XpertJet 1682WR

64" Wide Format Dye Sublimation Printer

Product Guide

Apr. 2021
Version 1.0

Discover the XpertJet 1682WR

1 Product Concept, Target Public & Application Possibilities

2 Key Features, Product Enhancements and Performance

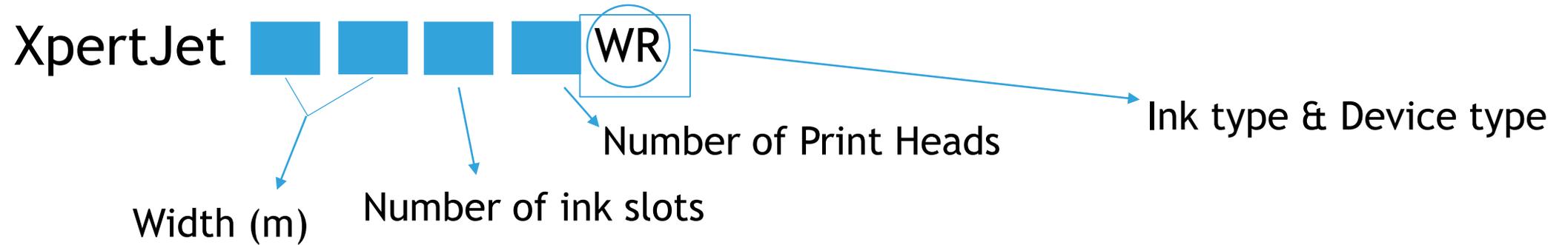**3** Standard Configuration & Pricing

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Product Concept XPJ-1682WR

- Successor model for ValueJet 1638WX

- Maintain high industry standards set by ValueJet range

- Reach very robust output quality:
  - Overall higher print quality
  - Banding free output over a wider speed range

- New features & product enhancements

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Product Concept XPJ-1682WR
Model Number Explained

XpertJet ▢ ▢ ▢ ▢ (WR)

Width (m)

Number of ink slots

Number of Print Heads

Ink type & Device type

XpertJet-1682WR

- 1.6 m
- 8 channels – 4, 6, 7 or 8 colours
- 2 heads
- Water based
- Roll

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Target Public

- Starters and established print service providers
- Businesses looking for both high quality and volume printer
- Existing ValueJet water-based printer users looking for higher productivity
- Businesses in on-demand rapid customization of soft signage & transfer to polyester coated or polyester based substrates

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Application Possibilities
Custom Apparel

Personalised clothing
- Fast fashion
- Blouses
- Shirts
- …

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Application Possibilities
Sportwear and Sporting Goods

- Sportswear
- Swimwear
- Snowboards
- Skateboards
- Helmets
- …

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Application Possibilities
Textile / Interior Décor

- Cushions, curtains, carpets, table cloths, …

- Corporate branded textile furnishings

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Application Possibilities
Soft Signage

- Advertising (POP, silicone edge graphics & backlit displays for shows & events, retail décor)
- Art replications, theatre backdrops, …
- Information : directional banners, receptions, …

Application Possibilities
Polyester Coated or Polyester Based Gadgets

Personalised gadgets
- Bags
- Umbrellas
- Key hangers
- Mouse pads
- Pillows
- …

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Key Specifications XPJ-1682WR

Print Head	2 piezo heads (staggered)
Nozzle Configuration	180 nozzles x 8 lines / head
Drop Volume Range (pl)	2.8 to 33.9
Resolutions	360 x 360 dpi up to 1440 x 1440 dpi
Head Heights	Low : 1.5 mm / Middle : 2.5 mm / High : 4.0 mm
Media Thickness [1]	0.3 / 1.3 / 2.8 mm
Media Width	500 mm (19.96") - 1625 mm (63,97")
Max. Print Width	1615 mm (63.58")
Media Measurements [2]	Ø 150 mm / 2" or 3" core / 30 kg, 40 kg or 100 kg take-up systems For roll off until Ø 250 mm, Mutoh offers a 100 kg feed and take-up unit.

