



Rho UV Inkjet Printing Systems
Highest efficiency,
maximum versatility

80

Years Experience

Innovation

Sustainability



Durst. Advanced Digital Production Technology

Durst is a world-leading manufacturer of advanced digital production technologies. In its active business areas, Durst is the first choice and a preferred partner for the transformation and digitization of industrial production processes. Durst is a family-owned company with 80 years of history in which innovation, customer focus, sustainability, and quality have been – and remain – its core values.



Durst location in Brixen,
Italy



Durst location in Lienz,
Austria

Digital large-format printing

Digital large-format printing technology offers an extremely wide-range of business opportunities and applications, and has been revolutionizing production processes in many industries.

Large Format Printing is commonly used for printed marketing and communication media for retail stores, POP/POS and Out-Of-Home. As a result of its versatility, special applications like for museums, interior (wall coverings, furniture, flooring), or industrial printing are also produced by Durst customers globally with this technology.

Rho UV Inkjet printing systems

Highest efficiency, maximum versatility

Rho roll printing systems



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Core technology



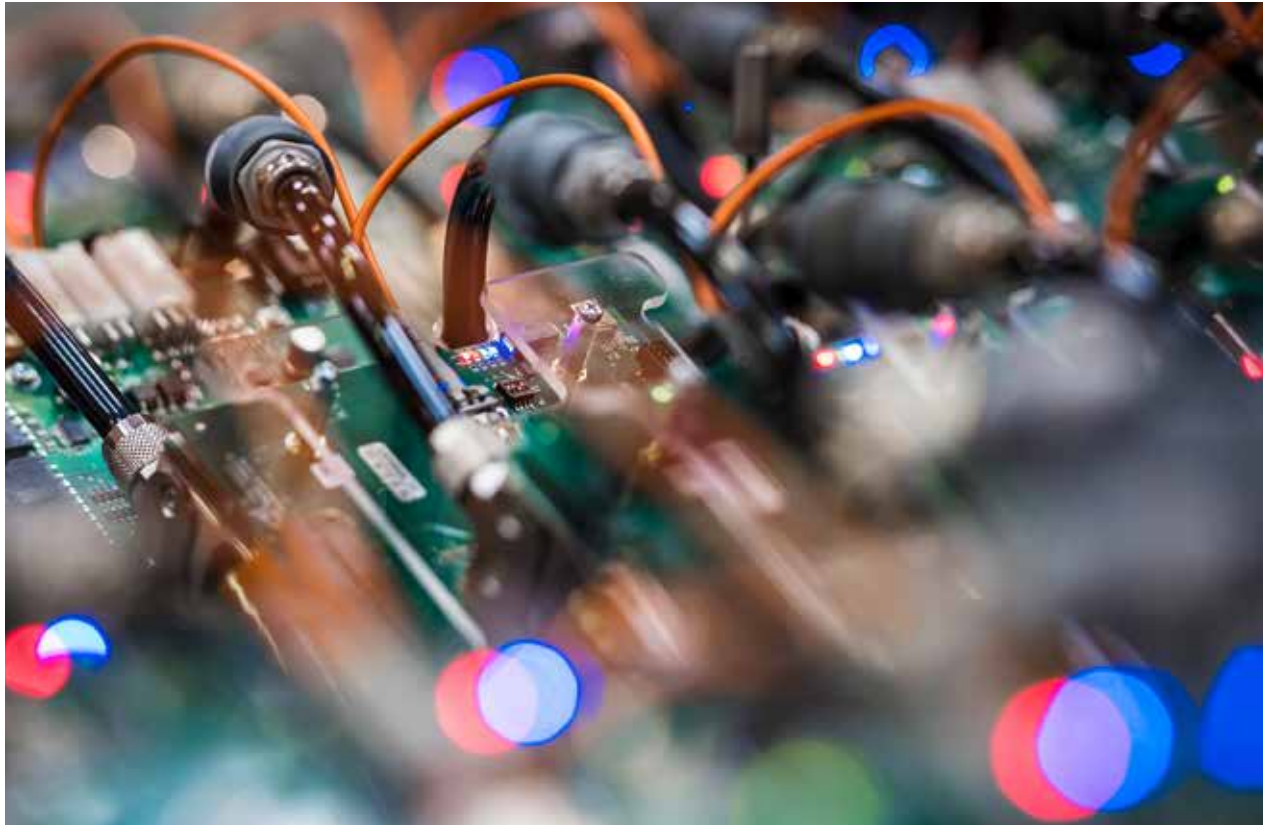
Without compromise in quality and longevity - this is the basis for ensuring the overall Rho printing systems' performance like reliability, quality and productivity. The Rho is designed for industrial production and require little maintenance.

