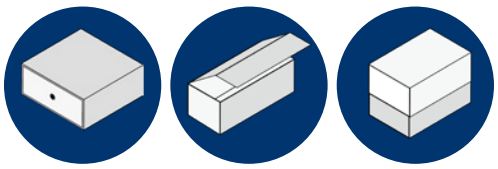
GROOVING MACHINE

100% accurate angles, smooth cuts and
sharp edges for perfect rigid cardboard packaging.
Design: eco box made of pure cardboard

Grooving machine NM 101 • up to 100 products/min



NM 101
up to 100
products/min

Technical data

KOLBUS

GROOVING MACHINE NM 101

Benefits:

- **The machine is used to cut grooves into cardboard**
- **KOLBUS Box Line for Eco Packaging: Innovative production methods for packaging made of cardboard**
- **Box Line stands for uncompromising quality on an industrial scale and deliver market-oriented packaging that makes sustainable use of resources**

Standard equipment NM 101

- Adjustable knife mountings with knife head from 90° to 110° (2 pcs.)
- V-groove knife blades (16 pieces)
- Setting device for the knife mountings
- Stack/stream cover delivery by means of a conveyor belt
- Automatic chip removal from the machine
  The customer is responsible for disposing of the chips
- Servo-controlled drive technology based on Siemens technology
- Smart Line Module for feeding back drive energy into the production line network
- Safety standard in accordance with EC directives and standards

Alternative equipment NM 101

- **Infeed with cardboard feeder, type CF 600**
  Automatic infeed from the single magazine or manual infeed via manual feed and separation of raw and laminated cardboards
  Size range longitudinal groove (Width x Height)
  min. 140 x 100 mm | max. 1,050 x 525 mm
  larger height possible when hand feeding
  Size range cross groove (Width x Height)
  min. 140 x 140 mm | max. 525 x 525 mm
  Size range when hand feeding max. 1,050 x 1,050 mm

Mechanical speed: up to 50 cycles/min
Net production is subject to material, sizes, etc.

Optional equipment for the board feeder CF 600

- Moveable board prestacking conveyor for automatic magazine reloading

- **Infeed with cardboard feeder, type CF 700**
  Automatic infeed from the double magazine and separation of raw and laminated cardboards
  - Version 1: Processing two identical cardboards in one magazine each (double magazin)
    Size range (Width x Height)
    min. 140 x 100 mm | max. 455 x 735 mm
  - Version 2: Processing one cardboard in the first magazine and creating a cross groove in the second magazine
    Size range cross groove (Width x Height) min. 140 x 140 mm
    1st blank: max. 455 x 455 mm | max. 580 x 330 mm
    2nd blank: dependent on the width of the 1st blank, max. < 250 mm
    Amount max.: 910 mm

Mechanical speed: up to 65 cycles/min over the entire format range.
Net production is subject to material, sizes and production method

The machine can be converted to single magazine operating mode.
Size range longitudinal groove (Width x Height)
min. 140 x 100 mm | max. 1,050 x 735 mm
Format range for cross grooving
min. 140 x 140 mm | max. 735 x 735 mm

Luxury packaging made from pure cardboard
100% Rigid Box ECO Design
Cardboard: Eska black 2 mm

Top view NM 101 with CF 700 and roller conveyor

- **Infeed with cardboard feeder, type CF 750**
  Automatic infeed from the double magazine and separation of raw cardboards
  - Suitable for cardboard or slightly curved cardboard with punched corners
  - Swivel slides in alignment operation for precise alignment of the cardboards. The swivel pushers are particularly recommended for smaller alignment edges, for example landscape format, large differences in the aspect ratio or corners that have been punched out beforehand.
    Size range (Width x Height)
    min. 140 x 140 mm | max. 500 x 735 mm
    Size range cross groove (Width x Height)
    min. 140 x 140 mm
    1st blank: max. 500 x 500 mm | max. 600 x 400 mm
    2nd blank: adependending on the width of the 1st blank, *with pusher* max. < 250 mm
    Amount max.: 910 mm

Production mode 1: Passage of the boards
Production mode 2: Infeed with pusher

Corner size 15 up to 210 mm
Alignment tab min. 100 mm up to 735 mm
The relationship between width / height and alignment edge is crucial for optimal alignment.
Mechanical speed without/with: up to 100/50 cycles/min swivel slide.
Net production is subject to material, sizes and production method

