

Industrial Direct-to-Film Printer

**RICOH**  
imagine. change.

# RICOH Pro D1600

✔ DTF Printer



Pro D1600

20.2  
m<sup>2</sup>/hour Colour

# Transforming garment and surface decoration.

Combining digital flexibility with exceptional productivity, the RICOH Pro D1600 is transforming garment and surface decoration. RICOH Direct-to-Film (DTF) inkjet technology allows vibrant, five-colour graphics to be applied to a wider variety of merchandise than ever before.

Capable of decorating over 20 square metres per hour, the system provides the speed and flexibility your business needs to produce bespoke garments and fulfil large orders. Automating production, the inline powder shaker and drying unit eliminates manual touchpoints and reduces costs.

## The RICOH Pro D1600.





# Enjoy astonishing quality and productivity.

**20.2**  
**m<sup>2</sup>/hour**



## Production powerhouse automates decoration.

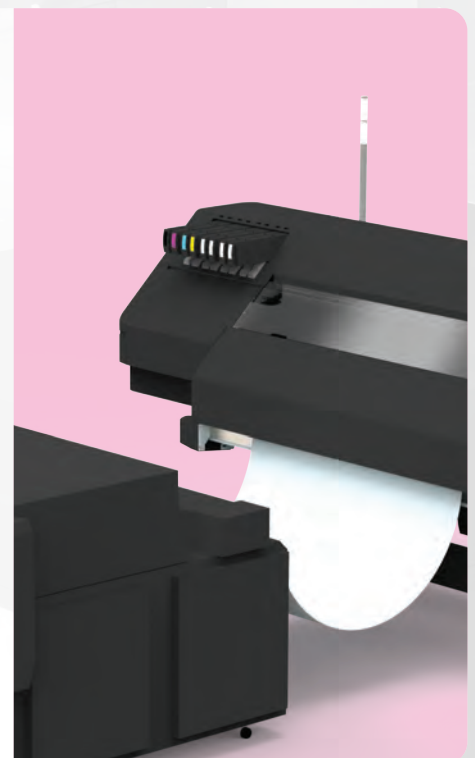
Industrial garment decorators can meet high volume production demands more responsively with the new RICOH Pro D1600 DTF printer. Utilising our proven drop-on-demand inkjet technology, this innovative Direct-to-Film production system produces high resolution colour transfer graphics at speeds exceeding 20 square metres per hour. The digital production system supports personalisation and provides the power and capacity needed to fulfil large orders.

- Proven inkjet Direct-to-Film production process.
- High throughput speeds and exceptional quality.
- Amazing productivity: 20.2 square metres per hour.
- Easily produce over 200 garments per hour.
- Personalise merchandise and fulfil orders of one item to many.

## Integrated, inline production system.

Ideal for screen printers transitioning to digital, and for industrial decorators looking to enhance their capabilities, the RICOH Pro D1600 is a fully integrated, inline production system. An automated inline powder shaker and drying unit reduces manual handling, streamlining production. Media is delivered in jumbo rolls for fewer changeovers. The bundled ColorGATE Textile Productionserver RIP directs production processes and controls the optional cutter.

- Fully automated, inline Direct-to-Film production system.
- Media is delivered in jumbo rolls for fewer changeovers.
- ColorGATE Textile Productionserver RIP manages print processes.
- Inline powder shaker and drying unit streamlines production.
- Automate trimming with the optional Neolt cutter.

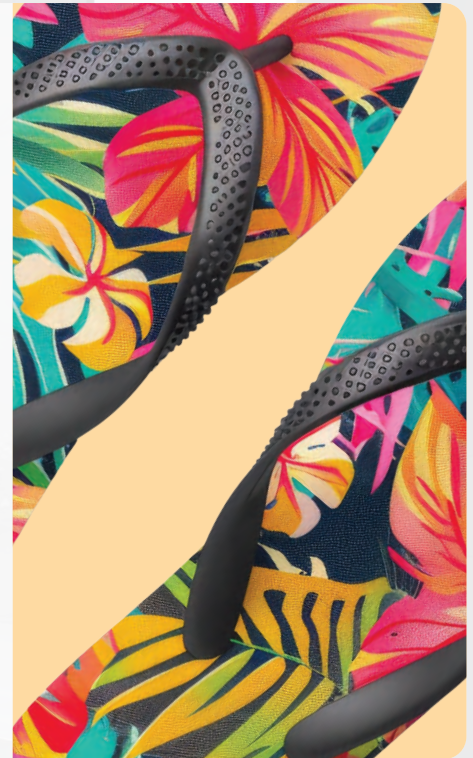


# Explore new applications and expand your business.

## Expand your horizons beyond garment printing.

With the RICOH Pro D1600, you have the tools for exponential growth. Printing onto film allows you to apply vibrant graphics to static and hard to reach surfaces that could not previously be decorated. No special equipment is needed. If the surface can be heated, you can apply a DTF graphic to it. And because it only requires heat to bond the designs to substrates, you can prepare pre-printed transfers for clients to apply within their own production environments.