At the heart of the Rho are the Durst Quadro Array printheads. With absolute precision, they achieve a "fine art" print quality with a resolution of up to 1,200 dpi.

The production process of the magnetic linear drive for printing carriages is unique. Precision technology is used to ensure error-free, reliable operation. The tolerance for Rho systems, for example, is just 2 μm .

Variodrop Technology not only increases productivity, but also improves the image quality like more vibrant and deeper colors and better color gamut . Especially at high production speeds solid colors are smoother.





The Durst core technology sets the industry standard in terms of print quality and reliability. In addition, the Rho UV Inkjet printing system creates added value by offering highest efficiency and maximum versatility.

Highest efficiency

- Choice out of eight Rho printing system in order to fit to the business model for rapid ROI
- Upgradability to boost productivity, print quality, and versatility.
- Optimized continuous production process for roll and sheet printing
- Higher cost efficiency due to multiple-machine operation concept
- Sensor-controlled reliable multi-track printing to maximize system performance
- Optional auxiliary equipment (heavy duty roll, feeder, stacker, etc.)
- Durst Analytics: Optional remote monitoring service for optimized machine utilization

Maximum versatility

- Fine Art printing mode for premium backlit and close-up view applications with optimized color graduations
- Sensor controlled accurate double sided printing
- And other specific solutions for roll and flatbed printing



Rho 512R Plus

Since its launch, the Rho 512R has been setting new standards in terms of performance and reliability for the industrial large-format printing market. The new Plus version follows the same ambitious approach. It impresses with additional print quality, productivity, and reliability, offering a reliable basis for efficient production runs.

- + Variety of applications: Fine Art print mode, new inks
- + Productivity: 386 m²/h high-speed printing mode
- + Production efficiency: New cutting system, Interface for external Big Roll units
- + Reliability: Durst Analytics

Productivity

24/7

Cost-effectiveness

Printing system:

Roll transport system with Quadro® Array technology
Motorized adjustment of the medium/printhead distance

Resolution: Up to 1,200 dpi

Productivity: High-speed up to 386 m²/h (4,155 sq ft/h)

Production mode with PO: 152 m²/h (1,636 sq ft/h)

Colors:

Standard: CMYK
Optional: Light Cyan, Light Magenta, Light Black, White, PCA inks on request

Inks:

Rho Roll UV-curing inks, GREENGUARD GOLD certified
co-branded Durst Rho Roll 3M Premium UV inks for a 3M MCS guarantee

Maximum print width: 500 cm (16.4 ft)

Maximum material width: 520 cm (17 ft.); 3 rolls 160 cm (63 in.) side by side

Maximum Roll Media Diameter: 350 mm (13.7 in)

Maximum material thickness: 2 mm (0.8 in) – material-dependent

Maximum roll weight: Approx. 350 kg (770 lb)

Options:

Low-maintenance cutting system, dual/triple roll, double-sided printing, textile printing



Rho 312R Plus

Thanks to its design, which matches the equipment and quality standards of the 512R Plus, this robust and compact printer delivers maximum efficiency and cost effectiveness by offering unsupervised, 24/7 production.

- + Variety of applications: Fine Art print mode, new inks
- + Production efficiency: New cutting system, support for big rolls
- + Reliability: Durst Analytics

Printing system:

Roll transport system with Quadro® Array technology
Motorized adjustment of the medium/printhead distance

Resolution: Up to 1,200 dpi

Productivity: High-speed up to 302 m²/h (3,250 sq ft/h)

Production mode with PO: 128 m²/h (1,378 sq ft/h)

Colors:

Standard: CMYK
Optional: Light Cyan, Light Magenta, Light Black, White, PCA inks on request

Inks:

Rho Roll UV-curing inks, 100% VOC-free, GREENGUARD GOLD certified co-branded Durst Rho Roll 3M Premium UV inks for a 3M MCS guarantee

Maximum print width: 320 cm (10.5 ft)

Maximum material width: 330 cm (10.8 ft.); 2 rolls 160 cm (63 in.) side by side

Maximum roll diameter:

Standard version: 350 mm (13.7 in); Big Roll version: 540 mm (21.2 in)

