

XpertJet



64" Wide Format Sign & Display Printers Product Guide

Sept. 2019
Version 2.0

Discover the XpertJet 1641SR & 1682SR

- 1 Product Philosophy, Target Public & Applications
- 2 XpertJet Enhancements at a Glance
- 3 Performance & Key Specifications
- 4 In-the-box Software
- 5 Standard Configuration, Options & Ink Pricing

Extended Info

- A Order Recommendation & Warranty
- B Practical, Working Environment & Maintenance
Measurements, Shelf Life, Packaging, Profiles, etc.

1

改善

Kai Zen

CHANGE FOR THE BETTER

Kaizen

A Process of Continuous Improvement

- Quality as highest priority
- Through all entities of the company:
R&D, design, production, finished product, logistics, sales, service, ...
- Setting standards and keeping them
- Continuously introduce small improvements in the process



Kaizen @ Mutoh



Company-wide commitment to
create continuous improvement and innovation

Kaizen Goals in XpertJet

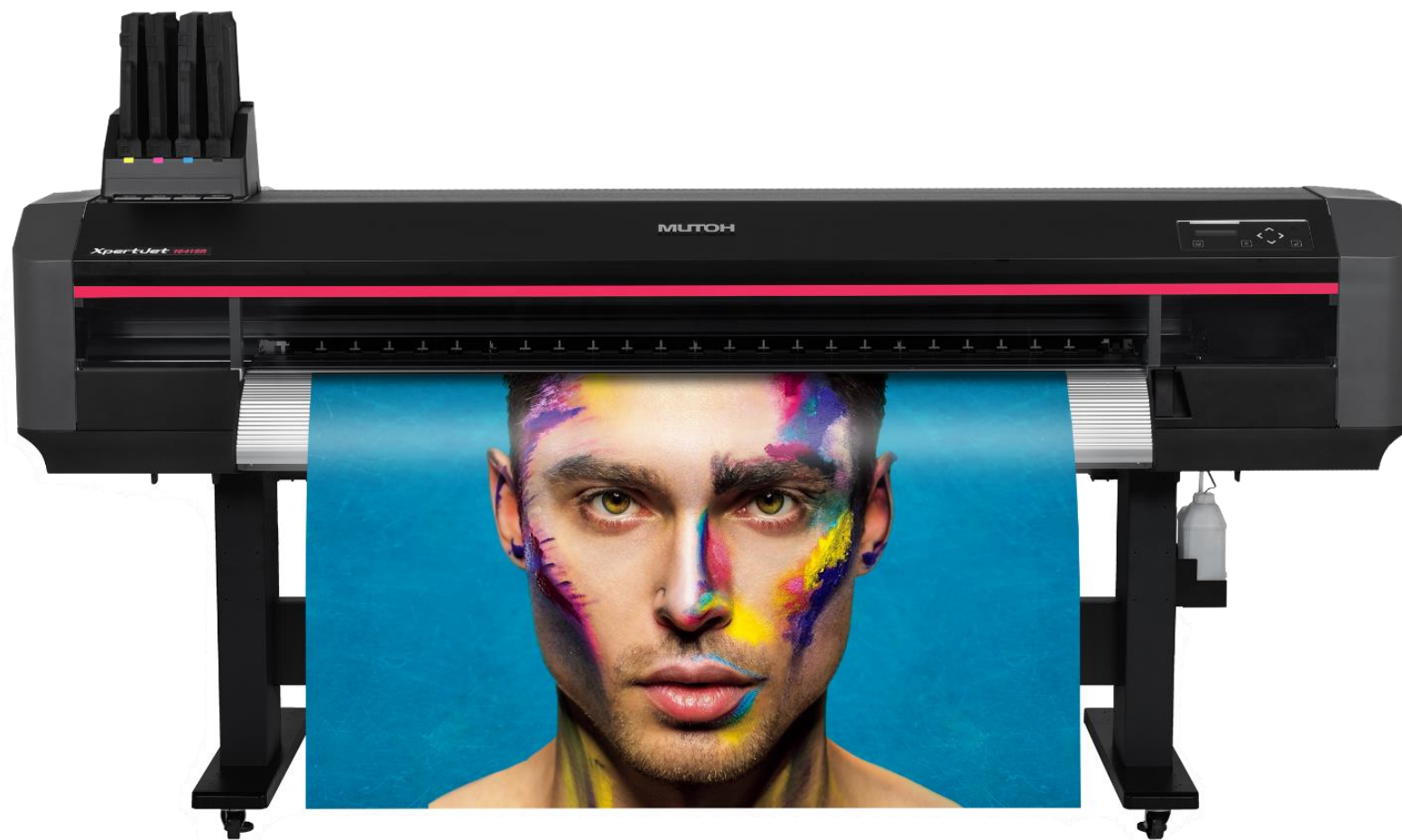
- Successor models of ValueJet 1624X and 1638X
- Maintain high industry standards set by ValueJet range
- Implement **new features & enhancements based on customer & reseller feedback**



XpertJet 1682SR / 1641SR

XpertJet 1641SR

- 1 print head - 4 channels - 4 colours



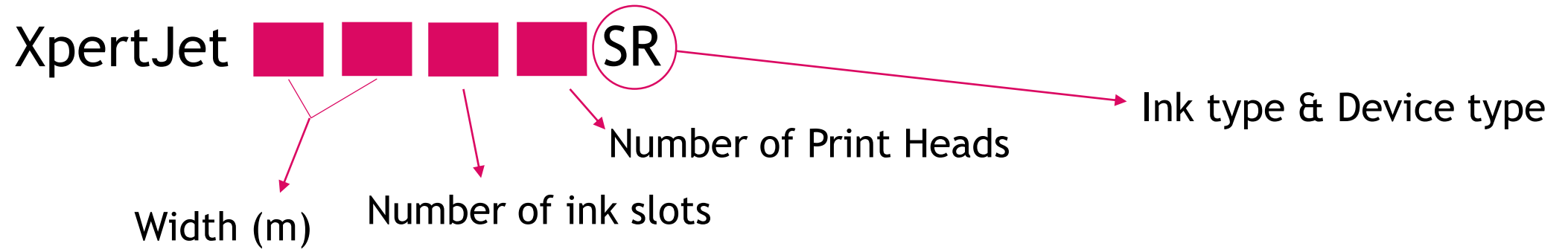
MUTOH

XpertJet 1682SR

- 2 print heads (staggered setup) - 8 channels - 7 colours or 2x4 colours



Model Numbers Explained



XpertJet-1641SR

- 1.6 m
- 4 channels
- 1 head
- (Eco-)Solvent
- Roll

XpertJet-1682SR

- 1.6 m
- 8 channels
- 2 heads
- (Eco-)Solvent
- Roll

1 Target Public

- For starters or established print shops needing extra versatility and flexibility
- For businesses focusing on the combination of speed production and top quality print work

