DELTA SPC 130
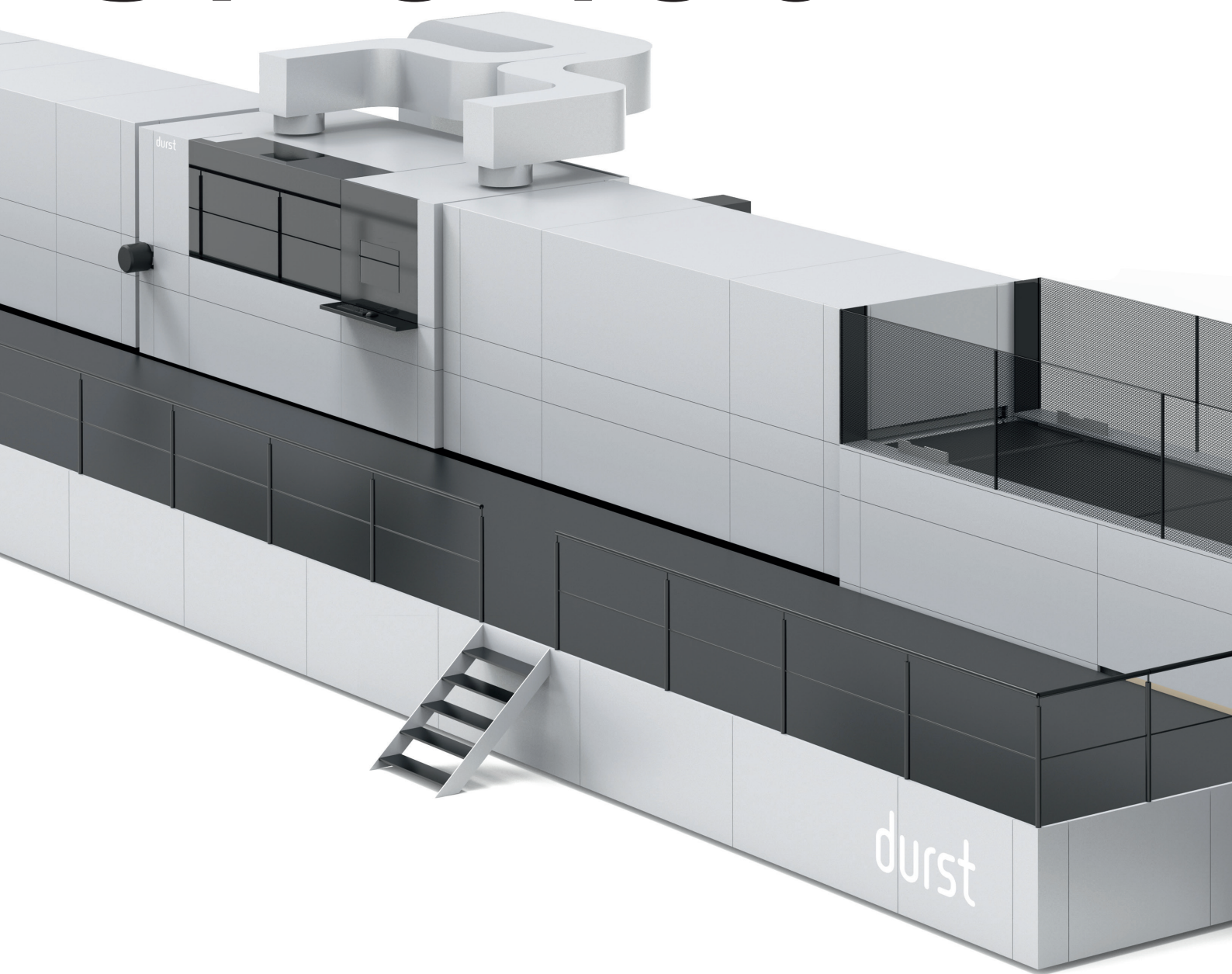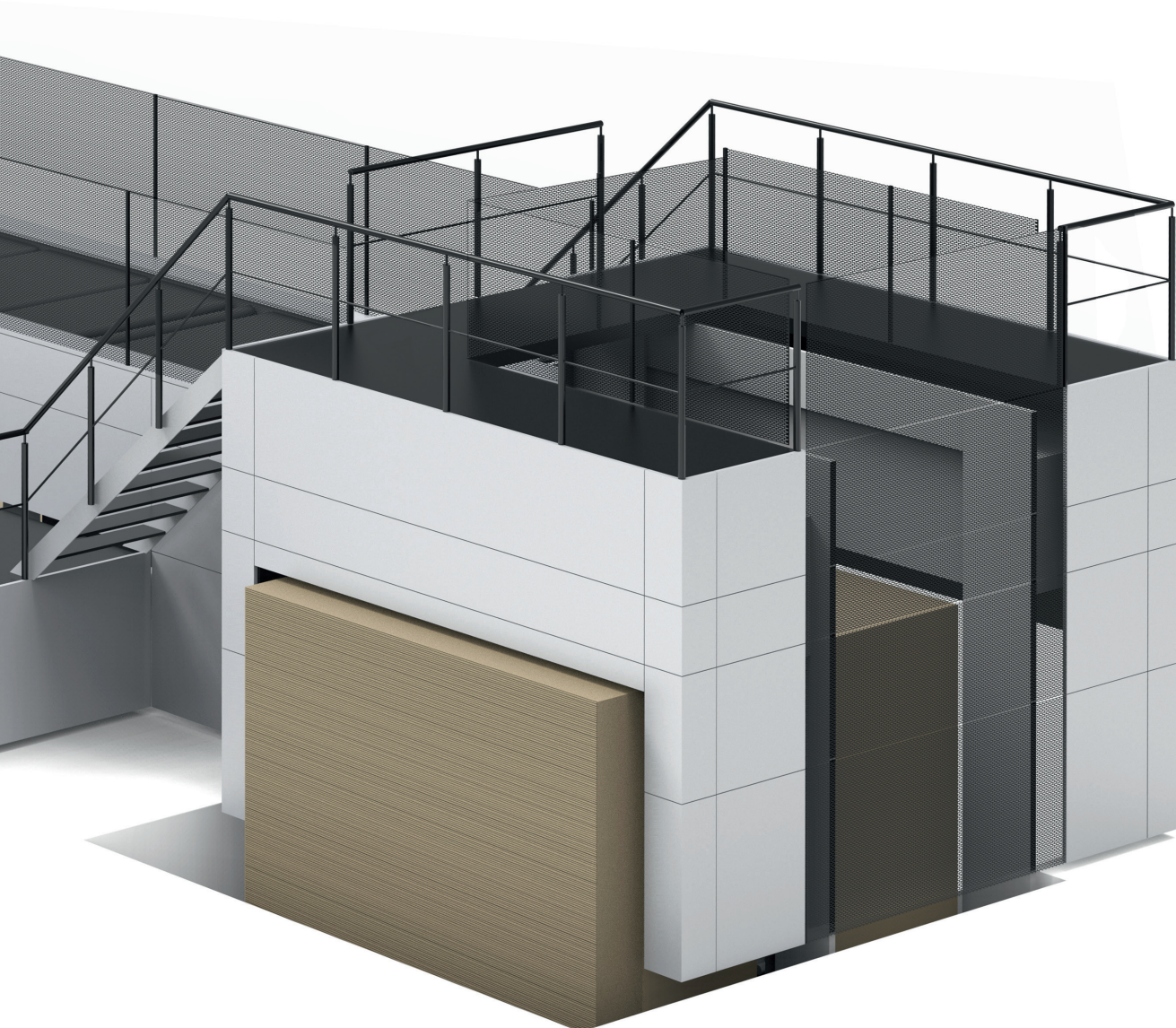

