

kortho

GraphicJet 18 NP



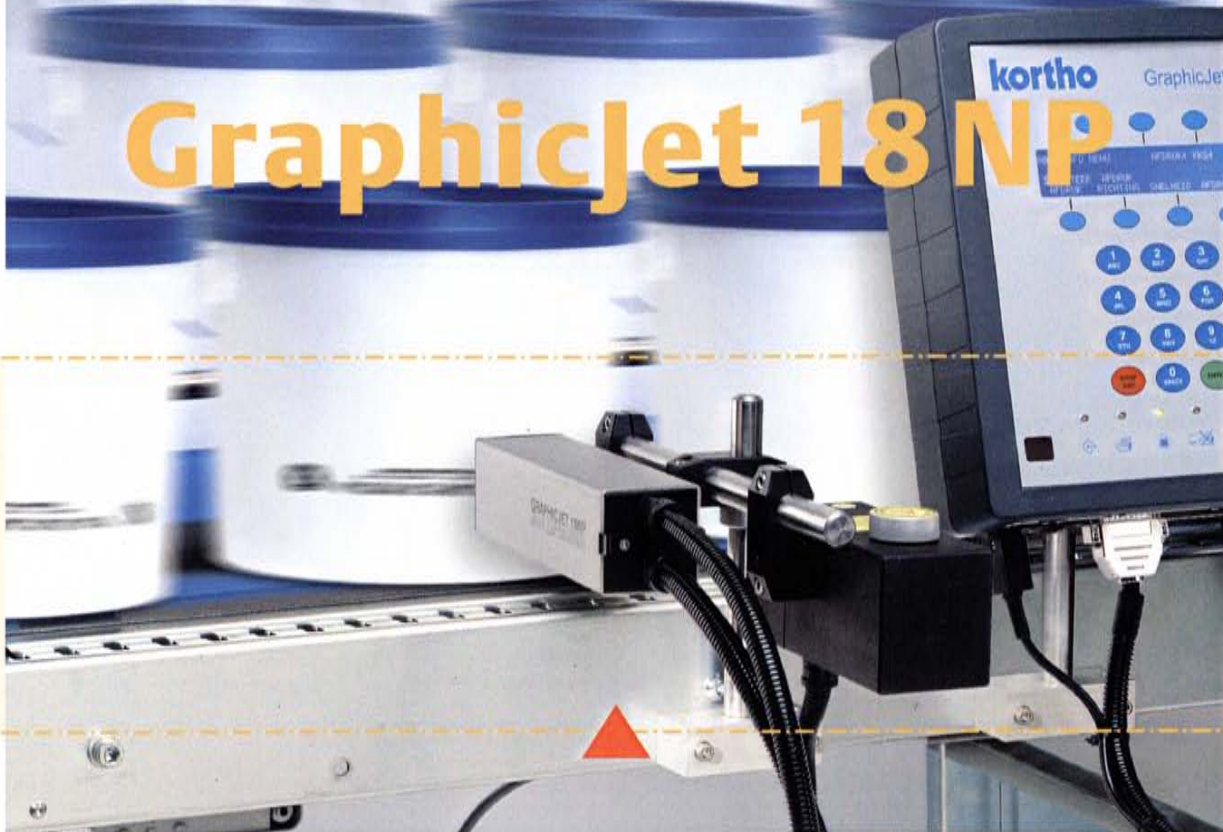
Your best choice
for non-porous surface coding & marking

kortho

The mark of preference

kortho

GraphicJet 18 NP



A world of **difference** in one **new printer** of **preference**

We all know that innovations are often little more than additions to existing applications. It's up to you to decide whether this applies to our new 18NP. To help you decide, we'll give you a list of advantages of our new printer and we're sure you'll agree with us: the 18NP is a breakthrough.

- **Do you prefer** a clean printer and its environment?
- **Do you prefer** uninterrupted production?
- **Do you prefer** less use of ink?
- **Do you prefer** to save on cleaning fluids?
- **Do you prefer** a printer that pays for itself in no time?

Technology in brief, the organisation, distributor network & services

Technology, in brief

- High-resolution inkjet: 128 individually addressable dots per printhead (185 dpi).
- Total freedom in the layout design of the printed image.
- Coding and marking of all types of packaging or individual products, up to 8 lines high.
- Combinations of text, images, logos, bar codes and automatic codes in one image are possible.