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

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Latest Piezo Variable Drop Print Head Technology

Nozzle Configuration	180 nozzles x 8 lines
Drop Mass Range (pl) *	2,8 – 6,8 – 7,4 – 11,0 – 17,0 – 33,9
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

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Illuminated Print Platform

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

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Intuitive Operation Panel

- 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

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Media Tracker

1. Enter media length upon loading new media roll

2. Print bar code before removing roll in use

3. Upon reloading roll, printer will read barcode and detect how much media is left on roll
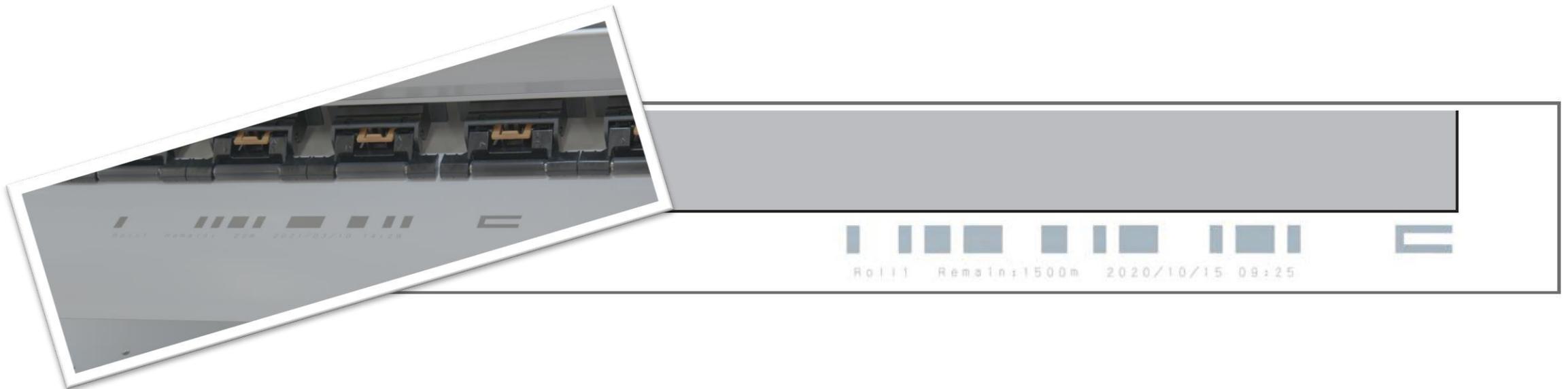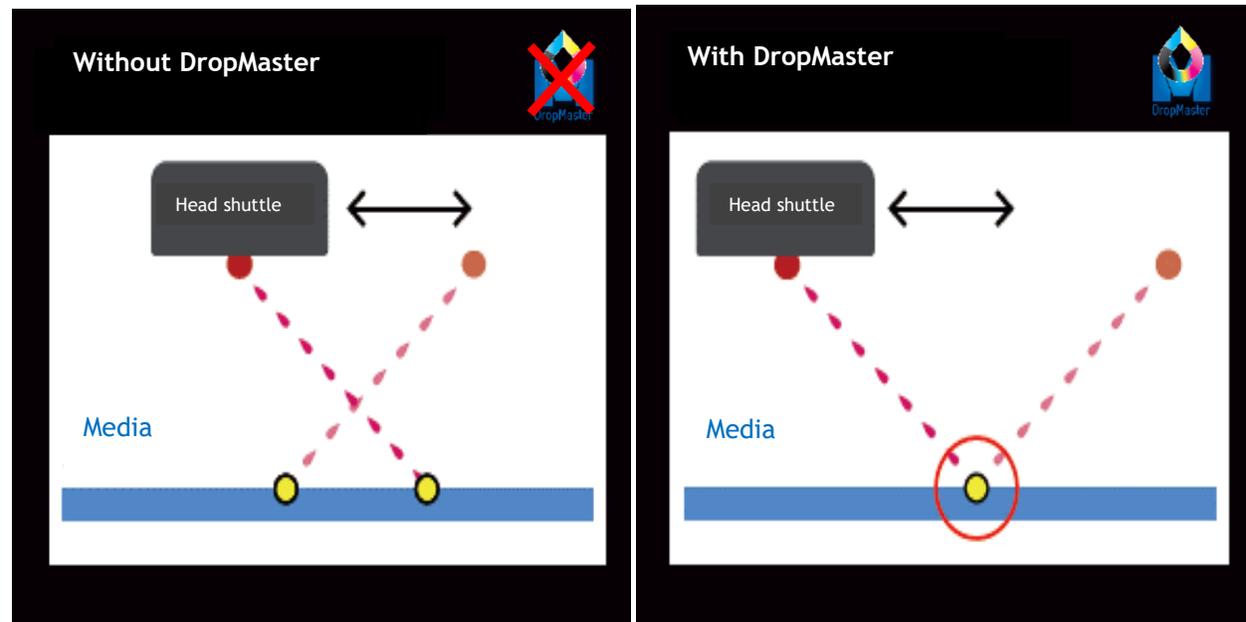
DropMaster

