XpertJet Pro Series Sign & Display Printers





Product Guide





Reassuringly Mutoh!



- ☐ Robustly built & reliable printers, delivering high quality output
 - first time, every time
- ☐ New print head
- New weaving algorithm
- New MUTOH VerteLith RIP software
- ☐ Quality Up! Speed Up!
- ☐ High user assistance for uninterrupted production
- ☐ GREENGUARD Gold certified inks





XpertJet 1341SR PRO



- . 1371 mm media width / 1361 mm print width
- . VERY compact footprint : 1.3m² *
- . Enhanced maintenance extra maintenance door
- . Extra head height
- . 20 kg & 30 kg motorized take up units
- . Quality Up! Speed Up!



* (WxDxH) : 1916 x 685 x 1218 mm



XpertJet 1641SR PRO



* Optional Item - IJ-NZMD-01



Target Applications





High quality volume production of indoor/outdoor sign & display graphics

- ☐ General signage
- Car wraps
- ☐ Stickers
- Interior décor
- Window graphics
- ☐ Fine Art
- **⊔** ...

















The Three Key Building Blocks



Quality Up! Speed Up!



High User Assistance





The three key building blocks...



AccuFine Head Technology



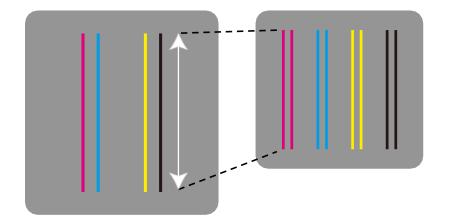
High density nozzle pitch

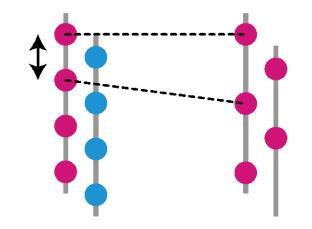
ACCUFINE

[PH 1324X/1641SR]



[PH 1324X/1641SR]







