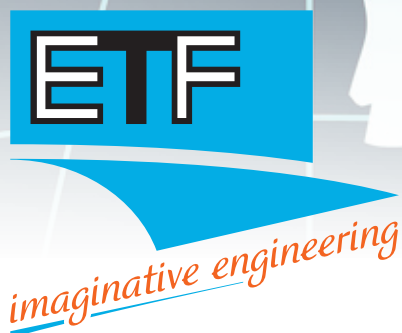




Production program

MACHINES FOR THE FLOOR COVERING AND NON-WOVEN INDUSTRY

ETF Machinefabriek



W W W . E T F . N L



A customised problem needs a customised solution

ETF Machinefabriek designs and manufactures machines for inspection, cutting, rolling, packaging, transporting and sorting of a wide range of different floor coverings and non-wovens. Our machines are suitable for a multitude of utilizations and are designed to offer you an all-in-one solution. Our machines can also include smart customised process automation to decrease the amount of waste material and to reduce the number of operators to an absolute minimum or to extend the working range to the max.

Our skilled sales team will help you to specify your exact requirements and to integrate the new addition seamlessly with your existing machines and processes. Our team of highly experienced engineers will then elaborate one of our proven concepts into the machine that will enhance your production process. Even when you ask the seemingly impossible, we will come up with a solution. Working worldwide; online and with qualified service engineers

to solve any problem you may encounter; quickly and accurately.

ETF machines are all designed and installed under the highest quality and latest CE safety standards. Would you like to know how we can help you optimising your processes, please visit www.etf.nl for the contact details of our nearest sales support team.



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Maximum flexibility in handling materials

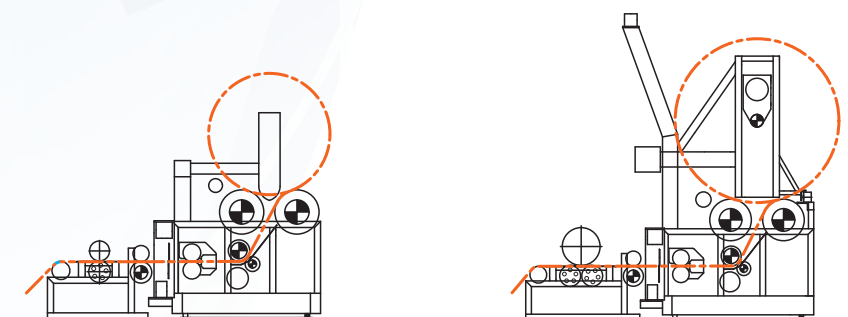
Features & options

- Electronic (optical) length measuring device M 2620 / M 2622
- Bi-directional fast cross cutter M 2410
- Slitting unit(s) M 2422
- Automatic feed up of material between main rollers
- Both rollers independently driven for tight rolling and speeds up to 100 m/min.
- Electronically width guided
- Automatic tube dispenser
- Pneumatically pivoting side guiders
- Centre drive system or push roller to create tight rolls of non wovens or artificial grass
- Foil dispenser for on-line wrapping
- Pneumatic roll ejection

The ETF semi-automatic rolling machine can be installed at the end of any floorcovering production line. It produces either large or small rolls, rolled pile in or pile out. Whatever needed at any given time. The special design of this rolling machine ensures perfectly straight and tightly-wound rolls. The rolling process must be started manually by one or two operators. The semi-automatic rolling machine can be modified for usage with artificial grass or very light weight materials. For that purpose it will be fitted with a centre drive system or push roller. This ensures the creation of a hard, round roll which makes handling and transportation of the roll a lot easier.



M 5720 Semi-automatic rolling machine



With minimum operators, maximum flexibility

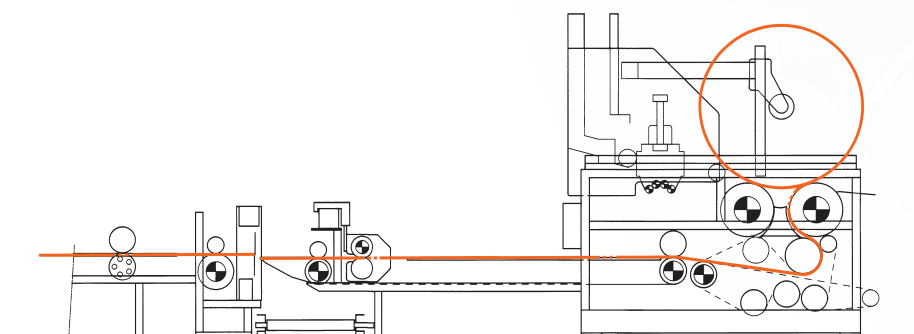
The ETF fully-automatic rolling unit can be installed at the end of any carpet production line. This comprehensive machine can be operated by just one operator. Advanced design of the feed section together with the lapping bridge guarantees problem free winding, pile in or pile out, and wrapping of all carpet qualities. The special design of this rolling machine ensures perfectly straight and tightly-wound rolls and short cycle times. The rolling process of this machine starts fully automatic.

Features & options

- Electronic (optical) length measuring device M 2620 / M 2622
- Bi-directional fast cross cutter M 2410
- Automatic cut out of marked parts, like seams or rejects
- Slitting unit(s) M 2422
- Both rollers independently driven for tight rolling and speeds up to 200 m/min.
- Pneumatically pivoting side guiders
- Dual lapping bridge for handling broad range of material thicknesses
- Centre drive unit for e.g. tight winding of artificial grass
- Automatic tube dispenser
- Foil dispenser for on-line wrapping
- Wrapping of split rolls
- Tacker beam M 2213 to fix the foil to the material
- Heat seal beam M 2220 or automatic tape dispensers to close the wrapped roll
- Automatic roll ejection
- Option of double lapping bridge for handling of two core diameters



Fully-automatic rolling machine M 5724





Optimised roll preparation

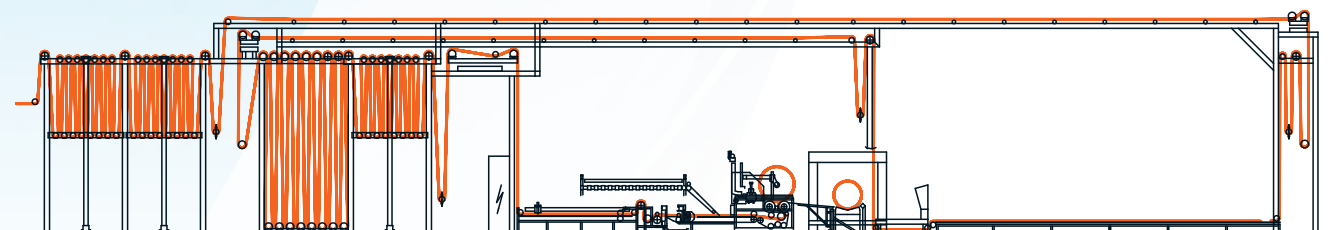
Features & options

- Width guided edge cutting system M 2450
- Edge choppers M 2460 to save volume of waste
- Accumulator M 5150 for temporarily carpet storage
- Pneumatically controlled dancing roller for excellent tension control
- Inspection section, controlled independent of the remaining line
- Guiding frame for track position control
- Carpet rolling machine M 5720 or M 5724
- Automatic roll transport system M 5900
- Ultra-sonic sealing unit M 5230 to close roll ends automatically
- Automatic roll sorting system M 5940
- Integration of the machine into a company network

The ETF end of a carpet backing line is an extensive installation that optimises your preparation of wrapped rolls. It is a smart combination of accumulation, inspection, cutting, rolling and wrapping; all controlled through one common plc-program which guarantees maximum flexibility. The integration of a fault registration and optimisation system increases the number of first quality rolls and therefore drastically decreases the number of short rolls. The total backing line extension can be controlled by only one operator and one inspector.



