

LABEL & FLEXIBLE PACKAGING

durst



# ALL YOU NEED IS RSC

## CONTENT

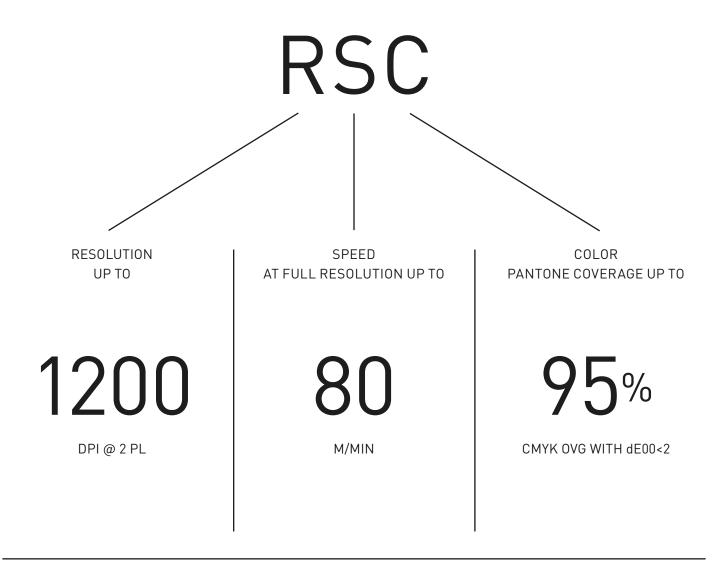
1. TAU RSC PRINTING SYSTEMS	4
TAU 330 RSC E	6
TAU 330 RSC	8
TAU RSCi	10
TECHNICAL OVERVIEW	12
TAU RSCi FLEXO STATION	14
2. TAU RSC INKS	16
TAU RSC UV INK	18
TAU RSC LOW MIGRATION UV INK	19

3. APPLICATIONS	20
4. DURST SOFTWARE ECOSYSTEM LABEL	22
5. INTEGRATION & CONSULTANCY	25

1

# TAU RSC PRINTING SYSTEMS

Introduced at Labelexpo 2017, the Tau RSC platform sets a new benchmark in industrial digital UV inkjet label printing. Best in class quality and productivity, combined with highest uptime, result in a competitive package with lowest total cost of ownership.



# SPECIAL FEATURES

#### BEST IN CLASS PRINT HEAD: DIMATIX SAMBA G3L

- > Durable design based on MEMS print head technology
- > Full 1,200 x 1,200 dpi resolution
- > 2 pl minimum drop size for smooth gradients and absolute sharpness
- > Automated nozzle compensation for increased press uptime and reduced service costs



#### TAU RSC INKS

- > Tau RSC UV inks
- > BS5609 and UL compliance achieved, excellent light fastness and heat resistance for outdoor applications
- > Tau RSC Low Migration UV inks for food and pharmaceutical applications



#### AUTOMATIC PRINT HEAD CLEANING

- > Reduces time for daily maintenance
- > Ensures high up time



#### PRECISE TEMPERATURE CONTROL

- > Closed and protected print engine for maximum printing stability
- > Heating and cooling of Tau RSC inks to maintain color consistency



#### PROPRIETARY ELECTRONICS

- > Ensures highest productivity
- > Allows to print variable data at 80 m/min with all colors



#### **SOLID MACHINE CONSTRUCTION**

- > In-house manufacturing of key components
- > Designed for 24/7 operation



# TAU 330 RSC E — EVOLVES YOUR BUSINESS

Equipped with latest RSC technology, the Tau 330 RSC E combines best in class print quality with an economic investment. Fully upgradable to an 8 color Tau 330 RSC with a print speed of 80 m/min guarantees that future increased production capacity requirements are covered.

Customers can choose between the Tau RSC UV inks and Tau RSC Low Migration UV inks.