Benefit: higher image quality

33% Wider

11% More Nozzles

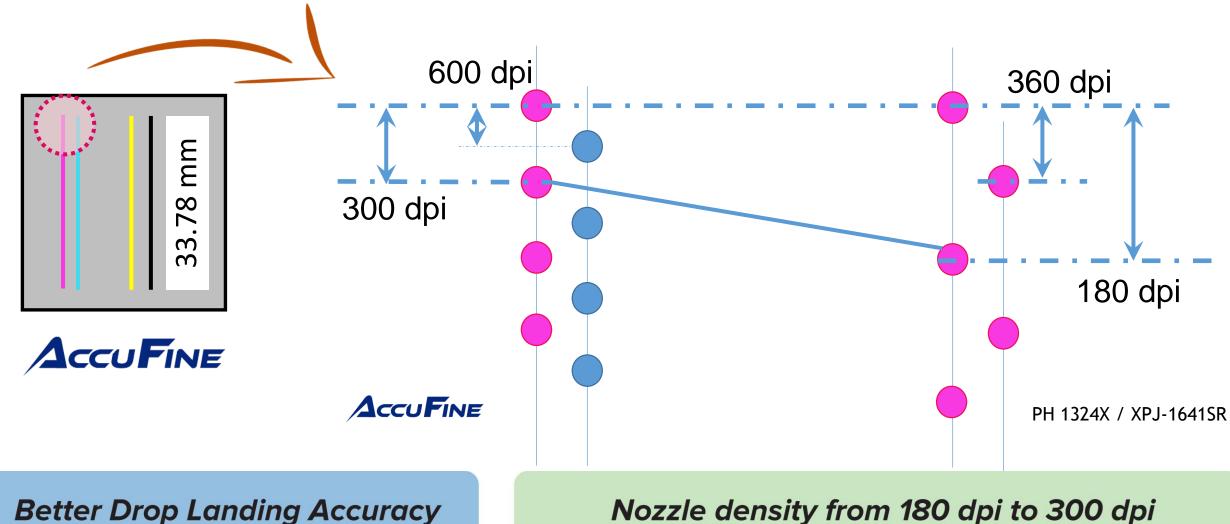
Faster Firing of Drops



 $oldsymbol{\Delta}$ CCU $oldsymbol{\mathsf{F}}$ INE

AccuFine Nozzle Layout

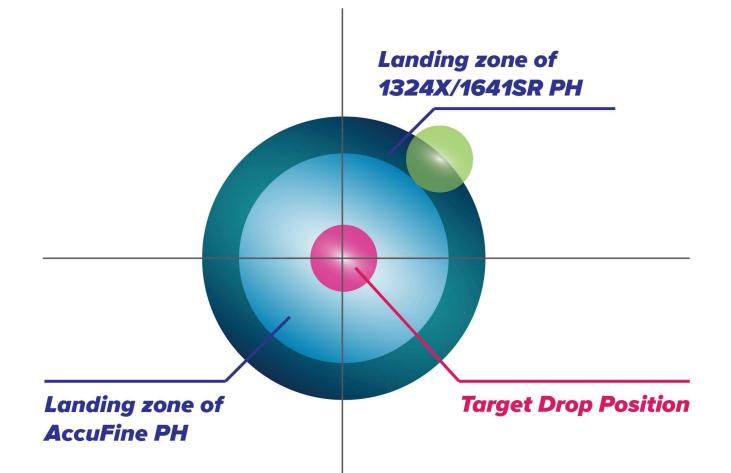




Nozzle density from 180 dpi to 300 dpi

Drop Landing Accuracy — Close Up









New i-screen Weaving Technology





- New weaving algorithm
- Multiple new print effects
- Overall higher print quality
- Banding free output over wider speed range



Mutoh's 4th generation weaving technology

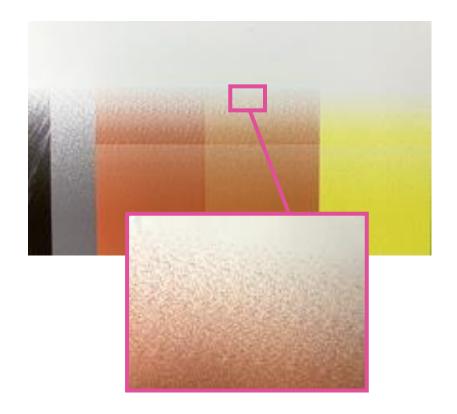


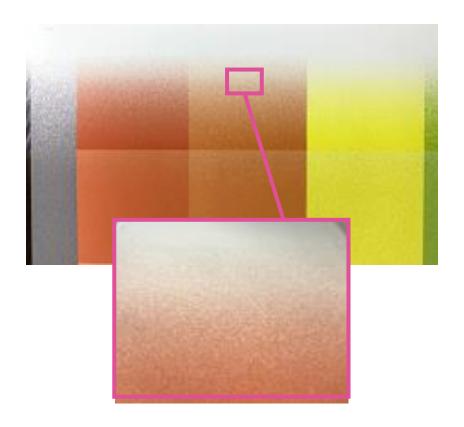
i-screen Weaving Technology — Close Up



Fine/Fog Effect

NEW i-screen Effect







VerteLith - MUTOH GENUINE RIP SOFTWARE



- ☐ Built around Harlequin® RIP Core
- ☐ Straightforward & powerful user interface
- ☐ Simple workflow
- ICC substrate profiling included
- ☐ Impressive features list, including finishing toolset
- Best possible output results from Mutoh printers
- ☐ Can also be hooked up to non-Mutoh RIP solutions
- ☐ Multi language chat support



1

MUTOH Proprietary Half Tone Screening:

Clear Tone



MUTOH Clear Tone

Less variation in colour density and smoother gradations

High image quality technology maximizing the performance of the XpertJet Pro series





2

Accurate processing of PDF transparencies



VerteLith processing

Improper processing

More reliable output through accurate processing of PDF transparencies & drop shadows

High image quality technology maximizing the performance of the XpertJet Pro series



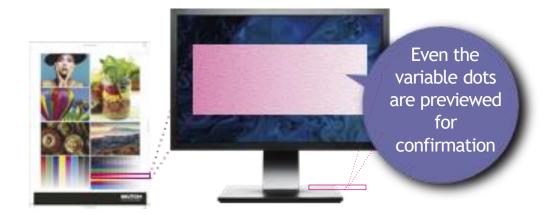


3

Powerful Preview Functions to reduce errors and waste

RIP preview

Preview "the actual printing dots" on screen before printing



Soft proof

Simulate "the colour" of the printed image on screen before printing



 * For soft proofing, a display with monitor calibration is recommended







Workflow Efficiency & Finishing Tools

- Add trim marks in different styles
- Add grommets for banner production
- Automated and manual tiling for jobs exceeding your substrate or printer width
- Step & repeat functionality for handling textile/wall deco patterns
- Automated layout processing and printing variable data with multi-page PDF