- Decorate a wider variety of merchandise.
- Apply graphics to static and hard to reach surfaces.
- If the surface can be heated, you can apply a DTF graphic.
- Support clients by supplying transfers for local application.
- Streamline production processes and minimise shipping costs.



## Create beautifully crafted merchandise.

With the RICOH Pro D1600 driving production, premium quality is assured. Ricoh's patented drop-on-demand technology delivers laser-sharp 1,200 dpi images. Dynamic waveform control produces finer lines and whiter whites. Vibrant five-colour images (CMYK+W) can be applied directly to a wide range of merchandise, including light and dark fabrics, leather goods, glass, wood, and metal. Hot melt powder, applied inline, ensures that the images bond seamlessly with merchandise.

- Vibrant, five-colour Direct-to-Film print process.
- Dynamic waveform control elevates print quality.
- Opaque whites, wide colour gamut, and fine lines.
- Decorate coloured fabrics, leather goods, glass, wood, and metal.
- Hot melt powder bonds images firmly to merchandise.

# Power and precision for every project.



## Supporting your transition to digital production.

The industrial garment decoration business just got a whole lot easier. With the introduction of the RICOH Pro D1600, digital garment and surface decoration has become an automated inline process. No special skills are required, the production process is clean, and there is no need to pre-treat or dry garments. The RICOH Pro D1600 prints vibrant digital images onto transfer film at speed, automatically applying hot melt powder and trimming output ready for application.

- The RICOH Pro D1600 supports an easy transition to digital.
- Printing with the RICOH Pro D1600 is as easy as ABC.
- No special skills are required, and there is no need to pre-treat garments.
- Our automated inline production process reduces labour costs.
- Images can be transferred to a wide variety of merchandise.

## Easy to use and effortlessly productive.

From its intuitive touchscreen operation to its automatic adjustment sensors and self cleaning printheads, everything about the RICOH Pro D1600 screams PRODUCTIVITY. The colour touchscreen operation panel puts you firmly in control. A CMOS sensor continuously monitors image quality, making fine adjustments to ensure stability throughout print runs. An auto-wiping mechanism keeps the print nozzles clean, minimising downtime. It makes the RICOH Pro D1600 easier to use and elevates productivity.

- The colour touchscreen panel puts you firmly in control.
- An optional attention light alerts the operator to issues.
- An illuminated viewing port allows progress to be monitored.
- Dynamic white ink circulation prevents clogging.
- Self-cleaning printheads reduce daily maintenance.





## ColorGATE Textile Productionserver RIP.

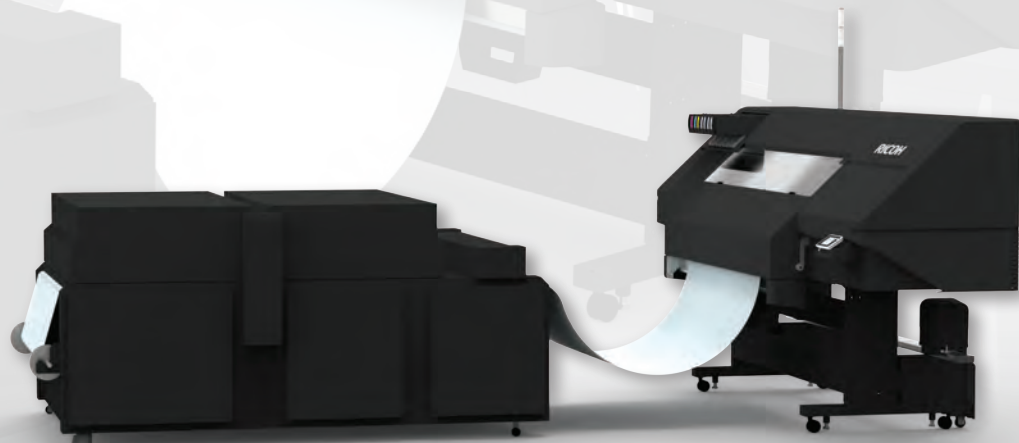
Exceptional colour quality is critical. Clients expect their brands to be represented faithfully on garments and merchandise. To achieve uniformity across different substrates and variously coloured backgrounds, it is imperative to maintain tight tolerances. The RICOH Pro D1600 is equipped with the latest ColorGATE Textile Productionserver RIP. The RIP provides precise colour control, enabling you to produce consistent colours from print to print across a variety of surfaces.

