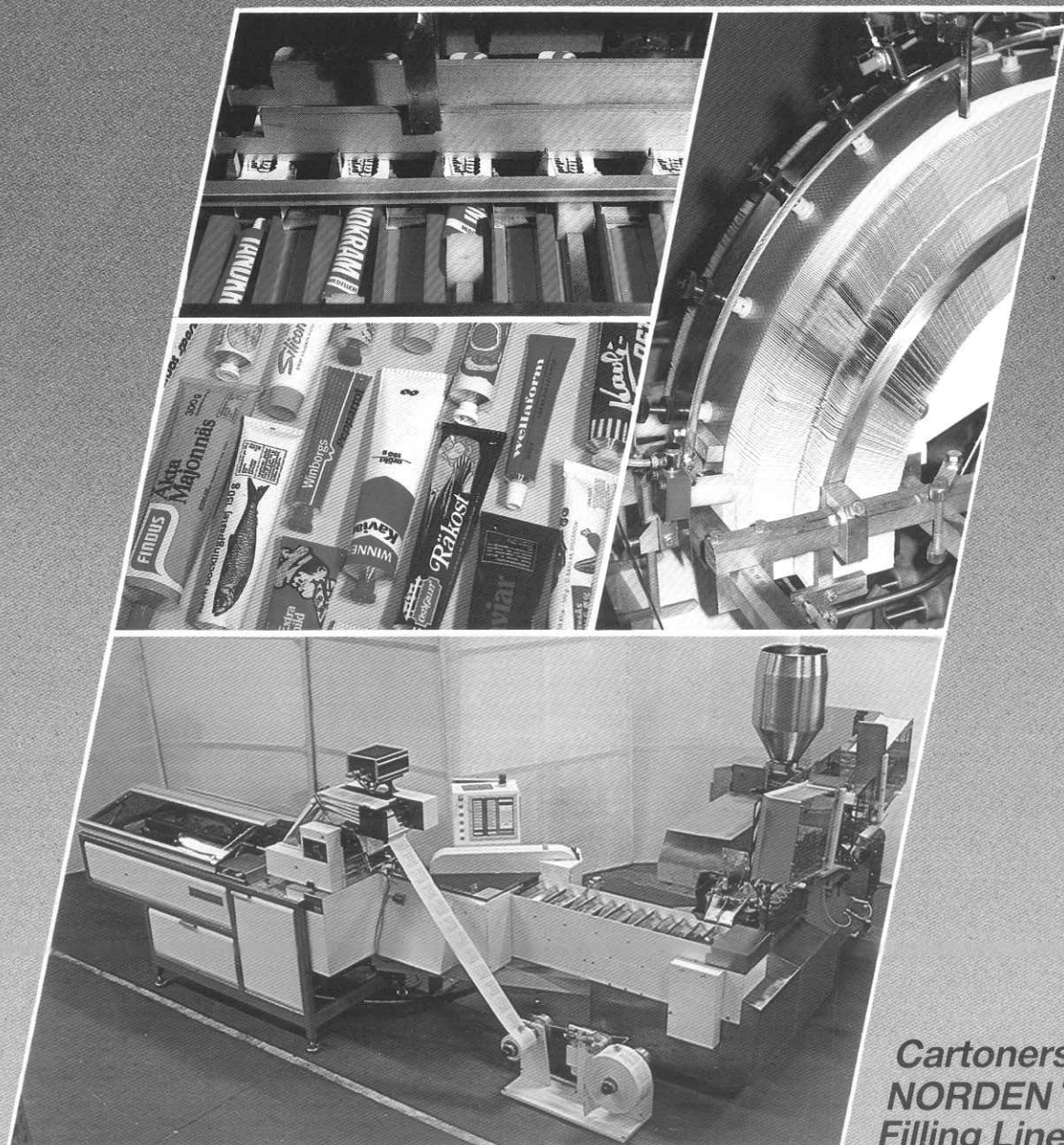


# NORDENPAC

## Cartoners Series 600 · 1000 · 2000

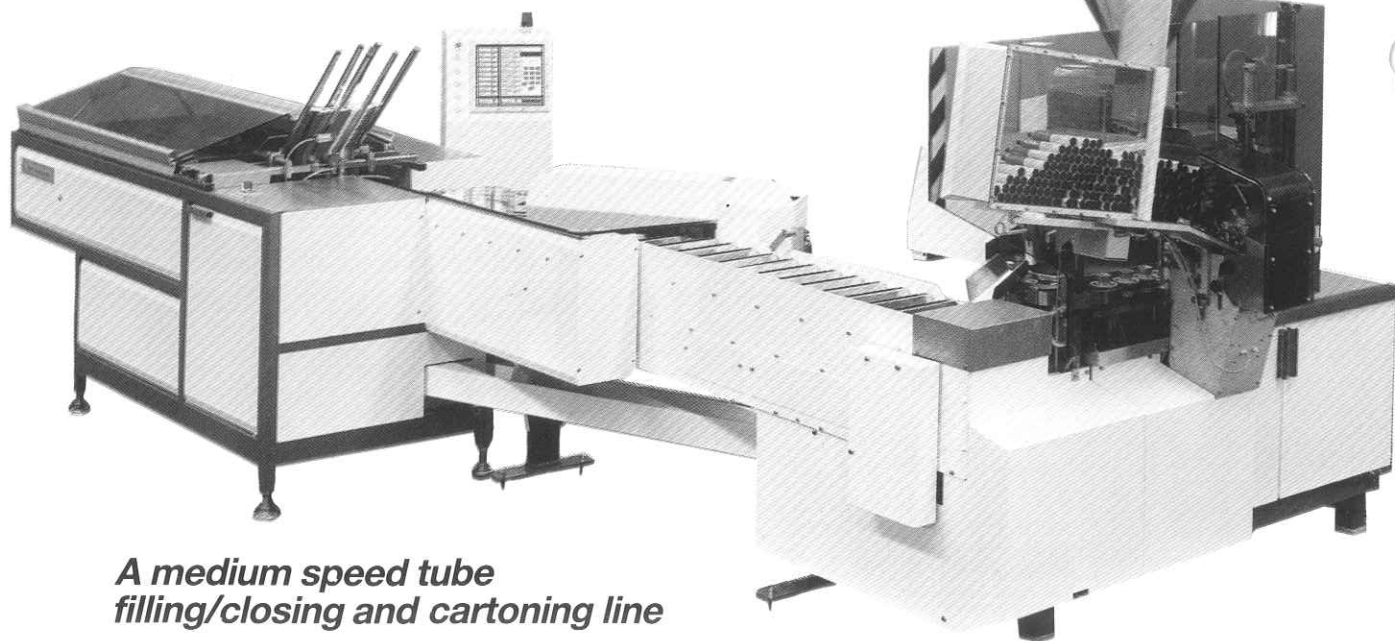


Cartoners for  
NORDEN Tube  
Filling Lines



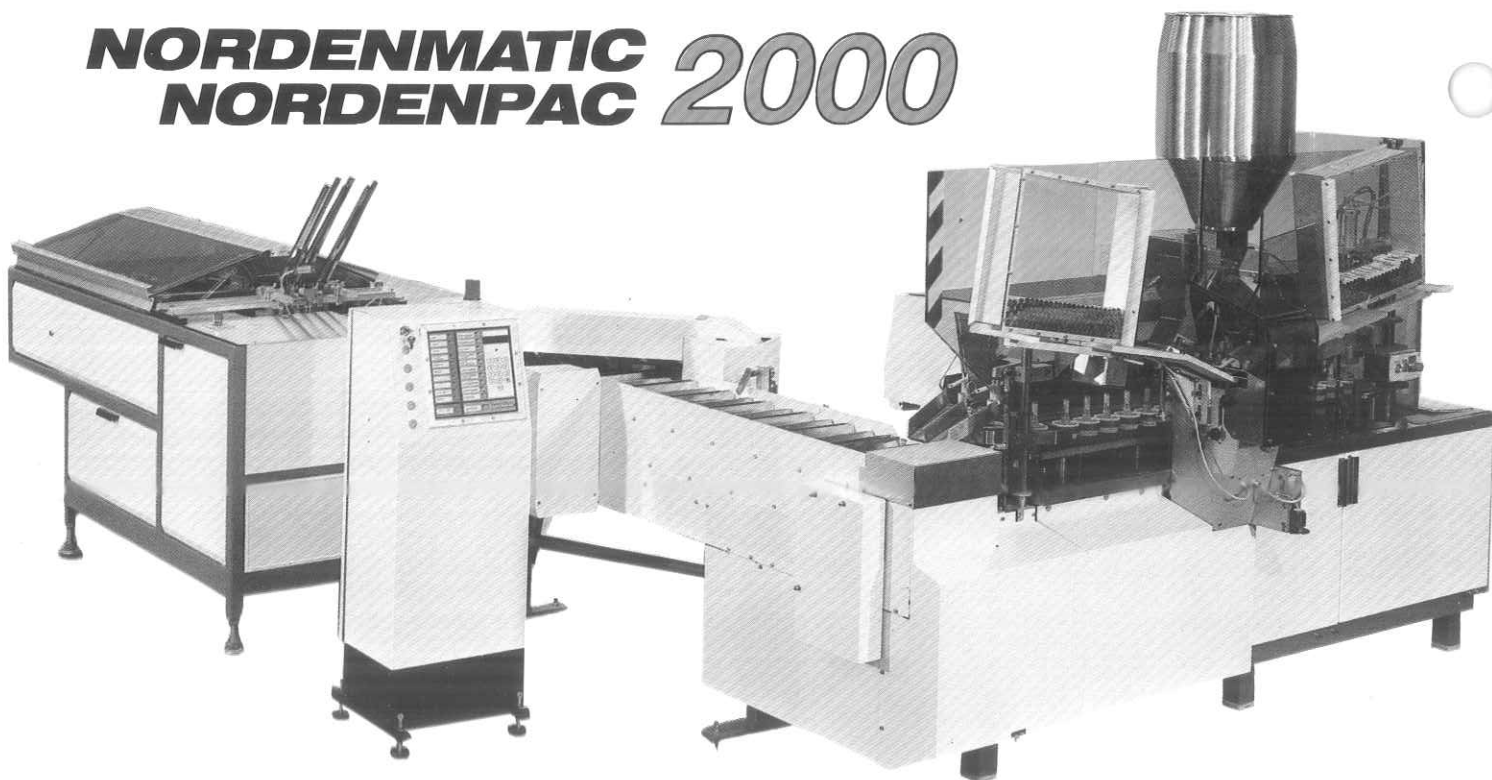
**norden**

# **NORDENMATIC** *1000* **NORDENPAC**



*A medium speed tube  
filling/closing and cartoning line*

# **NORDENMATIC** *2000* **NORDENPAC**



*A high speed tube  
filling/closing and cartoning line*



Lamps indicating faults. Buttons for switching on statistics about the faults.

Display showing machine speed, management statistics, production and machine settings.

Lamp indicating faults.

On-off buttons for machine functions. (For instance leaflet insertion).

Button marked FUNCTION switches on or off the connection between buttons for machine functions and the micro computer.

Key operated switch for the buttons marked FUNCTION and KEYBOARD.

On-off buttons for counters.

Button marked KEYBOARD switches on or off the connection between the keyboard and the micro computer.

Keyboard for machine settings.

