

# VariJET 106

Digital printing for industrial folding carton production



Reimagining printing. Unboxing possibilities.

## WHY DIGITAL? WHY HYBRID?

Folding carton printing run lengths are declining and brands are increasingly looking for fast turnaround solutions. Sustainability and waste reduction is a prerequisite to compete. High speed digital printing supports converters to address these critical issues.

At Koenig & Bauer Durst we have gone further in reimagining printing. Through our extensive knowledge of the folding carton market we have developed the VariJET 106 press without compromises. High speed, high uptime, offset quality and the ability to incorporate all the advantages of offset and flexo to address the broadest range of applications, all in the industry leading B1 format.

Unbox the profit possibilities with the VariJET 106.



- 1 Excellent color consistency
- 2 Very small, negative type and elements
- 3 Deep black print, vibrant images
- 4 Personalization
- 5 High quality print, large solid color areas
- 6 Track & trace and security printing
- 7 Different versions with unlimited spot colors
- 8 Regionalization and language changes

## THE BEST OF BOTH WORLDS

As the leading supplier of offset presses to the folding carton market, we understand the quality and productivity requirements of your brand customers. As a leader in digital printing in packaging applications, we have access to cutting edge digital printing systems from automated software, to latest ink and print electronics technology. This is all underpinned with a worldwide service support network to ensure the highest uptime and training of your team.

Based on the high-performance technology of the Koenig & Bauer Rapida 106 and the latest generation of the single-pass inkjet printing system from the leading provider of digital production technologies Durst, both companies have jointly developed the VariJET 106.

### Most productive digital printing system

By using market proven components, the VariJET 106 achieves outstanding productivity. With minimal make-ready times, low start-up costs and reduced waste costs, it enables cost-efficient and fast production of jobs with up to more than 5,000 sheets. Production on demand minimizes stock levels and reduces transport costs. Even large orders can be produced economically.

### Highest print quality

Offset-like print quality is achieved by using the latest generation of high performance print heads. Numerous spot colors can easily be printed on a single sheet. In addition, the VariJET 106 uses innovative and automatic inline quality monitoring and control. This advanced technology ensures a consistently high quality print result.

### Widest range of applications

The VariJET 106 was developed to meet the requirements of industries such as the food, pharmaceutical, luxury, healthcare, toy and tobacco industries. Coating and finishing units can be flexibly configured before and after the digital printing unit to realize a variety of inline finishing options.

### Sustainability

By using water-based inks from Koenig & Bauer Durst, high-quality packaging is produced in accordance with the requirements of the above-mentioned industries and environmental protection guidelines.

With the VariJET 106, you print only what is needed – when it is needed.