M 5300 End of a carpet backing line

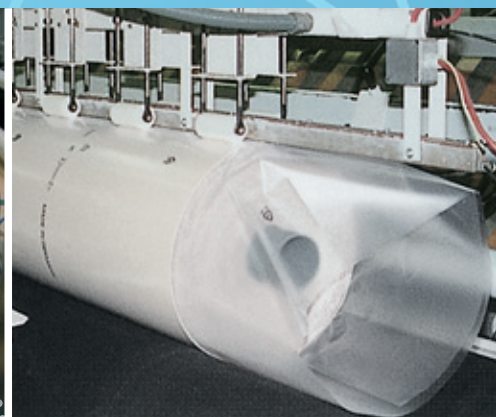


Smart add-ons save time and money

For the rolling and wrapping process ETF developed 3 add-ons to optimise your end of backing line. The reliable tape dispenser secures the trailing end of a roll with a number of equally spaced self-adhesive tapes without affecting the tightness of the roll. The tacker beam ensures a secure attachment of wrapping foil to the trailing end of a carpet roll using so called tackers (plastic clips) which makes the use of adhesive tape superfluous. If you wish to use a cost saving and environmentally friendly option for closing the wrapped roll ETF offers a thermal seal beam. This beam can be added to your machine to automatically seal the wrapping foil over its entire width as a replacement for tape. Also suitable for wrapping split rolls.

Features & options

- Automatic closing of large and small diameter rolls
- Tape dispensers can be separately activated
- Quick tape reloading
- Secure fixing of wrapping foil to the carpet by means of plastic tackers
- Closing the wrapping foil by means of heat sealing



Tape dispenser
Tacker beam
Seal beam

M 2210
M 2213
M 2220



Efficient rolling, easy operation

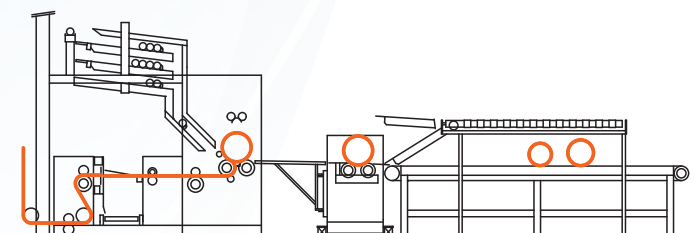
Features & options

- Electronic (optical) length measuring device M 2620 / M 2622
- Bi-directional fast cross cutter M 2410
- Automatic cut out of marked parts, like seams or rejects
- Slitting unit(s) M 2422
- Special shaped rubber rollers to avoid sticking of vinyl
- Pneumatically pivoting side guiders
- Automatic tube dispenser
- Wrapping system for automatic foil or paper wrapping
- Wrapping of split rolls
- Folding unit & bung press
- Automatic tape dispensers M 2210 to close the roll
- Automatic roll ejection

The ETF fully automatic vinyl rolling machine guarantees straight and tightly-wound rolls. It can be installed both on-line at the end of a production line or stand alone behind an inspection section. The machine is available for material widths of 2 up to 5 metre.



M 6720 Fully-automatic vinyl rolling machine



All-in-one roll preparation

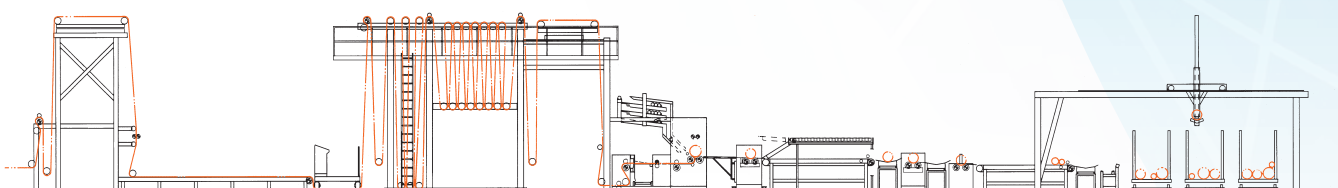
The ETF end of a vinyl production line is an extensive installation that optimises your preparation of wrapped rolls. It is a smart combination of accumulation, inspection, cutting, rolling and wrapping; all controlled through one common plc-program which guarantees maximum flexibility. The integration of a fault registration and optimisation system increases the number of first quality rolls and therefore drastically decreases the number of short rolls. This outlet line can be controlled by only one operator and one inspector.

Features & options

- Width guided edge cutting system M 2450
- Edge choppers M 2460 to save volume of waste
- Accumulator M 5150 for temporarily carpet storage
- Pneumatically controlled dancing roller for excellent tension control
- Inspection section, controlled independent of the remaining line
- Guiding frame for track position control
- Automatic rolling machine M 6720
- Automatic roll transport system M 5900
- Automatic roll sorting system M 5940
- Controlling the line through a mainframe



End of a vinyl production line M 6300





Straight and tight rolls, no matter what material

Features & options

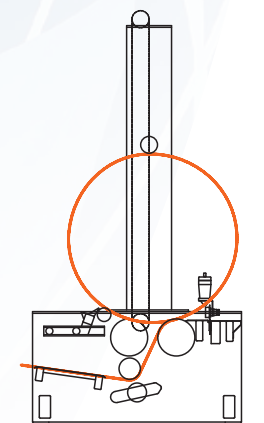
- Electronic (optical) length measuring device M 2620 / M 2622
- Single direction fast cross cutter M 2410
- Slitting unit(s) M 2422
- Crush slitter(s) M 3021
- Electronically width guided
- Adjustable main rollers for several tube diameters
- Automatic tube dispenser
- Gluing unit in order to start the rolling process automatically
- Manually or pneumatically operated side guiders
- Pneumatic roll ejection



The ETF versatile rolling machine ensures straight and tightly rolled rolls. It can be installed immediately at the end of a continuous or intermittent production line. Due to its modular design it can easily be (retro)fitted with e.g. a special central drive system or push roller to also roll artificial grass and non-wovens to very tight rolls.



M 5728 Versatile rolling machine



Smart roll preparation

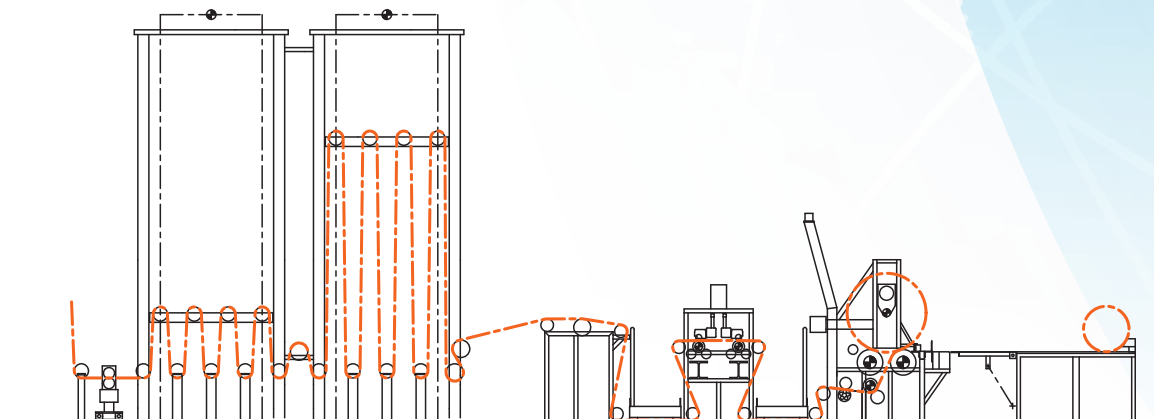
The ETF end of a non-woven production line is an extensive installation that optimises your preparation of wrapped customer rolls. It is a smart combination of accumulation, inspection, cutting, and rolling; all controlled through one common plc-program which ensures maximum flexibility.

