# NORDENPAC 702

Cartoning machine



#### **NORDENPAC 702**



# Nordenpac 702

## An efficient, medium speed cartoning machine from Norden

The Nordenpac 702 is based on the well proven NP 700 cartoner with added value to optimise production output.

The machine is equipped with a new ELAU based control system, which features a user friendly touch screen operator panel.

The Nordenpac 702 is able to operate in intermittent mode at speeds of up to 80 units per minute to match the output of the new Nordenmatic 702 tube filler. The transfer of the tubes from the tube filler to the cartoning machine is very simple. The machine, driven by a servomotor, may run either intermittently or continuously. When running the machine in line with a tube filler the motion is intermittent and is

controlled by the presence of a tube in the product chain. Each time a tube arrives, a photocell gives the signal for the NP 702 to index one cycle and then waits for the next tube to arrive. This provides a smaller overall footprint and reduces cost considerably.

In continuous mode the machine can operate at speeds of up to 140 tubes per minute.

Optional systems such as, different types of coding, leaflet folding and insertion and bar code reading are all available on the Nordenpac 702.

# STANDARD EQUIPMENT

- One set of size parts for one product and one carton size.
- Adjustable magazine for cartons and pick-up/erection by oscillating arm.
- Closing system for straight or reverse tuck-in cartons.
- Leading or trailing edge opening of cartons.
- Main drive by servomotor, type Elau.
- Electrical synchronization with tube filling machine.
- Product infeed detector to synchronize with the indexing of the cartoner.
- Pneumatic device for release of product pusher including overload clutch.
- Product rejection device if carton is missing.
- Discharge of cartons by sloping rails.
- Easy system for changeovers by:
  - separate chains for each side wall on the product and carton chain give easy adjustable pocket width.
  - scales and digital counters for carton length and carton height.
- Overload clutches on the product chain and on the carton chain.
- One set of tools and "first aid" spare parts.
- Doors and covers below the machine table are manufactured in stainless steel SIS2333 (DIN 1.4301).
- All glass covers are manufactured in plexiglass PMMA.
- Machine standard in accordance with European standard EN 60204-1 which is based on IEC 204-1: 1992.

# Electrical description / equipment General

- Norden EasyWare based on ELAU Electrical control system with separate touch screen operator panel.
- The electrical supply to the main controller is backed up by UPS.
- All electrical format changeovers and alarm handling are made from the main operator panel.
- Stop in most favourable position.
- Alarm signalling system with three colours and a buzzer:

Red flashing – Stop due to machine fault.

Green continuous – Machine is running correctly or runs by the jobbing system.

Green flashing – Jogging mode, the machine stands still. Buzzer – Short signal when machine starts on jogging mode. Yellow/orange flashing – Warning, low level in carton magazine. All indications could be pre-programmed by the customer from the panel.

- Jogging device with three different modes: Continuos mode with low speed forward.
   Step mode, one degree, forward.
   "Go to predefined position" mode.
- Fault indication with location on machine layout.
- The parameters of all functions may be set and tuned from the main panel.
- The operator panel functions are secured by different login levels.
- Production statistics.
- Safety switches on the doors. The doors are electrically interlocked during operation.
- One Emergency stop button that stops the machine in a position before tube filler indexing.
- Electrical power: please specify at order.

#### Control and Check Functions Specification

- No product no carton function.
- Automatic rejection of one product, without stopping the machine, if carton is missing.
- Three consecutive rejections machine stops.
- · Level indicator for carton magazine.
- Magazine empty machine stops.

#### **OPTIONAL EQUIPMENT**

- Complete set of size parts for additional tube or carton sizes.
- Insertion of pre-folded leaflets.
- Folding and insertion of unfolded leaflets.
- Automatic roll cutter and leaflet folder including unit for insertion of leaflets.
- Coding embossing or inked embossing. Up to 4 lines on one or two flaps.
- Rotary carton erection system.
- Extended and conveyorized carton magazine.
- Extended product chain.
- Four chains for the carton transport.
- Hot melt sealing instead of tuck-in flaps.
- Belt discharge conveyor.
- · Rejection of faulty cartons.
- Infeed systems of applicators or other articles.
- · Visual indication of non closed doors or covers.
- · Automatic lubrication system.

# **OPTIONAL EQUIPMENT**

- Data link for connection to PC or printer.
- One set recommended spare parts.
- Code readers for cartons and/or leaflets.
- · Labelling unit.
- · Ink-jet coding unit.
- Printers for connection to the control system.
- · Check weigher.
- Bundler.
- · Case packer.
- · Wrapper.
- · Conveyor system.
- Palletizer.

