



durst

Rhotex 325

## Rhotex Series Industrial Printing Systems for Fabrics & Soft Signage





80  
Years

Experience

Innovation

Sustainability

# Durst. Advanced Digital Production Technology

Durst is the world's leading manufacturer of advanced digital production technologies. In our target business categories, Durst is the top choice and a preferred partner for the transformation and digitization of industrial production processes.

Durst is a family-owned company with an 80 year history of values focused on innovation, customer orientation, sustainability and quality.



Durst location in Brixen,  
Italy



Durst location in Lienz,  
Austria

# Digital large format printing

Digital large format printing technology offers an extremely wide-range field of application, and revolutionizes production processes in many industrial categories. The broadest application of digital Large Format Printing is in the production of marketing and communication media for trade, POP/POS and Out-Of-Home. Due to its universal value, special applications for museums, interior (wall coverings, furniture, flooring), or industrial printing are also produced by Durst customers globally with this technology. For fifteen-plus years Durst has played a major role in adapting industrial inkjet printing solutions in many segments which include large-format printing, ceramic tile printing, label- and packaging printing and textile printing.

## Industrial Soft Signage



**Rhotex 325**

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In 2010 Durst introduced Rhotex 320, a dye sublimation textile signage printer, which instantly set a new quality standard in the industrial soft signage segment.

With the Rhotex HS Durst unveiled a high performance printing system for satisfying high-volume production for soft signage, followed by Rhotex 180 TR, a combined direct- and transfer paper printing system, and Rhotex 500, the first seamless 5 meter wide solution in the market.

With the new Rhotex 325, the Rhotex Series has now implemented an efficient high-end production process, to increase cost effectiveness, confirming its role as European market leader, and expanding its global position.



**Rhotex 180 TR**

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**Rhotex 500**

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**Rhotex HS**

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Impression sublimation grande laize  
 15 x 5 m – tissu diffusant 205g  
 Stand Peugeot Mondial de l'Automobile  
 Réalisation Agence A – Impression FIGAROL

Productive

Economical

Modular

Flexible

## Rhotex Series

### Dye Sublimation Direct and Transfer Printing

With the new Rhotex 325 dye sublimation printer, Durst is expanding its successful portfolio of high performance printers for soft signage and textile.

The portfolio now includes direct- and transfer-printing systems for all market needs. Printing on sublimation paper and the subsequent transfer process using a calendar, or direct printing on fabric no longer requires an in-depth knowledge of textile pre-treatment methods and finishing processes, or larger financial investments to start your textile production today.

All Rhotex printers use OEKO-TEX Standard 100 certified, 100 % VOC – and odor-free disperse dye inks, to ensure an environmentally friendly printing process also suited for skin-contact applications.

The trend towards consumer individualization, the growing number of textile solutions for POS, as well as web-to-print and print-on-demand techniques provide new market opportunities. These printing systems are suited for polyester and polyester blends, commonly used for soft signage, sportswear and certain home textiles.





24/7 Unattended

High Productivity

Flexibility

## Rhotex 325

With the Rhotex 325, Durst introduces in the 3.2 meter printer class a dual purpose printing system that combines direct-to-textile printing with dye sublimation transfer printing technology. Depending on the application and fabric, this printing system can alternate between paper transfer and direct printing on polyester-based materials in no time.

This is possible, thanks to the new Durst WTS printhead technology, which achieves an exceptionally high-quality print using water-based dispersion inks for various printing materials, and reaches a printing speed of up to 390 m<sup>2</sup>/hour.

The robustly built Rhotex 325 is equipped with an integrated hot air dryer, automated nozzle cleaning system, and additional features for 24/7 production.





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**Printing system:**

Transfer and direct to polyester based textile with patented roll to roll transport system and Durst WTS printhead technology

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**Printing mode and resolution:**

Variable and binary drop size  
400 x 600 dpi (7-14-21 pl); 800 x 600 dpi (7 pl)

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**Productivity:**

Backlit mode: 130 m<sup>2</sup>/h (1,400 sq ft/h)  
Production Mode: 170 m<sup>2</sup>/h (1,800 sq ft/h)  
High Speed Mode: up to 390 m<sup>2</sup>/h (4,130 sq ft/h)

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**Colors:**

Standard: CMYK  
Optional: Light Cyan and Magenta, Gray, PCA

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**Maximum printing width:**

3.200 mm (126 in)

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**Maximum roll diameter:**

Standard: 400 mm (16 in)

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**Maximum media thickness:**

Textiles: 2 mm (0.08 in); Transfer paper: 0,15 mm (0.01 in)

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**Media types:**

Transfer paper, wide range of coated and uncoated polyester fabrics.

