



COLARIS-NF

COLARIS-NF COMPACT-DX

DIGITAL PRINTING &

DYEING SYSTEM

FOR NARROW FABRICS



- ... high speed
- ... high quality
- ... high efficiency





High Performance industrial inkjet print heads

- StarFire™ SG1024/SA
- StarFire™ SG1024/MA
- StarFire™ SG1024/LA

TECHNICAL DATA

OVERVIEW

ZIMMER AUSTRIA offers 3 different models of the new high performance industrial inkjet print heads from FUJIFILM Dimatix. The **StarFire™ SG1024 (SA/MA/LA)** is a compact, self-contained unit built to withstand demanding industrial textile and other applications. It uses field proven materials to deliver consistent output over a long service life with continuous ink recirculation and single color operation at 400 dpi. Equipped with a single replaceable metal nozzle plate that is designed to withstand abrasion and to resist damage.

PRINT HEAD MODELS	StarFire™ SG1024/SA	StarFire™ SG1024/MA	StarFire™ SG1024/LA
number of addressable jets	1024	1024	1024
waveform & fluid dependent drop size	8 - 30 pl	30 - 90 pl	80 - 240 pl
applications	Light & medium fabrics i.e. fashion, home textiles, flags & banners, ...	Heavy textiles i.e. velour, plush, terry products ...	Voluminous substrates i.e. carpets, furs, blankets, ...

TECHNICAL FEATURES

- Robust and reliable construction
- Coated metal nozzle plate - not easily damaged
- High firing frequency - for high productivity
- High drop velocity - distance between printhead and nozzle can be up to 10 mm
- **VersaDrop™**- Incorporated binary and greyscale jetting modes
- **RediJet™**- Continuous ink recirculation system to avoid nozzle blockage and to reduce purged ink waste
- 3 interchangeable printing modules with different drop sizes for a wide range of applications



COLARIS-NF COMPACT-DX - ADVANTAGES

- The **Colaris-NF Compact** is a Single-side Digital Printing System for non-elastics light weight ribbons and label tapes. The **Colaris-NF Compact** uses High Resolution 400*400/600/800 dpi printing heads in a four color CMYK configuration and includes a complete in-line fixation system for Narrow Fabrics up to 70 mm in width. Optional six color CMYK, R, B (or other) configurations are available.
- The **Colaris-NF Compact** Printing System is supplied as a complete stand-alone system, working from “Box to Box” using the customer’s cartons or carts to supply new material and to receive finished printed ribbons/tapes. Optionally, the **Colaris-NF Compact** can be supplied in “Roll to Roll” configuration, with roll support feed-in and roll or tube rewinding for finished printed ribbons/tapes. Material transport within the **Colaris-NF Compact** is regulated for optimal printing speed & tension control.
- The **Colaris-NF Compact** Printing System is working with water-based Pigment ink and is using an “Open Ink System” allowing customers to select inks from any approved digital ink supplier. The color configuration can be conventional CMYK, (option: +2) or any other custom configuration, using Disperse or Pigment inks.
- The **Colaris-NF Compact** offers an affordable, configurable, simple to install, simple to operate, high production and high printing quality complete Digital Printing System for narrow fabrics. Installation is simple and minimal floor space is required.



COLARIS-NF COMPACT-DX (ENG)



THE COLARIS-NF COMPACT-DX PRINTING SYS-

- **Material Entry Module** → “Box to Box” including: Detangler and Knot Detector
 - Optional: material entry module → “Roll to Roll” including: roll stand and knot detector
- **Printing Module** → Pull pad, printing heads, tape transport and alignment
- **Fixation Module** → Heated cylinders (Teflon coated), temperature control (200°C max.)
- **Printed Material Exit Module** → “Box to Box” including: frame and pull pad
 - Optional: printed material exit module → “Roll to Roll” including: frame, roll re-winder and meter counter
- **Options include:** two additional printing heads, cooling module printed material. (before exit/re-wind), specialized modules, RIP Software, specialized training, extended service and training programs.