#### Attractive TCO

High-pigmented RSC inks



RSC ink sets

RSC UV inks RSC Low Migration UV inks



Automated nozzle compensation

Inline camera system

# TAU 330 RSC — BOOSTS YOUR BUSINESS

The benchmark in productivity and flexibility is the Tau 330 RSC. New added options such as the high-speed white allows operators to print with all colors and white at a speed of 80 m/min.

With the Tau RSC UV inks the press prints labels for various applications: industrial, oil and electronic labels, cosmetics, toiletries and bodycare, wine and spirits, stickers, tubes, commercial labels and many more.

#### Reliable construction

Proved and experienced design



#### Vibrant RSC inks

Up to 85% Pantone coverage with dE00<2 on HermaPE with CMYK



Automated nozzle compensation

Inline camera system

# TAU RSCi — INNOVATES YOUR BUSINESS

Innovation for an industrial level of productivity. The newest member of the Tau RSC platform is the Tau RSCi. Available in printing widths of 330, 420 or 510 mm the printer is using the Tau RSC UV inks. The press is designed to take over mid-to long run jobs but is also able to produce short-run jobs in the most economic way.

The user-friendly design including jumbo winders and roll lifts allows fast roll changes and good accessibility to print heads, UV-lamps and transport rollers. The integrated large inspection table provides space for visual inspection. The Tau RSCi is equipped by default with a chill roller to guarantee maximum material and application flexibility.

### Highest productivity

Print speed up to 100 m/min

## Jumbo winders

For rolls with Ø 1,016 mm and included roll lift



## Industrial scalability

Print width of 330/420/510 mm



Front side operation and ink refill

# TECHNICAL OVERVIEW

#### STANDARD SCOPE OF DELIVERY

# Print head Print resolution - native Minimum drop size - Greyscale levels Maximum print speed Print width Inks Loading capacity Substrate width Substrate thickness Substrate type

#### TAU 330 RSC E

Dimatix Samba



1,200x1,200 dpi		
2 pl – 3 levels: 2 – 4 – 6 pl		
52 m/min (170 ft/min), upgradeable to 80 m/min (262 ft/min)		
Max. 244 mm (9.6 in) or max. 330 mm (13 in)		
Tau RSC UV ink, Tau RSC Low Migration UV ink		
Roll diameter max. 680 mm (26.7 in), max. 120 kg (264 lbs)		
Min. 165 mm (6.5 in) – max. 350 mm (13.7 in)		
100 $\mu m$ to 500 $\mu m$ . With chill roller: *20 $\mu m$ to 500 $\mu m$		
Coated and uncoated, supported and unsupported substrates. Paper,		

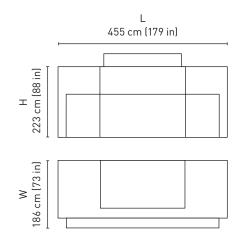
white and transparent film, aluminum foil, PP, PE, PVC, PET, BOPP

#### ADDITIONAL OPTIONS

Single or double side
Vetaphone
Yes
Yes
Yes
No
Yes
Yes
Yes, for roll loading capacity with a diameter of max. 1,016 mm (40 in) and max. 450 kg (992 lbs)
Yes, manual or automated mode
No
No

#### SPACE REQUIREMENTS

for standard scope of delivery



#### **ENVIRONMENTAL INFORMATION**

Temperature range: 18 °C (64 °F) – 28 °C (82 °F)