Features & options

- Width guided edge cutting system M 2450
- Edge choppers M 2460 to save volume of waste
- Accumulator M 5150 for temporarily carpet storage
- Pneumatically controlled dancing roller for excellent tension control
- Inspection section, controlled independent of the remaining line.
- Guiding frame for track position control
- Rolling machine M 5720 or M 5728
- Automatic tube feed (also for multiple width tubes)
- Glue system for automatic adhesion of the material to the core or to close the roll
- Offline automatic wrapping system
- Automatic roll transport system M 5900



End of non-woven production line M 3300





Robust in-line storage

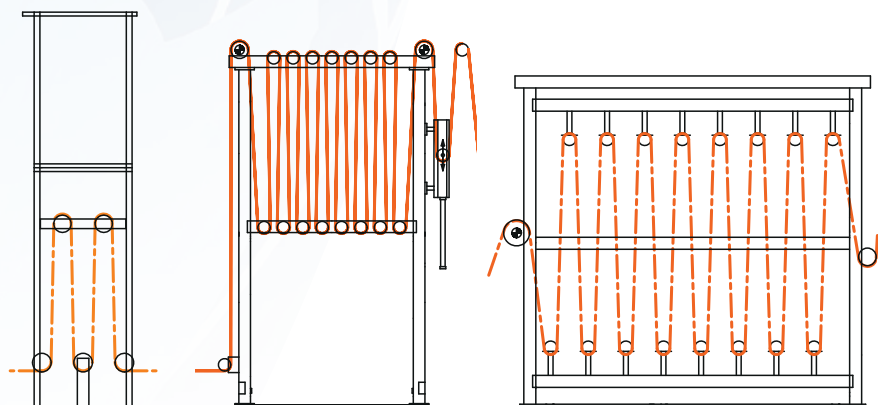
Features & options

- Robustly constructed frame
- Guaranteed horizontal bridge movement
- Drives at inlet and outlet roller
- Pneumatic or motor controlled contra weight regulation on bridge
- Pneumatically controlled dancing roller for excellent tension control
- Accumulator speed control system
- Aluminium rollers for tension sensitive materials
- Load cells for automatic tension control

The ETF accumulator provides storage within a continuous production line for various materials. It avoids an interruption of the continuous production process. This accumulator can be supplied with a moving upper- or lower bridge, a comb construction or a shaft drive. Several systems are available to counter balance the weight of the moving bridge, keeping the material tension to a minimum.



M 5150 Accumulator





Accurate and versatile cutting

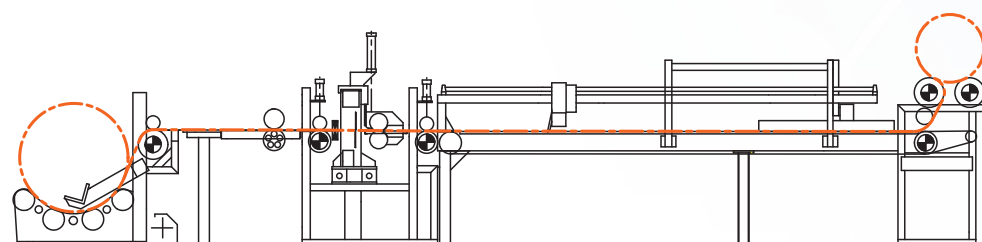
The ETF all round cutting machine is perfectly suited for splitting carpet rolls into rugs, runners, doormats, aircraft carpet or rolls for a sample department. The pieces are cut to a high degree of precision for the full length.

Features & options

- Width guided unrolling cradle
- Adjustable side guides in unrolling cradle
- Pneumatically operated arms to unroll bad wound rolls from the centre
- Electronic length measuring system M 2620
- Adjustable length stop
- Double action cross cutter M 2410
- Slitting units M 2422
- Manual or automatic width adjustment of slitting units
- Width guiding system on slitting beam
- Pneumatically operated push rollers before and after slitters
- Table with driven belts at discharge side
- Simple rolling unit



All round cutting machine M 5420





Slitting and inspection in one go

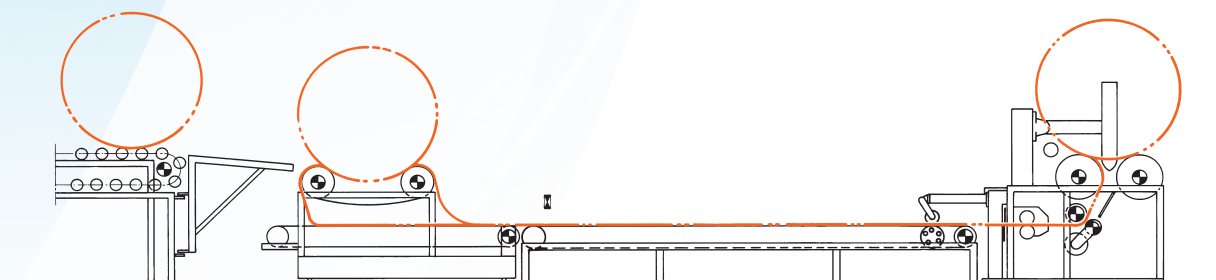
Features & options

- Roll supply table
- Electronically width guided unrolling cradle
- Pneumatically operated arms to unroll bad wound rolls from the centre
- Inspection table with driven belts
- Inspection platform overhead the inspection table
- Electronic (optical) length measuring system M 2620 / M 2622
- Slitting system with one or more slitting units M 2422
- Tube dispenser
- Carpet rolling machine M 5720 or M 5724
- Foil dispenser for on-line wrapping
- Roll discharge table

With the ETF re-rolling & inspection machine large rolls can be easily inspected and re-rolled. This machine ensures straight and tightly-wound rolls and can be used for pile in and pile out (un)rolling. Optionally it divides large rolls into a desired length and width using a fast bi-directional cross-cutter and one or more longitudinal cutting units.



M 5620 Re-rolling & inspection machine





Optimised offline roll preparation

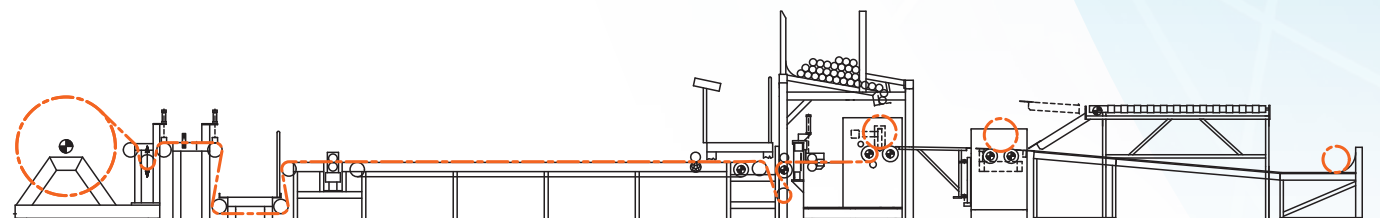
This ETF offline vinyl finishing line is an economic and efficient way of preparing straight and tightly wrapped rolls from a jumbo roll. It is a smart combination of inspection, cutting, rolling and wrapping; all controlled through one common plc-program which ensures maximum flexibility. The vinyl can be taken from an A-frame or an unroll cradle. The line can be controlled by only one or two operators.

Features & options

- Width guided A-frame with dancing roller for excellent tension control
- Edge cutting system M 2450
- Edge choppers M 2460 to save volume of waste
- Splice table with operator platform
- Inspection table with driven belts
- Slitting system with one or more slitting units M 2422. E.g. to divide 4m to 2x2m width
- Fully automatic vinyl rolling machine M 6720
- Offline automatic wrapping system
- Folding system and bung press for roll end closing
- Roll weighing system
- Automatic roll transport system M 5900
- Automatic roll sorting system M 5940



Offline vinyl finishing M 6610





Efficiency through cutting support

Features & options

M 5635

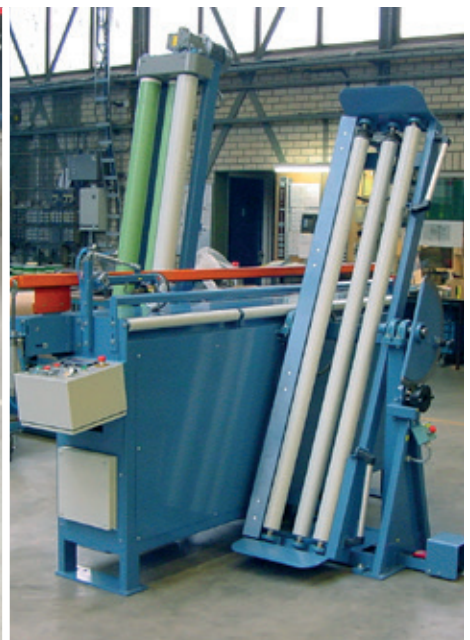
- Equipped with wheels (portable)
- Manual cutting slot
- Automatic cross cutter M 2410
- Slitting knife M 2425