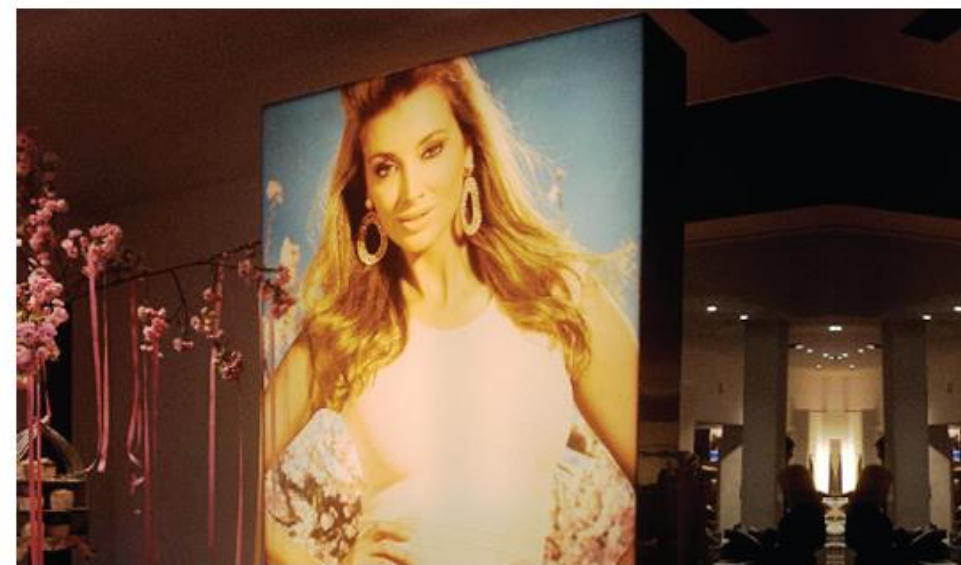
Applications



BANNERS



BACKLITS



SOFT SIGN / TEXTILE DISPLAYS

Applications



WALLPAPER



PHOTOGRAPHY

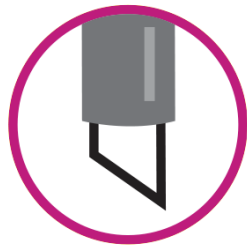


VEHICLE WRAPPING

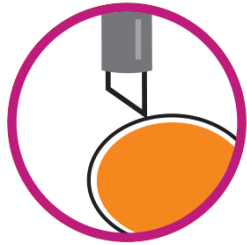
Ready To Team Up With Any Mutoh Cutting Plotter



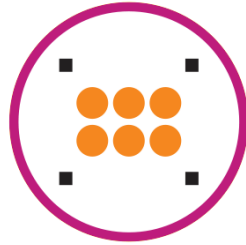
PRINT



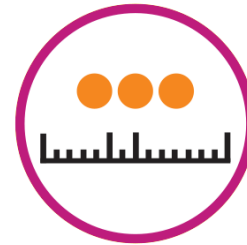
CUT



CONTOUR-CUT



REGISTRATION
MARKS



BARCODE
SUPPORT



PRODUCTION
SOFTWARE



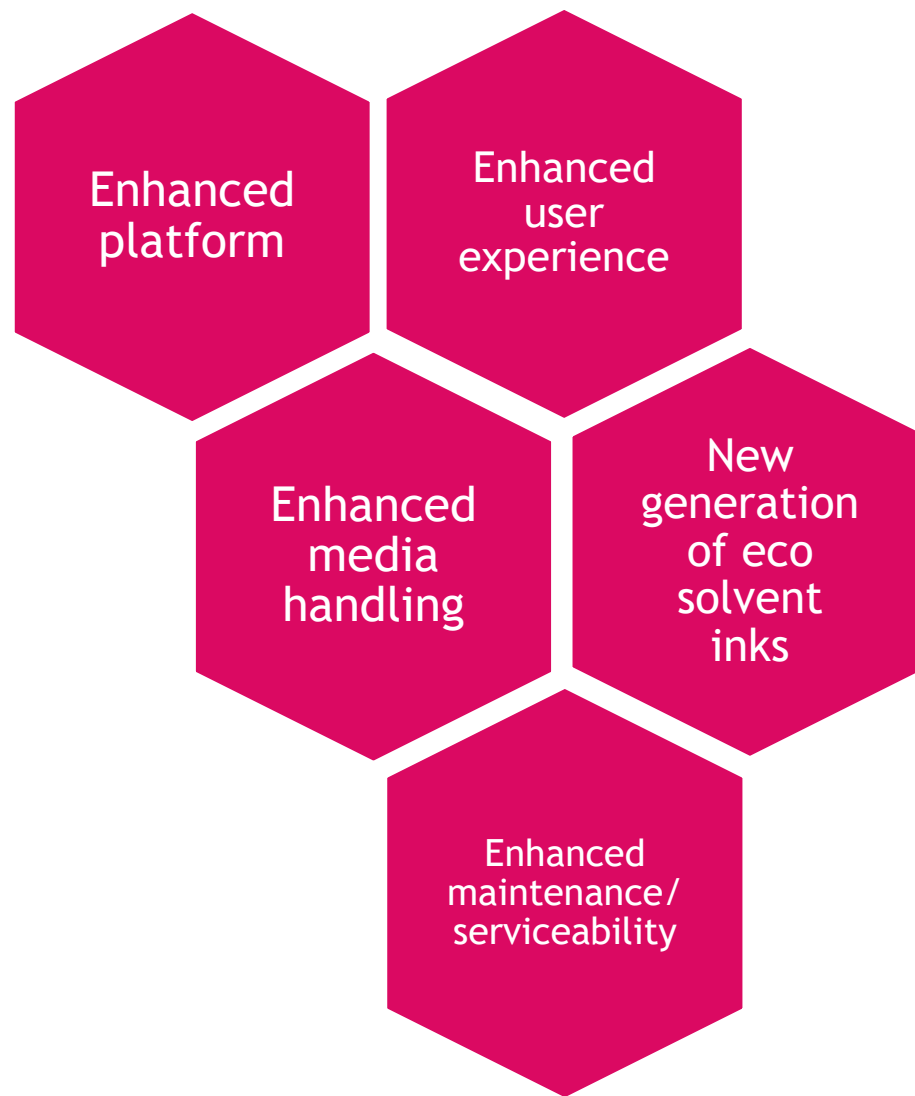
STICKERS

Read more : [Print & Cut Brochure](#)