DIGITAL HIGH QUALITY POST PRINT (HQPP) FOR INDUSTRIAL PRODUCTION

durst

FEFCO
Bronze Award in the category
of Best Innovation 2015

DELTA SPC 130 — REPRESENTING A NEW GENERATION OF DIGITAL PRINTING PRESSES EQUIPPED WITH DURST WATER TECHNOLOGY.

The Delta SPC 130 is based on the latest generation of single-pass printing systems that Durst is already using successfully in the ceramics and label-printing segments.

Durst has been continuously developing single-pass technology since 2005 and has a broad installation base with over 700 Gamma and Tau printing systems around the world.

With the Delta SPC 130, Durst is adapting single-pass technology to the corrugated board industry. The Delta SPC 130 combines a well-engineered mechanical design with easily accessible sub-assemblies and selected components to guarantee durable quality, high performance and reliability. It is a printing system that offers unrivaled versatility, low maintenance requirements and 24/7 reliability.

> Digital High Quality Post Print (HQPP)
> Industrial
> Productivity
> Digital workflow
> High machine availability
> Versatility

DELTA SPC 130 — INDUSTRIAL DIGITAL PRINTING WITH ODORLESS INK

The Delta SPC 130 is equipped with recirculating Durst Quadro Array printheads and WT inks. These form the basis for the constant readiness for operation and reliability in industrial, multi-shift production environments.

The Delta SPC 130 prints with a maximum of 6 colors on small formats from 500 x 600 mm through to very large formats with maximum dimensions of 1,300 x 2,100 (optionally 1,300 x 2,800 mm) and a maximum thickness of 12 mm.