M 6605

- Automatic cross cutter M 2410

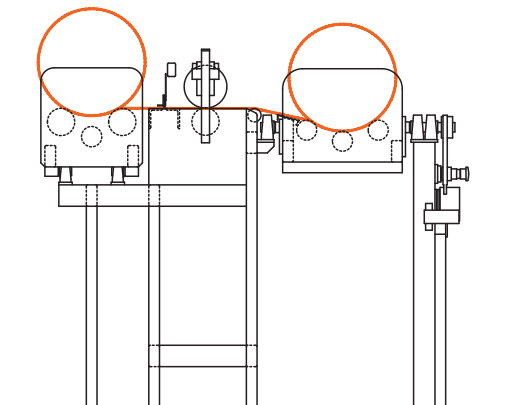
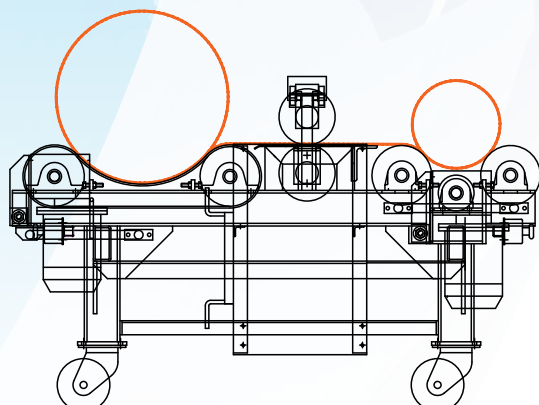
These efficient ETF compact cut length machines can handle all carpet or vinyl qualities. It is the ideal support to produce up to 100 cut orders per shift with only one operator. The M 5635 is suitable to handle all floor covering qualities up to 5 metres wide.

The M 6605 can handle vinyl up to 2 metres wide and is supplied including tilting devices for handling vertical stored rolls.



M 5635
M 6605

Compact cut length machines





Cost effective flexibility

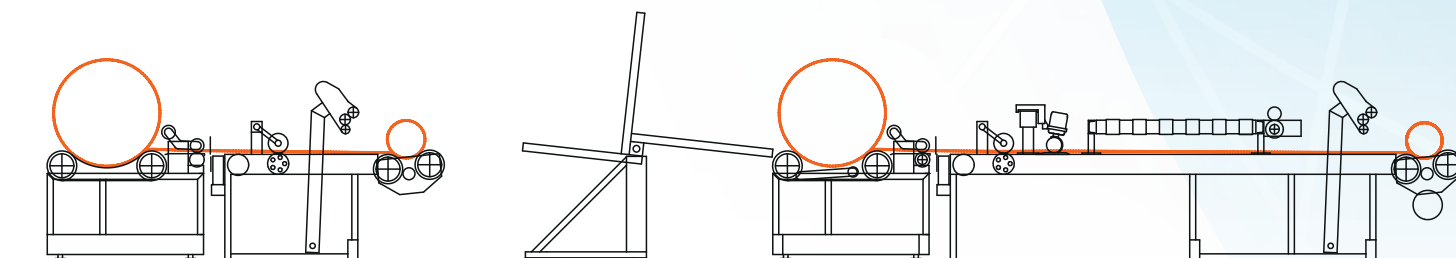
This cost effective ETF cut length machine handles all carpet and vinyl qualities. It produces up to 200 customer rolls per 8-hour shift: wrapped or unwrapped. Depending on the degree of automation the machine can be operated by only one or two operators.

Features & options

- Supply and discharge table for parent rolls
- Width guided unrolling cradle
- Single direction or bi-directional cross cutter M 2410
- Inspection table with driven belts
- Electronic length measuring system M 2620
- Slitting units M 2422 / M 2425
- Rolling unit for pile in rolling
- Ejectors for both the unrolling cradle and rolling unit
- Automatic online wrapping system
- Automatic roll transport system M 5900
- Ultra-sonic sealing unit M 5230 to close roll ends automatically
- Automatic roll sorting system M 5940



Cut length machine medium volume : M 5632





High volume at minimal costs

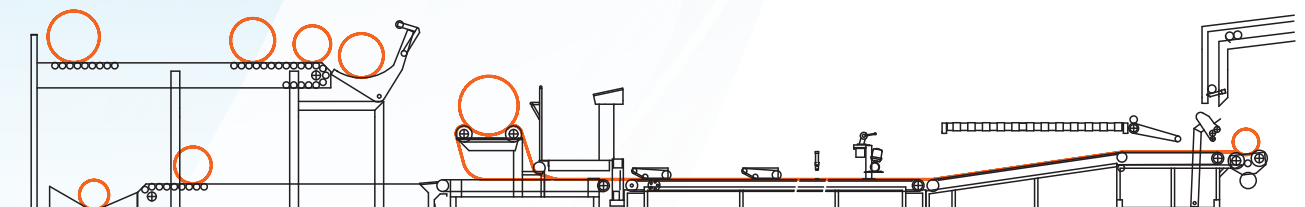
Features & options

- Width guided unrolling cradle
- Double action cross cutter M 2410
- Rectangular form cutting system
- Inspection table with driven belts
- Double inspection table to improve efficiency
- Operator platform over the full width of inspection table
- Electronic (optical) length measuring system M 2620 / M 2622
- Slitting units M 2422 / M 2425
- Automatic turning unit for short pieces
- Rolling unit for pile in rolling
- Automatic online wrapping system
- Automatic tube dispenser
- Automatic roll transport system M 5900
- Ultra-sonic sealing unit M 5230 to close roll ends automatically
- Automatic roll sorting system M 5940

This most cost effective ETF cut length machine handles all carpet and vinyl qualities. It produces a maximum of 500 customer rolls per 8-hour shift. Wrapped or unwrapped. The high degree of automation means that only one operator is needed. This cutting machine is very complete as it comes with quite a few extras compared to its smaller version the M 5632 a robust supply and discharge table, a tippable unrolling cradle, a bi-directional fast cross cutter and automatic ejection of the rolled cut length.



M 5630 Cut length machine





Efficient consumer roll preparation

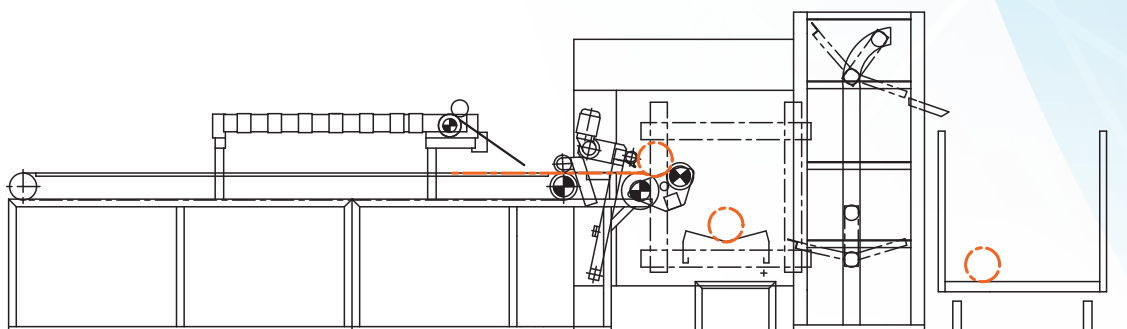
The ETF Rug rolling and wrapping machine is ideally suited for tufted and woven rugs. The machine can roll up to 240 rugs per hour and secures them with either belly bands or a full wrapping. Rugs can be rolled either pile in or pile out, with or without a tube. The machine can be operated by just one operator.