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**Inks:**

Totally VOC-free and eco-friendly water based dye sub inks for indoor and outdoor applications

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**Optional:**

Big roll system for printing roll up to 700 mm (27.5 in) diameter  
Direct printing kit

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# Rhotex 180 TR

The Durst Rhotex 180 TR combines industrial production capabilities with maximum print quality and reliability. The system is designed for a non-stop production. It creates brilliant color, razor-sharp images, and produces an impressive, abrasion-resistant, water-proof result. Durst also offers an optional "Direct Printing Kit" for printing directly onto fabrics. The changeover time between transfer and direct printing is only a few minutes and can be performed by a single operator.

High Quality

Versatility

24/7

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**Printing system:**

Transfer and direct to polyester based textile with patented roll to roll transport system and Durst Quadro S printhead technology

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**Printing mode and resolution:**

Variable and binary drop size  
300 x 600 dpi (7-14-21 pl)  
800 x 600 dpi (7 pl)

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**Productivity:**

Backlit mode: 73 m<sup>2</sup>/h (785 sq ft/h)  
Production mode: 95 m<sup>2</sup>/h (1022 sqm ft/h)  
High-speed mode: up to 223 m<sup>2</sup>/h (2.400 sqm ft/h)

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**Colors:**

Standard: CMYK  
Optional: Light Cyan and Magenta, Gray, PCA

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**Maximum printing width:**

1.850 cm. (6 ft)

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**Maximum roll diameter:**

Up to 400 mm. (16 in)

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**Maximum media thickness:**

Textiles: 2 mm (0.08 in); Transfer paper: 0,15 mm (0.01 in)

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**Media types:**

Transfer paper, wide range of coated and uncoated polyester fabrics.

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**Inks:**

Totally VOC-free und eco-friendly water based dye sub inks for indoor and outdoor applications

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**Optional:**

Direct printing kit

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# Soft Signage – Ready for the Mainstream

Today soft signage is consolidating applications that used to be the domain of other materials and production methods. Soft signage means more than just flags for outdoor use, produced via offset printing. Soft signage is the expansion of advertising, decorating, and sign applications using textiles as the medium. Previously, point of sale, point of purchase and banners were classic areas of application dominated by paper, PVC, and vinyl. Soft signage presents new opportunities for both, indoor- and outdoor signage, including shop windows, museums, trade shows, or in entire shopping centers.

## **This is possible thanks to its:**

- brilliant color
- an elegant look and feel
- light weight, for low-cost shipping and easy installation
- odorless eco-friendly inks
- low environmental impact
- media versatility





# Rhotex 500

The new Rhotex 500 printer series moves "seamlessly" into fabric-based advertising and information media.

With an unparalleled printing width of 5 meters, the Rhotex 500 allows seamless, extra-wide soft signage and true large format products at POS, trade fairs, arenas, theaters, event venues, and public spaces.

# Seamless

5 Meter

24/7

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**Printing system:**

Printing system with patented roll-to-roll transport and Durst Quadro printhead technology for printing of super-wide fabrics in highest productivity and quality.

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**Printing mode and resolution:**

Variable drop size  
400 x 600 dpi (7-14-21 pl)

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**Productivity:**

Backlit mode: 100 m<sup>2</sup>/h (1,075 sq ft/h)  
Production mode: 125 m<sup>2</sup>/h (1,340 sq ft/h)  
High-speed mode: up to 310 m<sup>2</sup>/h (3,330 sq ft/h)

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**Colors:**

Standard: CMYK  
Optional: Light Cyan and Magenta, Gray, PCA

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**Maximum printing width:**

505 cm (16.5 ft)

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**Maximum roll diameter:**

Up to 400 mm (16 in)

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**Maximum media thickness:**

2 mm (0.08 in) depends on media

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**Media types:**

Wide range of coated and uncoated polyester fabrics.

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**Inks:**

Totally VOC-free and eco-friendly water based disperse inks for indoor and outdoor applications

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# Rhotex HS

Top productivity, 24/7 reliability, and a resolution of up to 1200 dpi make the Rhotex HS the unrivaled "work-horse" in the soft signage market.

The Rhotex HS is equipped with proven, patented Durst Quadro Z printhead technology, and is the perfect solution for the whole range of soft signage and fabric applications.

The Rhotex HS printer's production efficiency allows the operator to quickly adapt to new customer requirements and to realize a profitable production from the start, on-demand, and independent of the job volume.

High Productivity

Sustainable

24/7

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**Printing system:**

Industrial Printing system with adhesive transport blanket and integrated washing unit.