## The micro computer control system gives many advantages

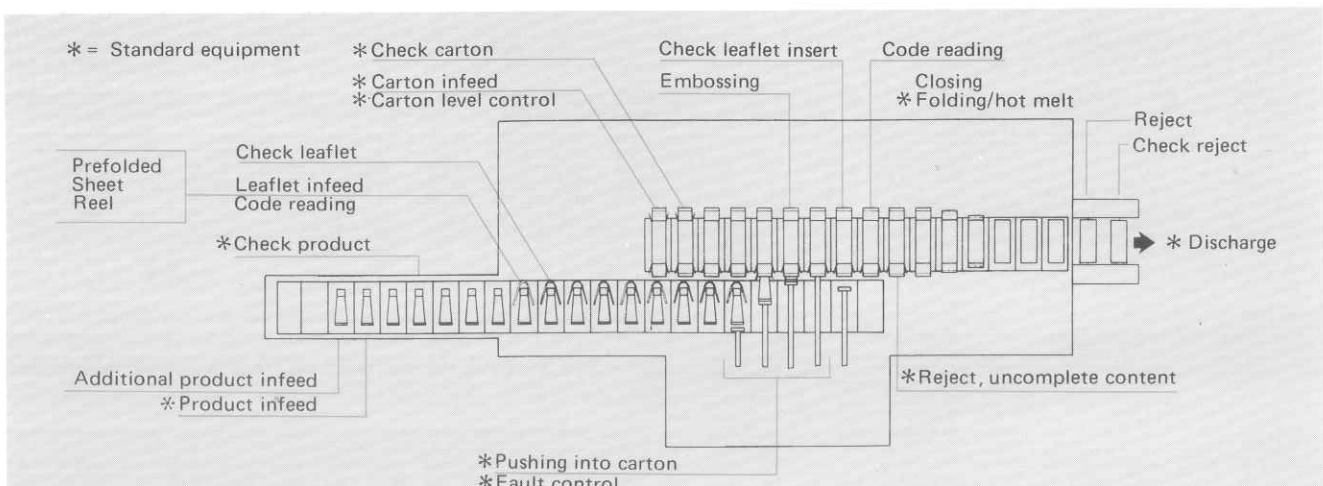
The operation and control system of NORDENPAC is operating by a micro computer consisting of two units. The EPROM memory controls the basic operations. The programable RAM memory contains settings for carton and leaflet, product counting, operating time, fault statistics etc. The RAM memory is set from the panel.

If a fault occur in the machine the corresponding pilot lamp on the panel will flash and the red lamp on top of the electrical cabinet shows a steady light. The digital display shows a code which further specifies the error.

The micro computer control system gives less interruption in service, simplified control and supervision, rapid and easy change-over of different products or carton sizes.