9000 M²/H
Maximum speed for a sheet size of 1,300 x 2,100 mm

3000 M²/H
Average speed for a sheet size of 1,300 x 2,100 mm

1100 SHEETS/H
Average speed for a sheet size of 1,300 x 2,100 mm

800 DPI
Maximum resolution

1300 MM
Maximum sheet size

2800 MM
Maximum sheet length

4–6 COLORS
(CMYK + Lc + Lm)

1 MM
Minimum sheet thickness
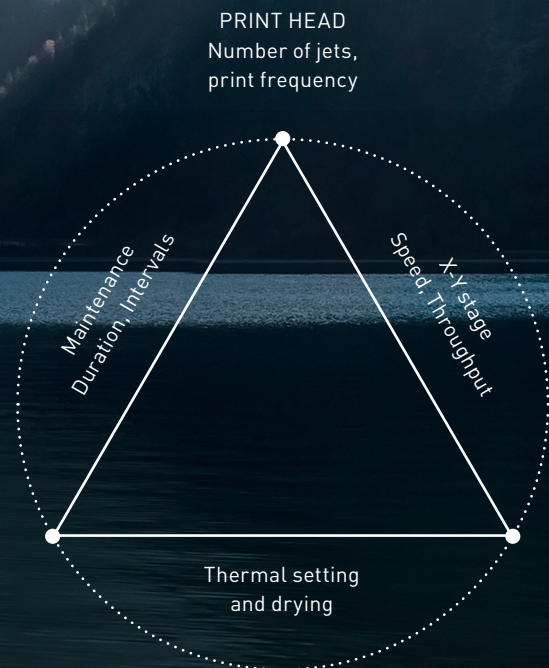
12 MM
Maximum sheet thickness

DURST WATER TECHNOLOGY

Durst Water Technology inks are an integral part of the long-term Durst strategy of offering sustainable, digital printing systems as an alternative to conventional printing systems for the packaging and display sector. Entirely in synchrony with the requirements of the corrugated cardboard and solid cardboard 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 end products to be produced in a single process.

Durst Water Technology means that pre-treatment, interim drying and overprinting steps can be eliminated.

> Odorless
> Flexibel
> Non-fading
> High-gloss
> Abrasion resistant

PRINT HEAD
Number of jets,
print frequency

Maintenance
Duration, Intervals

X, y stage
Speed, Throughput

Thermal setting
and drying

INK
Surface energy,
Viscosity, Stability,
Functionality,

SUBSTRATE
Chemical
Properties,
Functionalization

THE RECYCLING OPTIONS FOR WATER TECHNOLOGY INK

The recycling of Durst Water Technology prints was evaluated by the independent Paper Institute of the University of Darmstadt in Germany in accordance with the PTS-RH 021/12 Directive and the standard. The certificate from October 2018 confirms that the recycling requirements are met.

TECHNISCHE
UNIVERSITÄT
DARMSTADT

FOOD PACKAGING

Printing on Secondary Food Packaging materials has been possible with Durst Water Technology since the introduction of the Delta SPC 130 and Delta WT systems. Durst Water Technology Food Inks now allow Primary Food Packaging materials to be printed too.

Both sets of ink are based on the same formula, although their production method differs. Since production according to the GMP standard is defined, among other things, as a fundamental legal requirement for the printing of Primary Food Packaging, Durst needed to use the associated GMP production routines for Durst Water Technology Food Inks that now not only comply with just the Swiss ordinance, but also with the relevant EuPIA guidelines and the Nestlé Guidance Note on Packaging Inks.

INK FEATURES

DEVELOPMENT APPROACH

> Part of a long-term, environmentally friendly strategy
> Developed and quality-controlled entirely in-house
> Manufactured at Durst ink production facilities
> Optimized for corrugated cardboard

INK CHARACTERISTICS

> True and full-quality water-based ink
> Organically pigmented
> Based on special resin technology
> Free from monomers and mineral oils

PROCESSING

> Thermal drying with IR and hot air
> Resin sealing with UVV

SECONDARY
FOOD PACKAGING

Secondary Food Packaging made from suitable corrugated cardboard or cardboard material contains primary packaging with sufficient barrier properties, such as cans, jars or pouches. The outside of the packaging or display is printed without direct contact with the food.

INK SET: DURST WT SP INK

> SQTS-certified

PRIMARY
FOOD PACKAGING

Primary Food Packaging made from suitable corrugated cardboard or cardboard material surrounds the food directly. Here too, the outside of the packaging is printed without any direct contact between the printed surface and the food.