View more : <https://www.youtube.com/watch?v=LkezElsNJU0>

XpertJet Enhancements* at a Glance

* Versus VJ-1624X/1638X



Enhanced Printer Platform

Enhanced
platform

New ink cases - LED lights show ink level status

High precision aluminum extrusion for
extremely accurate ink dot placement

New operation panel

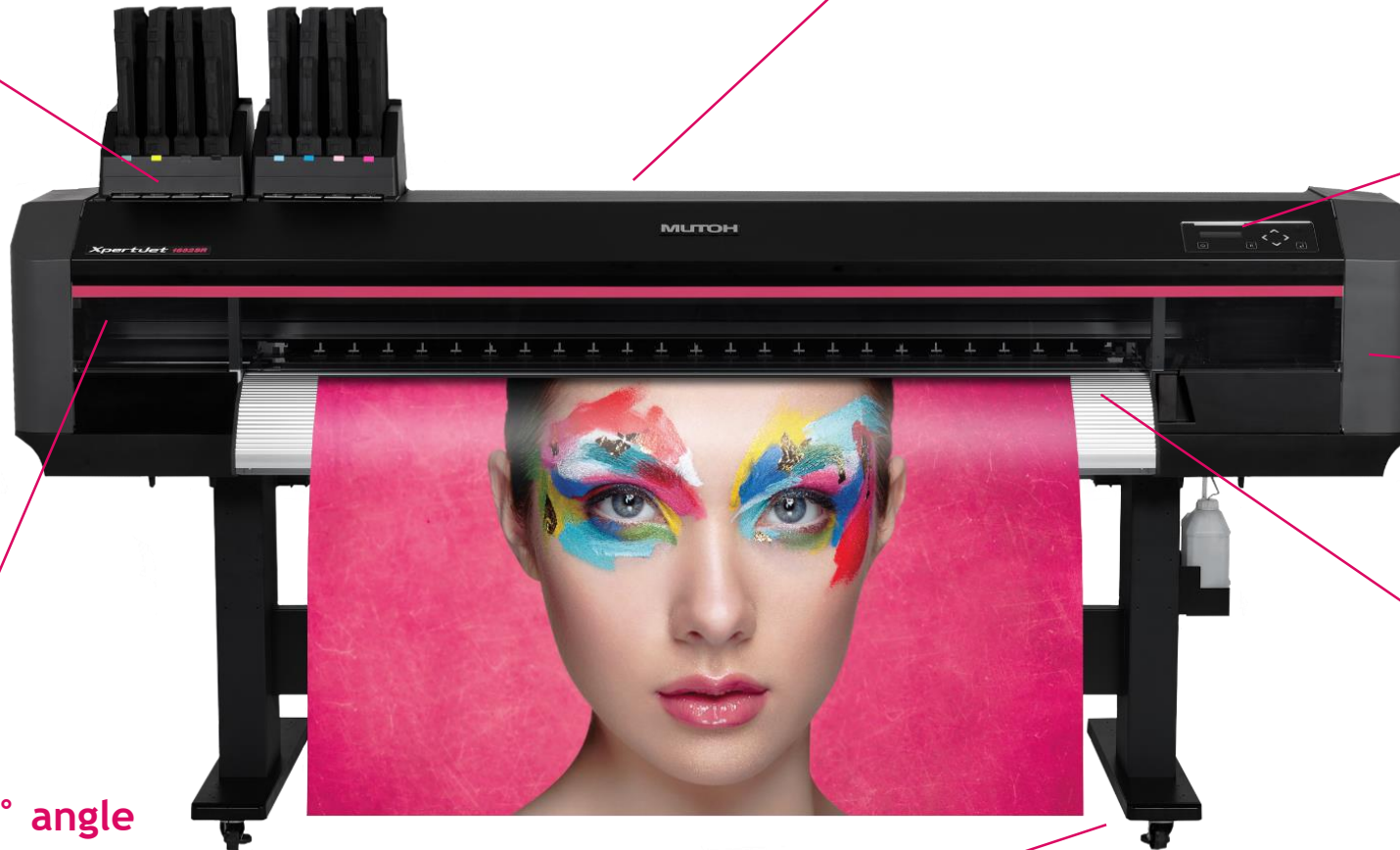
Piezo print head
technology

New cosmetics

Cover opens in 90° angle

Enhanced - screwless -
print platen design

Improved foot stand robustness - suppress shaking



Enhanced User Experience (UX)

Enhanced
user
experience

Illuminated print platform



New multi-language OLED display



Enhanced remote printer
monitoring



Automated bidirectional
alignment via integrated
colour sensor



Enhanced User Experience (UX)

Illuminated Print Platform

Enhanced
user
experience



LED lights above the print platform:

- Easy inspection of calibration prints
- Easy inspection of the print quality during printing
- Illumination settings can be tuned by the operator

Enhanced User Experience (UX)

New Operation Panel



Enhanced
user
experience

- OLED technology :
 - Improved image quality - better contrast, higher brightness, fuller viewing angle, faster refresh rates.
 - Lower power consumption.
- Intuitive : easy & quick navigation - unnecessary keys are hidden
- Multi-language : English, German, French, Italian, Spanish, Dutch, Portuguese
- Colour status bar enables remote viewing of printer status

Enhanced User Experience (UX)

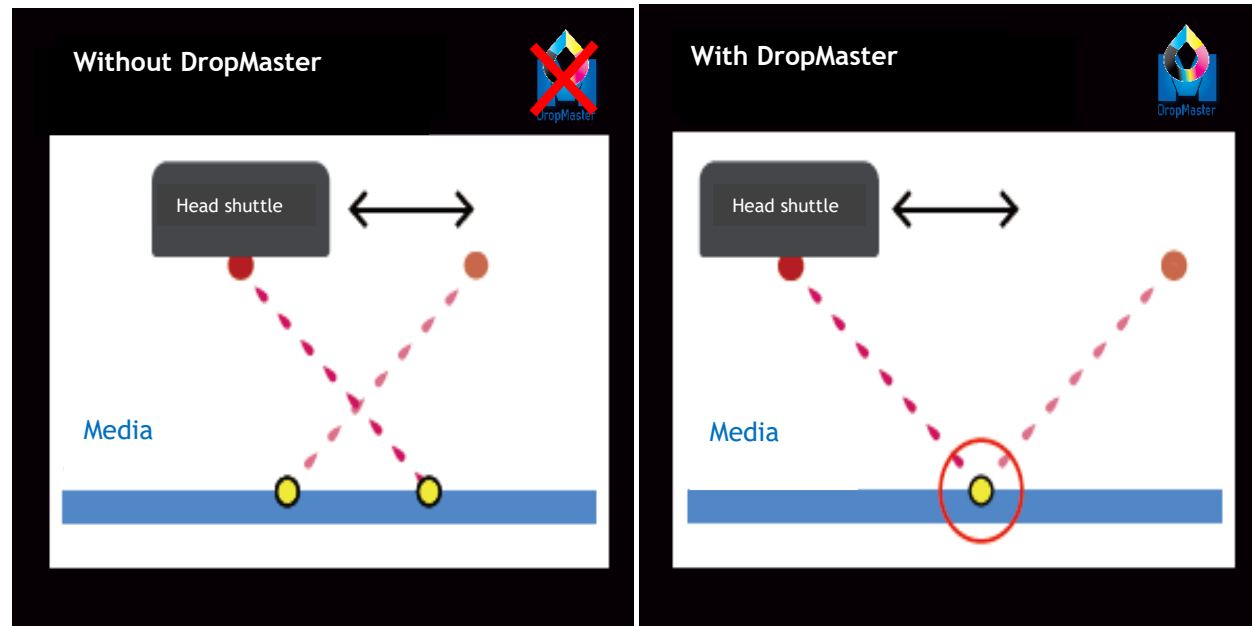
DropMaster

Enhanced
user
experience



DropMaster will automatically adjust the jet fire timings in function of the thickness of the media loaded.

- Enables overall increase in image definition and smoothness
- Eliminates need for cumbersome and time consuming media dependent head adjustments



Enhanced User Experience (UX)

DropMaster 2

Enhanced
user
experience

XpertJet integrates the next level of DropMaster, **DropMaster2**:

Automated bidirectional alignment through built-in colour sensor

Advantages :

- fully automated calibration
- reduced waste
- better efficiency
- no variation in adjustment among different operators



Enhanced User Experience (UX)

VSM Has Evolved to MSM

Enhanced
user
experience

- New Graphics User Interface
- Faster response rate versus VSM
- Multilingual support for all functions
 - English, Dutch, French, German, Italian, Portuguese and Spanish



Enhanced User Experience (UX)

Mutoh Status Monitor - MSM / MSM Mobile

Enhanced
user
experience



- Upon unit activation of a Mutoh printer, each end-user automatically becomes member of Mutoh's Printer Club
- MSM is a light-weight software enabling remote control of the printer from a computer
- For mobile phone or tablet, it is also possible to be remotely connected to the printer using MSM Mobile

Enhanced User Experience (UX)

MSM For Desktop

Features:

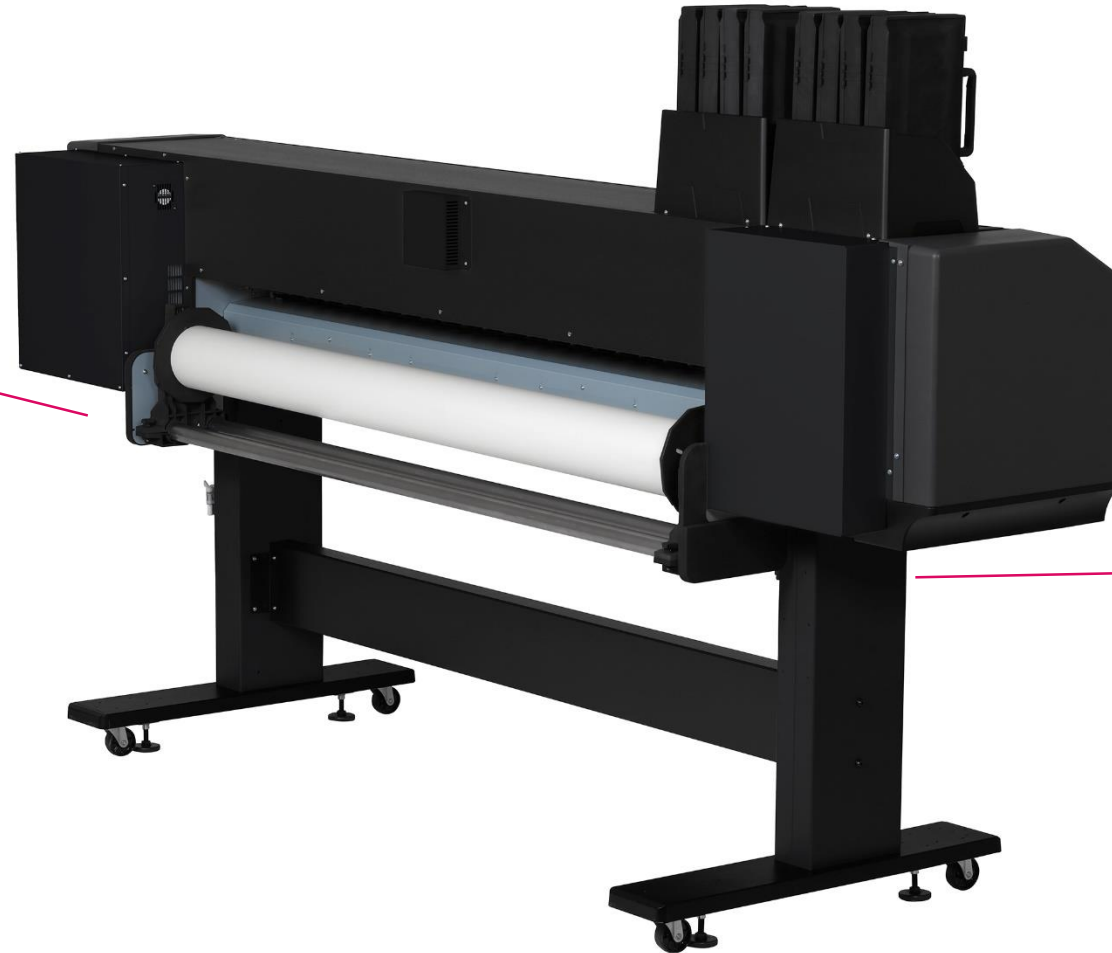
- Printer status
- Heater information
- Remaining ink
- Print information: print time, print mode, print size, ink consumption



Enhanced Media Handling

Enhanced
media
handling

New Roll Off System



New media feed flanges

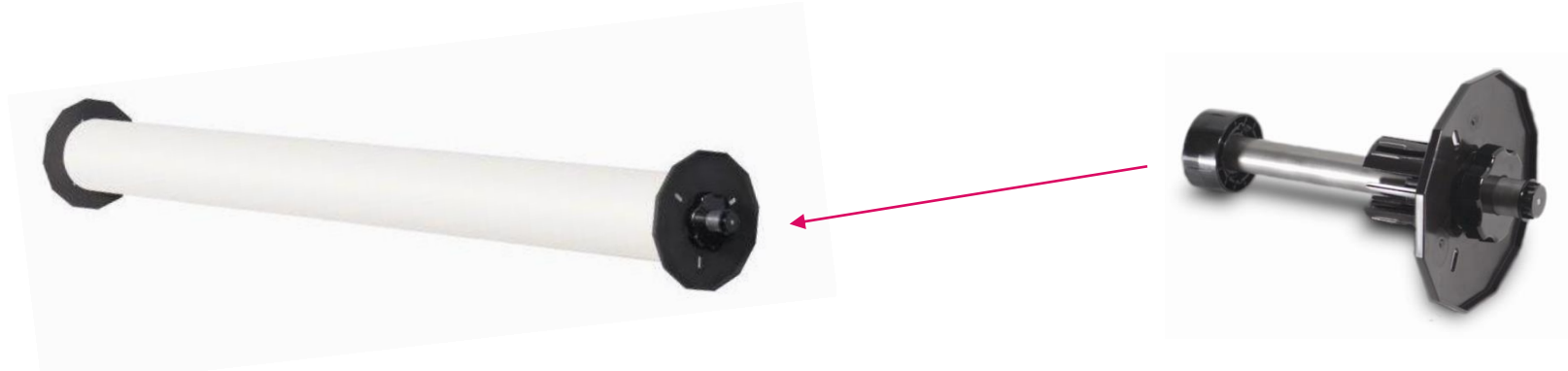


Enhanced Media Handling

New Media Feed Flanges

Enhanced
media
handling

Push the media flanges into the core of the media roll.



By twisting the handle clockwise, the inside spreads out and locks the flanges.



Enhanced Media Handling

New Roll Off System

Enhanced
media
handling

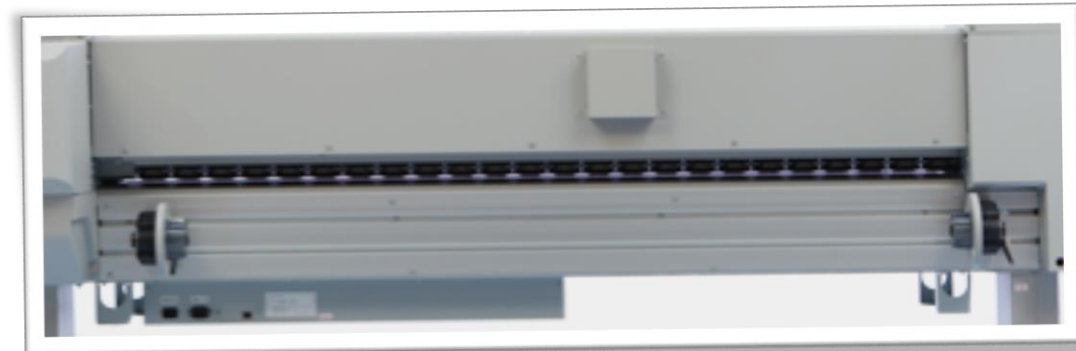
Newly built roll off system

Media roll “rests” on movable sliders

Once you have mounted the flanges, you simply place the roll on the roll off system.



