

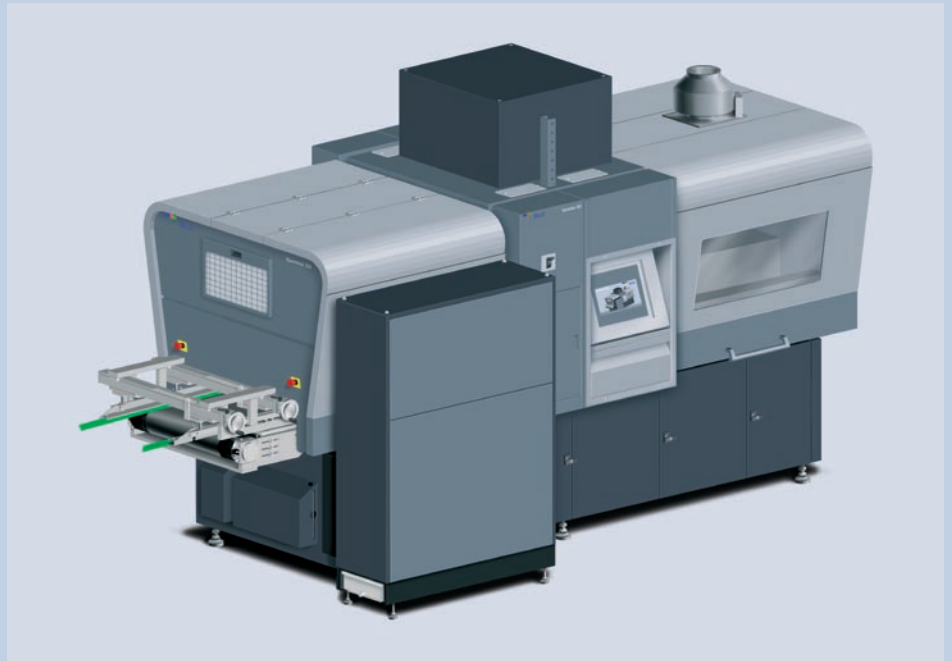
# Rho SP 60

## High Speed Direct Digital Wood Decoration System

The Durst Rho SP 60 is the world's first industrial-scale high speed direct digital printer to decorate wood panels in widths up to 63 cm, offering significant economic benefits as well as superior design advantages over traditional methods.

Compare to the limitations of conventional decoration techniques this new, no-touch, digital printing technology offers unlimited image variations, no setup costs thus eliminating the need to print minimum quantities, far superior image quality, definition and dynamic range. It prints onto various substrates and with just 4 colors all colors and shades are produced.

Durst is holding various patents on this new, innovative technology.



### The Benefits

- High Speed Digital Printing for high productivity
- Ultimate design flexibility (image & text)
- Drastically reduced setup time and costs
- Economical printing of short runs – mass customisation
- Lower production costs
- Reduced inventory and storage space
- Higher margins

### Patented Synchronized Inline Printing Engine

Durst has a longterm experience in developing and manufacturing industrial-scale large format inkjet printers for the graphic, packaging and industrial market, using heavy duty industrial piezoelectric inkjet print heads.

For the Durst Gamma industrial scale high speed ceramic printer with many printers operational at various tile manufacturing companies, Durst has developed a new inkjet printing technology, consisting of four (CMYK) full width inkjet printing arrays, fully synchronized with the production process. This proven technology is the basis of the new Rho SP 60 Direct Digital Wood Decoration Printer.

### The CMYK Printing Process

The Durst non-impact CMYK inkjet printing technology uses droplets of ink jetted from the small apertures (nozzles) to a specified position on the media to create an image. During printing the four colors (cyan, magenta, yellow and black, abbreviated as CMYK) are automatically combined in various ways to create virtually any color in one step.

### Software

Proprietary, patented Durst user software designed for the needs of the wood panel industry and built on the successful Durst software used in over 3000 Durst industrial scale digital printers since 1994. It features on-the-fly, full random printing for unlimited number of different panels from given designs, concept printing, register printing and many other interesting features.

In partnership with



## The Advantages

For producing innovative products, the manufacturing companies desire faster turnaround time, smaller runs and more flexibility in the decorating process to minimize inventories and maximize cash flow. The Durst Rho SP 60 Direct Digital Wood Decoration System offers the following advantages:

### Ultimate Design Variation & Flexibility (Patented Durst Random Design Printing Technology).

With this technology endless panels with different designs can be created, using several designs at the same time and to obtain each panel to be different. It allows to develop new products and to offer new customized solutions. New design samples can also be created much faster and at lower costs. Unique custom designs and concepts are now possible.

### Full Relief Decoration

When decorating uneven panels (with medium & strong reliefs), it assures perfect definition of all parts. Since the decoration of high and low reliefs are decorated simultaneously, it ensures designs with greater continuity and more realism.

### On Demand Printing & Trials

Since with this technology there is no physical setup and ink change needed, the printing quantity or square meters have no influence to the production cost and setup-time. To facilitate on-demand printing, the Rho SP 60 features very fast production changeover and new model start-up (it is sufficient to change the printing file) in addition to no down time between jobs. This assures also shorter production time from creation to final decorated tile.

### Easy Operation – Remote Diagnostics

The Rho SP 60 features a user guided touch-screen operation and remote access diagnostics and servicing via network.

## Technical Data

### General Specifications

**Power Supply:**  
230/400 V AC 3-phase

**Dimensions:**  
(LxWxH) 509 x 230 x 280 cm  
(200 x 91 x 110 in.)

**Weight:**  
Approx. 4500 kg (9920 lb)

**Safety Standards:**  
complies with currently valid guidelines

### Printing Specifications

**Printing System:**  
Patented Durst Synchronized Inline Printing System (SIPS)

**Resolution:**  
200-577 dpi

**Colors:**  
4 colors CMYK

**Inks:**  
Special, proprietary fast curing UV inks

**Ink Supply:**  
Ink supply system designed for continuous, non-stop operation with user-friendly refill system.

**Software/RIP:**  
Proprietary and patented LINUX based Durst Rho SP 60 software

**File Formats:**  
TIFF CMYK, RGB and Grayscale  
JPEG RGB  
BMP

**Image Processing:**  
Patented on-the-fly image processing for very fast operation, random image variation control with multiple choices for ultimate tile variability

**Printing Speed:**  
(Belt Speed) 20 - 30 m/min.  
(65 - 100 ft/min.)

### Panel Specifications

**Panel Width:**  
10 - 630 mm (0.4 - 24.8")

**Panel Length:**  
10 - 1500 mm (0.4 - 60")

**Panel Thickness:**  
5 to 30 mm

### Environmental Requirements

**Temperature Range:**  
+15 °C to +30 °C

**Relative Humidity:**  
25-80 % non-condensing



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