When the user sets the correct media thickness, 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
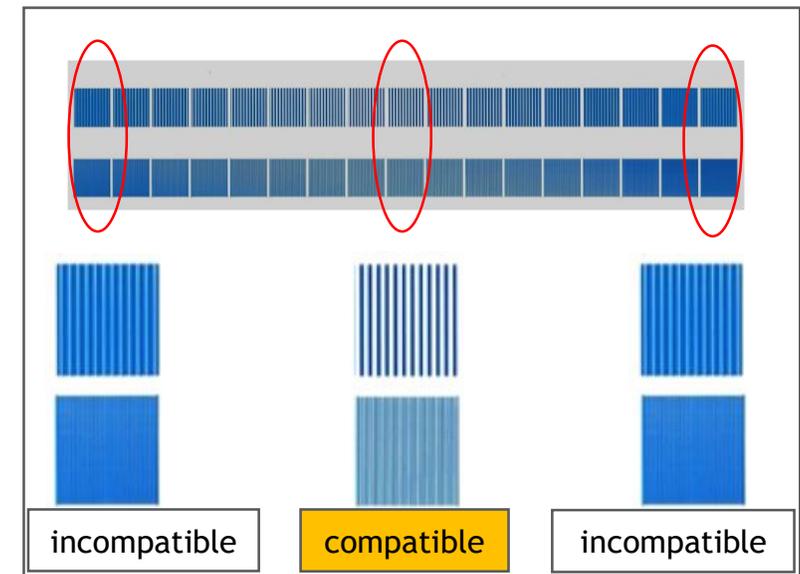

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DropMaster 2

The XPJ-1682WR integrates the next level of DropMaster, DropMaster2:

Automated bidirectional alignment through built-in colour sensor

Advantages :

- fully automated calibration[1]
- reduced waste
- no variation in adjustment among different operators

incompatible | compatible | incompatible

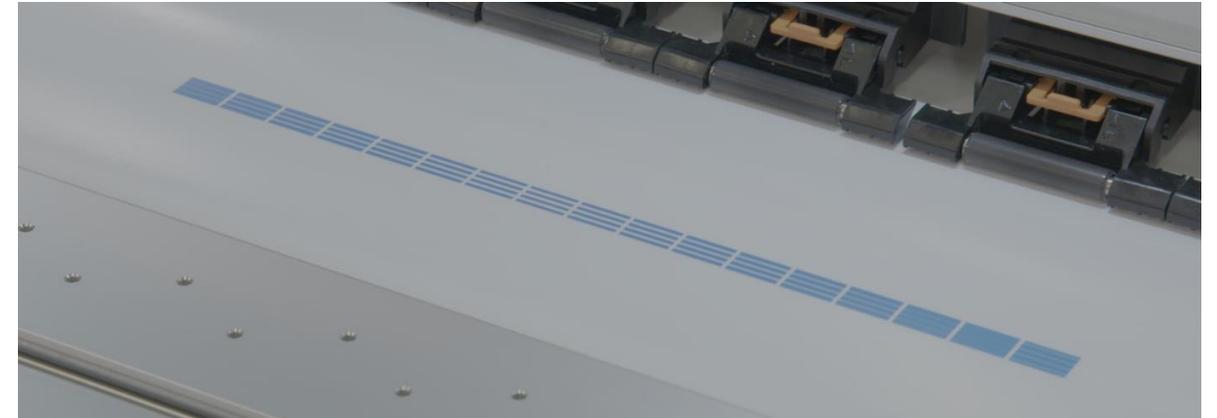1 : The automatic adjustment may be misleading when using an ink/paper combination suffering from heavy cockling.