INK SET: DURST WT FOOD SP INK

> SQTS-certified
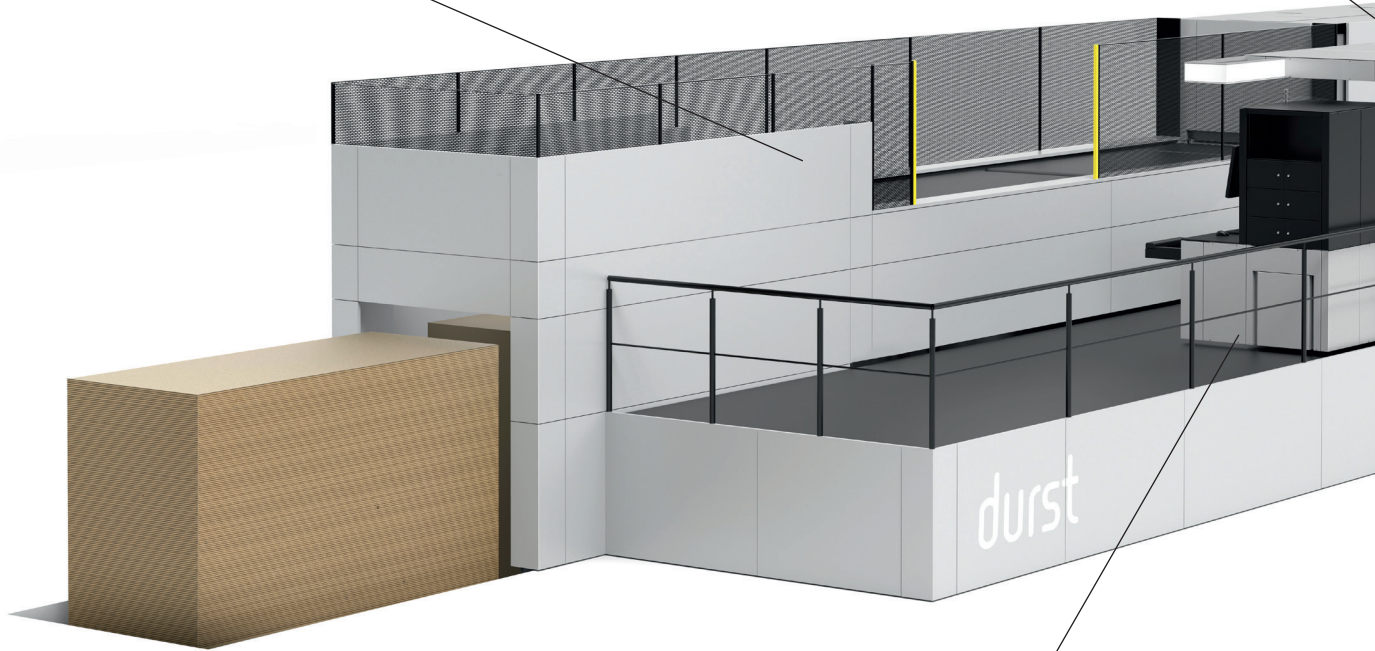> GMP production
> Swiss ordinance
> Nestlé-compliant
> EuPIA

DELTA SPC 130
FLEXLINE AUTOMATIC

P 4
Cooling section

Cooling of the printed sheets
for fast further processing.

S 1
Stacker section

Fully automatic stacker with integrated
ejection of waste sheets.

C 1
Delta Control Station

Centralized controlling of the Delta SPC 130
Printing Line.