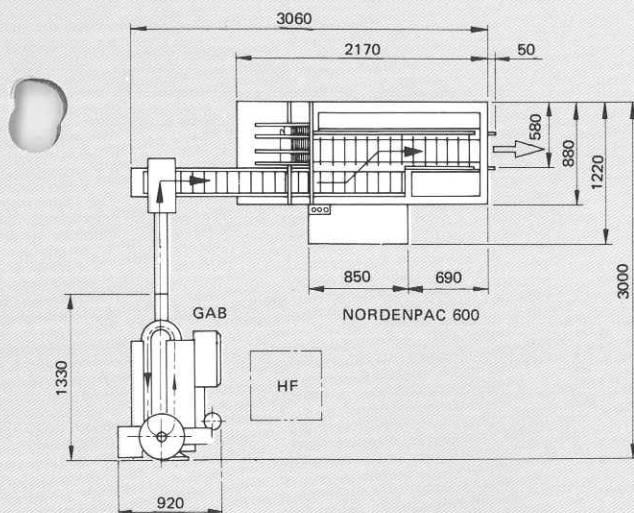
Code reader



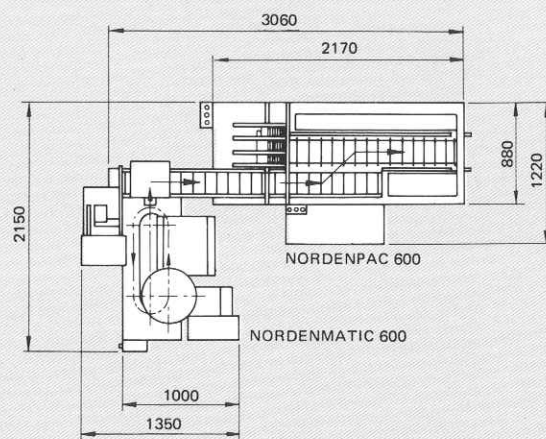
CONVEY  
CARTON

# Samples of Line Arrangements

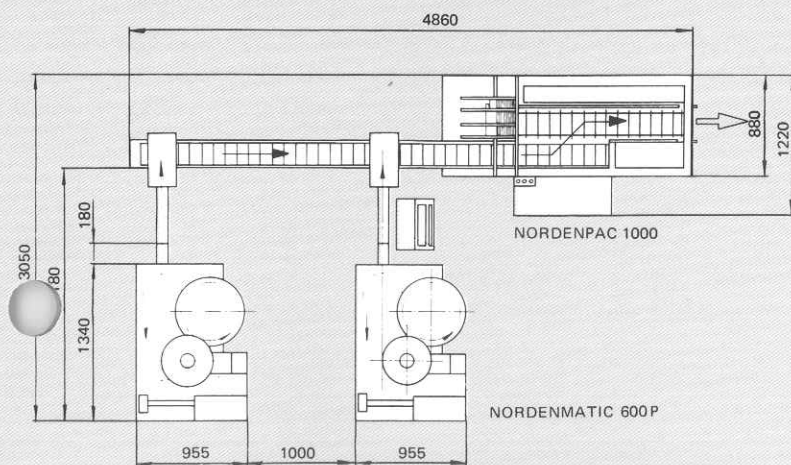
## GAB/Nordenmatic 600



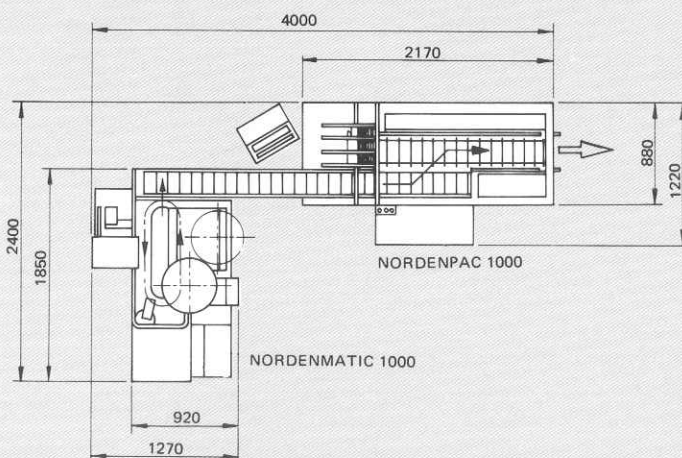
## Nordenmatic 600/Nordenpac 600



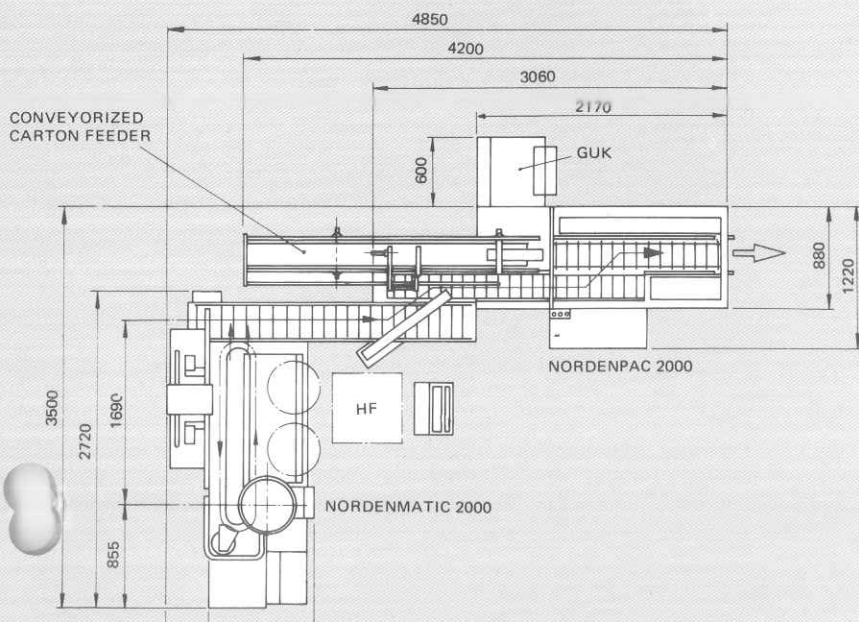
## Two Nordenmatic 600/Nordenpac 1000



## Nordenmatic 1000/Nordenpac 1000 with compact transfer device



## Nordenmatic 2000/Nordenpac 2000 with conveyORIZED carton feeder



### Carton Size Range

Type	Min dim. mm			Max dim. mm		
	Length	Width	Height	Length	Width	Height
N	70	20	15	220	52	52
NX	70	20	15	220	70	75
L	135	20	15	260	52	52
LX	135	20	15	260	70	75

### Max. product length

At standard carton length 220 = 200 mm  
 At carton length 260 = 250 mm  
 At carton length 320 = 300 mm



## Standard Equipment Series 1000 and 2000

Series 600 same but equipped with simplified electrical system instead of the MICRO computer control system. Specified below.

Size parts for one carton size

Closing system: (Choose one alt)

Alt A: Straight tuck-in cartons

Alt B: Reverse tuck-in cartons

Main motor with variable speed

Ejector vacuum system for connection to compressed air supply

Pneumatic device for release of product pusher

Overload clutch for product pusher

Product switch gear

Jogging device