Features & options

- Barcode scanner for automatic machine adjusting
- Feed in table with driven belts
- Fully automatic rolling unit
- Automatic foil dispenser for either full wrap or belly bands wrapping
- Stretch foil dispenser
- Automatic label dispenser
- Automatic roll ejection
- Automatic roll transport system M 5900
- Ultra-sonic sealing unit M 5230 to close roll ends automatically
- Automatic roll sorting system M 5940

Rug rolling and wrapping machine M 5727



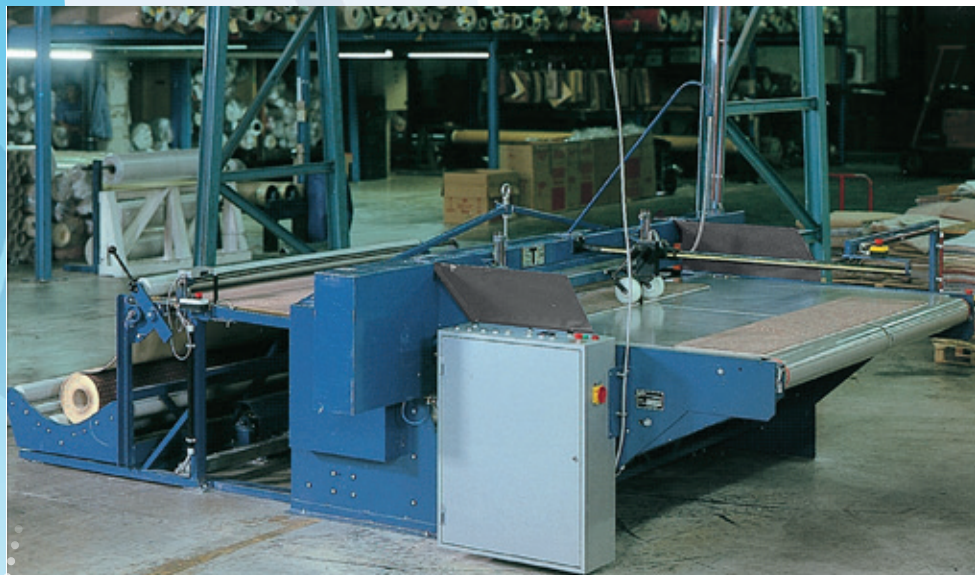


Smart sample cutting

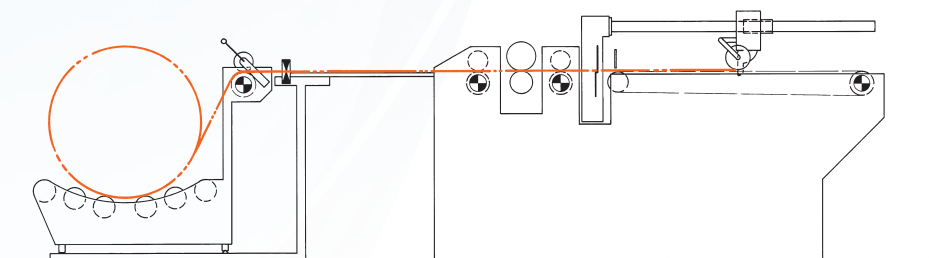
Features & options

- Required number of samples can be set
- Width guided unrolling cradle
- Adjustable length stop
- Quickly exchangeable slitting beam
- Double action cross cutter M 2410 with clamping beam
- Conveyor system to discharge samples

A perfectly presented sample sells your floorcovering. So investing in the ETF sample cutting machine is a wise decision. It operates very quickly and reliably for any kind of carpet, needle felt or vinyl. The machine produces cut samples with a minimum dimension of 5x13 cm (w x l) with an accuracy of better than 1 mm. Operation costs are lower as no dies are required.



M 5522 Sample cutting machine





Carpet sample enhancement

For manual bevelling of small carpet sample quantities ETF offers this table mounted bevelling unit M 5531. It neatly finishes the sides of carpet samples of various qualities.



Features & options

M 5531

- Adjustable bevelling angle
- Up and down moving shearing cylinder for extended lifetime
- Fusing unit to melt backing cloth yarn behind a shearing cylinder

Carpet bevelling unit : M 5531



A fully wrapped roll at low costs

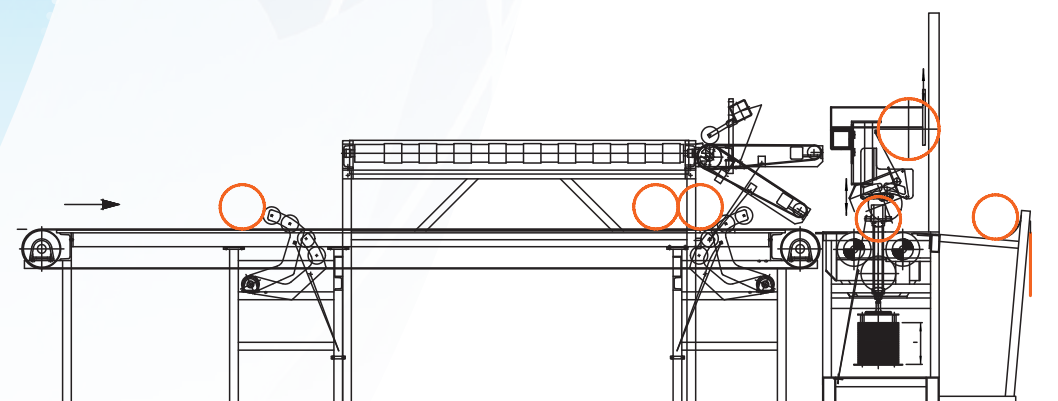
Features & options

- Supply / storage table with driven belts
- Rolling unit onto which rolls are wrapped
- Paper dispenser for automatically wrapping the rolls
- Pneumatic positioning of cardboard discs to roll ends
- Folding units to fold paper and tape
- Tape dispensers to apply protective tape to roll edges
- Automatic ejecting of wrapped rolls
- Weighing system

The automatic roll wrapping machine is suitable to completely wrap rolls including the roll edges. After wrapping the roll, cardboard discs can be applied to the roll ends and secured by a reinforced tape. This means the wrapped rolls can be stored vertically. With the automatic roll wrapping machine over 60 rolls per hour can be wrapped without operator intervention.



M 6200 Automatic roll wrapping machine





Sustainable roll end closing

The ETF ultrasonic sealing unit eliminates the need for clips or tape when closing your roll ends. Your PE, PP or other synthetic wrapping materials are sealed with great precision and superfluous wrapping foil can be trimmed without operator intervention.

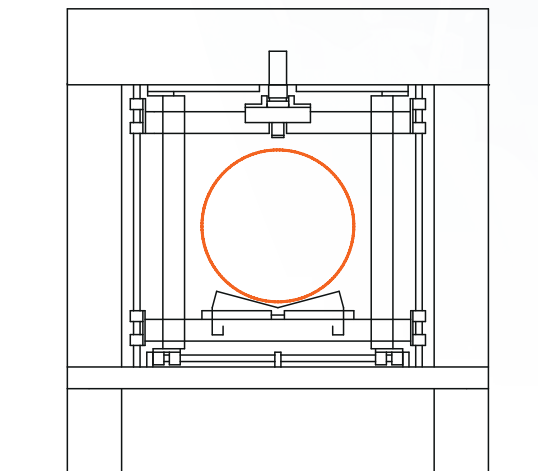
We offer a choice for either 50, 75 or 125 cm roll diametres, with a capacity of up to 6 end seals per minute.

Features & options

- Robust construction
- Automatic roll diameter and length detection
- Conveyor belts to forward rolls through the sealing unit



Ultrasonic roll end sealing unit M 5230



Efficient roll sorting systems

Features & options

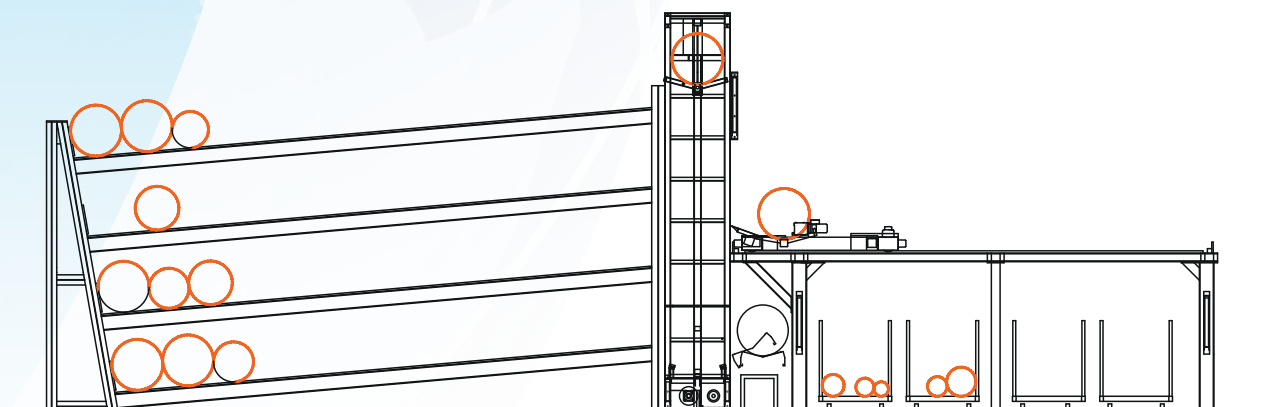
- Crane system to reduce impact when ejecting heavy rolls
- 360° barcode scanner to automatically determine roll destination from a label

ETF offers roll sorting systems in various versions. Whether you want to store cut-lengths or rugs in trolleys or racks, our sorting systems handle it very efficiently and are extremely flexible and user friendly. Decreasing labour costs and increasing safety are a direct result of applying a sorting system.