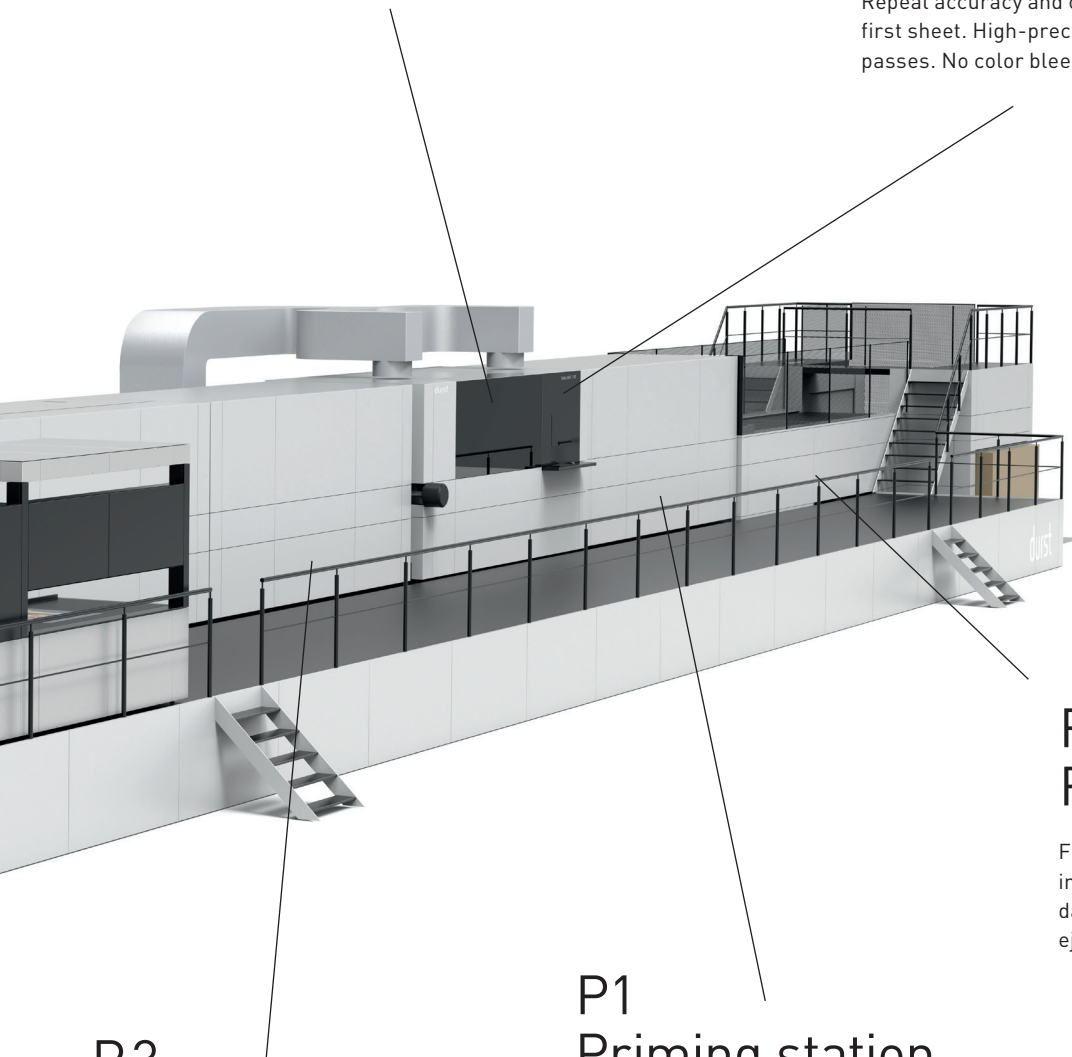| S1	P4	P3	P2.1	P2	P1	F1

48 m
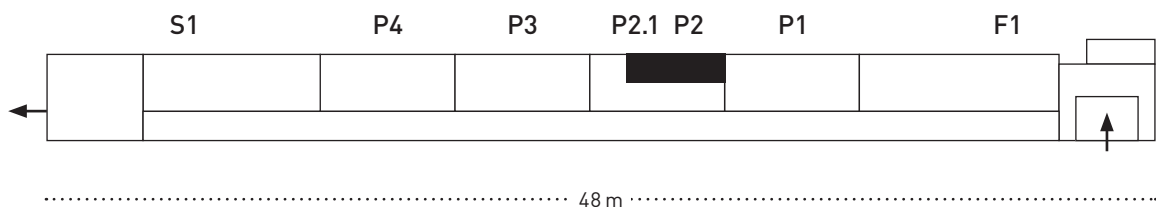
P2.1
Quality inspection

Detection of errors in the printing process (optional).

P2
Single-pass-printer

Printing on a wide range of fiber-based materials. Minimum set-up times when changing jobs. Repeat accuracy and color stability from the very first sheet. High-precision positioning, no incorrect passes. No color bleeds required.

F1
Feeder section

Fully automatic non-stop feeder with integrated cleaning station, detection of damaged sheets and automatic sheet ejection.
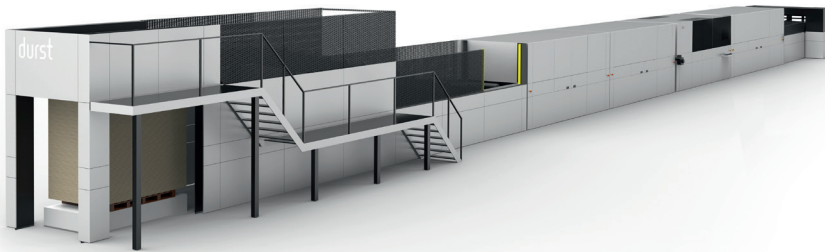
P3
Hybrid dryer

Hybrid, adaptive drying technology. High gloss and high adhesion on coated fiber-based materials without pretreatment. The thin coating layer and high adhesive friction of the ink surface prevents the stack from shifting.
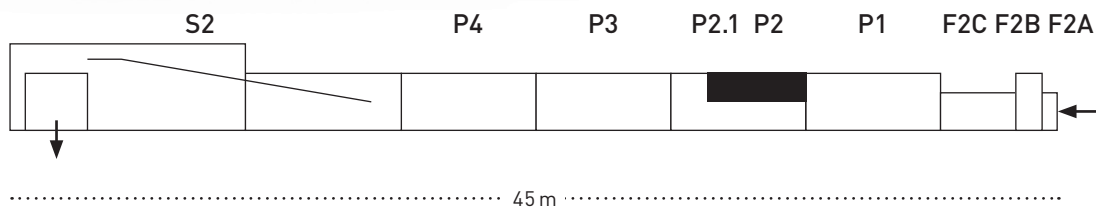
P1
Priming station

Digital pre-treatment of uncoated and coated material.