The organisation

Kortho produces high quality equipment for coding and marking all possible products and materials. From simple stamps to advanced programmable machines.

- Character size from 1.5 to 18 mm high.
- Kortho Image Generating Software (KIGS) with extensive designing features.
- In combination with the unique infrared Remote Control no cables are required.
- Rapid and clean filling of the ink system with 100 ml disposable ink bottles.
- A minimum of maintenance is needed, thanks to ingenious capping system of the printhead. No cleaning fluids necessary.

Manual, semi- and fully automatic. Complete with accessories and consumables. And service support on all continents.



Distributor network

Kortho aims to help you find the right solutions for all coding and marking questions. You can reach us at our head office or via the sales consultants in our widespread distribution network in more than 50 countries.



Services

Kortho's installation & service centre designs custom applications that will cater entirely to your requirements. So tell us what you're looking for, or looking at, and the odds are that we can help you out. As specialists, we're constantly on the brink

of market developments and solutions in coding and marking technology. With the continuous development of printing technologies and control systems, we are always working on extending our product range.



your authorised distributor

kortho
coding & marking



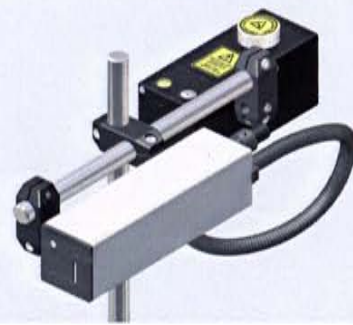
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A remarkable new solution for printing/marking on non-porous surfaces



With 185 dpi, the GraphicJet 18NP high-resolution inkjet printer always guarantees sharp printing. Not only on non-porous materials such as plastic, glass and metal, but also on porous packaging. Thanks to the compact printhead and the separate ink system, the printer can be installed almost anywhere in the production line. Wouldn't you prefer a printer that does not waste ink by

'spitting', does not cause interruptions in production and keeps the production environment totally clean?

The printhead has an ingenious capping mechanism. The perfect way to prevent the ink from drying out. It is no longer necessary to use firing routines to prevent the ink from drying up or to clean the nozzles after they were clogged again. These are the advantages:



- Elimination of make up fluids. The system does not require make up solution for flushing and retaining ink viscosity.
- Cleaner production environment. No wasted ink and no 'spit routines' to prevent the ink head from drying out. And that means no pollution of the environment.
- Savings on maintenance time and costs. There is no need for continual flushing, no extra costs due to clogged nozzles.
- Continuity in the production process. No downtime, no start-up or shut-off flushing procedures. With the unique capping mechanism, the printer is always ready to start.



Spit or spic [and span]

Traditional inkjet printers require extensive maintenance, caused by regularly firing all printhead nozzles ('spitting') or cleaning the printhead frequently with a solvent. This cleaning requires extra labour and the use of cleaning fluids is often environmentally unfriendly. It costs money, pollutes the work environment and frequently interrupts the production process.

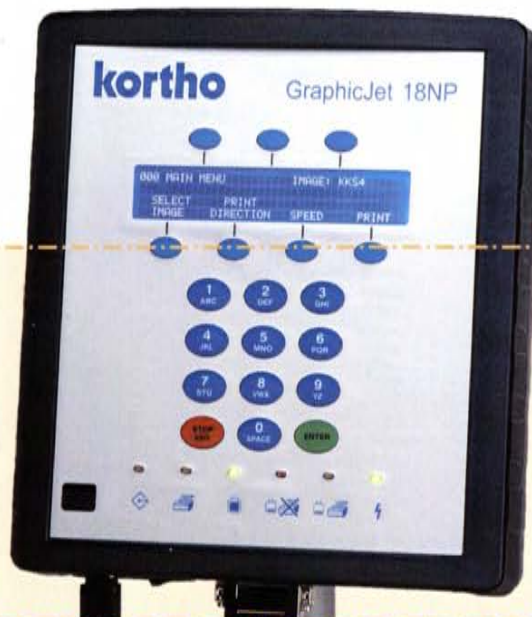
The 18NP is preferred for almost all non-porous applications



The **Kortho GraphicJet 18 NP** is a high-resolution inkjet printer. Developed for non-porous packagings, individual and endless products. The printhead has 128 individually addressable dots, which guarantees sharpest printing.