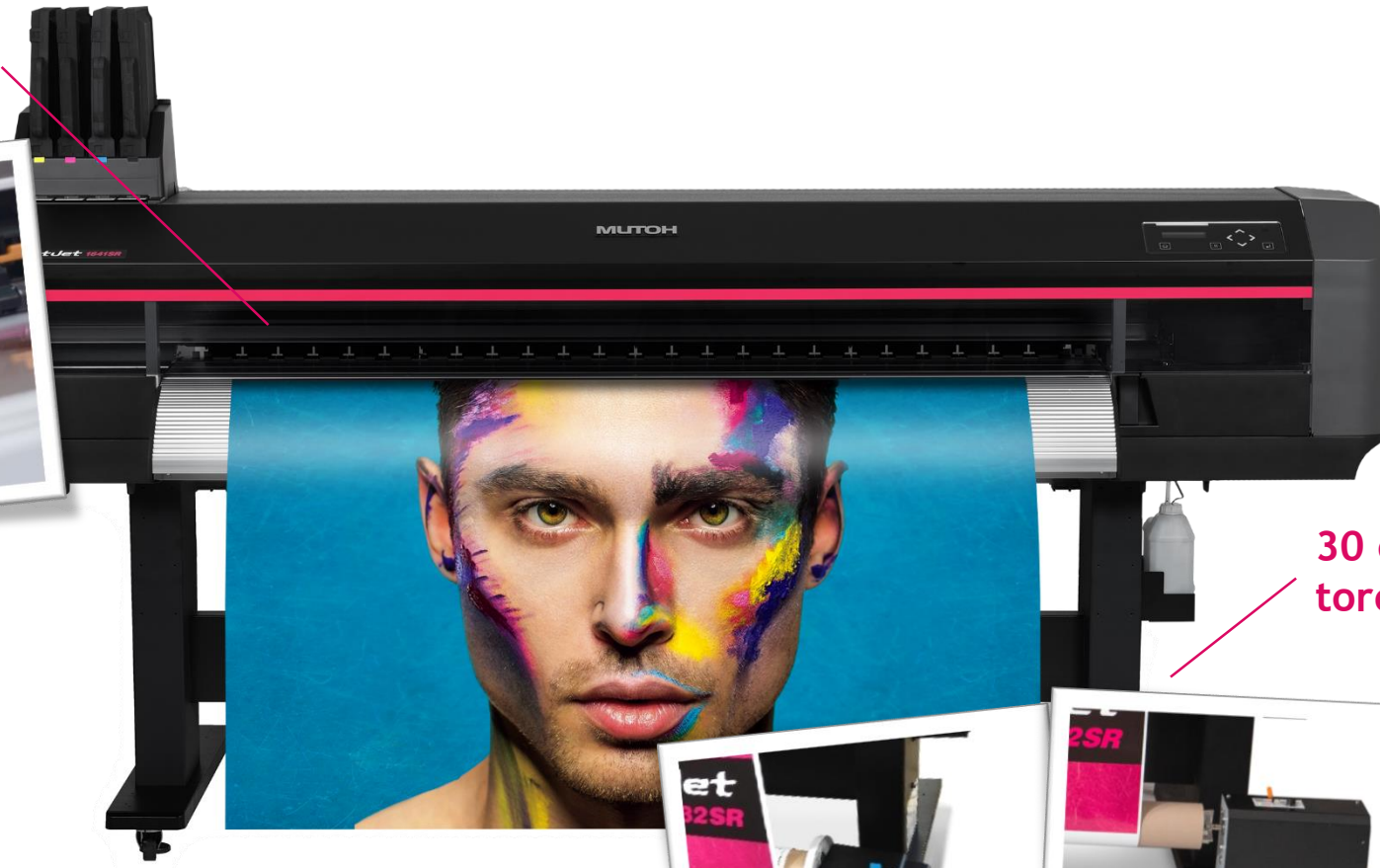
versus VJ-system



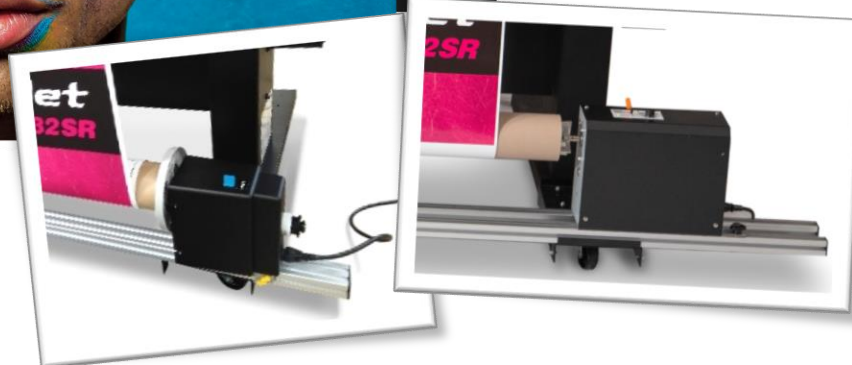
Enhanced Media Handling

Enhanced
media
handling

Multi-level pinch roller
system - adaptable pressure



30 or 40 kg motorised
torque winder



Enhanced Media Handling

Improved Media Feed Mechanism

Enhanced
media
handling

- New multi level pinch rollers with adaptable pressure (up to 800 g)



- Advantages

- Worry free loading and optimum transport of the widest range of media :
 - Conventional media for solvent printers
 - Thin media
 - Delicate media
 - Slippery media



Enhanced Media Handling

Improved Media Feed Mechanism

Enhanced
media
handling

Adaptable Pressure - 4 levels:

HIGH (700 - 800 g)	Media of which back side is slippery - backlit, synthetic paper, self adhesive PVC with PE liner, etc.
MIDDLE (500 -600 g)	Standard media - PVC, tarpaulin, etc.
LOW (300-400 g)	Thin & delicate media, exclusive softsign fabrics, etc.
PARTIAL PRESSURE (0 g)	Will avoid cockling for thin and delicate media



Enhanced Media Handling

Motorised Take-up Systems

30 kg Torque winder system

- Torque controlled continuous motorised take-up system
- DC geared motor drive
- Allows take-up of standard media rolls up to 30 kg
- Maximum roll-up diameter of 150 mm
- Face in & face out winding
- Adjustable torque strength & repositionable flanges for different media widths

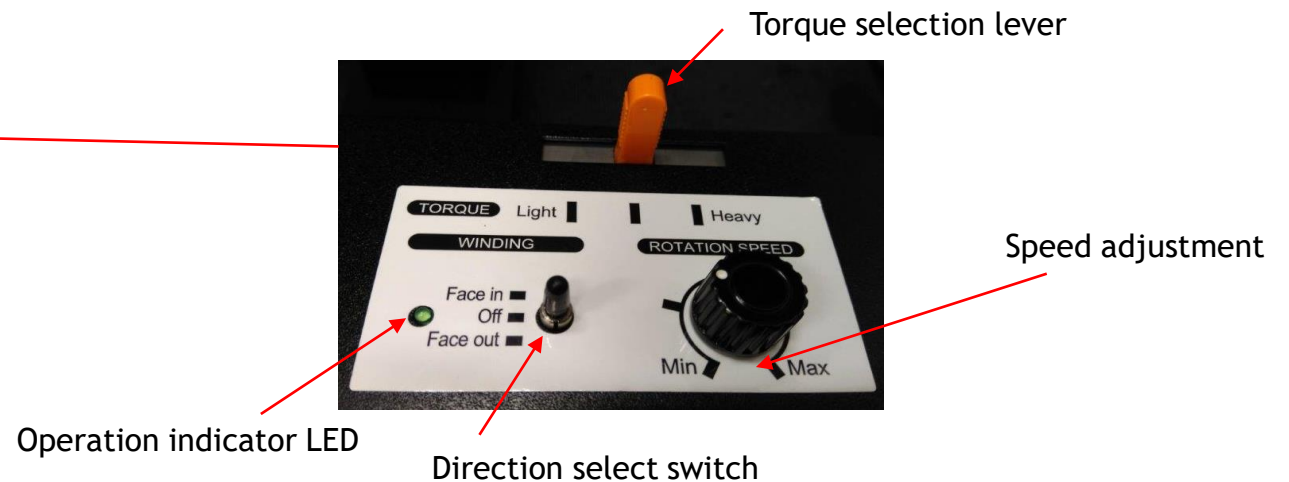
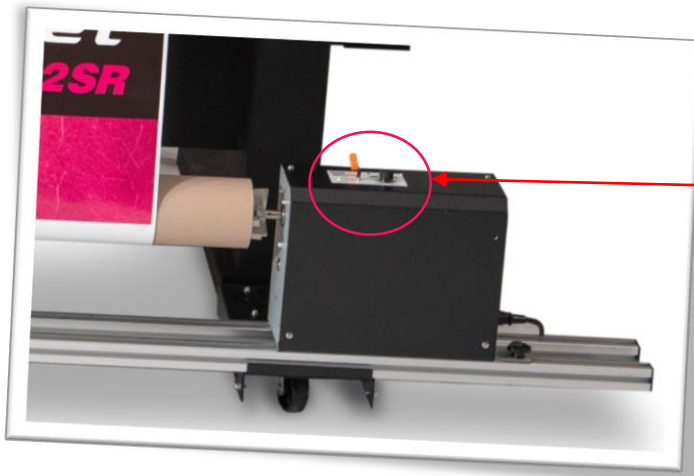


Enhanced Media Handling

Motorised Take-up Systems

NEW 40 kg Torque winder system

- Long-life brushless DC motor - low noise level
- Adapts to a wide range of media and various printing modes by using the 3-step take-up torque and stepless speed adjustment functions.
- Face in & face out winding
- Includes power saving function to automatically adapt the take-up rotation speed to the lowest speed when the printer stops printing for a certain time.