Protective covers and safety guards

One set of "first-aid" spare parts

One set of tools

Colour: White RAL 9010

Tube transfer device

### Micro Computer Control System, comprising:

1. Safety Functions:
  - Interlock for protective covers
  - Emergency stop
  - Release of overload clutch - machine stops
2. Control and Check Functions:
  - No product - no carton
  - Automatic ejection of product, without stopping the machine, if carton is missing
  - Three consecutive ejections - machine stops
3. Other functions:
  - Key board settings
  - Fault indication display
  - Production statistics

Machine can be adapted to any normal electrical power standard without extra cost. Please specify when ordering.

## Folding and inserting of leaflets

The folding unit is manufactured by GUK, Germany, and adapted to the cartoning machine by Norden Packaging Machinery AB. The unfolded leaflets can be taken either from a stacked pile or from a reel.

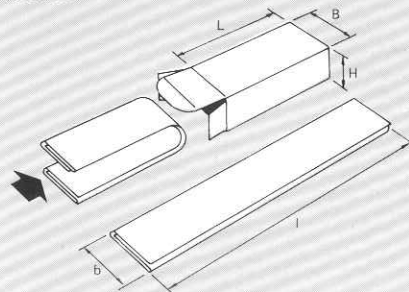
### Quality of Leaflet Paper

Recommended weight: 25-60 g per m<sup>2</sup>.  
Fibre direction (Y) must be along the folds.

### Leaflet Dimensions

Plain, mm	Folded, mm
Max 210x300	Max 210x45
Min 95x 60	Min 95x18

The minimum length,  $l_{min}$ , of the folded leaflet depends on height  $H$  the carton and the possibility of the unit to transfer short leaflets.