Humidity: 40 - 70%, non condensing

<sup>\*</sup> only aluminum foil and PET

#### TAU 330 RSC



#### TAU RSCi



Dimatix Samba
1,200x1,200 dpi
2 pl – 3 levels: 2 – 4 – 6 pl
80 m/min (262 ft/min)
Max. 330 mm (13 in)
Tau RSC UV ink
Roll diameter max. 680 mm (26.7 in), max. 120 kg (264 lbs)
Min. 165 mm (6.5 in) – max. 350 mm (13.7 in)
100 μm to 500 μm. With chill roller: *20 μm to 500 μm
Coated and uncoated, supported and unsupported substrates. Paper,

white and transparent film, aluminum foil, PP, PE, PVC, PET, BOPP

\* only aluminum foil and PET

Dimatix Samba

1,200 x 1,200 dpi

2 pl - 3 levels: 2 - 4 - 6 pl

80 m/min (262 ft/min) @ full resolution

Max. 330 mm (13 in), 420 mm (16.5 in), 510 mm (20 in)

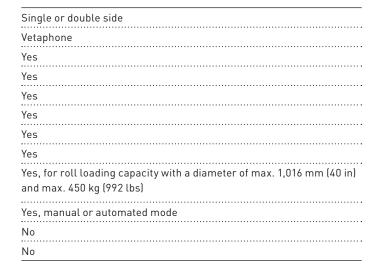
Tau RSC UV ink

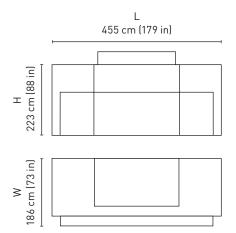
Roll diameter max. 1,016 mm (40 in), max. 450 kg (992 lbs)

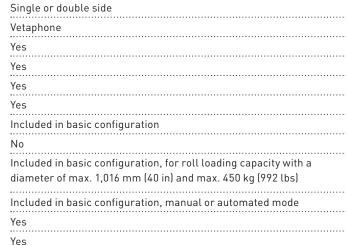
Min. 200 mm (7.9 in) – max. 350/430/520 mm (13.7/17/20.5 in) (depending on printing width)

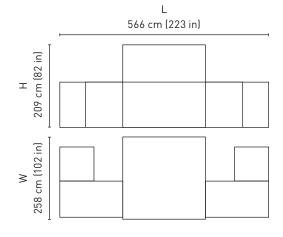
\*20 µm to 500 µm

Coated and uncoated, supported and unsupported substrates. Paper, white and transparent film, aluminum foil, PP, PE, PVC, PET, BOPP









<sup>\*</sup> only aluminum foil and PET

# TAU RSCi WITH FLEXO STATIONS— EXPAND YOUR POSSIBILITIES

The Tau RSCi is a real productivity workhorse and it is now possible to configure the Tau RSCi with an optional flexo station before and/or after the digital print unit. The use of challenging materials by adding a primer or combination printing between flexo and UV Inkjet, where for example large solid areas in white are printed in flexo, expand the possible applications even more.

The user friendly flexo stations fit to the available printing widths of 330, 420 or 510 mm of the Tau RSCi and are equipped with a slide in/out carriage to aid loading and unloading of the ink pan, pick-up and anilox roller.

#### Expand applications

More materials and possibilities



Use of challenging materials

By adding a primer

## Proven RSC technology

1200 x 1200 dpi @ 2 pl drop size



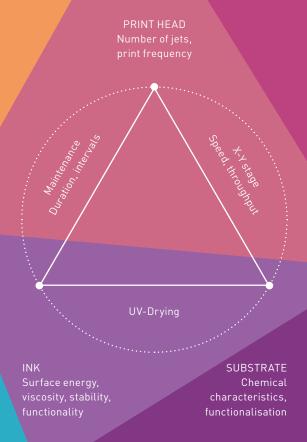
## Cost efficient production

Combine Flexo and UV Inkjet

# DURST INK TECHNOLOGIES

In accordance with Durst's quality, productivity and environmental standards, the company's ink portfolio comprises various UV ink systems matched to clients needs. Maximum print quality, uptime, and productivity with minimum ink consumption are the result of the continuous and systematic development of the core competencies in mechanical engineering as well as in ink and print-head technology in Durst's innovation center.

This 'magical triangle of inkjet technology' is a holistic approach aimed at providing inks for a wide range of different end uses.