The machine can be converted to single magazine operating mode
Size range longitudinal groove (Width x Height)
min. 140 x 140 mm | max. 1,050 x 735 mm
Size range cross groove (Width x Height)
min. 140 x 140 mm | max. 735 x 735 mm

Product delivery

- Product outfeed with 1,500 mm roller conveyor
  Use as individual machine
- Product outfeed with 2300 mm telescopic belt, type TS 200
  Use in inline mode

Optional equipment

- Digital knife position indicator for one or two knife beams
- Knife mountings and knife blades
  110° – 130°
- Cardboard separating device used to separate the cardboards into two products
- Grinding device for sharpening the knives

Remote Service Gateway / Coupling with model RSG 800

- Remote Service Gateway / Coupling with model RSG 800.B

Technial data

Board thickness
min. 1 mm | max. 4 mm

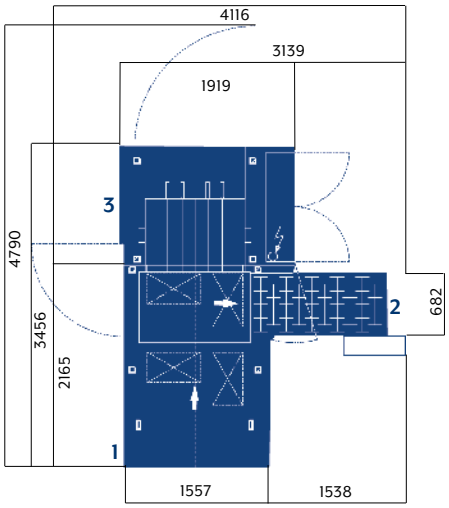
Number of grooves per cycle
1 – 8 grooves in running direction

Distance single groove
min. 1 mm

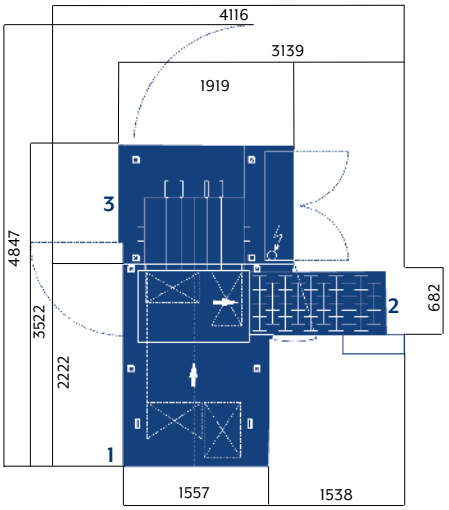
The customer has to provide:
Compressed air equipment 5 Nm3/h
Operating pressure 6 bar
Compressed air supply see extra sheet

Electrical equipment
3 phase, 400 Volt/N/PE, 50 cycles

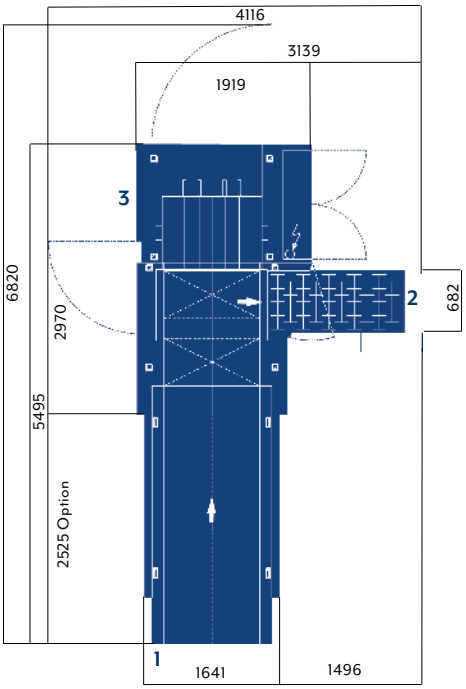
Footprint Grooving machine NM 101 with CF 700 (Height 2,000 mm | Weight 4,200 kg)



Footprint Grooving machine NM 101 with CF 750 (Height 2,000 mm | Weight 4,200 kg)



Footprint Grooving machine NM 101 with CF 600 (Height 2,000 mm | Weight 3,700 kg)



1 Infeed height appr. 700 mm | 800 mm (CF 600)
2 Delivery height appr. 1,200 mm
3 Connection compressed air

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