**740**  
mm

max. sheet width

**1,060**  
mm

max. sheet length

**500 - 700**  
mm

min. sheet width and length

**0.2**  
mm

min. sheet thickness\*

**0.8**  
mm

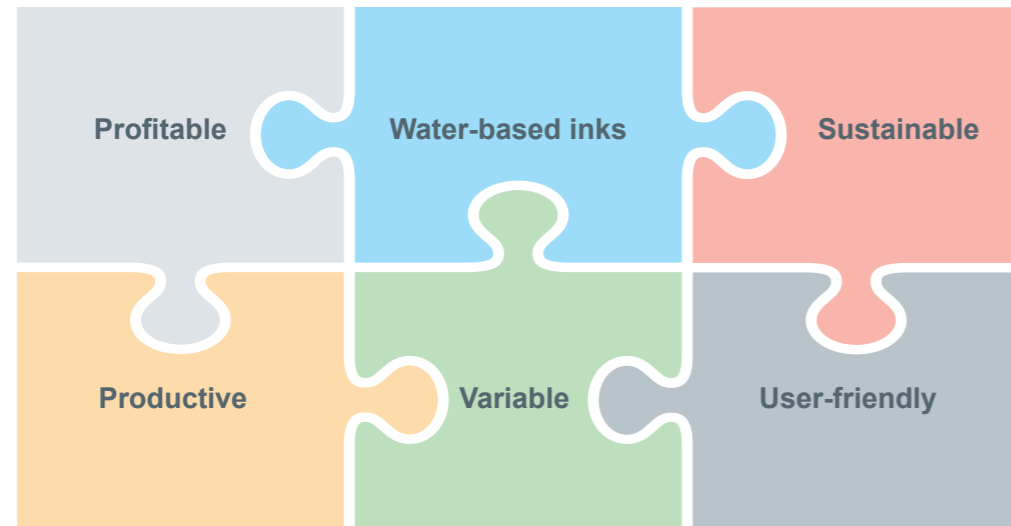
max. sheet thickness\*


**7**  
colors

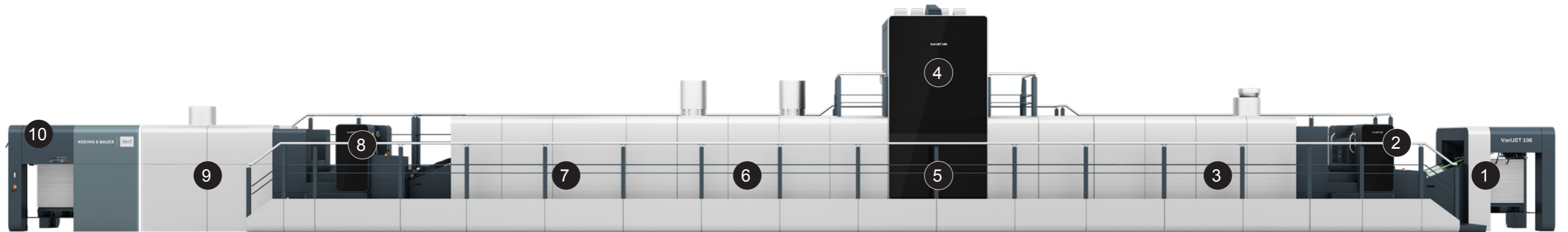
CMYK+Or+Vi+Gn (4c also available)

\* Suitability for printing is partly determined by the flexural rigidity of the substrate

# DIGITAL PRINTING IN OFFSET QUALITY



Specifications	
Media type	All types of carton boards
Max. sheet size	740 x 1060 mm
Min. sheet size	500 x 700 mm
Min. sheet thickness	0.2 mm
Max. sheet thickness	0.8 mm
Max. print area	720 x 1036 mm
Max. print resolution	1200 x 1200 dpi
Printing speed	5 500 sheets/h – 70 m/min
Colors	7C CMYK + Orange, Violet, Green (4C also available) 
Ink type	Water-based ink technology
Food compliant	All fluids and consumables are food compliant
Workflow	Koenig & Bauer Durst Workflow with ability to integrate in existing environment



- |  |  |   |   |   |   |   |  |   |   |
|--|--|---|---|---|---|---|--|---|---|
| <b>10</b>  | <b>9</b>   | <b>8</b>  | <b>7</b>  | <b>6</b>  | <b>5</b>  | <b>4</b>  | <b>3</b>   | <b>2</b>  | <b>1</b>  |
| <b>DELIVERY</b>  | <b>DRYER</b>   | <b>COATING UNIT</b>   | <b>CONDITIONING UNIT</b>  | <b>DRYER</b>  | <b>HIGH-PRECISION BELT</b>  | <b>INKJET PRINT ENGINE</b>  | <b>PRIMER DRYER</b>  | <b>PRIMER</b>   | <b>FEEDER</b>   |
| <ul style="list-style-type: none"> <li>AirTronic Delivery</li> </ul> | <ul style="list-style-type: none"> <li>VariDry Blue</li> </ul> | <ul style="list-style-type: none"> <li>For water-based varnishes</li> <li>Sheet alignment before coating</li> </ul> | <ul style="list-style-type: none"> <li>Conditioning the substrate for immediate processing</li> </ul> | <ul style="list-style-type: none"> <li>VariDry Blue</li> <li>Interface – digital to offset</li> </ul> | <ul style="list-style-type: none"> <li>Sheet alignment before the belt</li> <li>High-precision transport over the entire belt length</li> <li>Ensures high register accuracy</li> </ul> | <ul style="list-style-type: none"> <li>Inkjet print engine</li> <li>7C inkjet tower</li> <li>FUJIFILM Dimatix Samba® G3L</li> </ul> | <ul style="list-style-type: none"> <li>VariDry Blue</li> <li>Energy efficient drying</li> <li>Interface – offset to digital</li> </ul> | <ul style="list-style-type: none"> <li>Coating unit</li> <li>Sheet alignment before coating</li> <li>Secures highest print quality on different substrates</li> </ul> | <ul style="list-style-type: none"> <li>DriveTronic Feeder</li> <li>Market proven</li> </ul> |