Standard version:  $l_{min} = 80 + H$   
Special version:  $l_{min} = 70 + H$

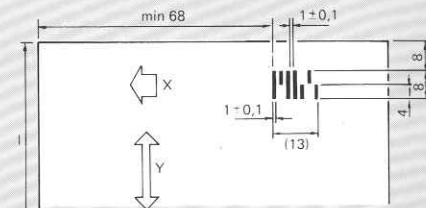
The maximum length,  $l$ , of the folded leaflet depends on length  $L$  and height  $H$  of the carton. Determine as follows:

Carton length, mm	Leaflet length, mm
$L \ 60-80$	$= 2 \times L + H - 20$
$L \ 80-125$	$= L + H + 60$
$L \ 125$	$= \text{max } 210$

The width,  $b$ , of the folded leaflet must be at least 3 mm less than the width  $B$  of the carton.

### Code marking and code reading

The code mark must be printed on the reverse side of the plain leaflet. See sketch for dimensions, fibre direction (Y) and direction of leaflet motion (X) in the unit. The code can automatically be read in the Nordenpac cartoner.

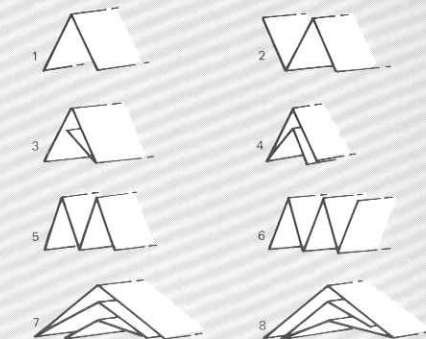


### Prefolded leaflets

The leaflets are stacked in a magazine on the Nordenpac machine and are automatically feed into the cartons. Measurement requirements as for the folded leaflets above. Code reading is not possible.

### Different types of folds

(Other folds may be possible after testing)



## Extra and Optional Equipment

### A. Size Parts

Complete set of size parts for additional carton size

### B. Leaflet Equipment

Insertor for prefolded leaflets  
Leaflet folder and insertor  
Leaflet folder and insertor from roll

### C. Coding of Cartons

Code marking on closure flap by embossing

Alt A: Reverse carton, one line

Alt B: Reverse carton, two lines

Alt C: Straight carton, one line

Alt D: Straight carton, two lines

Code marking by printing

### D. Miscellaneous

Applicator infeed device

Closing carton flaps by hot-melt glue

One set of recommended spare parts

Painting in other colour than standard

Micro computer program and data link for transmitting production statistics to printer or other computer (except 600)