7 TAU RSC UV INKS

Durst offers dedicated ink systems for the RSC platform to cover a wide range of applications. Durst's development approach and exclusive partnerships with world-leading ink companies, including in-house application and weathering tests, ensures maximum system stability.

All ink systems and production batches are continuously monitored under the strictest laboratory conditions in order to provide optimum performance for users.

- > Large color space
- > High system stability
- > Broad application diversity
- > High pigmentation
- > Low ink consumption
- > Additional process colors

# TAU RSC UV INK

With the launch of Tau 330 RSC label press, the new ink set Tau RSC UV ink has been introduced. During development the focus was on excellent flow characteristics and high edge sharpness.

With 7 process colors it is possible to cover up to 95% of the Pantone color scale and reproduce corporate colors exactly.

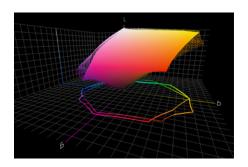
Tau RSC UV inks are light-fast and resistant to chemical influences. Tau RSC UV inks are available in Cyan, Magenta, Yellow, Black, Orange, Violet, Green and White. The ink set is used in the Tau 330 RSC E, Tau 330 RSC and the Tau RSCi press.

Color	Light-Fastness/ Blue Wool rating
Cyan	up to 8
Magenta	up to 8
Yellow	up to 8
Black	up to 8
Orange	up to 6 – 7
Violet	up to 8
Green	up to 7 – 8
White	not applicable

- > Automotive
- > Electronics
- > Industrial
- > Commercial labeling
- > Chemicals
- > Personal care

#### **COLOR GAMUT**

Comparison between CMYK and CMYK + OVG color profile, created on HERMA PE White TC851



#### **CHARACTERISTICS**

- > Durst has obtained UL recognitions for the Tau RSC inks in combination with several self-adhesive materials
- > BS5609 section 3 certification achieved
- > High resistance to sunlight, rain influence, temperature and chemicals

All test and certifications performed together with materials from Avery Dennison.

#### COMPLIANCE

Tau RSC UV inks comply the following guidelines:

- > REACH
- > SVHC
- > Heavy Metals
- > Mineral oils MOSH MOAH
- > RoHs 3
- > VOC
- > and more

For detailed information, please contact your local sales representative or Durst product management team.

# TAU RSC LOW MIGRATION UV INK

The new Tau RSC Low Migration inks have been developed specially for applications in the food, beverage, cosmetics and pharmaceutical markets.

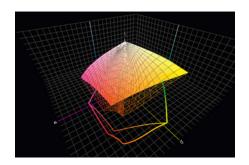
The inks have been formulated based on the common regulation and tested and declared as compliant by independent test institutes.

Color	Light-Fastness/ Blue Wool rating
Cyan	8
Magenta	6
Yellow	6
Black	8
Orange	7 – 8
Blue	7
White	not applicable

- > Beverages
- > Food
- > Cosmetics
- > Pharmaceutical
- > Toiletries

#### **COLOR GAMUT**

Comparison between CMYK and CMYK + 0 color profile, created on HERMA PE White TC851



# ADHESION CHARACTERISTICS

- > Assessed on a multitude of substrates according to DIN EN ISO 2409:2013. Excellent on typical label substrates suitable for UV inkjet printing
- Compliant with European Framework Regulation (1935/2004/EC) when utilized in compliant application and environment

For detailed information, please contact your local sales representative or Durst product management team.

#### COMPLIANCE

- > Nestlé Guidance Note on Packaging Inks (Version October 2018)
- > Swiss Ordinance RS 817.023.021
- Good Manufacturing Practice (GMP) Printing Inks for Food Contact Materials (4th edition – March 2016) – EUPIA Guidance
- > Latex free
- > Bisphenol A (BPA) and benzophenone are not intentionally added

3

# **APPLICATIONS**

With the printing quality and ink performance provided by the Tau RSC printers, converters are able to cover multiple applications with one printing system in a flexible and economic way, having a choice between RSC and RSC Low Migration ink to address dedicated applications. Thanks to its outstanding performance in productivity and print quality, especially the Tau RSCi is a game changer in transferring flexo jobs onto a digital press platform.