Durst Quadro Array printheads for super wide printing on fabrics and textiles

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**Printing mode and resolution:**

Standard: 800 x 600 dpi up to 1000 x 1200 dpi

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**Productivity:**

High quality mode: 230 m<sup>2</sup>/h (2,475 sq ft/h)

Production mode: 430 m<sup>2</sup>/h (4,620 sq ft/h)

High-speed mode: up to 905 m<sup>2</sup>/h (9,740 sq ft/h)

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**Colors:**

Standard: CMYK

Optional: Light Cyan and Magenta, Gray, PCA

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**Maximum printing width:**

3.300 mm (130 in)

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**Maximum roll diameter:**

Feed In up to 500 mm (19,7 in); Roll up unit up to 500 mm (19,7 in)

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**Maximum media thickness:**

2 mm (0.08 in) depends on media

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**Media types:**

Wide range of coated and uncoated polyester fabrics.

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**Inks:**

Totally VOC-free and eco-friendly water based disperse inks for indoor and outdoor applications

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# Innovative Technologies for Investment Security and Reliability

## Durst New WTS Printhead Technology

The new Durst WTS printhead technology achieves an exceptionally high quality print using water based dye sub inks for different applications for direct and transfer paper printing, and reaches high printing speed for higher productions.



### Simple Exchange of Printheads

When necessary, the new generation of Durst WTS printheads can be exchanged by the operator in very short time, minimizing downtime.



### Automated Purging and Head Cleaning Station

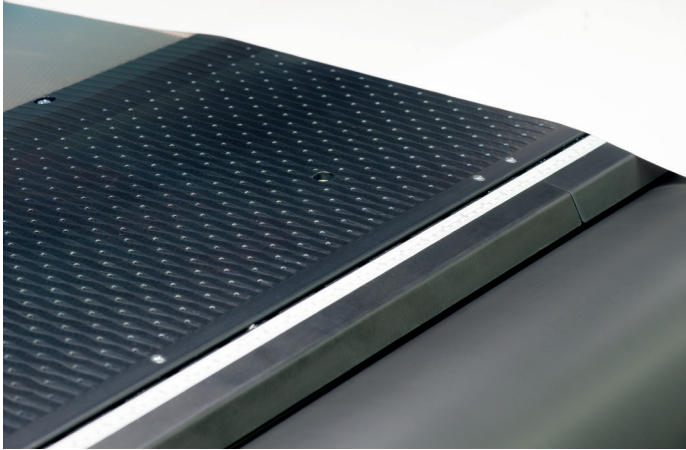
Thanks to an automated purge system, the printhead cleaning operations are minimized, ensuring continuous operation of the printer, with an extremely reduced maintenance time.



### Air-sealed Capping Station

The hermetically sealed printhead capping station fully encloses the nozzles and thus guarantees the immediate availability of the printer even after long inactive periods.





#### Efficient Vacuum Print Plane

The print plane assures, through Software controlled power setting, optimal media flatness during the printing process.

#### Other Features

- Anti-crash system
- Ink mist extraction system
- Heavy duty construction
- Patented media transport systems
- Only minutes for media change
- Ergonomic design for single person operation
- Jumbo roll unit



## Durst Water Technology

Durst Water Technology is a long-term strategy designed to offer digital printing systems with water-based, non-hazardous inks as a sustainable alternative to UV- and solvent-based printing systems in all segments. The Rhotex Series uses in-house developed, water-based dispersed dye ink sets, especially formulated for digital printing on polyester-based materials or transfer paper. The inks are skin-friendly and free of volatile organic compounds (VOCs), odorless, can be recycled, and are OEKO-TEX Standard 100 certified. The Rhotex ink sets are characterized by vibrant color, uncompromised printing stability, and a high through-print for flags. Available colors are C,M,Y,K, light-cyan, light-magenta, gray and further process colors (PCA).





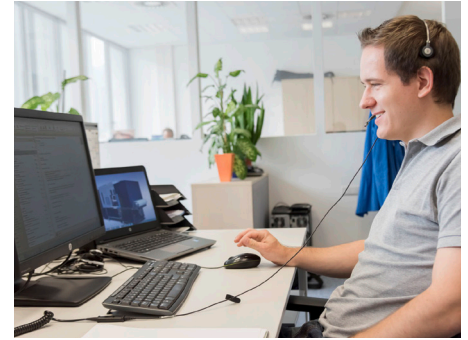
# Rhotex Applications

- Banners
- Posters
- Point of sale / point of purchase displays
- Shop decoration
- Wall decoration
- Tradeshow displays / tradeshow booth construction
- Flags
- Sun umbrellas
- Facades
- Outdoor advertising
- Backdrops (theater, television etc.)



Courtesy of Kendu, ES





## 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 maximizing these tasks.

## Durst Technical Academy



### **Durst Training. Tailored Programs – Flawless Production**

In our training center we offer tailored training programs for the different needs of digital production houses.

Operator-training, plus training for in-house engineers, focusing on maintenance and deeper technology insights. Workflow sessions, focusing on the workflow from the image file to the final print, where participants learn the theory and process of printer linearization, media profiling, ink-limiting, and color management settings.

All training is real-world-oriented to ensure flawless production processes and maximize your performance, quality, and productivity.





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