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Feed Master

Automated paper feed adjustment through built-in colour sensor

Benefits :

- Fully automated calibration[1]
- Reduced waste
- No variation in adjustment among different operators

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

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Performance XPJ-1682WR

Thanks to the **renewed print head control tailored to sublimation printing inks**, the XpertJet 1682WR has a more robust output compared to VJ-1638WX:

- Improved nozzle stability
- Improved Dot Quality
- Less satellite drops

- Overall higher print quality
- Banding free output over a wider speed range

|	
720 x 1080 dpi, 6p, 12-scan	10.0 m²/h
360 x 1080 dpi, 3p, 6-scan	18.8 m²/h
720 x 720 dpi, 2p, 4-scan	30.7 m²/h
360 x 1080 dpi, 3p, 3-scan	40.7 m²/h
360 x 720 dpi, 2p, 2-scan	47.8 m²/h

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Highest Quality Inherited From ValueJet

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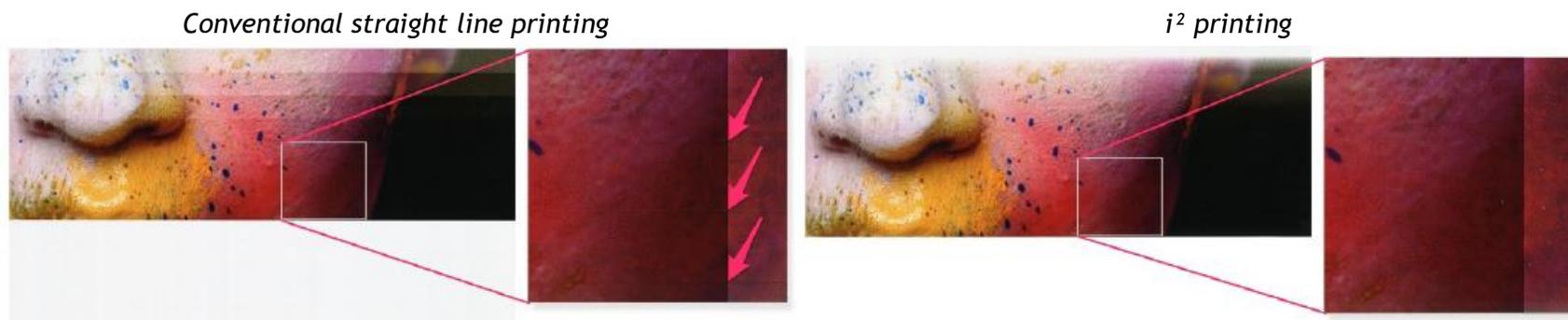- 3 variable drop families

PIEZO VARIABLE DROP

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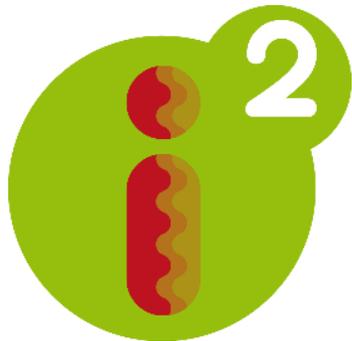
i² Intelligent Interweaving - Benefits
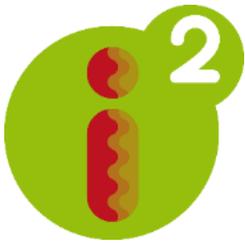
- Overall better printing quality
- Improved operator comfort
- Improved working tolerances using recommended print modes
- Avoids production loss
- Better planning & scheduling of print production

Conventional straight line printing   *i² printing*

VSM Has Evolved to MSM

MSM

- New Graphics User Interface

- Faster response rate versus VSM

- Multilingual support for all functions
  - English, Dutch, French, German, Italian, Portuguese and Spanish

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Mutoh Status Monitor Mobile

MSM

MUTOH Status Monitor

- 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

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MSM For Desktop

Features:

- Printer status

- Heater information

- Remaining ink

- Print information: print time, print mode, print size, ink consumption

Enhanced Media Handling / Transport

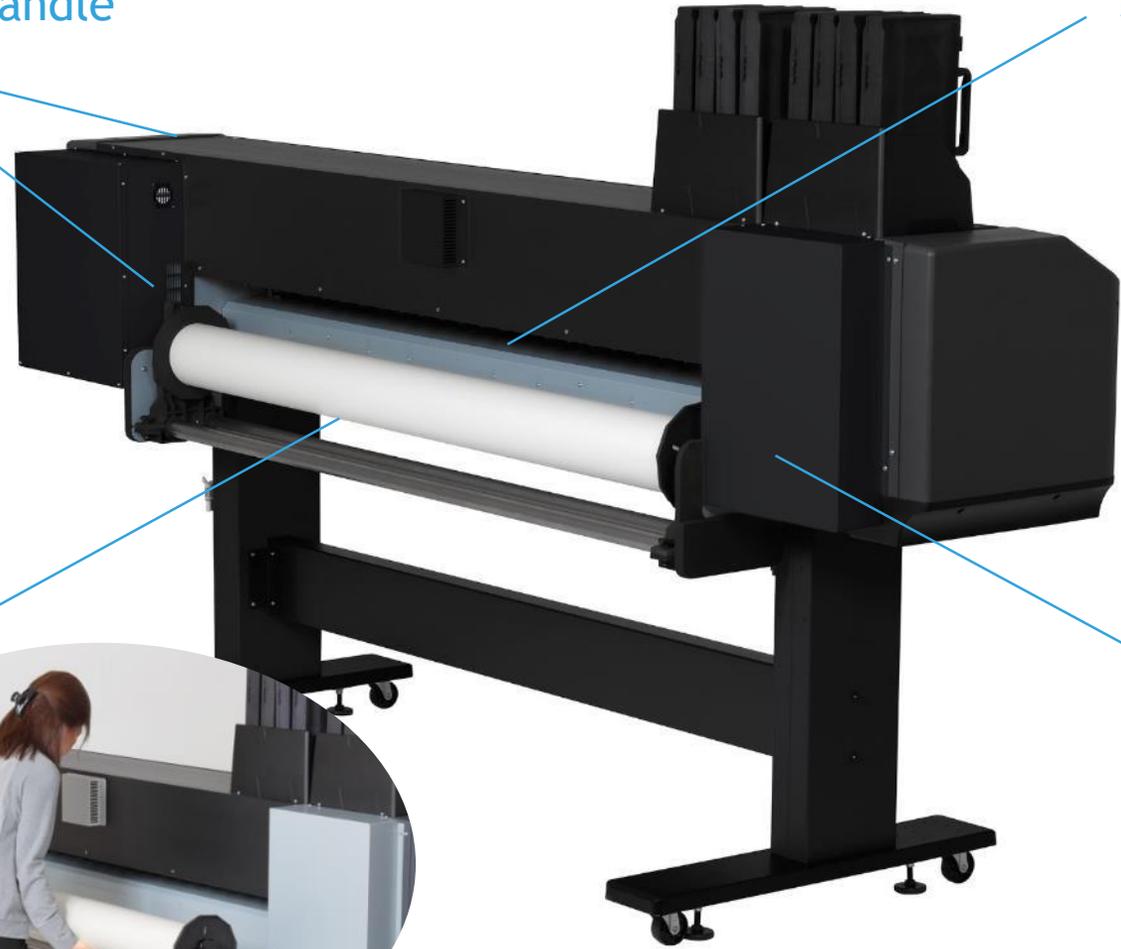**Front & <u>rear</u> pressure roller handle**