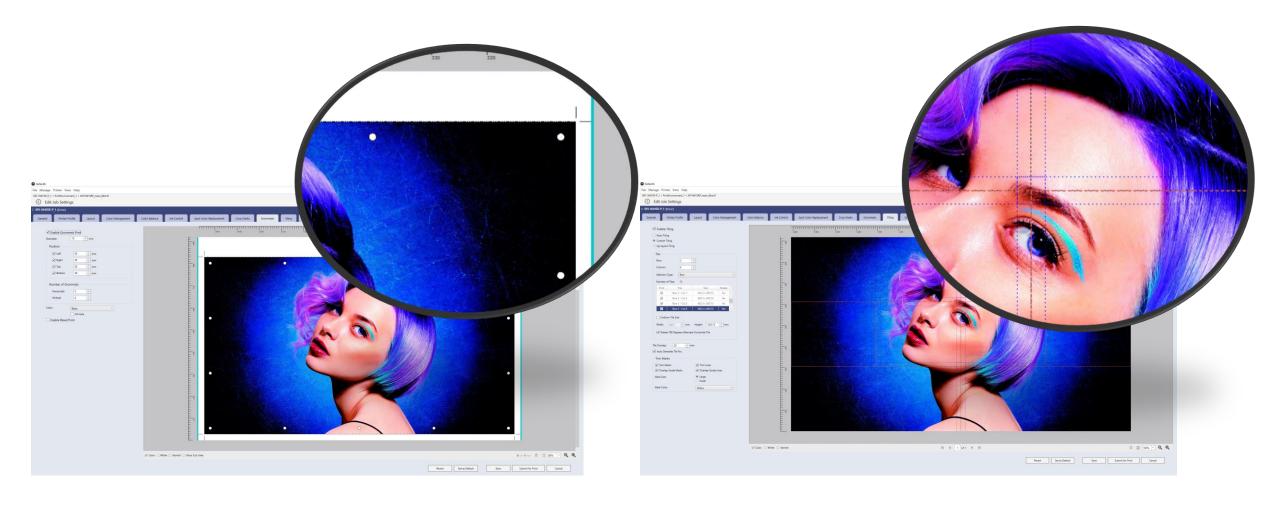
Operating environment: Windows 8.1/10

Data format: PDF/PostScript/EPS/TIFF/JPEG/PNG



VerteLith – Workflow Efficiency & Finishing Tools Grommets & Tiling



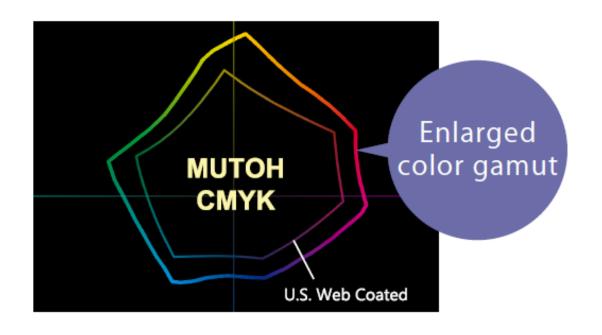






5

Wide color gamut ICC profile **MUTOH CMYK**



Enlarges the color gamut of MUTOH printers & enables vivid colours

High image quality technology maximizing the performance of the XpertJet Pro series



XpertJet Extra Head Gap







High 2.5mm

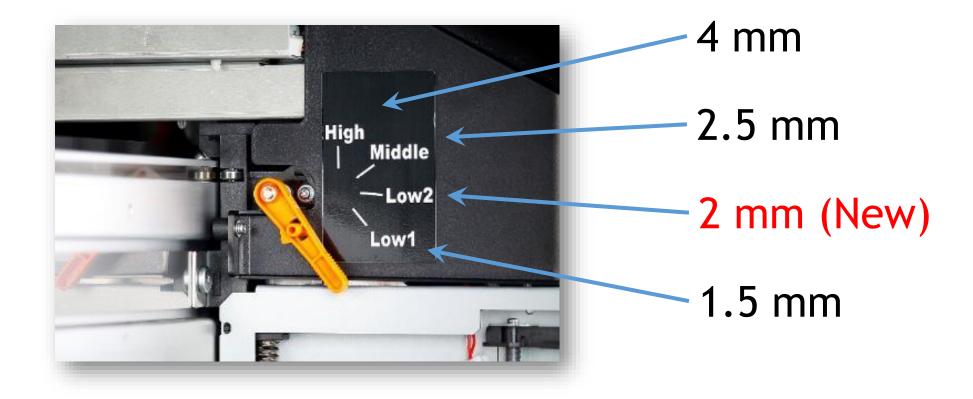
Middle 2.0 mm (New)

Low 1.5mm

Avoid possible media crashes + lower graininess thanks to additional head gap of 2 mm

XpertJet 1641SR PRO

Extra Head Gap



Avoid possible media crashes + lower graininess thanks to additional head gap of 2 mm





Quality Up! Speed Up!