Stand alone

The GraphicJet 18NP can be operated in a true stand alone mode. Designed images are transferred from the PC to the memory of the Kortho Remote Control. At the production location they are loaded into the control unit of one or more GraphicJet printers. In the PC controlled mode, image management and parameter adjustment can be done directly from the PC.

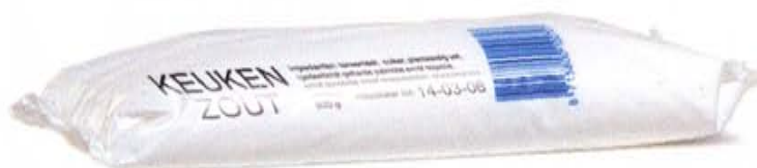


The **industrial design** of the GraphicJet 18NP comprises stainless steel, anodised aluminium, high-quality plastics and other durable materials.

This makes it the ideal stand-alone system for every type of production environment. The perfect system for cost-conscious printing of high-quality images.



Kortho's research & development department develops a wide range of GraphicJet systems. Ask our representative about the latest news and developments.



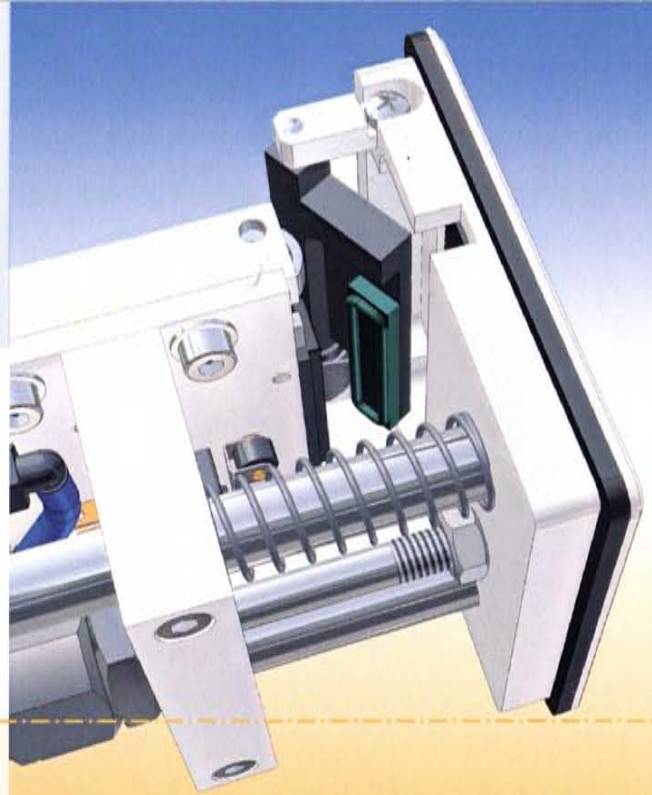
Our choice for an ingenious printhead capping solution

Ink for non-porous surfaces usually contains a solvent. This volatile substance evaporates when the ink comes in contact with outside air and the ink dries. If the ink dries up in the printhead, the nozzles become clogged. This can be prevented by regularly firing all nozzles of the printhead ('spitting') or cleaning the nozzles frequently with a solvent. Many printer manufacturers opt for this method.

The GraphicJet 18NP is equipped with the unique

CNS (Clear Nozzle System), an ingenious capping mechanism that always completely shuts off the nozzles again when the printer is not printing. So 'spitting' and cleaning maintenance are no longer necessary. The result: greater efficiency and less downtime. And that means: shorter production times and major savings on ink, solvent, maintenance and labour.

Kortho has applied for a worldwide patent on this development.



Powered by Xaar Technology

Leading manufacturer of Piezo-electric printheads

The software of choice to complete the solution

The Kortho GraphicJet printers can be used in two operational modes: as stand-alone or PC-controlled.

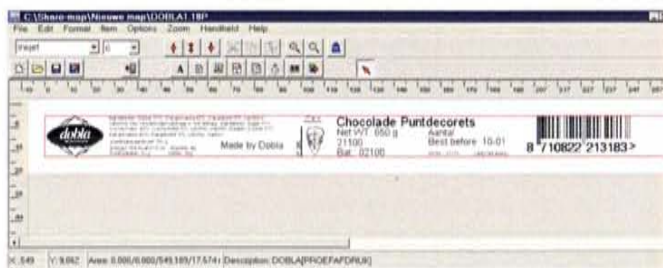
Two intuitive software packages are available: KIGS and RAC.

