







Handsaeme Machinery designs and builds automatic machines and finishing lines for both woven and tufted carpets. We start from a standard concept which can be extended with modular options to increase the automation level.

Speed, productivity and safety are key to any working environment Our focus is on providing you with the most effective solution that will give your business:

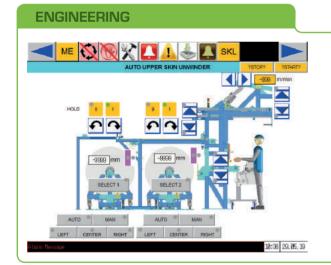
Production improvement
Cost reduction
Quality
Safer working environments

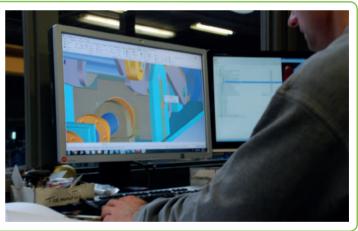


#### **OUR MACHINES, YOUR AUTOMATIC CARPET FINISHING**

If you are searching for a reliable long-term partner to innovate and automate in your production, you have come to the right place.

We develop and install machinery with the degree of automation desired by the customer. You can always count on a personal approach from the engineering phase until the start up and commissioning at your site.







All our machines are developed to automate partly or completely, one or more processing actions to finish your carpets. Most automated operations are cutting, finishing the edges, rolling, packaging, transporting or inspecting. Furthermore, Handsaeme Machinery can also develop on demand machines for special operations such as labeling and automated infeed & outfeed systems for various production lines. These installations can be stand alone machines or integrated in existing or new production lines. More specific to the tufting industry, we also provide additional equipment such as creels, polyback unrollers, inspection stands and rollers for tufting machines.















Each machine is tailored to handle specific carpets such as woven, tufted and printed carpets, artificia grass, needle felt, doormats, etc.

Our engineering team does the necessary tests and reseach to optimally process your product range.



### **Cutting**

Our cutting solutions cut the machine woven or tufted carpet to the desired dimensions before being further finished.

The applied cutting technology is according the material to be cut. We guarantee in this way the best result and highest return.

Depending on the type of carpet, high or low pile, type of backing, dark or light design, our range contains different detection systems to determine where exactly the material should be cut. Each detection system is foreseen with an automatic machine stop when the parameters are not followed.



#### **BENEFITS CUTTING MACHINES**

- Accurate cutting of different materials through adapted detection system
- · Fast cutting with consistent quality
- Higher production through efficient cutting automation

#### **LENGTH CUTTING**





- · Cut your carpet into the desired number of strips (in width).
- Minimum strip width 23 cm
- · Work with driven cutting blades or with ultrasonic cutting heads
- Each cutting head can work with its own detection or follow another cutting head on a programmed distance

#### **CROSS CUTTING**

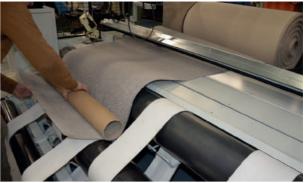




- · Cut your carpet automatically on length
- Follows the straight or curved sides of the carpet easily
- · Can process different material qualities on one machine
- Shows an important quality improvement compared to manual or semi-automatic cutting

#### PROFESSIONAL COUPON CUTTING "HM EASYCUT E1"





- Unrolling, cutting and rolling unit for the retail sector and professional usage
- Ergonomic alternative, especially developed for the semi-automatic processing of artificial turf and tufted carpet for wholesalers or low production capacities
- Can be operated by one person
- Different qualities on one and the same machine
- · Rolling with or without cardboard tube possible

#### INDUSTRIAL COUPON CUTTING





- · Combine lengthwise and cross cutting in one machine
- Cut the mother roll into smaller coupons (different sizes programmable)
- Process different qualities and types of material on one and the same machine
- Different detection options of the cutting line
- Further automation possible for rolling and packaging of ready-made coupons

#### **CUTTING PRESS**



#### **CNC CUTTING**



- Cutting carpet tiles with high precision cutting die but also to cut carpets with round corners or without PVC border
- Equipped with infeed and outfeed conveyor system
- Also possible to feed in multiple layers
- Capacity: 10 punching cycles per minute
- Special layered belt for cutting onto, belt is moving so knive is cutting on different places on the supporting belt to minimize the wear
- Flexibele of cutting different sizes of tufted and printed carpets
- Shape cutting
- · Equipped with infeed and outfeed system
- With suction table conveyor

### ≟√ Edge finishing

Our edge finishing machines mainly focus on finishing of woven and tufted carpets. After cutting, the edges of the carpets have to be finished both in the longitudinal direction and in the transversal direction. This can be done in different ways: an edge can be sewn to the carpet (overedging or sewing); with or without extra fringes, or the edge can be folded and glued. The carpet edge finishing machines have been one of the corner stones of our expertise for years.