Linking of the ETF sorting system to your warehouse software ensures an insight into the position of rolls for a highly efficient way of loading trucks.



M 5940 Roll sorting systems



... in various ways



Roll sorting systems M 5940





Automatic roll handling

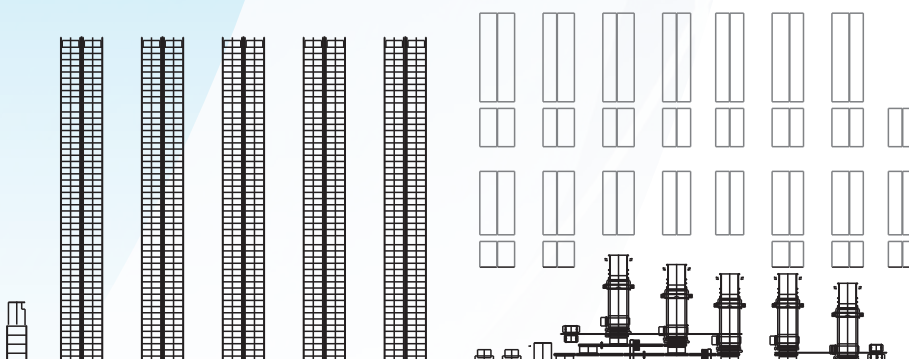
Features & options

- Straight, tipping and turning conveyors
- Roll elevators
- Storage tables with driven belts and dosing system
- Ultra-sonic roll end sealing unit M 5230
- Roll sorting system M 5940

ETF logistic systems increase efficiency and avoid errors in in-house logistic movements between a production line, processing machines, a warehouse and shipping doors. Smart programming done by our own software department ensures a seamless connection with your existing machines and storage systems. When using an ETF logistic system no more forklifts or operators are required to transport the rolls. All logistic systems are made to measure to your specific requirements.



M 5900 Logistic systems



Accurate material slitting

The ETF M 2422 slitting unit is a universal longitudinal cutter suitable for cutting various materials. It is based on a scissor-cut principle with 2 circular knives (ø 132 mm) which ensures a perfect cut and a long lifespan.

The ETF M 2425 slitting knife is a universally applicable longitudinal cutter suitable for cutting various materials. It can be used as a hand knife or built onto a machine.

The knife consists of a driven blade with a fixed counter-blade, a built on grinding unit and a separate handle, and guarantees you a high quality slit.

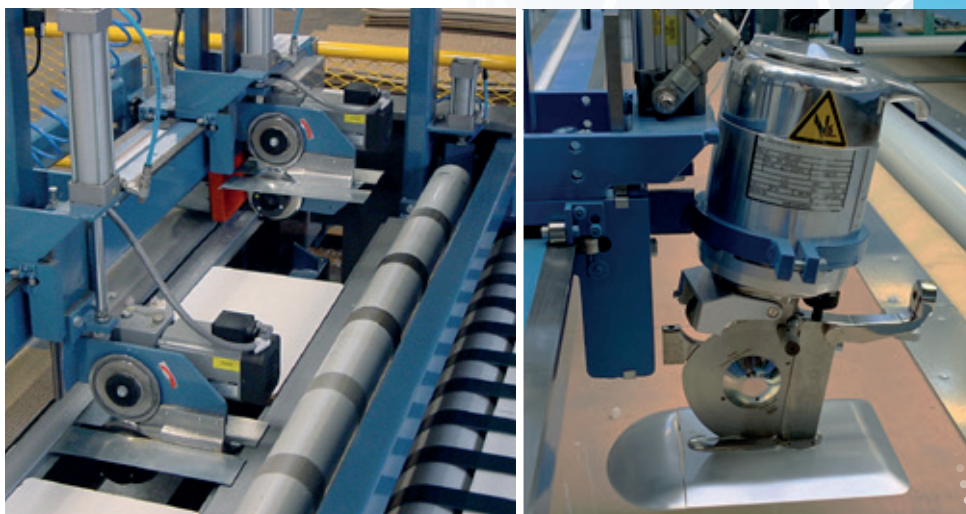
Features & options

M 2422

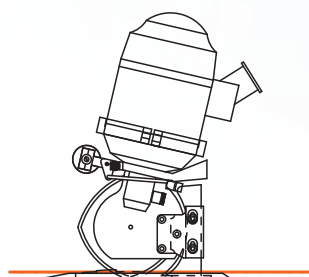
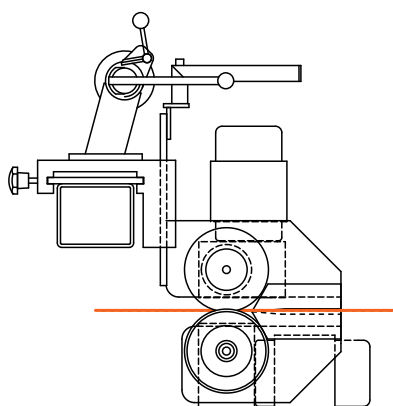
- Driven upper and or bottom knife
- Bottom knife spring loaded against top knife or direct driven
- Manually or pneumatically positioning in and out of the cutting position
- Manually or motor driven width adjustment

M 2425

- Manually or pneumatically positioning in and out of the cutting position
- Manually or motor driven width adjustment



Slitting unit : M 2422
Slitting knife : M 2425



Reliable material slitting

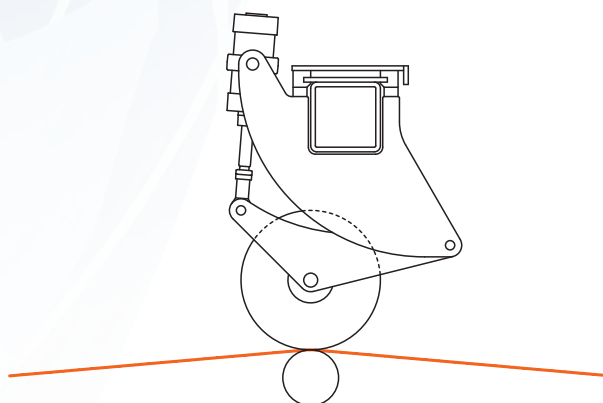
Features & options

- Pneumatically positioning in and out of the cutting position
- Manual or motor driven width adjustment
- Slitting to small widths possible
- Long lifetime of the blades

The ETF crush splitter is ideal for continuous cutting applications. The cutting blade is pneumatically pushed to a hardened, driven shaft. The material running in between will be split by crushing it. Due to the metal on metal contact of blade and shaft the edges of the blade do not have to be sharp which guarantees a long lifetime of the blade.