NEW Generation Eco-Solvent Inks

MS41 series

New
generation of
eco solvent
inks

- Mutoh's fourth generation Sign & Display inks
- Up to 7 colours
- 1 liter packs - in foil - less waste
- Economical : 20 % cost reduction ! (vs. ValueJet eco ultra liter packs)



XPJ-1641SR 4-Colour Configuration



XPJ-1682SR 7-Colour Configuration



XPJ-1682SR 2x4-Colour Configuration



NEW Generation Eco-Solvent Inks

MS41 series

New
generation of
eco solvent
inks



- 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
- 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

* 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

NEW Generation Eco-Solvent Inks

Front Access Ink Cases

- Re-usable ink cases
- Front positioning for easier ink exchange
- Chip card separated from ink pack
- LED lamp flashes when ink level is low
- Replace empty ink packs while printing (integrated subtanks)

New
generation of
eco solvent
inks



NEW Generation Eco-Solvent Inks

MS41 Ink Consumption

New
generation of
eco solvent
inks

Average ink consumption : 8 ml/m²
for regular coverage at 720 dpi
(CMYK setup)

Average ink cost : 1,192 €/m²

Versus Eco Ultra ink cost

- 220 ml cassettes - saving 110 % / m²
- 440 ml cassettes - saving 75 % / m²
- 1 litre packs - saving 20 % / m²



ISO Image Cafeteria

Enhanced Serviceability & Maintenance

Enhanced
maintenance /
serviceability

Expanded opening &
illuminated print platform



IC chip card separated from ink packs

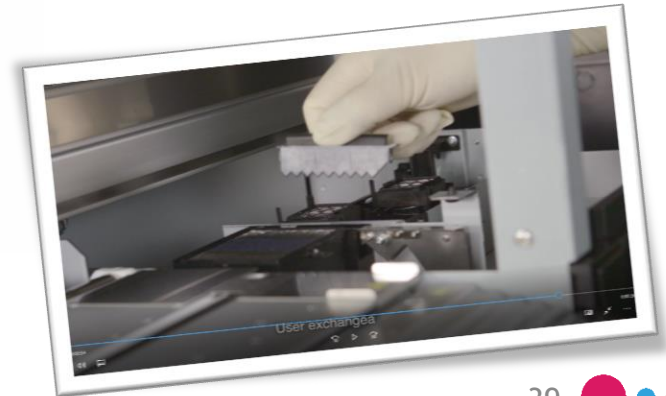


Smart PCB box design



Clean heads individually

User Replaceable Wiper



Enhanced Serviceability & Maintenance

Expanded Opening & Illuminated Print Platform

Enhanced
maintenance /
serviceability



- Front cover can be opened in 90° angle
- LED lights above the print platform for easy inspection, diagnosing and adjustments

Enhanced Serviceability & Maintenance

IC Chip Card Separated from Ink Packs

Enhanced
maintenance /
serviceability



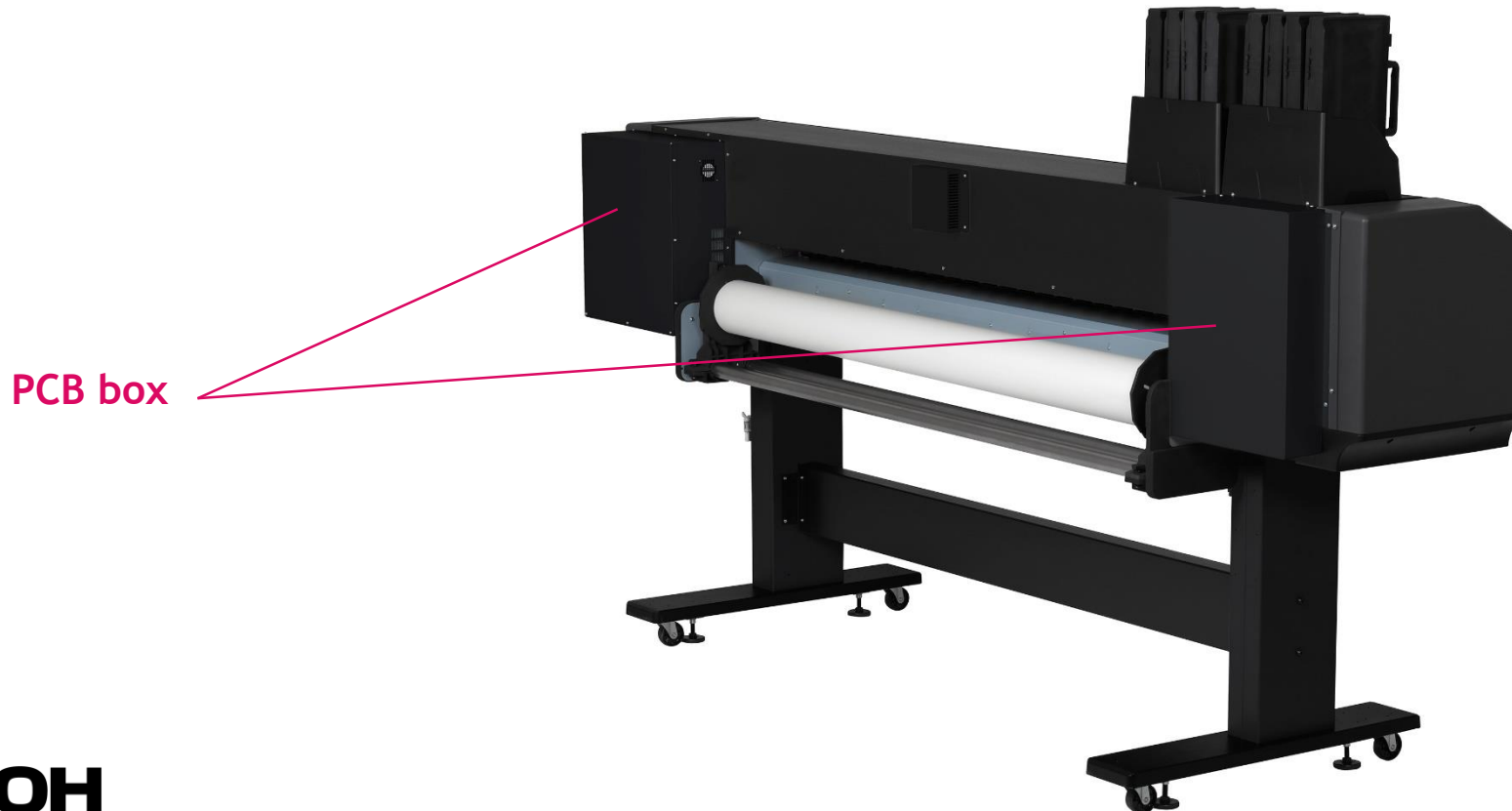
- Individual LED light indicates ink level status
- Reduce smart chip errors

Enhanced Serviceability & Maintenance

Smart PCB Box Design

Enhanced
maintenance /
serviceability

- PCB box at the rear of the printer - easy access to all electronics
- Wet parts & electronics in different areas - no risk of damage due to accidental ink leaks in the maintenance station



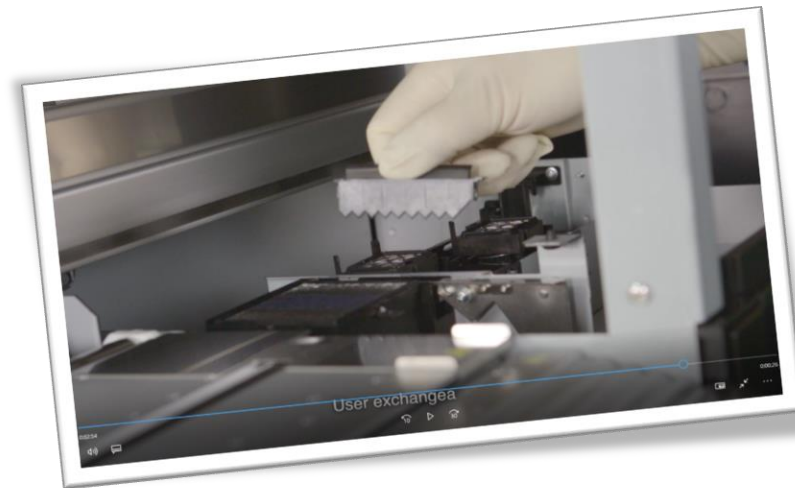
Enhanced Serviceability & Maintenance

Enhanced Periodical Maintenance

Enhanced
maintenance /
serviceability

Enhanced periodical maintenance by operator

- Possibility to clean heads individually (1682SR) - less waste
- User replaceable wiper