Quality Up! Speed Up!



Comparing corresponding print modes (1341SR-P vs. 1324X and 1641SR-P vs. 1641SR):

- 1. Significant speed gain in all production print modes!
 - ☐ 1341SR-P is **up to 212 % faster** vs. 1324X
 - ☐ 1641SR-P is **up to 201 % faster** vs. 1641SR
- 2. Highest speed gain is obtained in the most popular speed range
- 3. Productivity up!



Speed Gain XPJ-1341SR-P vs VJ-1324X

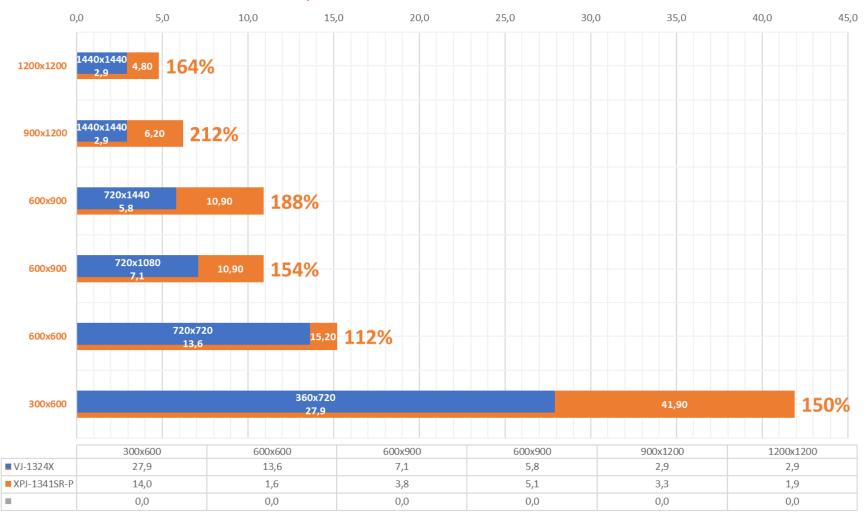
Comparing corresponding print modes





XpertUet

Speed Gain XPJ-1341SR-P vs VJ-1324X





Speed Gain XPJ-1641SR-P vs VJ-1641SR Comparing corresponding print modes







Speed Gain XPJ-1641SR-P vs XPJ-1641SR

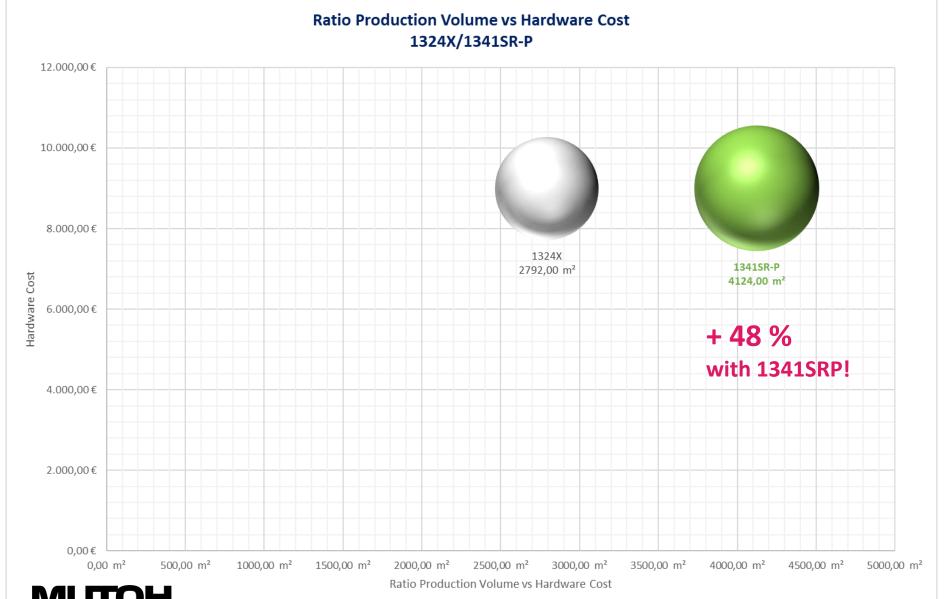




Productivity / Hardware Cost 1341SR-P vs VJ-1324X







Simulation as example

- Hardware Cost: Printer List Price
- Production Time:

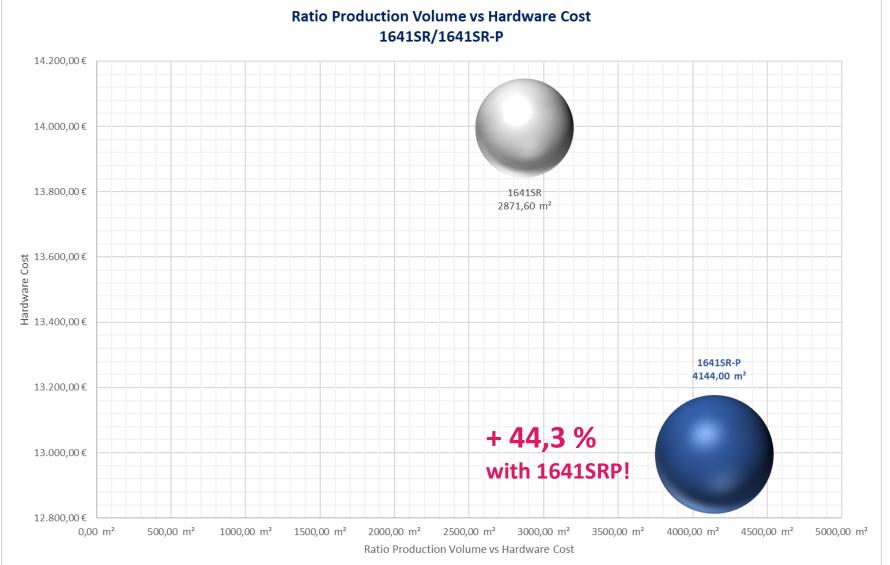
200 working days @ 2 h/day

- Production Volume 1324X/1341SRP
 - □ 30% Budget PVC @ High speed $(13/15 \text{ m}^2/\text{h})$
 - □ 30% Mid-term PVC @ Medium Speed $(5,8/10,9 \text{ m}^2/\text{h})$
 - □ 30% Specialty (e.g. window deco, fabric) @ Quality speed $(2,9/6,2 \text{ m}^2/\text{h})$
 - □ 10% Cast (Car deco) @ Quality Speed $(2,9/6,2 \text{ m}^2/\text{h})$

Productivity up!

Productivity / Hardware Cost 1641SR-P vs 1641SR An example ...





Simulation as example

- Hardware Cost: Printer List Price
- Production Time:

200 working days @ 2 h/day

- Production Volume 1641SR/1641SRP
 - □ 30% Budget PVC @ High speed (14/**15,5** m²/h)
 - □ 30% Mid-term PVC @ Medium Speed (5,9/**10,9** m²/h)
 - □ 30% Specialty (e.g. window deco, fabric) @ Quality speed $(3/6,1 \text{ m}^2/\text{h})$
 - □ 10% Cast (Car deco) @ Quality Speed $(3/6,1 \text{ m}^2/\text{h})$

Hardware cost down! **Productivity up!**



MUTOH

XpertJet PRO

High User Assistance













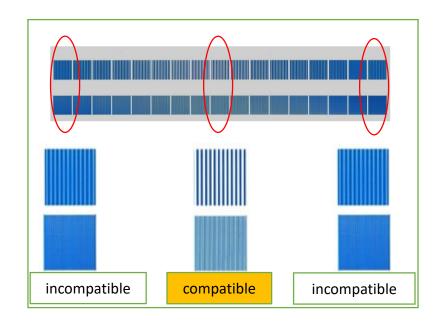
DropMaster 2



Automated bi-directional alignment through built-in colour sensor

Benefits:

- Save time: fully automated calibration¹
- Reduced waste
- No variation in adjustment among different operators





^{1:} The automatic adjustment may be misleading when using an ink/substrate combination suffering from heavy cockling. Manual calibration is possible.