#### **COSMETICS AND TOILETTRIES**

Tau RSC provides the highest opacity white, vivid colors and a screen-like feeling of the prints. Patternware add additional value to further enhance the appearance on the shelf.



#### **FOOD AND BEVERAGES**

Abrasion resistance and temperature stability is key for these industry applications. Furthermore, the vivid and strong Tau RSC inks will make products stand out. With the new Tau RSC Low Migration inks products can be produced in compliance with general industry regulations and standards.



#### **DURABLES**

Tau RSC ink provides outstanding light fastness, temperature and abrasion resistance for durable applications. The ink is very well suited specifically for electronic, oil and lubrificant labels. Compliance with UL or BS5609 section 3 for Tau RSC inks is achieved.



#### VARIABLE DATA PRINTING

Multiple variable elements, such as barcodes, serial numbers or variable text, can be placed together on one label. All variable elements can either be in a single color or printed in multi color at full resolution and full speed of up to 80 m/min. Combined with the high ripping speed of the Durst Workflow Label variable data jobs can be processed fast and efficient.



#### **WINE & SPIRITS**

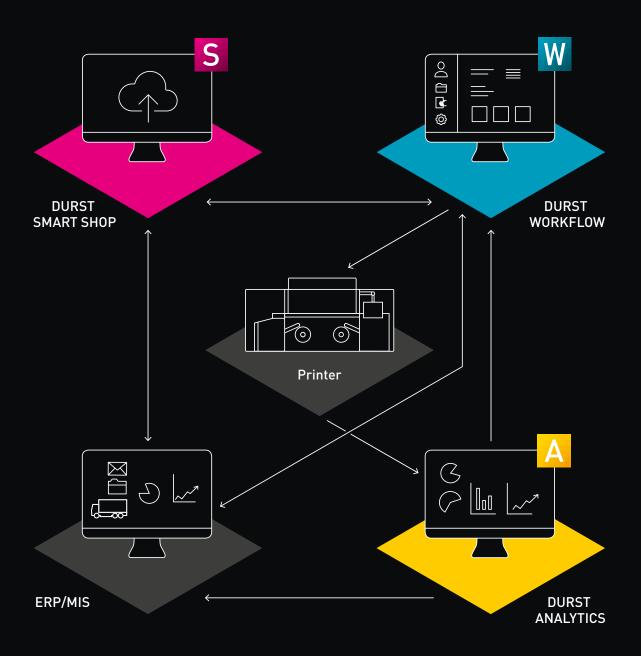
Textured and uncoated substrates for these specific applications deliver a good quality with the high resolution combined with the finest drop-size of the Tau RSC platform printers.



#### SPECIALITY PACKAGING

In the past, Durst has gained a vast know-how about speciality packaging applications such as blister, tubes, tags, tickets, folding cardboard. The Tau RSC platform printers are able to print on a large variety of substrates and the software solutions offered by Durst Workflow Label ensure an integrated workflow combined with secure handling of sensitive job data. For detailed information please contact your local Durst partner.





4

# DURST SOFTWARE ECOSYSTEM LABEL

All Tau printers are equipped with the software solution Durst Workflow Label and the monitoring tool Durst Analytics. This turns the printer into a production unit from day one.

To integrate e-commerce businesses, Durst offers a scalable solution for B2C and B2B with Durst Smart Shop. All Durst software can be modularly extended and managed with a web-based user interface.