# TRAINING CENTER

## TAILORED TRAINING PROGRAMS – OPTIMIZED PRODUCTION

At our training center, we offer customized training programs covering a wide range of requirements: operator training courses, training for in-house engineers focusing on maintenance and the transfer of technological expertise, as well as workflow training courses covering everything from the image file to the final print product.

We also focus on teaching theory and practical application for printer linearization, media profiling, ink limitation and color management. All of our training courses are practice-oriented to ensure smooth production processes and to maximize the performance, quality and productivity of your investment.

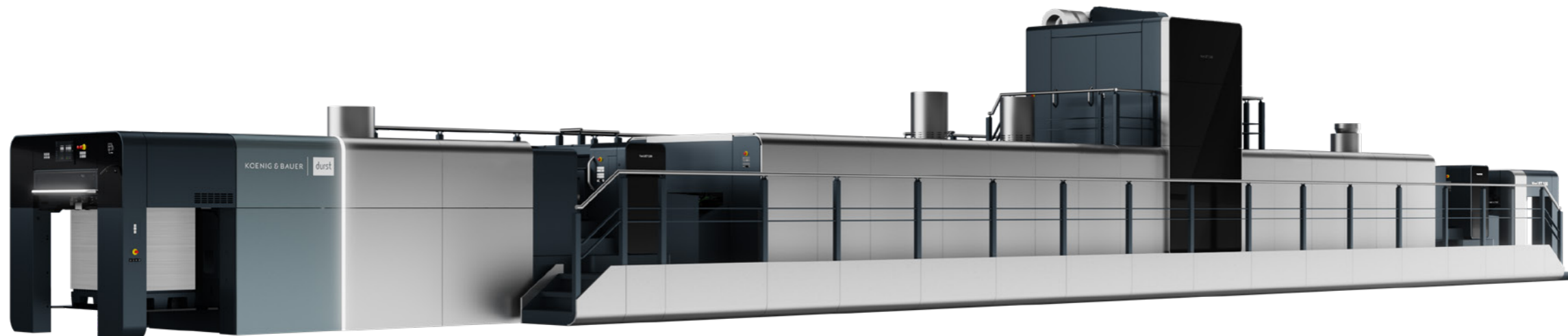
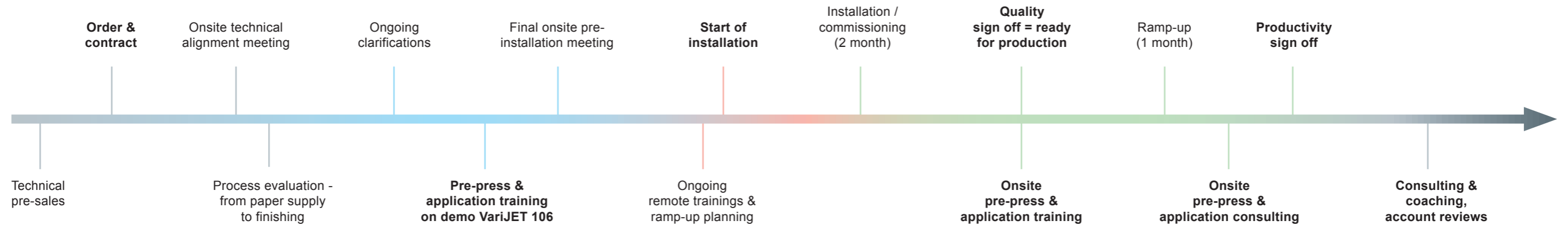
### PRE-PRESS AND APPLICATION TRAINING