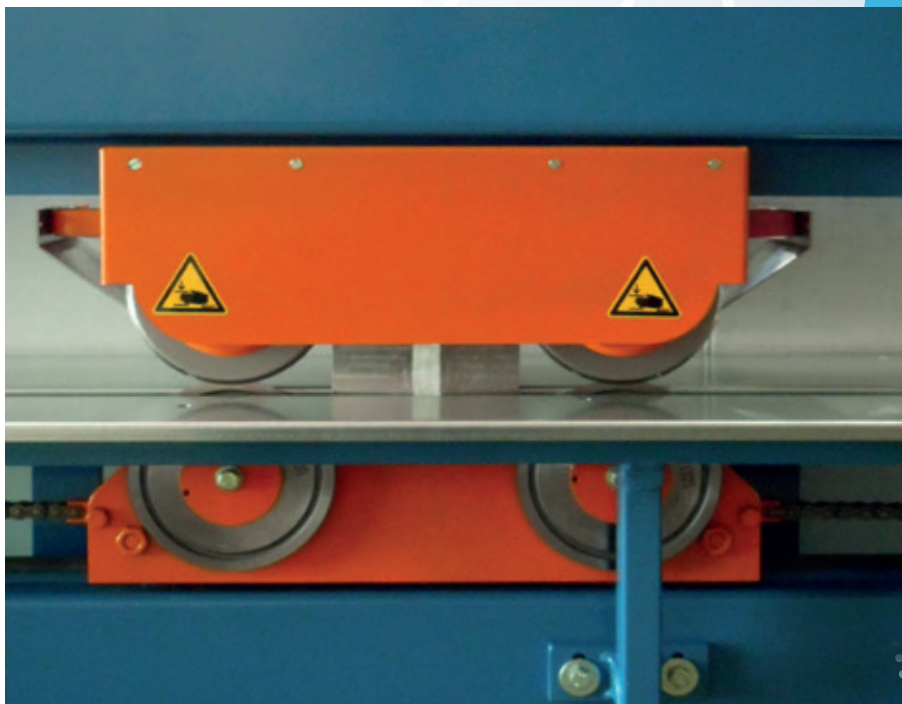


M 3021 Crush Slitter



Fast and robust cutting

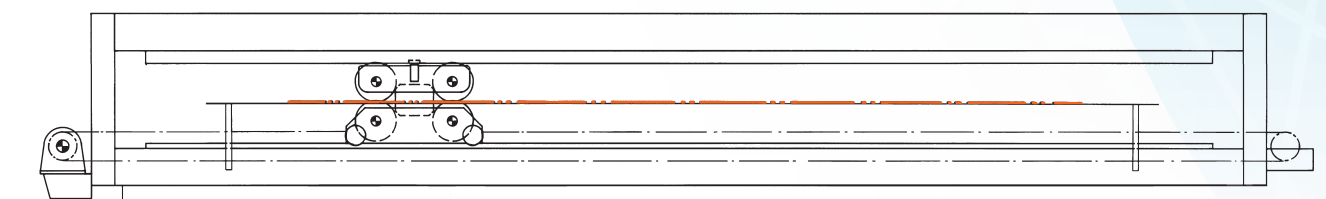
The ETF cross cutting unit is a bi-directional fast cross-cutter with a maximum cutting speed of 120 m/min. It perfectly cuts various materials without clamping it. The cutting is based on the scissor-cut principle with 2 sets of driven circular knives. It cuts from left to right and vice versa meaning it doesn't have to move back to its home position after cutting, which saves time.



Features & options

- Direct driven upper and bottom knives
- Also available as single direction cutting execution

Cross cutting unit M 2410



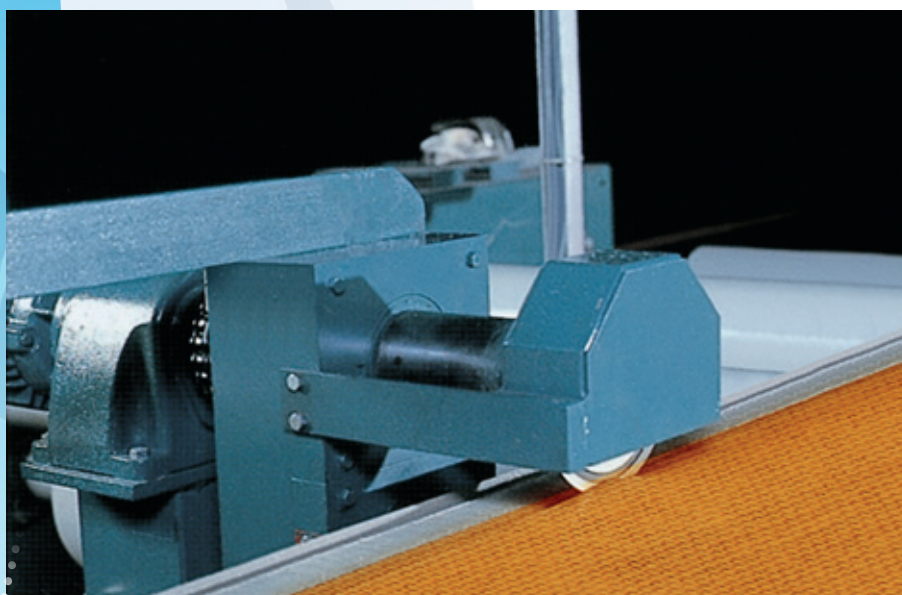
Everlasting knife quality

The ETF edge cutter offers problem free trimming of selvages by centrally width adjustable cutting heads. Each cutting head operates with a set of separately driven circular, long-lasting knives \varnothing 132 mm which can be individually fine adjusted in width. This edge cutter can be provided with a vision system which detects the selvage or the print pattern and uses this information to control the position of the cutting heads.

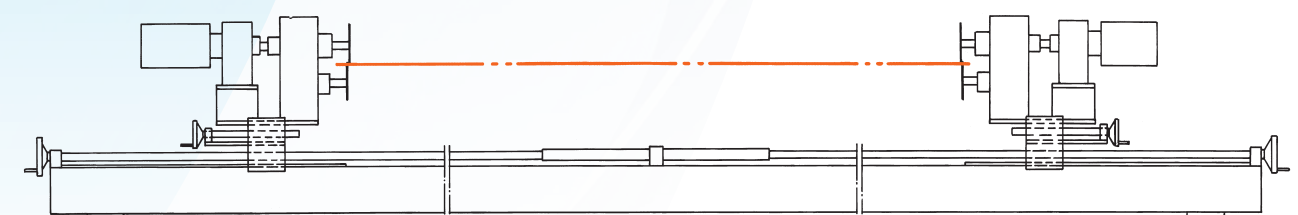
This contributes to the reduction of the carpet-edge width and the subsequent quantity of yarn wasted.

Features & options

- Motor controlled width adjustments
- Centre line adjustment
- Double executed version in order to keep the line running during knife exchange

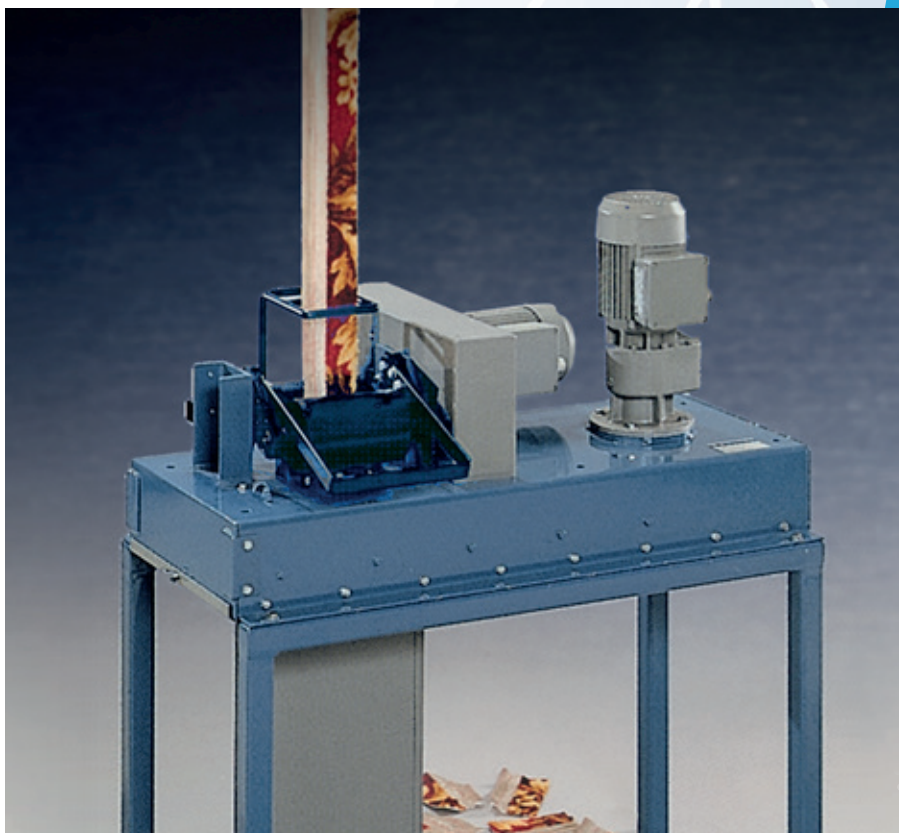


M 2450 Edge Cutter



Waste volume reduction

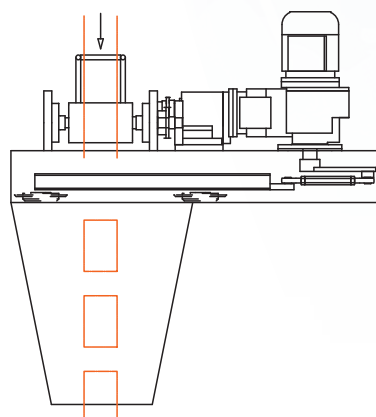
Save up to 50% on your waste volume by using an ETF edge chopper! It chops your carpet edges into 10-15 cm lengths. Simple and efficient. This unit can be integrated with your waste disposal system.