## MACHINE PROGRAMME

We have different machine models for tube filling, with suitable cartoners or tray packers:

Nordenmatic	Output	
250	25 tpm	
402	40 tpm	
702	80 tpm	Single-head fillers
850	85 tpm	
1002	120 tpm	
		1
1700	170 tpm	Twin-head fillers
2002(S)	220 tpm	
		Triple-head filler
3002	300 tpm	mpre rreda mer
50035	F00 to	Five-head filler
5002S	500 tpm	

#### TECHNICAL SPECIFICATION

#### **NORDENPAC 702**

Production output (max cartons/min) 80<sup>1</sup>
Power consumption, approx 1,5 kW
Air consumption Nm³/h approx 9
With GUK device 11
Air pressure MPa (bar 4-6) 0,4-0,6<sup>2</sup>
Hot melt device connected Nm³/h 0,3

- (1) Depending on filler capacity.
- (2) Air pressure MPa 0,6 (6 bar).

# Carton size, standard

**NP 702,** L x W x H Min 70 x 20 x 15 mm

Max 210 x 52 x 52 mm

Max product length = 200 mm

# Carton size, optional

**NP 702 NX,** L x W x H

Min 70 x 20 x 15 mm

Max 210 x 70 x 70 mm

Max product length = 200 mm

NP 702 L, L x W x H

Min 115 x 20 x 15 mm

Max 260 x 52 x 52 mm

Max product length = 250 mm

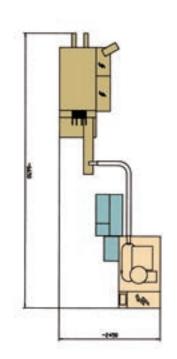
# **NP 702 LX,** L x W x H

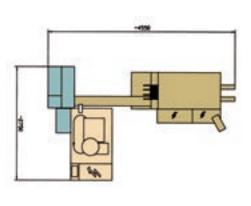
Min 115 x 20 x 15 mm Max 260 x 70 x 70 mm Max product length = 250 mm

# SHIPPING SPECIFICATION

# **NORDENPAC 702**

Net weight approx. 1200 kg
Gross weight (case) approx. 1800 kg
Volume approx. 14 m<sup>3</sup>





NSM / NM702 / NP702

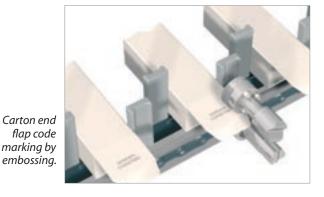
# **NORDENPAC 702**





Carton erection by oscillating arm.

Cap first tube discharge (intermittent working machine).





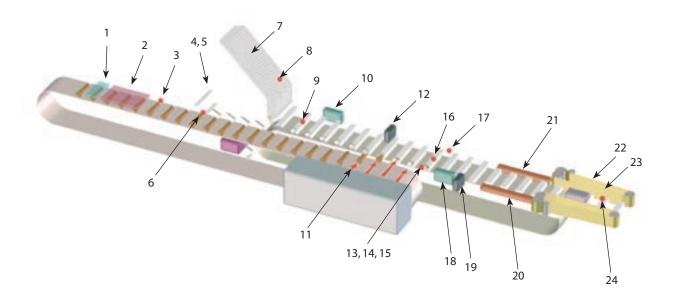
Leaflet infeed from a magazine.

# **CARTONING OPERATION**

- 1. Product infeed
- 2. Product pocket extension
- 3. Product detection
- 4. Leaflet infeed
- 5. Code reading on leaflet
- 6. Detection of leaflet in leaflet pocket
- 7. Carton magazine
- 8. Level control
- 9. Detection of carton in carton chain

- 10. Closing of side flaps
- 11. Product pushers, including product infeed switch
- 12. Coding embossing
- 13. Detection of no leaflet
- 14. Code reading
- 15. Detection of complete infeed product
- 16. Detection of product in carton
- 17. Detection of leaflet in carton (Lumat)

- 18. Closing of side flaps
- 19. Coding embossing
- 20. Closing system
- 21. Closing system
- 22. Belt discharge conveyor
- 23. Rejection of faulty cartons
- 24. Detection of not rejected cartons



#### www.nordenmachinery.se



Norden Machinery is a medium size company producing first class packaging machinery. Operating globally we still maintain very close relationships with our customers. Every year we supply 150 packaging systems to every corner of the world, which in one way or another are designed and built specifically to meet the requirements of each customer.

Our 5000 machines in operation worldwide provide us with the industrial feedback and customer relations necessary for our future development.

When you choose Norden you invest for the future with an innovative, forward looking partner, which is dedicated to the success of its customers.

Norden Machinery originates from Arenco, which was founded in 1877. The first tube filling machine was designed in 1934. In 1980 the Norden Company was founded.

In January 2004 Norden became part of the Sirius Machinery Group, which is owned by the Swedish Industrial Company Nordstjernan.

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