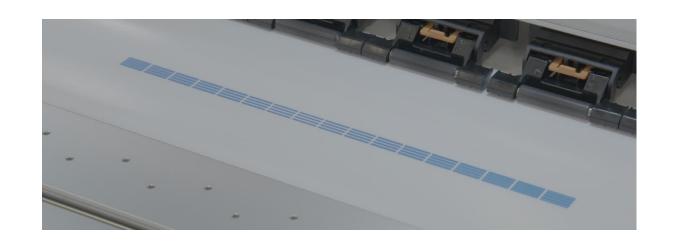
Feed Master



Automated paper feed adjustment through built-in colour sensor

Benefits:

- Fully automated calibration¹
- Reduced waste
- No variation in adjustment among different operators



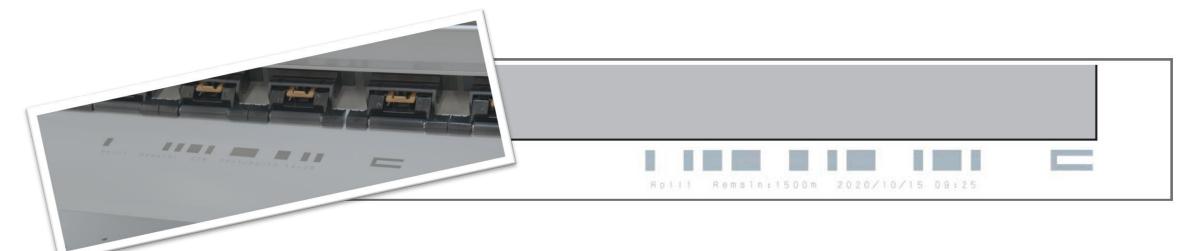
1: Manual adjustment remains possible if it is preferred by an experienced operator.



Media Tracker



- 1. Enter media length upon loading new media roll
- 2. Print bar code before removing roll in use
- Upon reloading roll, printer will read bar code and detect how much media
 is left on roll
 - → no waste of media, quick start!
 - => ideal for businesses with multiple operators increased efficiency





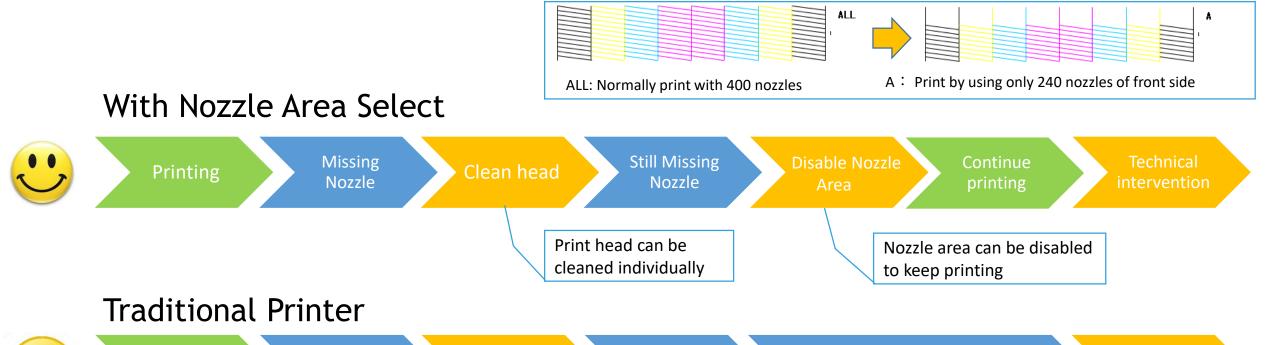
Nozzle Area Select

Missing

Nozzle



Eliminate downtime by limiting the active nozzle blocks in the event nozzles cannot be recovered.



Still Missing

Nozzle



Clean head

Technical

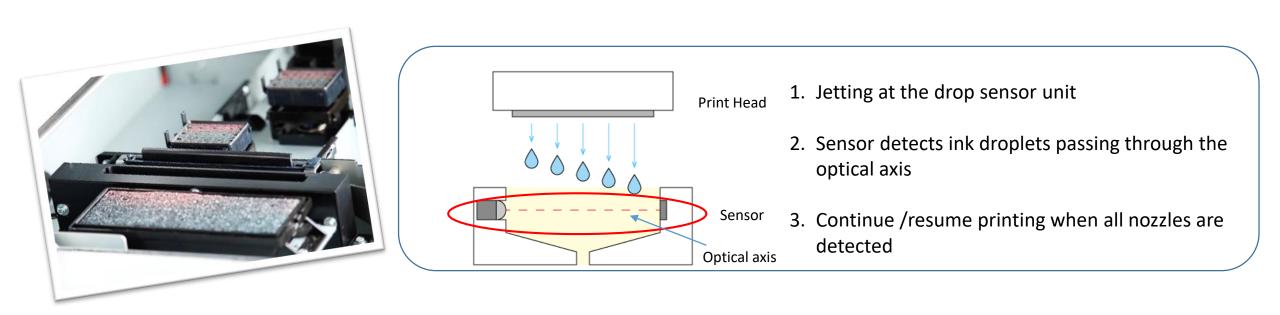
intervention

No printing

^{*:} Reducing the amount of active nozzles will reduce the output speed.