DELTA SPC 130 FLEXLINE 3/4 AUTOMATIC

S2
Upstacker

Gathering and stacking of the sheets up to a stack height of 2,000 mm.

S2   P4   P3   P2.1 P2   P1   F2C F2B F2A

·········· 45 m ··········

# DELTA SPC 130 FLEXLINE BASIC

F2A
Non-Crush-Feeder

Transport of sheets without damage to the material structure.

F2B
Board Cleaning Section

Double-sided automatic sheet cleaning.

F2C
Board Quality Control Table

Detection of faulty material before the printing press.

S3
Counter Ejector

Gathering and stacking of sheets. (Ejection of faulty sheets and test sheets (optional)).

S1   S3   P4   P3   P2.1 P2   P1   F2C F2B F2A
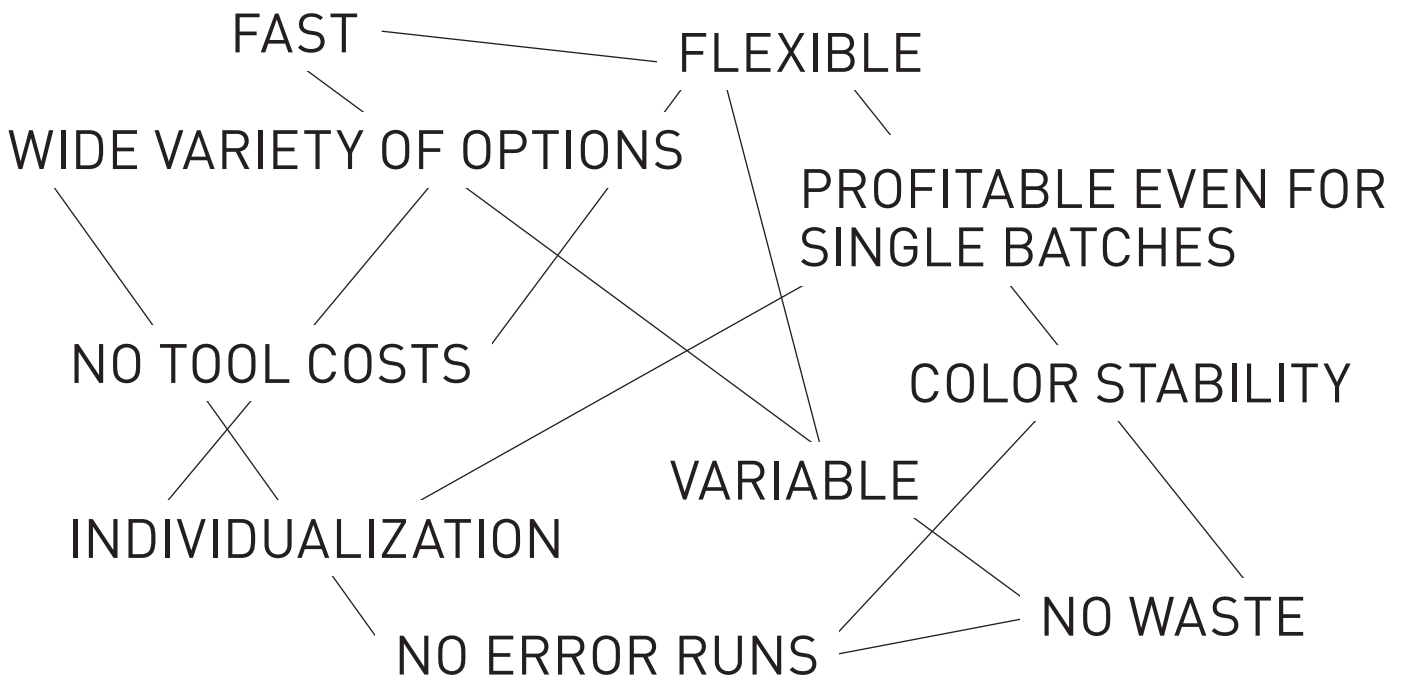
·········· 38 m ··········
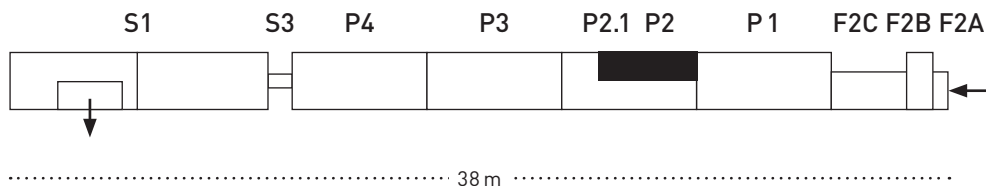
DELTA CONTROL STATION — CONTROL STATION FOR CENTRAL- IZED OPERATION AND MONITORING

The Delta Control Station offers a state-of-the-art, ergonomic workstation for simple, clear and central operation of the Digital Durst Single-Pass Printing Line.