Maximum material thickness: 2 mm (0.8 in) – material-dependent

Maximum roll weight:

Standard version: Approx. 350 kg (770 lb)
Big roll version: Approx. 480 kg (1,058 lb)

Options:

Low-maintenance cutting system, CCD camera for precise alignment during double-sided printing, dual roll, double-sided printing, textile printing, roll winder for unattended printing of big rolls



Rho 1312

Rho 1330

For customized mass production, the Rho 1300 printing systems offer the ideal solution with highest efficiency. With custom-configurable automation, even complex orders can be processed profitably with short response times. The different automation systems consist of 3/4, palette to palette, and continuous roll printing. With the sensor controlled double sided roll printing option, this flatbed printer provides a unique proposition. This makes the Rho 1300 printing systems the most productive and versatile large-format UV inkjet printers available.

- + Cost-effectiveness: 15% ink saving
- + Versatility: sheet and board printing, double-sided roll printing

Productivity

Cost-effectiveness

Versatility



Rho 1312

Printing system:

UV flatbed printing with Quadro (R) Array technology

Resolution: Standard 1,000 dpi

Productivity:

Up to 620 m²/h (6,673 sq ft/h) – continuous roll printing over the full printing width
 Production mode: Up to 129 boards per hour (board size 244 x 122 cm, 4 x 8 ft)

Colors:

Standard: CMYK
 Optional: Light Cyan, Light Magenta, Orange, Violet, White
 Rho UV Ink

Printing material:

Minimum: DIN A3 – 29.7 x 42 cm (12 x 17 in) – depending on peripherals
 Maximum length: Limitation dependent on material, peripherals, and roll length and diameter

Maximum print width: 250 cm (98 in)

Maximum weight: Standard up to 50 kg (110 lb)

Options for optimized material handling:

¾ automation, palette to palette automation, single and dual printing, heavy duty roll option 60 cm (23.6 in) for rolls up to 600 kg (1,322 lb) in weight or 60 cm in diameter, double-sided roll printing, corrugated print option

Rho 1330

Printing system:

UV flatbed printing with Quadro (R) Array technology

Resolution: Standard 600 dpi

Productivity:

Up to 1,250 m²/h (13,454 sq ft/h) – continuous roll printing over the full printing width
 Production mode: Up to 192 boards per hour (board size 244 x 122 cm, 4 x 8 ft)

Colors:

Standard: CMYK
 Optional: Light Cyan, Light Magenta, Orange, Violet
 Rho UV Ink

Printing material:


Minimum: DIN A3 – 29.7 x 42 cm (12 x 17 in) – depending on peripherals
 Maximum length: Limitation dependent on material, peripherals, and roll length and diameter

Maximum print width: 250 cm (98 in)

Maximum weight: Standard up to 50 kg (110 lb)

Options for optimized material handling:

¾ automation, palette to palette automation, single and multi-lane printing, heavy duty roll option 60 cm (23.6 in) for rolls up to 600 kg (1,322 lb) in weight or 60 cm in diameter, double-sided roll printing, corrugated print option



Rho P10 200 HS Plus Rho P10 250 HS Plus

With the introduction of the Rho P10 200 HS/Rho P10 250 HS, a new standard in efficiency and versatility was defined in its class. The new Rho P10 HS Plus has been improved even further in the following performance characteristics:

- + Productivity: Up to 40%
- + Cost-effectiveness: 15% ink saving
- + Versatility: Hapt Print, double sided roll printing

Productivity

Cost-effectiveness

Versatility



Printing system:

UV flatbed printing with Quadro (R) Array technology

Resolution: Standard: 1,000 dpi

Productivity**Rho P10 250 HS Plus:**

Up to 400 m²/h (4,305 sq ft/h) – continuous roll printing over the full printing width

Up to 130 boards per hour (board size: 244 x 122 cm, 4 x 8 ft)

Production mode:

Up to 142 m²/h (1,528 sq ft/h)

Up to 42 boards/h (board size 4 x 8 ft)

Rho P10 200 HS Plus:

Up to 350 m²/h (3,767 sq ft/h) – continuous roll printing over the full printing width

Production mode:

Up to 127 m²/h (1,367 sq ft/h) – continuous roll printing over the full printing width

Colors:

Standard: CMYK

Optional: Light Cyan, Light Magenta, Orange, Violet, White Rho UV ink

Printing material:

Minimum: DIN A3 – 29.7 x 42 cm (12 x 17 in)

Maximum length: depending on material, and roll length and diameter

Maximum print width:

Rho P10 250 HS Plus: 205 cm (80.7 in)

Rho P10 200 HS Plus: 250 cm (98 in)

Maximum weight: Standard up to 50 kg (110 lb)

Options for optimized material handling:

¾ automation

Palette to palette automation

Heavy duty roll option for rolls up to 200 kg (440 lb) in weight, double-sided web printing, corrugated print option



Rho P10 200

Rho P10 250

The Rho P10 200/250 set a quality standard in terms of UV large-format printing, and redefined productivity and versatility in its class. With the enhancement of the Rho P10, new markets can be developed, and existing markets served more profitably.

- + Cost-effectiveness: 15% ink saving
- + Versatility: Hapt Print, double-sided roll printing

Cost-effectiveness

Versatility

Printing system:

UV flatbed printing
Quadro (R) Array technology

Resolution:

Standard: 1,000 dpi
Fine Art mode: 1,200 dpi

Productivity:

Continuous roll printing over the full printing width
Rho P10 250: Up to 240 m²/h (2,583 sq ft/h),
Production mode: (2 pass PO) 50 m²/h (538 sq ft/h)
Rho P10 200: Up to 205 m²/h (2,206 sq ft/h),
Production mode: (2 pass PO) 45 m²/h (484 sq ft/h)

Colors:

Standard: CMYK
Optional: Light Cyan, Light Magenta, Orange, Violet, White Rho UV ink

Printing material:

Minimum: DIN A3 – 29.7 x 42 cm (12 x 17 in)
Maximum length: Limitation dependent on material, and roll length and diameter

Maximum print width:

Rho P10 200: 205 cm (80.7 in)
Rho P10 250: 250 cm (98 in)

Maximum weight:

Standard up to 50 kg (110 lb), industrial version up to 70 kg (154 lb)

Options for optimized material handling:

Heavy duty roll option for rolls up to 200 kg (440 lb) in weight, double-sided roll printing corrugated print option



Rho P10 160

The Rho P10 160 offers the same advantages in terms of print quality and versatility as the Rho P10 200/250. The minimized space requirement allows the best possible use of space available in an industrial production environment.

- + Cost-effectiveness: 15% ink saving
- + Versatility: Hapt Print, double-sided roll printing

Printing system:

UV flatbed printing
Quadro (R) Array technology

Resolution:

Standard: 1,000 dpi
Fine Art mode: 1,200 dpi

Productivity:

Continuous roll printing over the full printing width
Up to 100 m²/h (1,076 s ft/h), production mode: (2 pass PO) 24 m²/h (258 sq ft/h)

Colors:

Standard: CMYK, Light Cyan, Light Magenta, White
Rho UV ink

Printing material:

Minimum: DIN A3 – 29.7 x 42 cm (12 x 17 in)
Maximum length: depending on material, and roll length and diameter

Maximum print width: 160 cm (138 in)

Maximum weight: Up to 50 kg (110 lb)

Options for optimized material handling:

Heavy duty roll option for rolls up to 150 kg (330 lb) in weight,
double-sided roll printing



Rho applications



- Banners
- Posters
- Point Of Sale/Point Of Purchase displays
- Shop decoration
- Wall covering
- Tradeshow displays/Tradeshow booth construction
- Flags
- Sun umbrellas
- Facades
- Outdoor advertising
- Backdrops (theatre, television, etc.)





Individual material tests

> 1.500 tested media settings

Web-based support

Application Center

Worldwide Rho printing systems have long been setting the standard in terms of print quality, productivity, and reliability. However, since it is not only the choice of hardware that is crucial for optimum results, Durst offers you a broad-based service portfolio by way of assistance. In addition to a web-based database containing innumerable tested roll media that can be accessed free of charge from anywhere in the world, it is also possible to have proprietary printing materials and print designs tested at Durst's Demo and Application Centers. Using the parameters determined here, your own printing system can be adjusted perfectly to the desired application and material type.

Newly determined information is constantly being fed into the database, ensuring it is kept permanently up to date. Our database is built on the many years of data gathered and digitized from our product tests. Rho customers are able to access the data easily via a web browser, search by material manufacturer, media type, and area of application, and download the data you need as a PDF file. You are able to start production straight away, even with new applications, without tedious tests and sampling processes.



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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