-Frame Winder

EF-EGD

Pin Chain Tenter Frame
Dryers

The unit is mainly preferred where the open width fabrics are processing on drying machine in order width adjustment , gum application and edge drying before drying chambers.

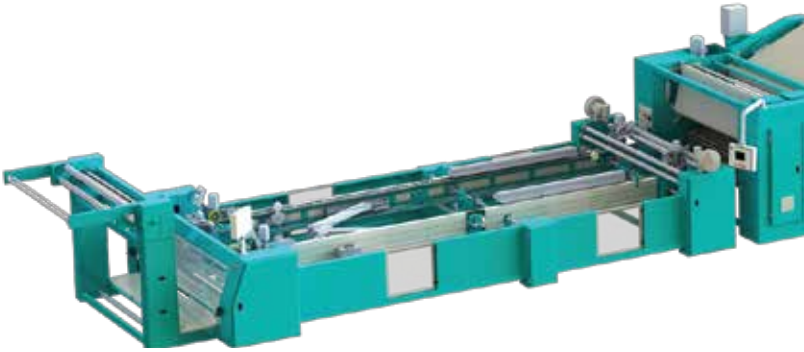
Inlet Section and Operator Platform
- Steel construction, painted and reinforced main frame
- Main traction roller, AC inverter controlled, Ø 220 diameter
- 11 kW capacity, 1400 rpm motor-gearbox drive system
- 2 pcs spiral expander roller enable to uncurl fabric edges before pinning on chain links
- Manuel skew correction roller, 500 mm stroke
- Functional control panel and PLC system
- Driven fabric conveyor unit, syncronized with machine speed or can be adjust seperately

Chain Inlet Groups
- Pneumatic controlled, rubber coated, left-right pinning wheels and brushes
- Fabric edge spreading unit EF-MED and Infrared edge control sensor EF-ECU
- Actuators EF-ECU/C, Inverter controlled chain rail position adjustment
- Pneumatic chain tension adjustment group

Chain Rails
- 5+1 long chain rails, vertical rail arrangement
- Chain tension control sensors
- Stainless steel chain rails and chain links
- Independent chain rail motor-gearbox system, encoder and inverter controlled

EF-EGS

Pin Chain Tenter Frame
Compacting Machines



Technical Specification
- Fabric centering and guiding unit (EF-FCU)
- Total lenght of chain rails 8180 mm (pin top pin)
- Pinning success with special design pinning groups (EF-HKS)
- Pneumatic controlled, rubber coated, left-right pinning wheels and brushes
- Fabric edge spreading unit EF-MED and Infrared edge control sensor EF-ECU
- Actuators EF-ECU/C, Inverter controlled chain rail position adjustment
- Pneumatic chain tension adjustment group
- Driven fabric center transport ropes for tension-free and relax transportation of fabric (EF-DCB)
- 2 pcs encoder controlled width adjustment spindle on chain rails
- PLC controlled, working period adjustable chain lubrication system
- Complete stainless steel frame chain rails and chan links
- Indirect steam base chain rail heating system to prevent condensation
- Conic "V" type steaming unit
- Air curtain system enable to prevent the inlet electronic equipments at the inlet section agains effect of steam
- Inverter and encoder controlled, left - right seperate motor - gearbox, direct connection to chain rails
- Functional control panel and PLC system

EF-HKM

Fabric Preparation Machine

The unit is designed and produced to prepare the rolls of tubular and open width fabrics before dyeing process.

Technical Specification

- 100 m/min mechanical speed of machine
- Stainless steel U-Box cylinders
- Availability to work 2-3 tubular rolls at the same time

EF-EXF

Exhaust Fan Applications

Alternative exhaust fan applications for Stenter machines, printing machines and drying machines.

Technical Specification

- 12.500 m3 and 18.000 m3 capacities exhaust fan applications.
- Direct syncronized system between fan and motor in order to avoid classical problems
- 5.5 kW capacity fan motors
- Cooling fan application between motor and exhaust frame
- Galvanized fan structure, made by 4 mm thickness metal frame
- Exhaust fan applications can be designed according to exhaust pipe exit dire

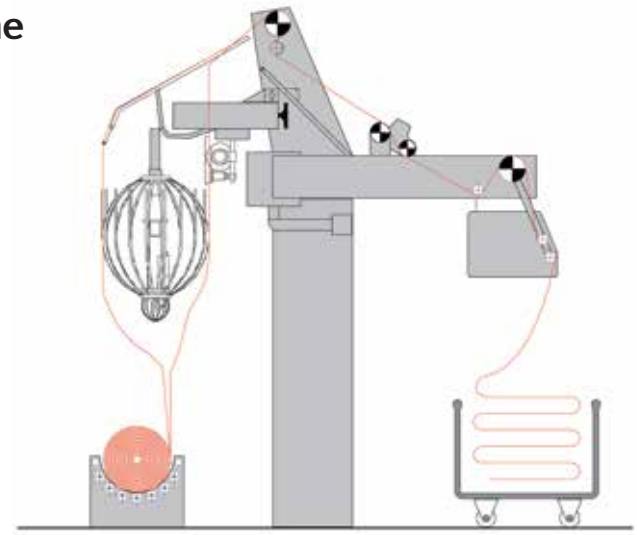
EF-TKM

Tubular Fabric Slitting Machine

The unit is mainly use for slitting of dry tubular fabrics as an open width fabric form.

Technical Specification

- Steel solid construction
- J-Box rollers are stainless steel and supported by the center
- Tubular fabric cutting head with reading sensors
- Spiral expander rollers to uncurl the fabric edges
- Plaiting unit to fabric carrier
- Mechanical speed range 5 - 100 m/min.

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B-01/11
BRÜCKNER


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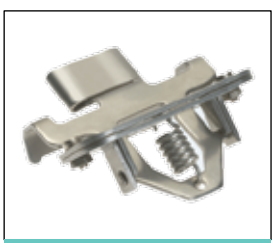
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M-02/12
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M-03/13
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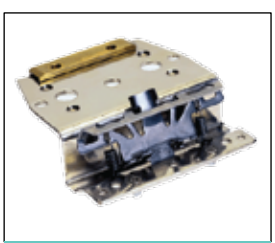
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