COLARIS-NF COMPACT-DX MACHINE CONCEPT

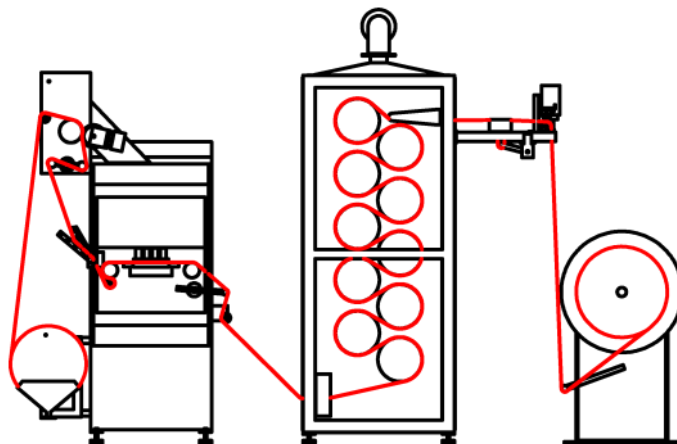
- Standardized machine for non-elastic light weight and label tapes
- Working from “Box to Box” or optionally “Roll to Roll”
- Single side printing only
- High resolution
- Using pigments inks CMYK or RBYK
- Suitable for printing multiple materials PES, PA, Cotton etc.

WORKING PRINCIPLE:

Feed in → Tension control → Print → Fixation → Re winding.



COLARIS-NF COMPACT-DX STANDARD MODULES



Total length: 300 mm

COLARIS-NF COMPACT-DX

- **Feed in**
 - Pull pad
 - Knot Detector
 - Detangle
 - *Optional: Roll stand - one roll in operation, one roll in standby*
 - Dancer
 - Tension Control
- **Printer**
 - 4 (6) heads Fuji Dimatix Starfire SG1024/SA
 - CMYK
 - *Optional: +2 = two more colors*
 - Mechanical regulation of the distance between tape and print heads
 - Tray for spitting
 - Dancer for tension control
- **Take off**
 - Pull pad without pressure to avoid that the tape shrinkage during fixation is traveling inside the printer.
 - Dancer
 - Tension Control
- **Fixation**
 - Cylinders
 - Electrical heating
 - Temperature up to 200°C
 - Temperature control
 - Teflon coating on the cylinders
 - Heat protection cover
 - Exhaust
 - *Optional: Cooling device*
- **Exit to Box**
 - Frame
 - Pull pad – speed controlled by take-off (above box)
 - *Optional: Anti-static device*
- **Electrical cabinet**
 - Simple concept with plug connection for easy installation
 - Plug and play
 - Internet support

OPTIONAL

- **Re winder**
 - *Winding of the printed tapes*
 - *Tension control*
 - *Meter counter*
 - *Tape side movement for winding bobbins*
 - *Optional:*
 - *Accumulator*
 - *Double station for fast doffing*

COLARIS INKS

- Available for all kinds of textile substrates
- Developed by ZIMMER AUSTRIA in close cooperation with famous dyestuff manufactures
- Recommended inks ensure excellent fastness properties and Oeko-Tex® Standard 100
- Open Ink system
any ink approved by ZIMMER AUSTRIA can be used

... from the leading company for digital carpet & textile printing systems



NEW TECHNOLOGY APPLICATION CENTRE

ZIMMER AUSTRIA offers customer oriented developments and applications using inkjet and valve jet digital printing and digital coating technologies.

Our new technology centre for digital textile applications will open in mid-2016!



Service is our Business.

QUALITY IS OUR FIRST PRIORITY!

All materials and components are inspected and tested before being assembled.

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First in Quality | First in Service



All machines and components from **ZIMMER AUSTRIA** are strictly inspected and tested before shipping to customers to ensure efficient installation and best performance with 100% satisfaction.

Colaris on-site customer support is guaranteed by service partners and ZIMMER engineers and technologists.

This setup guarantees a short response time on a service call from a customer.



INNOVATION

QUALITY

SERVICE

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DIGITAL PRINTING SYSTEMS

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