> Work table for a 280 x 130 cm sheet size for quality assessment, profiling and color checking
> Standard light D50/65
> Automatic angle adjustment of the table top for optimized ergonomics
> Camera server for clear monitoring of the printing line
> Two 55" monitors for Q control, workflow, camera view, ERP
> One 32" touchscreen for control of the Delta SPC 130 line
> Matrix screen control for customer-specific, freely selectable assignment of the monitors
> Pull-out leather seat arm for machine operators
> Interface for color measuring devices for profiling and color checking
> 6 lockable compartments for machine operators incl. cellphone charging option
> Signal lamp to display the printer status
> Integrated refrigerator for 1.5-liter PET water bottles

WHY DIGITAL?

FAST

FLEXIBLE

WIDE VARIETY OF OPTIONS

PROFITABLE EVEN FOR
SINGLE BATCHES

NO TOOL COSTS

COLOR STABILITY

VARIABLE

INDIVIDUALIZATION

NO WASTE

NO ERROR RUNS

DELTA SPC 130 PEOPLE

Speed to market, high flexibility
and cost control with variable data
and no tool costs, color fidelity for
branded products, HQPP quality,
precise prints with odorless, water-
based inks for food packaging. The
future is here!

Wolfram Verwüster
Global Sales Director CPD
Durst Group

Developing the Delta SPC 130
FlexLine presented us with some
tremendous challenges. We stepped
up to these challenges and created
a unique digital printing solution for
the corrugated cardboard industry.

Matthias Krautgasser
Product Manager CPD
Durst Group

The on-deadline planning, instal-
lation and commissioning are the
basis for any digital printing line
project and essential for the fast
turnaround and successful hand-
over to the client.

Harald Kuenz
Project Manager CPD
Durst Group

DURST PROFESSIONAL SERVICES: SOLUTIONS FOR THE PRINT WORKFLOW

Our solution rationalizes the print workflow and gets the most out of your printing press.

> Complex file handling and version conflicts are a thing of the past
> Precise color management functions allow better user results (cleaner spot colors, neutral gray axis, individual black dot compensation, thinner ink layer)
> Faster and simpler workflow with parallel ripping ensures a convenient printing process (order processing, item selection, workflows optimized for production, simplified color matching, automated reports)

THE PRINTING SOLUTIONS ARE MADE UP OF VARIOUS INTEGRATED SOFTWARE MODULES

CREATE

Create print-ready files with a simple and optimized workflow in the prepress stage

> Simplification of data processing and handling
> Optimization of print settings (quality, costs, etc.)
> Interface for data transfer to the CREATE+ version

PRODUCE
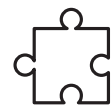
Process production orders with maximum quality and speed

> Fulfill print orders based on simplified file handling
> Get the most out of the printing press (quality and speed)
> Interface for data transfer to the PRODUCE+ version

PRINT

Print with Durst quality and productivity

> Optimized results in harmony with PRODUCE
> Confirmation by our Demo Center experts

INTEGRATE

Print workflow can be integrated seamlessly into your systems

> Integration and data exchange between the print workflow and ERP/MIS systems can be customized
> Bi-directional data exchange (CREATE+ and PRODUCE+ support the unilateral transfer of data to the print workflow solution)

PRODUCTION ANALYSIS

ANALYZE

> Current printer status
> Current ink levels
> Utilization (printed orders, square meters, printing time)
> Ink consumption
> Detailed order data

ANALYZE+

> Server crosslinks all printing presses equipped with ANALYZE
> Aggregated and specific data for each printing press
> Interface for integration into ERP/MIS

SERVICE & CUSTOMER CARE

DURST SERVICE. A NETWORK TO 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. We have focused on maximising these tasks.