#### **BENEFITS FINISHING MACHINES**

- Increase the quality of the carpet, resulting in longer carpet life and greater customer satisfaction
- Various techniques possible
- Automation degree in function of requirement

#### **LENGTH OVEREDGING**



- Avoids unraveling carpet and give a nice finish to the edge of the carpet
- Time savings by finishing both sides simultaneously
- No start and stop markings visible (computer controlled synchronization)
- Many automation options possible
- Useful carpet width between 0 and 5,2m
- Simultaneous length overedging of 3 runners on one machine possible



#### **CROSS OVEREDGING AND FRINGING**





- · With the full automated version, the sewing machines follow the side of the carpet, even if it is slightly bowed
- · Automatic alignment and correct positioning of sewing machines for each carpet
- Only 1 operator needed to run the machine
- Can handle various qualities and different dimensions without major changes to the set-up

#### **FOLDING AND GLUING**





- Automatic detection to make the fold in the correct place
- Neat and qualitative type of finishing of the carpet edge
- No operator needed, machine works 100% independent according programmation
- Many qualities programmable by means of touch screen
- · Semi-automatic folding and glue units are also available

## Rolling

to the pile working effect. The rolling machines from Handsaeme Machinery are especially designed to meet this requirement. Edge steering can be foreseen on our rolling machines to avoid telescoping.

- rollers with a tension curve
  rollers with a pressure roll for tufted grass & long pile carpets
  rolling machines with 3 rollers
  rollers for wall to wall carpets and runners
  unrolling devices are also among our specialties.

  BENEF



- Straight rolling, without telescoping by means of side steering
- Rolling with or without cardboard tube
- Rolling with pile inside or outside

#### **C&C ROLLERS**

- Type "belt roller": infeed table with belts that grip the carpet and roll it
- Rolling with a very small core or around a cardboard tube with as a result the name of the machine: 'Centerless' and 'Cardboard tube' roller

#### >> ECONOMIC MODEL "C&C-E"



- Compact machine, often separately next to the line
- Suitable for rolling small carpets up to 2 m useful width, also for PVC & rubber doormats.
- Can be provided with stretch film heads to close the rolled carpets
- Infeed and outfeed at the frontside of the machine

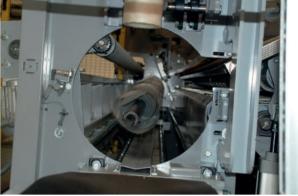
#### » INDUSTRIAL MODEL "C&C-I"



- Machine is suitable for larger carpets (up to 3 m useful width) and for industrial sized productions of woven or tufted carpet
- Various possibilities for closing the roll and/or for packaging (stretch foil, wide plastic band, fully packed, ...)
- Automatic rolling after manual infeed by the operator or following automatic infeed from the finishing line
- Automatic outfeed of the carpet roll at the side of the machine; up to 5 carpets/min

#### **AXIS ROLLERS**





- Machine is designed for rolling larger carpets (up to 4 m useful width)
- · Carpet is rolled around an axis, this is especially suitable for high pile carpets
- · Also suitable for rolling carpets with gel or foam backing
- Rolling with programmable tension and speed
- The carpet can be rolled with the pile inside as well as with the pile outside
- Capacity automatic configuration: 3 to 4 carpets per minute
- After rolling the carpet roll can be packed simultaniously

#### **ROLLERS FOR WALL TO WALL CARPETS AND RUNNERS**



- Manual, semi- and fully automatic solutions available
- · With pressure roll or center driven for compact rolling
- Edge steering for perfect straight rolling
- · Possibility to pack the roll on the same machine
- Speed and tension are adjustable

#### **ROLL CLOSING POSSIBILITIES**







To preserve the quality of the perfectly rolled carpet, there are following closing options; strapping, stretch foil, or a wide plastic band, possibly foreseen with a label underneath.

# Packaging

For the complete packaging of carpet and textile rolls, we make both simple but functional units for the processing of smaller runs, as well as fully automated packaging installations for continuous industrial production.