### E. Complementary Equipment, available on request

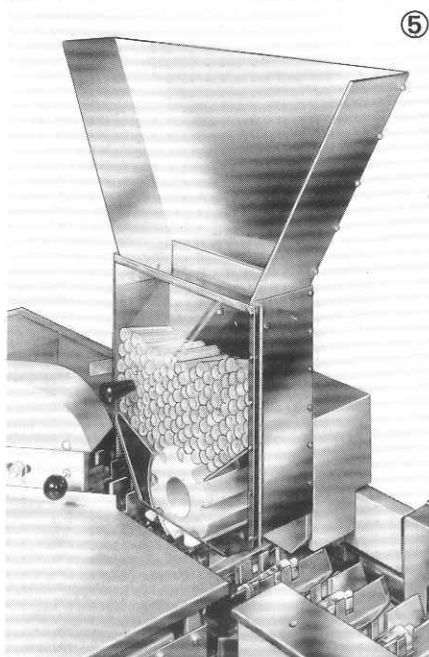
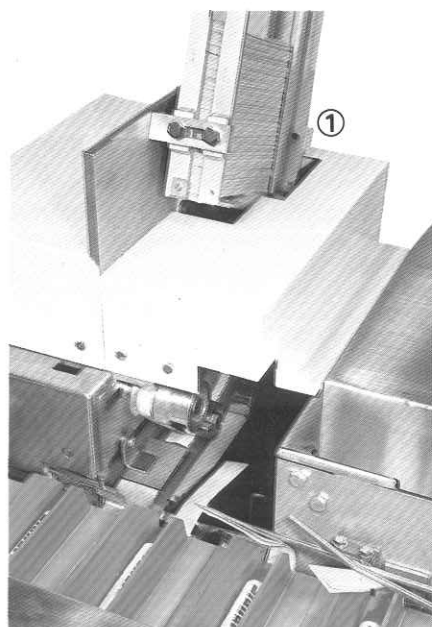
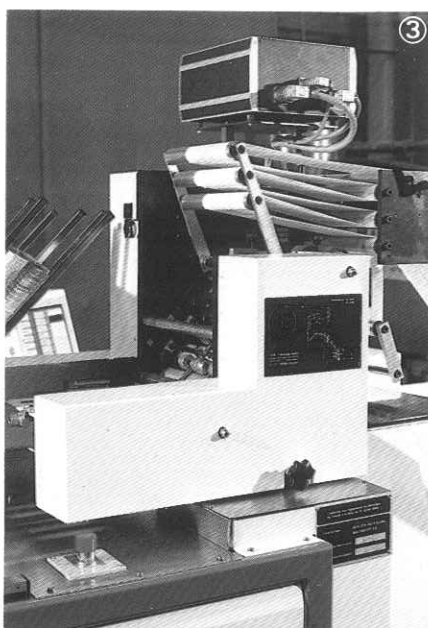
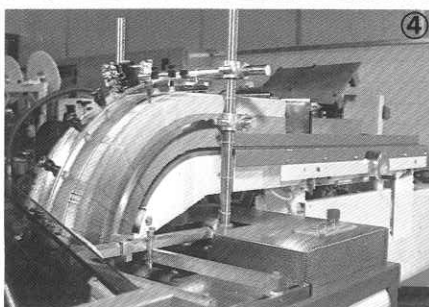
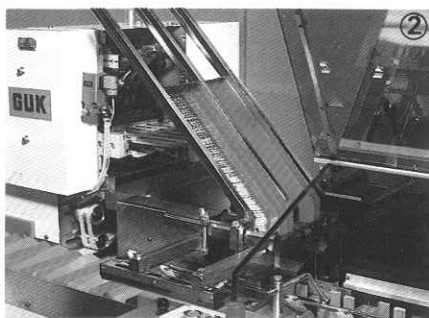
- Code readers for carton and/or leaflet
- Labellers
- Ink jet printers
- Printer for connection to micro computer system
- Check weighers
- Bundlers
- Case packers
- Wrappers
- Conveyor systems
- Palletizers

# Product infeed devices

1. This leaflet inserter is loaded with prefolded sheets for automatic insertion into cartons with the product,

2. The GUK leaflet folding and insertion unit is used when leaflets are required. This unit accepts plain leaflets.

3. Leaflet folder and inserter from roll.



4. All cartoners can be equipped with conveyorized carton feeder, which can keep approximately 1000–2000 unerected cartons.

5. The cartoner may be equipped with infeed devices for additional articles such as spoons, spouts, spatulas, pipes, etc.

6. Equipment for hot melt closure.

## Technical Data

	NP 600	NP 1000	NP 2000
Production capacity, max cartons per hour (Typical figures which may vary depending on machine speed, carton size and quality, product etc.)	4 000	6 000	12 000
Attendance, operator	1	1	1
Connected power, kW	1.5	1.5	1.5
Air consumption, appr. Nm / h standard	5	5	5
with GUK device	9	9	9
Air pressure, Bar	4 - 6	4 - 6	4 - 6

## Shipping Specification

	Net. weight appr. kg	Gross weight appr. kg	Volume appr. m <sup>3</sup>
NP 600	800	1 200	9
NP 1000	900	1 300	9.5
NP 2000	900	1 300	9.5
Transfer Unit	300	450	2.5