



# Rho 500R Superwide 5m UV roll-to-roll printer

**A print output of 400m<sup>2</sup> per hour with uncompromised quality**  
The Durst Rho 500R combines 600 dpi 6-colour print quality with an exceptionally high output of up to 400m<sup>2</sup> per hour thanks to its sophisticated mechanical engineering and further enhancement of the Durst Quadro 30D Array technology.

The Rho 500 is designed for printing a wide variety of large format display items such as 5m wide vinyl banners and mesh for facade cladding. It will also print three 1.6m rolls together, for example, of textile for banners or self-adhesive polyester film for backlit application. The high precision of the carriage system, the linear motor drive technology and the enhanced Quadro Array technology with 2048 nozzles per colour, achieves optimum print quality with high productivity. While the built-in sensors and the specially designed media transport system allow for problem-free unattended printing, the extremely low production costs and low ink consumption, thanks to its intelligent dither technology, make the Rho 500R one of the most economical printers ever.

The software developed with customers around the world lets you set support-specific parameters for all printing jobs and memorize them for duplicates.

The completely VOC-free UV Rho Roll Ink, accredited with the Nordic Swan certification, meets the most stringent environmental requirements.

**The quality features of the Rho 500R are:**  
Build Structure - Segmented shaft is incremented using laser technology, designed not to sag and is constructed out of a special aluminium alloy. High-precision transmission is by linear motor and the Push-Media advancement technology is powered by winding rollers and pairs of tension rollers with different surface roughness.



**Nozzle technology**  
New Quadro 30D Array with double the density of nozzles, ink temperature nozzle-regulated and Point Drop Setting technology.



# Technical Data

## General specifications

### Dimensions:

Width: 850 cm (27.8 ft.)

Depth: 220 cm (7.2 ft.)

Height: 208 cm (6.8 ft.)

### Weight:

approx. 7500 kg (16500 lb.)

### Safety standards:

Complies with currently valid guidelines

## Printing specifications

### Printing system:

- Roll to Roll transport system with Quadro® Array 30D Technology
- Motorized head media distance adjustment, controlled via user software with storage capability for each media channel
- Integrated border cutting system
- Textile printing option for printing on Mesh without a liner (Option)

### Resolution:

600 dpi

### Colours:

Standard: CMYK

Optional: Light Cyan and Light Magenta, White, selected spot colours (on request)

### Inks:

Rho Roll Ink - UV-curable pigment inks accredited with the Nordic Swan certification, for indoor and outdoor applications. The Rho Roll Ink, pigments classified at Blue Wool scale 8. The inks are VOC free.

### Ink drying:

UV-Lamp system with 2 independent air-cooled UV-lamps (7.2 kW), adjustable in 16 power steps

### Ink supply:

Integrated ink tanks with 10 litre capacity per ink, refillable during the printing process. The refill inks are in 5 litre, non-returnable containers, easily disposed in collapsed condition, thus avoiding pollution to the machine and the environment.

### Software/RIP:

- Durst Rho Touch Screen Linux Software for very fast processing with minimum storage capacity on the hard disk. External Caldera RIP Server with GrandRip+ Software
- Glossy and Matte selectable printing option
  - Simultaneous file ripping, data transfer and printing
  - True Skip White (X and Y direction)
  - Ink cost calculation
  - Integrated cellular capability for SMS notification of printer status and maintenance - SMS alert for unattended printing
  - Multi-roll Printing Option for 3 individual rolls (max. roll width: 160 cm/63 in.) via 3 individual print queues
  - Software and hardware for creating media ICC-profiles (Optional)

### Productivity:

Up to 400 m<sup>2</sup>/hour (4300 sq.ft./hour)

No speed reduction when using the 6 colour printing mode.

## Media specifications

### Media types:

Wide range of uncoated and coated roll media types like vinyl banners and mesh for facade cladding, tarpaulin, truck-banner, polyester, textiles, canvas, paper, self-adhesive PVC, PVC/PA-transparent media types, Mesh

### Maximum printing width:

500 cm (16.4 ft.)

### Max. printing length:

Only restricted by media length

### Maximum thickness:

2 mm (depending on media)

### Max. roll diameter:

350 mm (13.7 in.) outside diameter

### Max. Media width:

520 cm (17 ft.) / resp.

3 x 160 cm (63 in.) 3-rolls side by side

### Max. roll weight:

approx. 500 kg (1100 lb.)

## Ambient conditions:

### Space requirement:

approx. 13 x 10 m (43 x 33 ft.)

### Max. sea level of installation :

2400 m above sea level (8000 ft.)

### Max. ambient temperature:

+15 °C to +30 °C (+59°F to 86°F)

### Max. humidity:

25 - 80 %, not condensing



## Durst Phototechnik AG

### Large Format Division

Vittorio-Veneto-Straße 59

I-39042 Brixen, Italy

Telefon +39 04 72 81 01 11

Telefax +39 04 72 83 09 80

www.durst-online.com

info@durst.it

## Durst Phototechnik

### Digital Technology

### GmbH

Julius-Durst-Straße 11

A-9900 Lienz, Austria

Telefon +43 48 52 7 17 77

Telefax +43 48 52 7 17 77 50

www.durst-online.com

info@durst-online.at

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