- General introduction to VariJET106
- Board flow through the press
- Quality requirements for boards
- Introduction and training on GUI
- Introduction to Koenig & Bauer Durst Workflow
- Color management & profiling
- Pre-press training on existing customer jobs
  - Transfer jobs from offset to digital
  - Edit and modify jobs
  - "Print it yourself"
- Show best practices and how to avoid bad practices
- Define job portfolio for ramp-up phase

### CONSULTING AND COACHING – A WIN-WIN PARTNERSHIP

- Overcome unforeseen challenges
- Realize special applications & specific brand requirements
- Gain and realize new opportunities
- Stay ahead of competitors
- Regular account reviews
  - Benchmarking
  - Market trends
  - R&D updates around the VariJET 106 ecosystem
  - Supply customers with latest innovations

### THE COURSE OF A HOLISTIC VARIJET 106 PROJECT



# SERVICE AND CUSTOMER CARE

## A SERVICE NETWORK YOU CAN RELY ON

We stand for the steadiness and efficiency of our systems. If you still need help, you can rely on our worldwide network of service and support. For

trouble-free operation of your system, we support you with remote diagnostics and telephone service, and with direct service on site, whenever needed, within a very short time.

### BENEFITS OF A SERVICE SELECT PRO VARIJET CONTRACT

- Regular service interactions are planned by the service-provider in alignment with customer
- Maximization of uptime
- Ensure machine safety
- Ensure best possible print quality
- Clear cost model – no unplanned costs
- Service activities performed by trained and certified technicians
- Preventive maintenance activities and Health Check
- Ensure efficient utilization of the VariJET106 through comprehensive trainings for operators and pre-press



# WE HELP YOU TO DEFINE THE SERVICE PACKAGE THAT FITS



Service models and scope of service	Service Select Basic	Service Select Individual	Service Select Pro
Hardware service (RIP)	✓	✓	✓
Online / remote press support 24/7	✓	✓	✓
Spare parts*		●	✓
Onsite services (1st / 2nd / 3rd level)		●	✓
Labor and travel costs		●	✓
Regular preventive maintenance visits		●	✓
Inspection and calibration		●	✓
Printhead insurance – Co-Pay model			✓
Software maintenance		●	●
Expert & application training		●	●

\*consumables and wear parts are not included

# WATER TECHNOLOGY

Our philosophy in developing our whole VariJET 106 digital printing system is to ensure that we can support converters to comply with the ever-changing regulatory environment by eliminating as many process steps with third party fluids as possible.

Our Water Technology inks are an integral part of the long-term strategy of offering sustainable digital printing systems for the folding carton market.

Entirely in synchrony with the requirements of the folding carton industry, these are eco-friendly,

marking-free, water-based, organic-pigmented and monomer-free ink systems. They represent the next technological milestone in water-based ink systems, as they allow high-quality, odor-free, indelible, glossy and non-fading products to be manufactured in a single process.

- **Odorless**
- **Flexible**
- **Non-fading**
- **High-gloss**
- **Abrasion resistant**

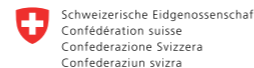


## PRIMARY FOOD PACKAGING

Certified by SQTS (Swiss Quality Testing Services). SQTS tested the VariJET 106 ink set for primary food-safe packaging printed on folding carton. For this application printing on the exterior, non-food contact side was approved.