Features & options

- Direct driven pull section for selvages
- 2 direct driven circular knives

Edge chopper M 2460



Smart measuring systems

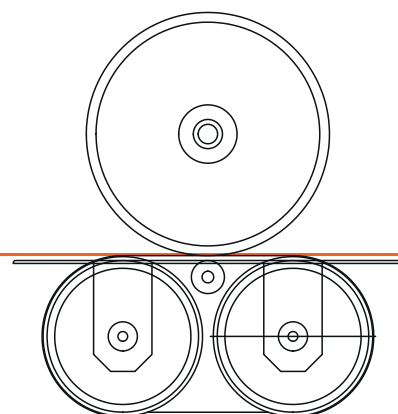
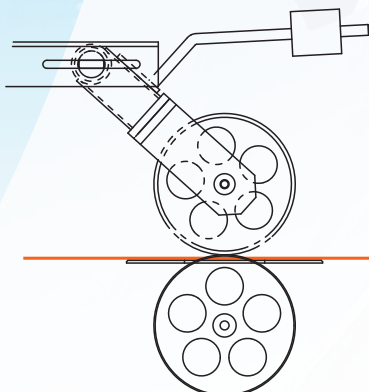
Features & options

- Driven belt next to measuring wheel to flatten curl at starting edge
- Additional measuring wheel for measuring both carpet and vinyl
- Control unit with displays and keypad
- Set length and measured length read out
- Slow down signal generated prior to stop signal
- Automatic machine stop at set length
- Controllable through a mainframe

ETF offers you a measuring solution that is both very accurate and communicates on ethernet interfacing. This microchip controlled device operates with a measuring wheel and guarantees an accuracy better than 0.5%. Measuring is done at the backside of the material.



M 2620 Electronic length measuring unit

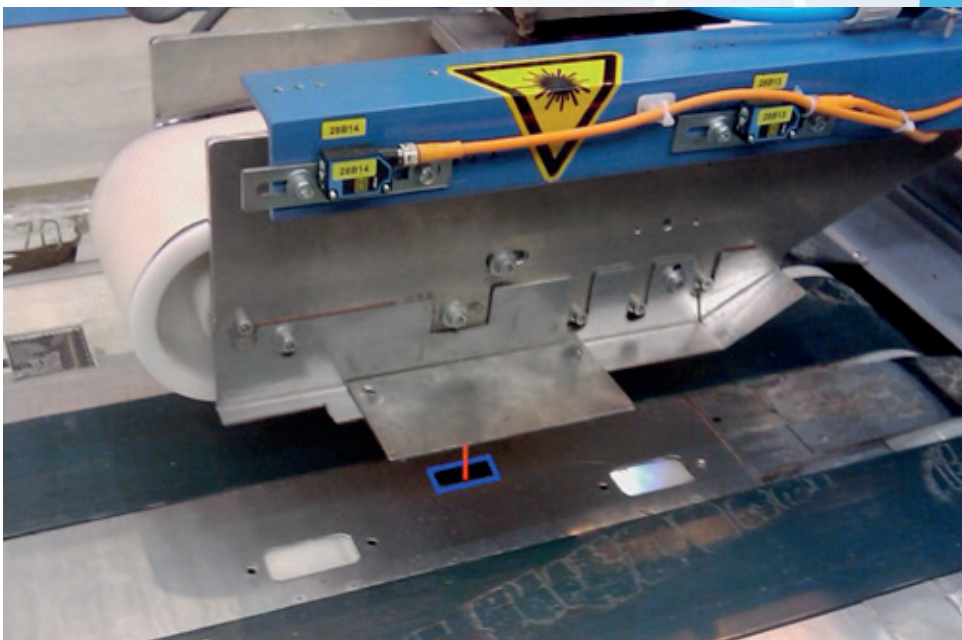


Laser measuring for maximum accuracy

With the optical length measuring system a measuring accuracy of even better than 0.15% can be achieved. Measuring is done by a laser which can measure any material in both directions on the fly. Since the laser is not in direct contact with the material the measurement will not be influenced by e.g. a moment of inertia, a slip of the wheel or dirt on the contact surface.

Features & options

- MID (Measuring Instruments Directive) approved
- No wear and tear
- Automatic laser lens cleaning
- Driven belt next to laser to flatten curl at starting edge in offline operation



Optical length measuring unit M 2622





Imaginative utilisation of proven technology

All ETF machine concepts that are developed for floorcoverings can be applied to different areas. Our imaginative engineering department is excellent at translating your specific requirements into a unique design of a made to measure machine. Everything is possible.

During the past 65 years of manufacturing machines we have built a special designed machine for application in another industry on numerous occasions. Even specials like a pick and place unit and polystyreen forming unit. The processes in floorcovering production are not unique. We are able to translate them into different areas. The examples below illustrate this:



M 6320



M 6430

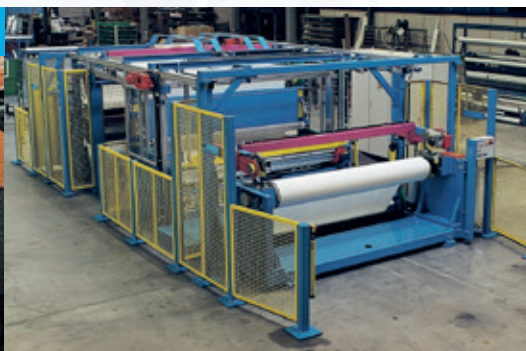


M 3821

Special machines



M 3420



M 6325



M 5523



Fabric inspection machine M 6320

The ETF fabric inspection machine is an advanced inspection machine for virtually all kinds of industrial fabrics. It operates with an inspection speed of up to 80 m/min from a batch roll to customer roll. It comprises an integral light box in the inspection table with additional lighting above it.

Vinyl sawing machine M 6430

The ETF vinyl sawing machine is perfect for cutting 4 metre rolls into e.g. 2+2 metre width rolls or 3+1 metre. These widths can be varied to customer's needs. The sawing position is supplied with a rolling unit which contributes to fast cycle times. The sawn rolls are carried out by means of a conveyor belt.

Re-rolling cut machine M 3821

ETF designed a very efficient machine for re-rolling and cutting various non-woven materials. It slits the material longitudinal, reduces the roll width or makes straight clean edges. This machine is extremely suitable if a minimum tension is required during the process when the non-woven is very thin. The machine operates at a maximum speed of 400 m/min.

Thermal cutting machine M 3420

The smart ETF thermal cutting machine is equipped with temperature adjustable cutting knives and can be used for all synthetic fabrics. It comes with a discharge system and the production speed is roughly 25 cuts per minute.

Re-rolling machine conveyor belt material M 6325

The ETF re-rolling machine for conveyor belt material has been developed for re-rolling both lightly woven inlay material and heavy conveyor belt material including automatic transportation and inspection.

Cut & stack machine M 5523

This ETF machine is the best choice for quick and accurate cutting and stacking of non-wovens and synthetic materials such as shammy, household cloth etc.

Rug centre rolling and wrapping machine M 5725

The rug centre rolling and wrapping machine has been primarily developed to roll PP woven rugs pile out. By using the centre rolling technique straight and tight rolls can be guaranteed. The machine can roll and wrap up to 240 rugs per hour.

Lead slitting & rolling machine M 9630

ETF developed a machine for slitting, cross cutting and rolling of lead, both with or without a tube. This machine is a complete finishing system when delivered with tape dispensers for securing the roll, an on-line weighing and labelling system and an automatic palletizing system.

Wire lay on machine M 3521

This ETF machine is specially designed for manufacturers of electronic blankets. It takes care of the wire laying and gluing during the production process.



M 5725



M 9630



M 3521

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W W W . E T F . N L

ETF

imaginative engineering