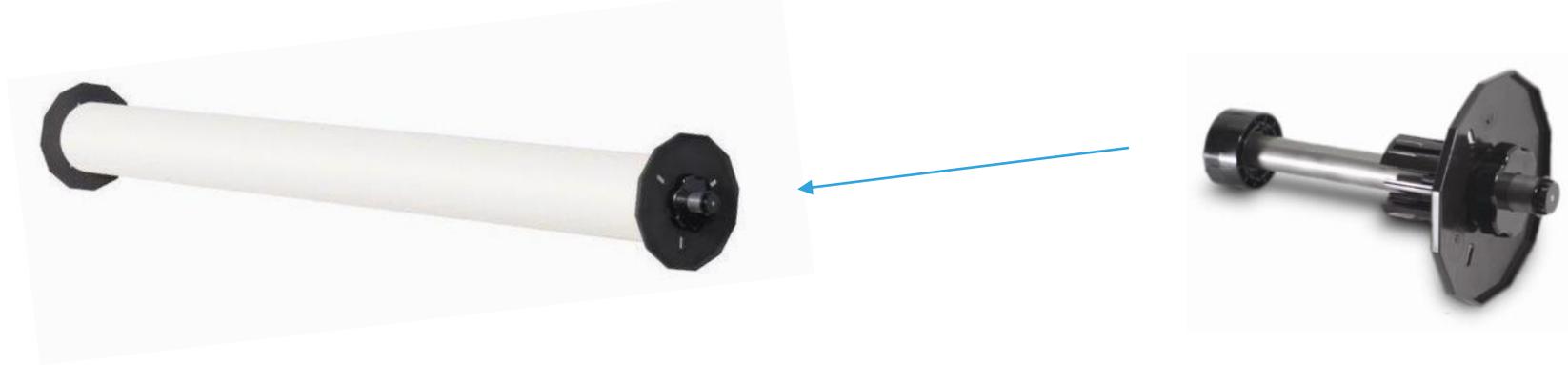**Multi-level pinch roller system – adaptable pressure**

New Roll Off System

New media feed flanges

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New Media Feed Flanges

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

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

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New Roll Off System

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.
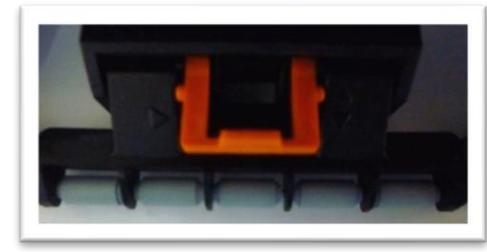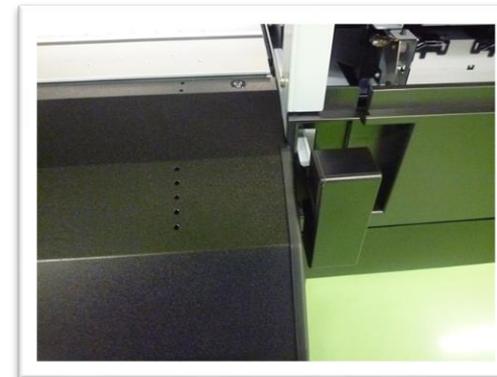

versus VJ-1638WX

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Improved Media Feed Mechanism

- 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 paper for dye sub printers
    - Thin paper
    - Delicate paper
    - Slippery paper

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Improved Media Feed Mechanism

Adaptable Pressure – 4 levels:

| HIGH (700 – 800 g)	Media of which back side is slippery
MIDDLE (500 -600 g)	Standard media
LOW (300-400 g)	Thin & delicate media
PARTIAL PRESSURE = individual disable (0 g)	**Will avoid cockling for thin and delicate media**
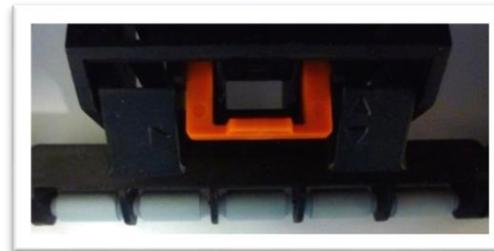
30 kg Torque Winder System

- 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

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40 kg Torque Winder System

- Maximum roll-up **diameter of 250 mm**
- 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.