XpertJet Optional Nozzle Check Unit - IJ-NZMD-01 1641SR PRO

Automatically detect missing nozzles and clean the nozzles to continue printing!

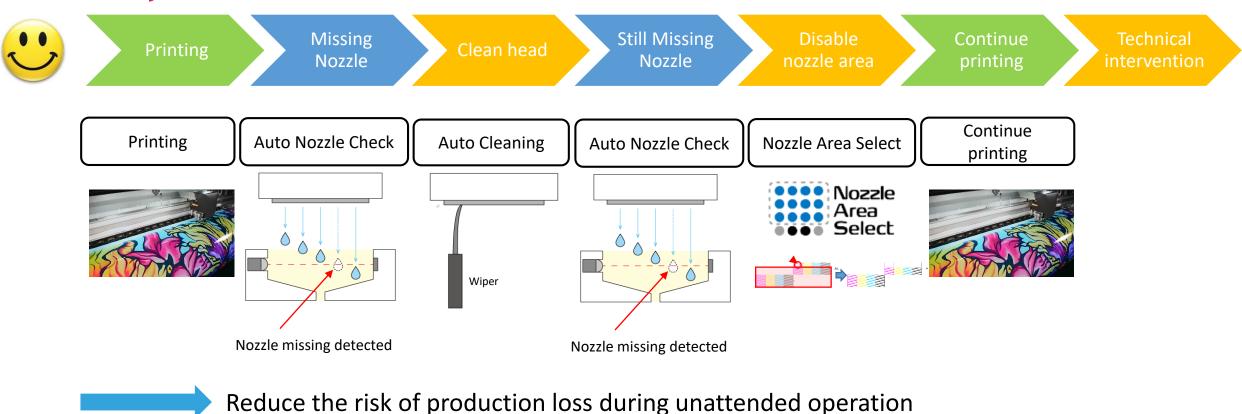






XPJ-1641SR Pro: Optional Nozzle Check Unit - 1J-NZMD-01

Fully Automatic in combination with Nozzle Area Select!





^{*:} In the case multiple nozzles would become blocked on different locations in a nozzle row, printing will not be continued.

Unrestricted Level of Use









Unrestricted Level of Use MS31 / MS41 Inks

GREENGUARD Gold Certification

- MS31/41 inks meet the UL 2818-2013 Gold Standard for chemical emissions for building materials, finishes and furnishings.
- UL GREENGUARD Gold indicates that products including inks, printed substrates and the combination of both for indoor applications contribute to healthier indoor environments by minimizing potential exposure to airborne chemicals.





Unrestricted Level of Use MS31 / MS41 Inks

GREENGUARD Gold Certification

- MS31/MS41 inks are certified at the highest level category Wallpaper¹ (lowest emissions) and qualified as "unrestricted" to decorate a complete room.
- Category Wallpaper means :
 - Unrestricted for a fully decorated room 33,4 m² in an office environment and 94,6 m² in a classroom environment.

BENEFITS

- Prints can be used at full room coverage, even in sensitive environments such as schools and hospitals!
- Using GREENGUARD Gold inks widens the scope of applications!



- The other categories of GREENGUARD Gold certification are:
 - Category Decorative Wall = one wall of less than 10,4 m²/h in office environment and less than 31,6 m² in a classroom environment
 - Category Signage = sign of less than 3 m² in office environment and less than 11,9 m² in a classroom environment





MS-31/MS-41 Sign & Display Inks

- Mutoh's fourth generation Sign & Display inks
- MS-31 220 cc cassettes & 1 L packs XPJ-1341SR-P ¹
- MS-41 300 ml² & 1 liter packs in foil less waste XPJ-1641SR-P³

XPJ-1641SR Pro / XPJ-1341SR Pro 4-Colour Configuration







¹ To load 1L MS31 ink packs on a 1341SRP, you need a set of ink pack adaptors VJ-HCIPADPT – not included in standard unit configuration

² MS31 300 ml ink packs can only be ordered as starter ink set for a new machine order

³ XPJ-1641SR-P is directly compatible with both MS41 300 ml and 1 L packs since the standard unit comes with ink pack cases

MS31 / MS41 Eco Solvent Inks

MS 31 MS 41







Indoor / Outdoor

- · Wide colour gamut deliver vibrant high density prints with excellent dot gain
- Print on a wide range of coated and uncoated substrates
- Suited for long term outdoor and indoor applications
- GREENGUARD Gold certification, category Wallpaper
- Excellent weather resistance, abrasion and chemical resistance
- UV durability without lamination up to 3 years outdoor*
- Operator friendly thanks to low maintenance
- 24 months shelf life
- Average ink consumption: 8 ml/m² **