- RICOH Pro D1600 includes ColorGATE Textile Productionserver RIP.
- Market leading application manages all print processes.
- Easily maintain consistent colours across a variety of surfaces.
- Print and Cut module automates the cutting process.
- Cost Calculation module accurately costs jobs.

## Safe and sustainable production process.

Certified by the Global Organic Textile Standard (GOTS) programme, the RICOH Pro D1600 adheres to exacting environmental standards. The specially formulated Pro DTF inks are solvent-free. As the water-based pigment inks are odourless and do not emit volatile organic compounds (VOCs), the system can be deployed without the need for venting. What's more, our Pro DTF transfer films do not contain formaldehyde and can be safely used to transfer images onto children's clothing.

- Enhance your environment and produce sustainable products.
- Printer boasts Global Organic Textile Standard (GOTS) accreditation.
- Our water-based inks do not emit volatile organic compounds.
- The emission-free production process doesn't require venting.
- RICOH Pro DTF transfer film is formaldehyde-free.



# RICOH Pro D1600

## SYSTEM SPECIFICATIONS

### GENERAL

Ink Type:	RICOH Pro DTF Ink Series (Water based pigment ink)
Head Type:	RICOH MH5421 High speed piezo durable print heads
Print Speed:	Pro D1600 8 pass: Standard-Production 20.2 m <sup>2</sup> /h 12 pass: Standard-Quality 13.6 m <sup>2</sup> /h 16 pass: High-Quality 9.4 m <sup>2</sup> /h 32 pass: Super-Quality 5.1 m <sup>2</sup> /h (Productivity with 1,300mm wide film)
Resolution:	450dpi , 600dpi , 900dpi , 1200dpi
Dimensions (WxDxH)	3,300 × 1,000 × 1,500mm
Weight:	Less than 385 kg
Power Source:	AC220-240C, 16A, 50/60H, 1 line
Power Consumption:	Operation: Less than 3000W Sleep: Less than 5.35W Off: Less than 0.3W
Interface:	Ethernet (100BASE-TX/1000BASE-T)
Operation Panel:	Colour touch panel and hard keys 4.3inch uWVGA screen Display languages: English, German, French, Italian, Spanish, Dutch, Portuguese

### INK SET

Ink Set Combinations:	5-Colour mode (CMYK+W)
Ink Capacity:	CMYK: 1,200ml (1 Cartridge for each colour) White: 1,200ml (4 Cartridge for white)

### MEDIA

Media Type:	Direct-to-Film Film
Maximum Printable Width:	1,615mm
Maximum Media Width:	1,625mm (Minimum 420mm)
Media Weight:	55kg or less
Media Feed Length:	Maximum 300m or less
Roll Outside Diameter:	Maximum 250mm or less
Roll Inside Diameter:	3 or 2 inches
Head Height Adjust:	1.8mm (default), 2.3mm, 2.8mm, 3.8mm
Margin Setting:	Default: 15mm each side Minimum: 5mm each side

### RIP

<b>ColorGATE Textile Productionserver</b> (provided with mainframe)	
Features:	High colour quality modular components Optimal colour rendering Consistency of reproduction at any time Maximum productivity Intuitive control concept and user interface Utilises the latest Adobe PDF print engine

### PC SYSTEM REQUIREMENTS

Operating Systems: (64 bit recommended)	Microsoft Windows 10 (Pro, Enterprise) Microsoft Windows 11 Microsoft Windows Server 2016 Microsoft Windows Server 2019 (For optimal performance we recommend Microsoft Windows 10 or 11)
Minimum hardware requirements:	Apple Mac devices with ARM-based processors (M1 chips) are not supported. On Intel- based Macs, Productionserver can be used in conjunction with a hardware dongle (Single Host License / Hardware) and Parallels Desktop. CPU: Intel Core i3-2100 / AMD Athlon II X2 340 RAM: ≥4 GB Free disk space: 120 GB Display resolution: 1280 x 1024
Recommended for single printer:	CPU: Intel i5-7500 or newer / AMD Ryzen 5 1600 or newer RAM: ≥8 GB Free disk space: 120 GB SSD Display resolution: 1920 x 1080
Recommended for multiple printer:	CPU: Intel i9-9900K or newer / AMD Ryzen 7 3800X or newer RAM: ≥16 GB Free disk space: 512 GB NVME Display resolution: 1920 x 1080
Installation and operation:	LAN adapter, TCP/IP for network access required
Interfaces:	Parallel, Ethernet, TCP/IP, Serial, FireWire, TWAIN

### ENVIRONMENTAL INFORMATION

Recommended environment:	20 to 25°C, 45 to 60%, no condensation
Operable environment:	15 to 30°C, 35 to 80%, no condensation
Altitude:	Under 2,000m (6,561ft)