DURST TRAINING CENTER

**DURST TRAINING. TAILORED PROGRAMS — OPTIMIZED PRODUCTION.**

At our training center, we offer customized training programs covering a wide range of requirements: Operating 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 in order to ensure smooth production processes and to maximize the performance, quality and productivity of your investment.
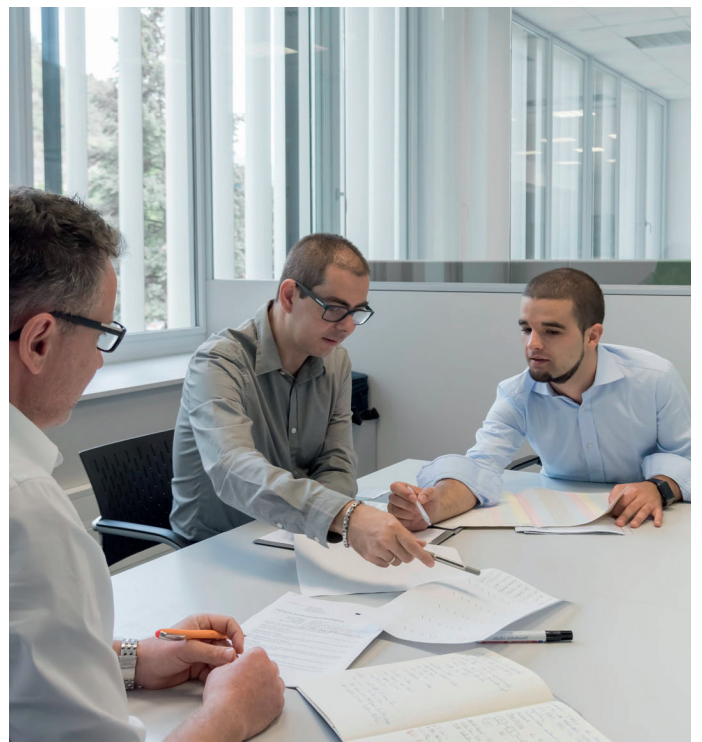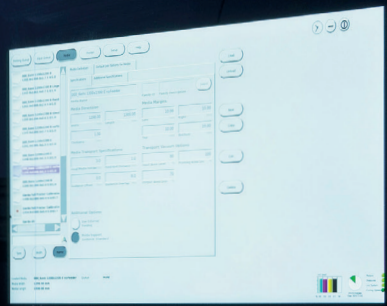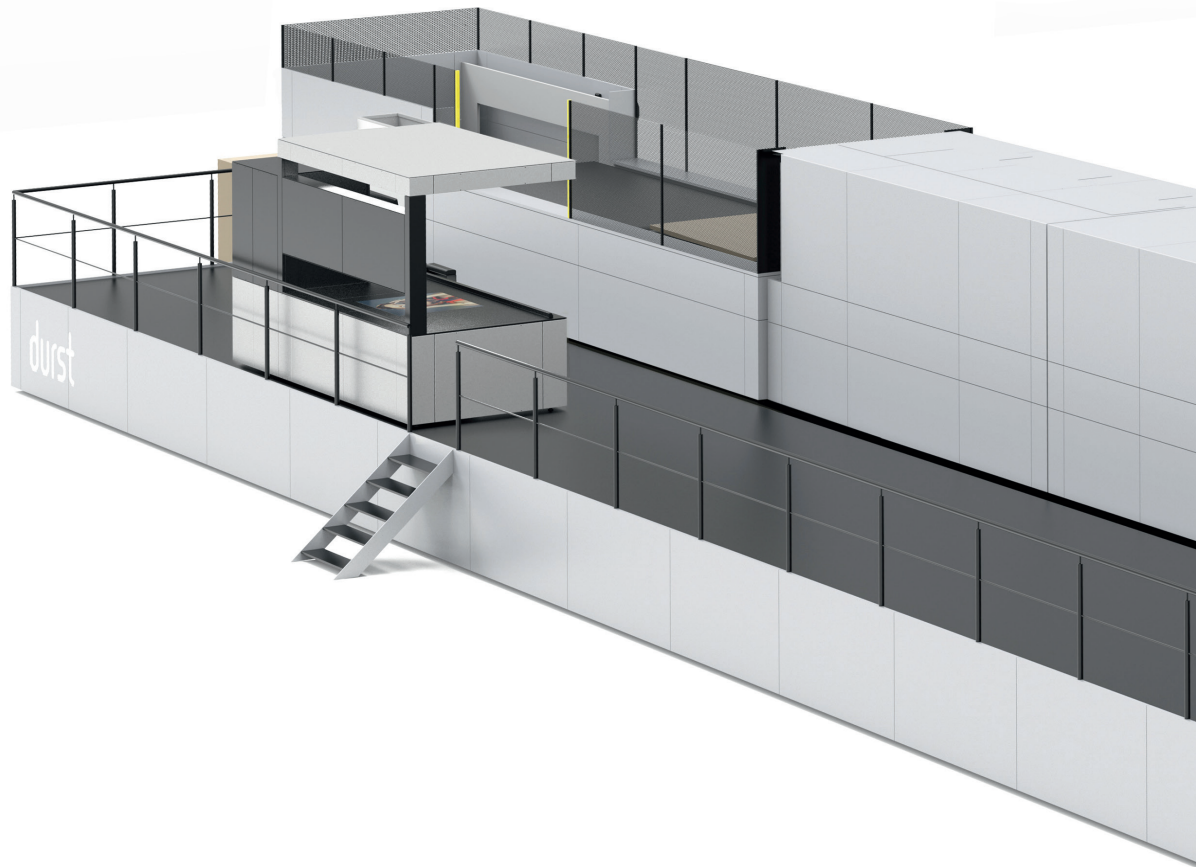
durst-group.com/corrugated

The latest technical developments are constantly being incorporated into Durst products. Descriptions, illustrations and specifications are therefore subject to change without notice. Images and graphic representations are protected by copyright.

Durst® is a Registered Trade Mark
Copyright Durst Phototechnik AG
EN | 05/2019

durst