# DURST WORKFLOW LABEL



# DURST WORKFLOW LABEL PLUS

Durst Workflow is a future-oriented, smart, and easy-touse all-in-one solution for managing and streamlining prepress and production processes. Simple data management, combined with proven technology for color management and ripping, takes productivity to a new level. Additional features allow a faster and more flexible preparation of print data. Customizable corrections, a sophisticated color matching toolbox and integration with ERP/MIS systems streamline and automate all processes.



#### DURST ANALYTICS

Durst Analytics increases transparency in production. The printing system can be monitored at a glance practically from anywhere. A web-based dashboard displays all production data, such as productivity, ink consumption and utilization of the printing systems, over the selected timespan. This allows to identify malfunctions preventively and to minimize downtimes.



#### DURST ANALYTICS PLUS

The server-based system connects all printers equipped with Durst Analytics for uncomplicated and personalized data export and makes the data available to a production planning or ERP system via our API.

# **CORE FUNCTIONS**

#### **AUTOMATE RECURRING TASKS**

To save time and avoid manual intervention as a potential source of errors, recurring tasks and settings can be automated in Durst Workflow Label Plus. Fixup chains and other production-relevant templates can be created, saved, assigned to a hot folder, or triggered fully automatically in the case of integration into a customer's production planning system.



#### MAP YOUR COLORS

Consistent colors, a precise color reproduction and an individual color adjustment are prerequisites for a smooth production and can be realized easily and effectively with Durst Workflow Label. For example, by reading in the colors of a proof or using grid charts and color books for precise color selection. The defined values can then be stored material or customer-specific.



#### **CUT YOUR COSTS**

Intelligent software algorithms of the Save Ink function minimize ink consumption with minimal visual effect in the print item, in order to reduce ink cost and consequently to allow a most cost-efficient production.



#### SPEED UP THE CREATION OF VARIABLE DATA

Serial numbers and text, images, shapes, colors and over 100 different types of barcodes can be created with the Durst Workflow Label plug-in for Adobe Illustrator. It also provides a live preview of the variable data in the print file. State-of-the-art ripping technology ensures a smooth and fast file processing.



#### MANAGE APPROVALS WITH FEW CLICKS

Customer approvals are usually created manually in programs such as Adobe InDesign, which takes a lot of time and is also a potential source of errors due to the manual generation. In Durst Workflow Label, approval reports can be created with just a few clicks and additional customer- specific reports can be stored. This not only saves the user a lot of time, but also minimizes the potential for errors and ensures great flexibility.



# 5

# INTEGRATION & CONSULTANCY

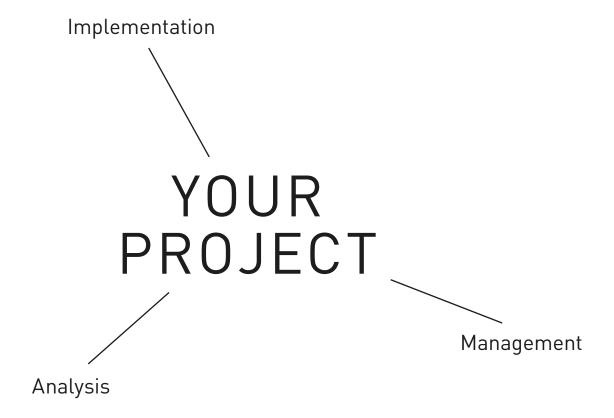
To capture the full potential of process automation and digitization, it is advisable to integrate leading systems such as ERP, MIS or online stores into existing IT environments at the same time as our software solutions.

Durst Software & Solutions supports and manages these integration projects. There are two service options available:

- > Self-Service-Option: Durst provides standardized interface definitions for the integration of Durst Workflow Plus and Durst Analytics Plus.
- > Full-Service-Option: A professional Durst service expert manages the integration project and ensures the connection to any software interface.

Our qualified consultants and integrators at Durst Software & Solutions will work with you to:

- > Find the best solutions for your needs.
- > Streamline and automate your prepress and printing workflow.
- > Improve your application results.
- > Successfully implement an e-commerce solution, if needed.