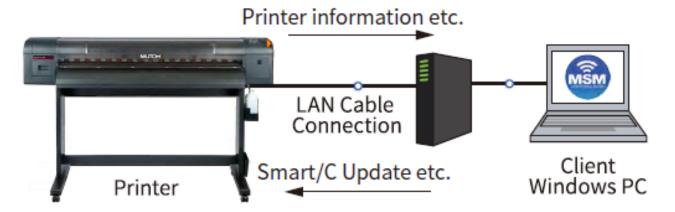
^{*} For heavy-duty applications where mechanical stress or environmental impact is involved (floor, vehicle and marine graphics), lamination is required. Stabilisation is required prior to lamination

^{**} Test image: 'ISO 400 - Marketplace Antwerp' representing typical average ink consumption in sign application

MUTOH Status Monitor (MSM)

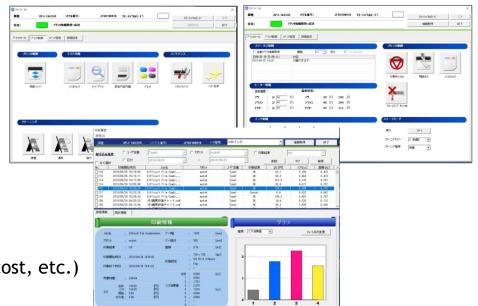


MUTOH Status Monitor (MSM) checks the printer's operation status in real time



In the Status Monitor, the following information can be checked for the MUTOH printer.

- Detailed information
- Status information
- Heater information
- Head temperature/cartridge information
- S/C card information
- Smart /C information
- Paper information
- Print information
- Print history(job information, print time, ink consumption, cost, etc.)
- · Multi-language support for all functions (10 languages)
- · Print history can be exported as a CSV file.







XPJ-1341SR Pro – Roll Off Systems / Edge Holder

- > Standard 19 kg roll off system at the rear of the printer
 - Non motorised roll off system for rolls up to 19 kg



- Optional 30 kg media holder at the rear of the printer (IJ-MDHLD30-01)
 - To work with rolls exceeding the standard 19 kg which cannot be loaded on standard 19 kg roll off system.



- Optional Edge holder (IJ-EGHLD-01)
 - Edge holder prevents substrate edge curling and ensures stable media feeding.
 - Easy to attach and remove with magnets









XPJ-1341SR Pro — Optional Motorised Take-Ups

- 20 kg motorised torque winder (VJ1213-TUP20)
 - For handling standard media rolls
 - Motorised roll up to 20 kg



- > 30 kg motorized take-up unit¹ (VJ13-TUP20U)
 - For motorized roll up with tension bar weights up to 30 kg.
 - Only required if it is the intention to use 30 kg rolls from start to end, in combination with the REAR 30 kg media holder



30 kg take-up unit (VJ13-TUP20U)



Rear media holder 30 kg (IJ-MDHLD30-01)





XPJ-1641SR-Pro Roll Off System / Media Feed Flanges

New Roll Off System



New media feed flanges







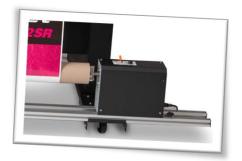
XPJ-1641SR Pro – Motorised Take Up Systems

- 30 kg torque controlled continuous motorised take-up system
- VJ1619-TUP30
 Maximum roll-up diameter of 150 mm



- VJ1619-TUP40
 Maximum roll-up diameter of 250 mm
- 100 kg Feed & Take-up System
- IJ-TUP100-01
 Front & rear diameter up to 250 mm











XPJ-1341SR Pro – Improved Daily Maintenance

Improved daily maintenance and work efficiency





A maintenance door is provided on the standby side of the print head, which makes it easy to remove paper chips and dust from the print head.



The cleaning wiper can be replaced by the customer as needed to reduce downtime.

Marketing & Sales Resources





- XpertJet 1341SR Pro product video
- XpertJet 1641SR Pro product video



- XpertJet 1341SR Pro webpage
- XpertJet 1641SR Pro webpage
- VerteLith RIP software
- MS31 ink information
- MS41 ink information



- XpertJet 1341SR Pro datasheet
- XpertJet 1641SR Pro datasheet
- **XpertJet Pro logos**
- Logos of product features (i-screen, AccuFine ...)
- **XpertJet Pro product images**
- MS31 & MS41 GREENGUARD certificate & logos



MUTOH