#### **BENEFITS CARPET PACKAGING MACHINES**

- Packaging the roll for storage or as sales preparation
- Full packaging for optimal protection of your carpet
- Possibility to apply label, stack or place in boxes

#### **ROLL IN PACKAGING**





- Carpet rolls (up to max diameter 50 cm) are already rolled in a previous stage of production and pre-closed with tape or stretch foil
- Plastic foil is automatically cut to the correct size, regardless the length of the carpet roll, and then wrapped around the roll. The plastic foil is closed automatically lenghtwise with tape.
- · Tightly wrapped carpet rolls to avoid telescopic formation, choice between a plastic band or full width packaging

#### **PUSH IN PACKAGING**





- Suitable for the automatic packaging of carpet and textile rolls of equal lengths with a maximum diameter up to 70 cm
- Rolls are completely wrapped with plastic foil on this machine ("full packaging" is the only possibility here)
- The plastic foil is sealed both in length (with heat seal) and at the ends (with weld or shrink)

#### **SHRINK PACKAGING**





- For full automatic and continuous packaging of both short and long carpet rolls (unlimited in roll length)
- Also possible to pack piles of unrolled carpets
- · Fast, efficient and economical packaging system without intervention of an operator

#### **PLASTIC STATIONS**



- Semi-automatic packaging solutions
- Can be placed above or next to a rolling machine
- The operator only has to insert the plastic foil between the flap of the carpet roll
- The plastic foil is automatically cut at the pre-set length
- Also possibilities to pack splitted rolls

#### SIDE CLOSING POSSIBILITIES









If the carpet roll is completely wrapped with a plastic foil, there are various possibilities for closing the sides of the roll: ultrasonic or flat welding (with or without handle cut off) or shrinking.



### **™** Transport

Handsaeme Machinery supplies all kind of transport, buffering and sorting

systems.

Our range includes conveyor belts, buffer belts, J-boxes, accumulators, elevators, box filling, stacking and sorting systems.



#### **BENEFITS TRANSPORT EQUIPMENT**

- Efficient transport between the production and finishing lines
- Buffer conveyors, accelerators, J-boxes, accumulators ... a wide range of possibilities
- Cost-saving stacking

#### **CONVEYING SYSTEMS**

#### >> TELESCOPIC CONVEYOR



#### **>> TRANSPORT BELTS**



- For unloading and loading trucks
- Up to an extended length of max 23 m
- · Tailor made conveyor of any size and shape for different applications

#### **CARPET ELEVATORS**



- Elevator can be placed after a rolling or packaging machine
- Carry out the carpet rolls along the right or left side, depending on the operator's choice
- The carpet roll is dropped into the selected container via a lift system
- Optional with XZ manipulator to continue sorting the rolled

#### **BUFFERING SYSTEMS**





 J-boxes and accumulators provide a buffer and prevent a complete line from being stopped if an intervention is needed somewhere

#### **SORTING SYSTEMS**



- Can be placed after a rolling or packaging machine
- For sorting the carpet rolls in bins, carts or pallets using an ID-label and barcode scanner that communicates with your ERP system

#### **BOX TILTING SYSTEMS**



- Are placed after a rolling or packaging machine
- Lifting and rotating unit to tilt and move cardboard box
- Move the pallet in and out via a pallet truck or forklift truck

### Inspection

Inspection tables are used to inspect visually the carpet and, if necessary, to repair errors before it is further processed. This is mainly used for tufted carpet, artificial grass carpet and axminster woven carpet.

Our inspection tables can have up to 3 compensation rolls and are also surrounded by a walking floor with lighting for the operator. The balancing rolls make sure the tufting machine can keep working continuously while the operator repairs the production faults in the carpet. After it has been checked, the carpet is rolled up again.



#### **BENEFITS INSPECTION TABLES**

Here, too, there are various possible extensions of the machine possible, e.g. to follow the speed of the tufting machine, or to add a steam tank to open up the carpet pile.

- Check the carpet for quality and repair possible faults
- Horizontal, vertical or diagonal inspection plates possible
- Handsfree operation of inspection table

#### **INSPECTION OF TUFTED CARPET AND ARTIFICIAL TURF**





- Adjustable working speed
- Including unrolling and rolling after the inspection
- Stand alone machine or integrated in line with unroller, roller and/or packaging machine

#### **INSPECTION OF AXMINSTER CARPET**





- Unrolling cradle for unrolling mother rolls
- With 3 double balanced rolls, 5 walking floors and 2 inspection tables
- Fluorescent lamps are hermetically sealed
- The sides of the control units covered with a curtain system to avoid strong backlighting

### And more

Besides the already mentioned machines, Handsaeme Machinery can also handle many more! Various machines and automations do not belong to the pure carpet finishing, but they are an indispensable link in the production process.



Handsaeme Machinery can provide a lot of equipment for the tufting machine, the finishing of (tufted) carpets and for special operations:

- Label machines
- Folding machines
- Creels for tufting machines
- Infeed and outfeed backcoating lines
- · Accessories for the tuft sector
- Air tables
- · Machines and equipment for hand-tufted carpet
- Machine development on demand

- Machines and accessories around the confection lines
- Many accessories for the tufting industry
- Customized machinery for special work in carpet finishing

#### **AIRTABLE**



**AUTOMATED CREELS** 



#### **INFEED LATEX LINE**



#### **LABEL INSERT**



### INNOVATIVE & ADVANCED MACHINERY





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