### INK SET: VARIJET 106 WATER-BASED INKS

- ✓ **SQTS - Swiss Quality Testing Services tested**
- ✓ **GMP compliant ink production**
- ✓ **UL 2801 ECOLOGO certified**
- ✓ **Nestlé compliant**
- ✓ **Swiss ordinance compliant**
- ✓ **EuPIA conform**



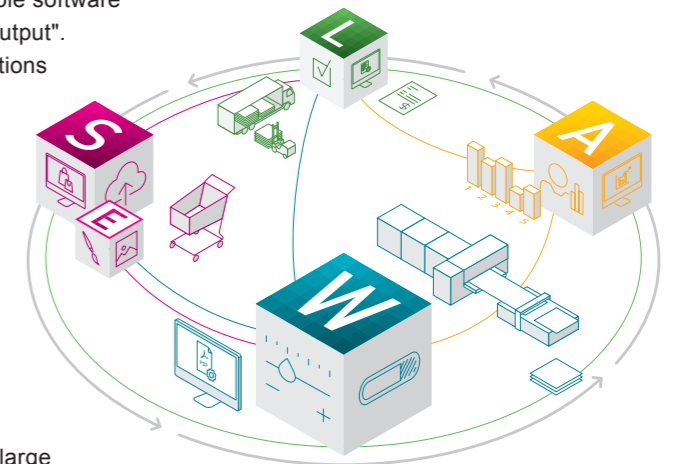
## RECYCLING AND DEINKING

VariJET prints were evaluated by the Technical University of Darmstadt (TU Darmstadt). The testing of recyclability of the VariJET inks was carried out in accordance with the PTS method PTS RH 021-97:2012 – Category II: Paper and board for Recycling (PfR) that are predominantly used in the manufacture of packaging papers. The criteria used in the assessment of the recyclability are desintegrability (mass percentage of the constituents not usable in papermaking) and undisturbed sheet formation (purity of the furnish mass percentage usable in papermaking regarding stickies or optical inhomogeneities).

# SOFTWARE & SOLUTIONS

## A REVOLUTIONARY SOFTWARE ECOSYSTEM DESIGNED FOR YOUR DIGITAL PRINTING BUSINESS - SEAMLESSLY INTEGRATED WITH YOUR ENVIRONMENT.

Durst Software & Solutions offers smart and simple software solutions to optimize the process "from pixel to output". Designed specifically for digital printing, our solutions are modular and easy to integrate into your existing IT environment. From initial online file creation to pre-press, production and final analysis, our software helps improve print production processes and simplify your business. Consulting and training services tailored to your specific needs will help you to achieve optimized work processes. The Durst software is modular and can be flexibly adapted to your needs – from a simple stand-alone solution to a fully integrated system. All products are individually expandable and can be used for large format, label, corrugated, textile and folding carton printing.



## PRE-PRESS & PRODUCTION – KOENIG & BAUER DURST WORKFLOW

A browser-based software solution that combines pre-press and production automation tasks. File checking, data preparation, color management, ink and media saving and much more. Koenig & Bauer Durst Workflow is the ideal toolbox to ensure an efficient production flow with optimal results in the shortest time. Generate print predictable files, manage your process according to your production requirements and get real time feedback on the current status with Koenig & Bauer Durst Workflow.

- **Improve your pre-press productivity**
- **Handle your printing data**
- **Achieve outstanding color accuracy**
- **Enhance your print data handling**
- **Optimize material usage**
- **Optimize your ripping speed**
- **Automate your processes**
- **Increase your variable data management**

## DATA & TRANSPARENCY – KOENIG & BAUER DURST ANALYTICS

The analytics software designed for your Koenig & Bauer Durst printers to allow data-driven decisions. Customized dashboards with key performance information, production timelines, detailed job information as well as KPI reports. Spare part conditions are also effortlessly checked to allow preventive maintenance operations. Increase your productivity and keep your equipment under control with Koenig & Bauer Durst Analytics.



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**KOENIG & BAUER**

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