Sweet Spot Speed Range



XpertJet 1641SR



XpertJet 1682SR

Colour Setup	C M Y K	C M Y K Lk Lc Lm	C M Y K C M Y K
Production Sweet Spot Speed Range ^(*)	5 - 10 m ² /h	5 - 10 m ² /h	10 - 15 m ² /h

^(*) The indicated speed range is applicable for worry free printing, allowing *the broadest type of work and graphics selection ranging from poster to small detailed stickers for short viewing distances*. Based on experience with previous generations of Mutoh Sign & Display printers.

The true printer speed range is a lot wider. See slide “Performance Overview”.

Performance Overview ¹



XpertJet 1641SR



XpertJet 1682SR

Colour Setup	C M Y K	C M Y K Lk Lc Lm	C M Y K C M Y K
1440 x 1440 dpi ⁽²⁾	3.0 m ² /h	2.5 m ² /h	5.4 m ² /h
720 x 1440 dpi ⁽²⁾	6.1 m ² /h	5.3 m ² /h	10.9 m ² /h
720 x 1080 dpi ⁽²⁾	8.2 m ² /h	7.2 m ² /h	15 m ² /h
720 x 720 dpi ⁽³⁾	14.0 - 20.5 m ² /h	10.9 - 18.0 m ² /h	21.0 - 36.0 m ² /h
360 x 720 dpi ⁽²⁾	29.2 m ² /h	25.1 m ² /h	48.2 m ² /h
360 x 360 dpi ⁽⁴⁾	53.4 m ² /h	48.1 m ² /h	87.0 m ² /h

¹ Applicability to be judged on individual basis and depending on region, application and print viewing distance.

² Indicates the most popular speed for this print resolution. Based on experience with previous generations of Mutoh Sign & Display printers.

³ Per print resolution a complete speed range can be created by varying the shuttle speed, uni-dir & bi-dir choice, weave (i²) settings, print passes etc.
The given example shows the variation range for 720 x 720 dpi.

⁴ Maximum speed. Applicability to be judged on individual basis.

XpertJet 1641SR/1682SR – Key Specifications



XpertJet 1641SR



XpertJet 1682SR

Print Head	1 piezo head	2 piezo heads (staggered)
Nozzle Configuration	180 nozzles x 8 lines / head	
Drop Volume Range (pl)	3.5 to 35	
Resolutions	360x360, 360x720, 720x720, 720x1080, 720x1440, 1440x1440 dpi	
Head Height	Low : 1.5 mm / Middle : 2.5 mm / High : 4.0 mm	
Media Thickness ¹	0.3 / 1.3 / 2.8 mm	
Media Width	Up to 1625 mm (63.97")	
Max. Print Width	1615 mm (63.58")	
Media Measurements ²	Ø 150 mm / 2" or 3" / 30 kg	
Ink Type / Volume	Eco Solvent MS41 series inks / 1 litre packs	

¹: Maximum media thickness is specified per head height. ²: Standard non-motorised roll-off system.

Latest Piezo Variable Drop Print Head Technology

Nozzle Configuration	180 nozzles x 8 lines
Drop Mass Range (pl) *	3,5 - 4,4 - 7,8 - 8,7 - 16,0 - 21,8
Print Resolutions	Up to 1440 x 1440 dpi



Variable dot

- Higher quality
- Photographic quality - low graininess
- Excellent gradients - skin tones

High durability
print heads

- Lower long-term cost

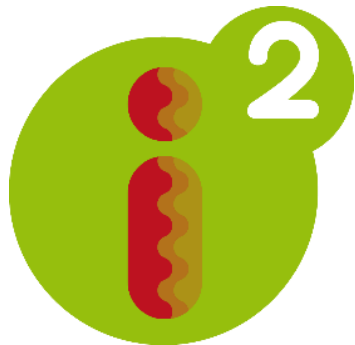


PIEZO VARIABLE DROP

*: Maximum 3 drop sizes can be used per drop family

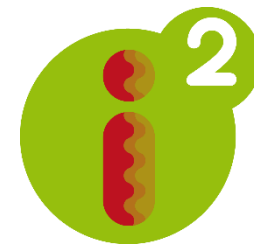
Highest Quality Inherited From ValueJet

- Intelligent Interweaving (i^2)
- High image quality of 1440 dpi
 - Print resolution range: 360x360, 360x720, 720x720, 720x1080, 720x1440 & 1440x1440 dpi
- 3 variable drop families

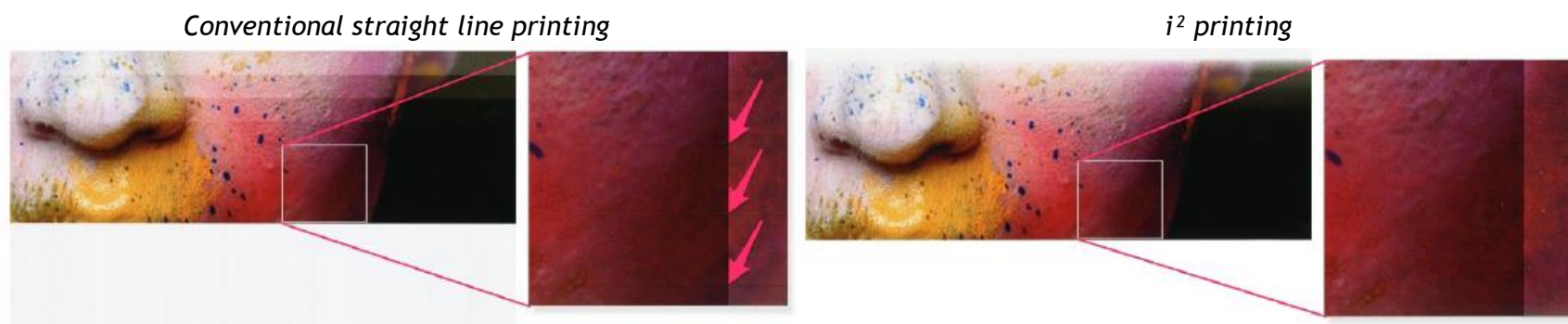


PIEZO VARIABLE DROP

i² Intelligent Interweaving - Benefits



- Overall better printing quality
- Improved operator comfort
- Improved working tolerances using recommended print modes
- Avoids production loss
- Better planning & scheduling of print production



XPJ-1682SR Ink Setup Guidance



***XpertJet* 1682SR**



Main focus on speed production & outdoor work :

Car wraps
Banners
Billboards
Soft Signage Textile



Main focus on high quality, photorealistic prints (smooth skin tones & gradients) for short viewing distance (< 1 m) :

Indoor prints
Photo reproduction prints
Fine art
Small sized prints / small stickers

In-the-box Software



FlexiPRINT SE Mutoh Edition

FPSEME / V19

High-Featured PDF RIP

- 64-bit PDF RIP
- Tiling
- Nesting with AutoNest
- Print & Cut workflow
- Print Copy Counter
- Fine-Tune Pantone/Spotcolourmatching tool
- Easy to use, short learning curve