With **KIGS** (Kortho Image Generating Software), messages can be created and edited on a PC. Images containing all sorts of automatic codes, barcodes, multi-line items and graphic files are easily designed in the print area screen. Quick and easy, and you can preview exactly what will be printed. In the stand-alone mode, the images are downloaded from the PC to the memory of a unique Infrared Remote Control (Image Transfer Device), and loaded on-site into the controller of one or more GraphicJet printers.

In the PC-controlled mode Kortho **RAC** (Kortho Remote Access Control) software allows you to send messages to the GraphicJet printer and to view and adjust a number of printing parameters as well as the printer status directly from your PC.

Kortho RAC also enables control of several printers in a network environment. Factory-wide control over what is being printed on each production line. Even a wireless network can be created, optionally.

KIGS/RAC



Korthero

GraphicJet 18NP

The preferred solution for non-porous surface coding & marking

We all know that innovations are often little more than additions to existing applications. It's up to you to decide whether this applies to our new 18NP. To help you decide, we'll give you a list of advantages of our new printer and we're sure you'll agree with us: the NP18 is a breakthrough.

- **Do you prefer** a clean printer and its environment?
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Texts

1 to 8 lines, character sizes: 6, 8, 10, 12, 16, 20, 28, 48, 54, 69 with standard font InkHr. Texts can be changed on the control unit with 'operator input' option.

Automatic numbering

Batch codes, lot numbering, pallet counting, etc. in various forms of notation. Space for several numbering codes per image.

Automatic date coding

Best before date, production date and other date designations in various forms of notation, such as day of the week, week of the year, in Arabic format, etc. Multiple date codes per image possible. Dates can be changed on the control unit.

Automatic time coding

Time in various forms of notation. Multiple time codes possible in one image.

Automatic shift codes

Up to 25 shift codes, definable over a maximum of 7 days. Multiple shift codes possible in one image.

Barcodes

EAN8, EAN13, CODE 39, EAN128, UPCA, UPCE, CODE128 and ITF, with adjustable height and module width. Multiple barcodes possible in one image.

Graphic images

Logos can be imported in KIGS as black & white bitmaps. Depending on size, multiple logos per image are possible.

Free Image layout

All codes can be freely placed within the design field (18 x 2000 mm). Every text, time, date, numbering or shift code can be rotated in 4 orientations: 0, 90, 180 and 2700.

Text or graphics can be aligned automatically, on a grid or by entering the exact coordinates for precise layout of the image.

Print position and printing direction

Printing position (delay) can be adjusted in mm. Print direction can be set to left or right.

Speed

Printing speed is adjustable, from 0.4 m/min to 35 m/min. Optional speed encoder available for products which do not move with constant speed.

Image Size

Image width is adjustable, even during printing. The image width can be enlarged up to 9 times.

Continuous printing

Option of continuous printing with adjustable repeating space, up to 1 meter.

Low-ink alarm

Standard. Ink system refillable during printing.

Internal memory capacity

512 kB, up to 999 images. Number of images depends on the size, an average image without a picture is between 1 and 5 kB.

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Technical specifications

System

Stand-alone High Resolution Inkjet Printer.

Printhead technology

Piezo-electric, 185 dpi vertical resolution, 128 individually addressable dots.

Print distance

Maximum 5 mm.

Ink system capacity

160 ml.

Maximum printing speed

35 m per minute.

Voltage

115-230VAC \pm 10%, 50-60 Hz, 40VA.

Print signal

Standard type NPN. Optional: PNP photocell, potential-free contact or a voltage between 5 - 30 VDC.

Air conditioning

0.5 MPa (5 bar), moisture and oil-free, filtered at 40 μ m.

Temperature range

10 - 40 °C.

Humidity

10% - 90%, non-condensing.

Main dimensions in mm (h x w x d)

Controller: 303 x 266 x 104

Ink system: 95 x 70 x 175

Printhead: 62 x 62 x 260

Ink

Kortho Ink GJ1NP, Ethyl Di-Lactate based

Software

Kortho Image Generating Software

Kortho Remote Access Control Software running on

Windows 95, 98, NT4, 2000, XP

Optional

Speed Encoder for automatic printing adjustment,
Alarm beacon, Floor stand, Air regulator/conditioner

Interface

Ready signal

your authorised distributor

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coding & marking



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