# **DURST GROUP**

We are a manufacturer of advanced digital printing and production technologies with headquarters in Brixen, South Tyrol, Italy. Our core business is digital inkjet printing and the associated ecosystem of printing inks, software and services. We offer holistic solutions in the following business areas:

# GRAPHIC BUSINESS

Large Format Printing
Textile
Decoration

# SPECIAL SOLUTIONS

Ceramics
Digital Glaze
Industrial 3D

# LABEL & FLEXIBLE PACKAGING

Label Digital
Label Hybrid
Specialty Packaging

#### NEW BUSINESSES

Software & Solutions Corrugated & Folding Carton

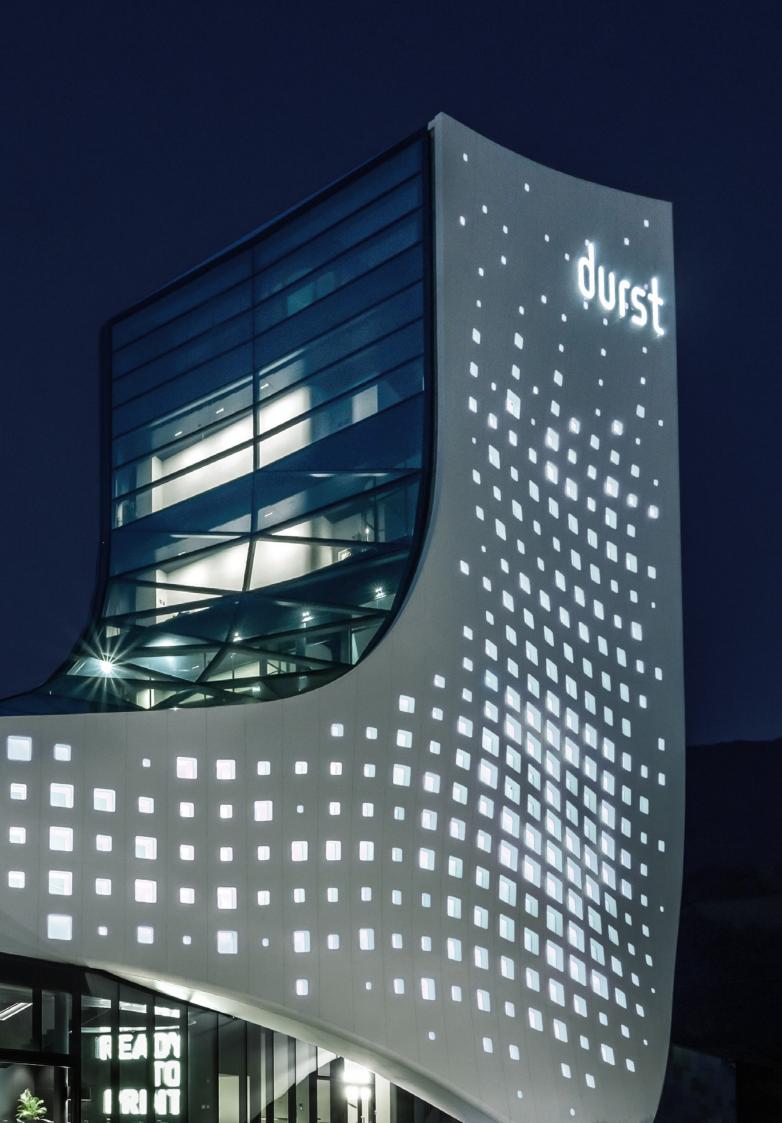
#### **OUR CORE VALUES**



To earn loyalty and respect from our customers and employees by providing high-tech systems and solutions in the highest quality and by being true to ourselves:

A little big company with firm roots in Tyrol<.</p>

Christoph Gamper CEO & Co-Owner, Durst Group AG





For more information, please visit

durst-group.com/label