FlexiPRINT SE Mutoh Edition

FPSEME / V19

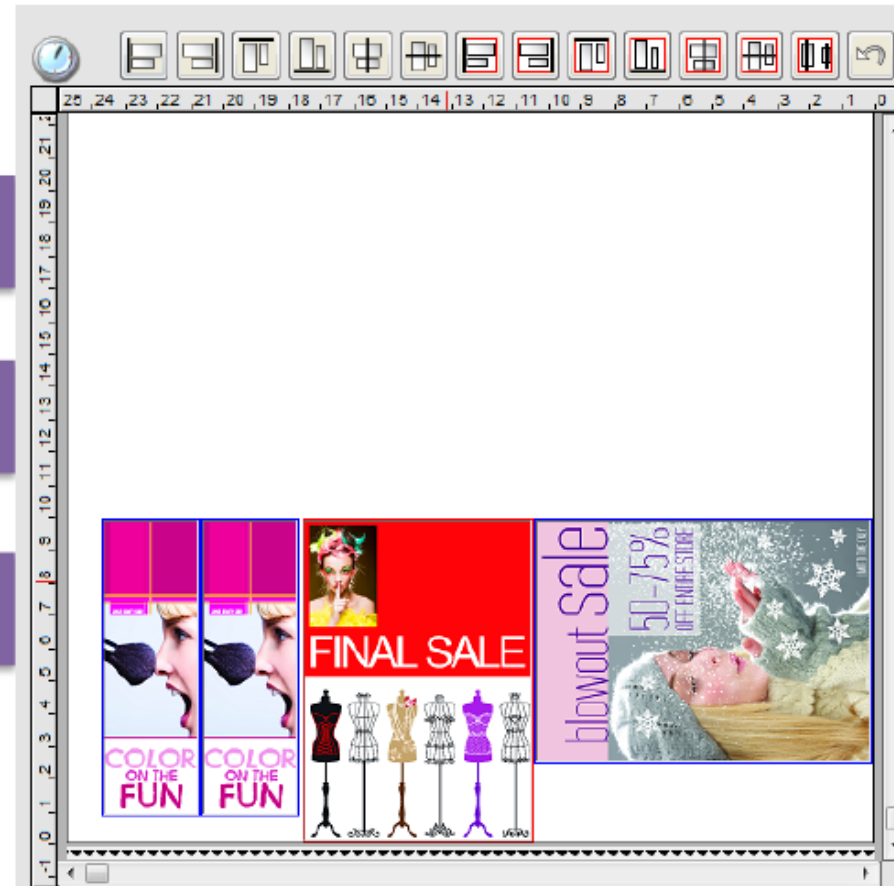


Nesting Alignment Controls

One-click job nest alignment

Align on media roll or page

Align on job edges for faster edge cutting



FlexiPRINT SE Mutoh Edition

FPSEME / V19



Mobile App

New rotate-view production trend charts

Apple Watch support

Android Wear support



RIPCenter ValuePlus Mutoh Edition

SRM-RIPCTR-MUT / V19

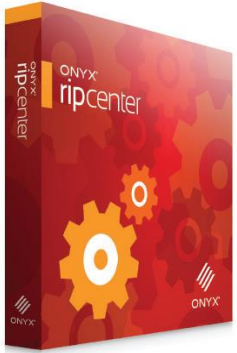


High-Featured PDF RIP

- Full 64-bit platform for RIP & applications
- Latest Adobe PDF Print Engine
- Job edits on the fly with Job Editor
- Automatic nesting and job preview
- Streamline job preparation
- Easy to use calibration tools to maintain consistent print quality
- Simple to use intuitive interface

RIPCenter ValuePlus Mutoh Edition

SRM-RIPCTR-MUT / V19



ONYX RIPCenter software combined with MUTOH printers provides a winning combination for the control and simplicity needed to achieve consistent high quality output at an affordable price. The versatile tools in ONYX RIPCenter software make it easy to prepare jobs and create sellable prints faster.

Simple

- Automate repetitive tasks with tools for print-only or print & cut applications
- Simple to use intuitive interface
- Automatic nesting and job previews
- Easy-to-use calibration tools to maintain consistent print quality
- Streamline job preparation, reduce errors and minimize material waste with ONYX Quick Sets

Innovative

- Latest Adobe PDF Print Engine
- Full 64-bit platform for RIP and applications
- Colour managed previews provide confidence in accurate, final output before printing
- Job edits on the fly with Job Editor
- Track key customer and job information throughout the workflow with Job Ticketing
- Produce vibrant colour with software driven by ONYX Colour, the proprietary colour engine from Onyx Graphics

Proven

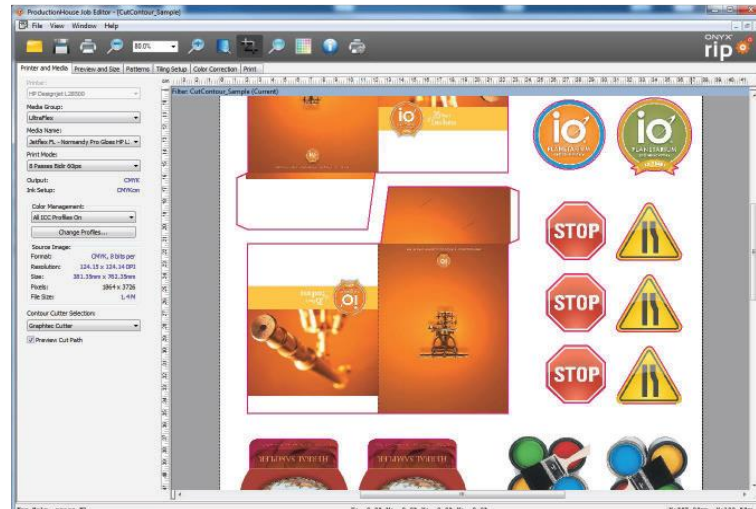
- Eliminate bottlenecks with record RIP speeds
- Consistent colour across devices and file types
- Easily train new employees with an intuitive user interface designed for your workflow

RIPCenter ValuePlus Mutoh Edition

SRM-RIPCTR-MUT / V19



Complete Print & Cut Workflow



- A fully integrated print & cut workflow
- Preview cut paths, before submitting images to production, to enhance confidence in final output
- Eliminate the additional printing step and import jobs directly into the CUT-Server module with cut-only workflow

RIPCenter ValuePlus Mutoh Edition

SRM-RIPCTR-MUT / V19



Print & Cut Workflow with Quick Startup



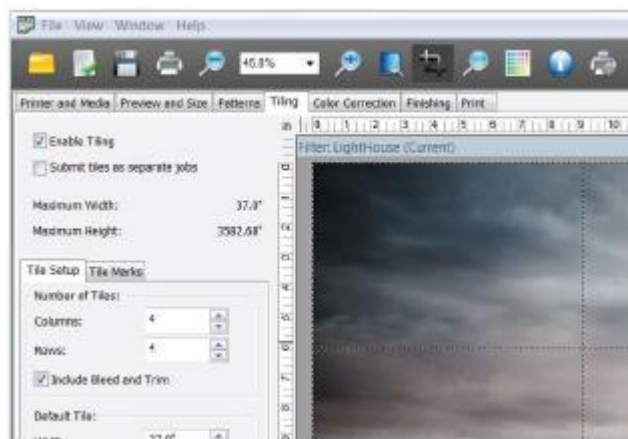
- Open and print your first file in minutes with intuitive functions
- View active, upcoming and previously printed files within a single job queue
- Access on-line videos and training through ONYX TV and onyxgfx.com

RIPCenter ValuePlus Mutoh Edition

SRM-RIPCTR-MUT / V19



Job Preparation for Fast, Effective Printing



- Easily modify jobs, without switching applications, with access to Job Properties from RIPQueue
- Live colour managed preview shows colour correction and real time edits
- Simplify your workflow and minimize user decisions with ONYX Quick Sets

XpertJet 1641SR & 1682SR - Movie



<https://www.youtube.com/user/DDVatMEN>