Torque selection lever

Speed adjustment

Operation indicator LED

Direction select switch

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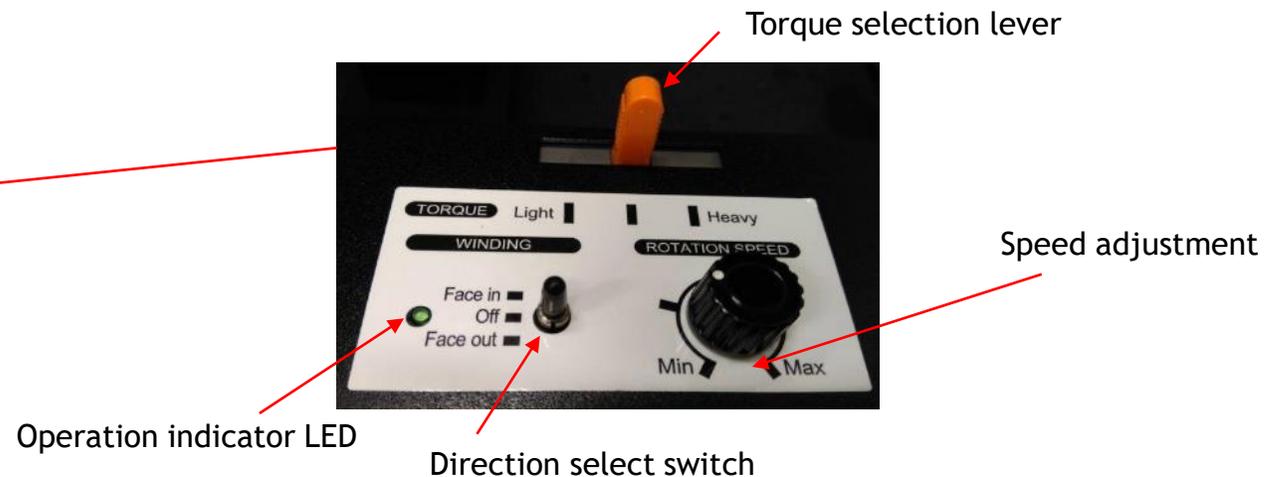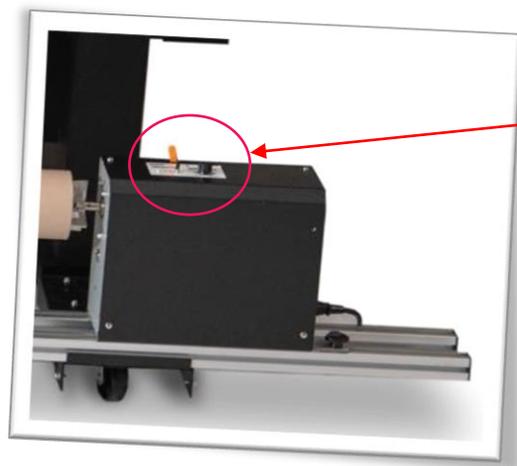
100 kg Feed & Take-up System

- Front & rear diametre up to **250 mm**
- Suited for your production intensity and workflow
- For long print runs and large graphics, completed jobs securely wound
- Easy and precise workflow; ready e.g. for feeding through roll-to-roll calendars
- Keep substrates tightly wound, avoid nicks, creases and scratches in the substrate
- Keep printed output clean – easy & safe storage

Position adjustment mechanism for tension bar

Installed power switch device in the front arm

Support roll media weights up to 100 kg

Position adjustment mechanism for roll units

Resin type media flange as standard

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Enhanced Serviceability & Maintenance
Smart PCB Box Design

- 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
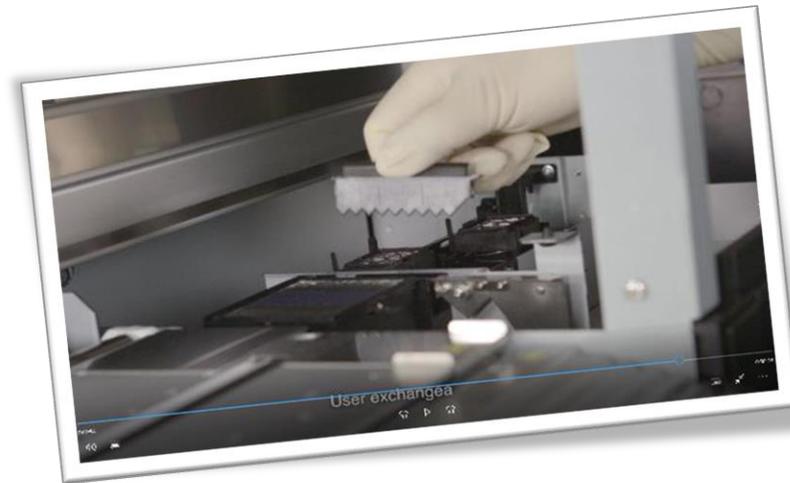

PCB box

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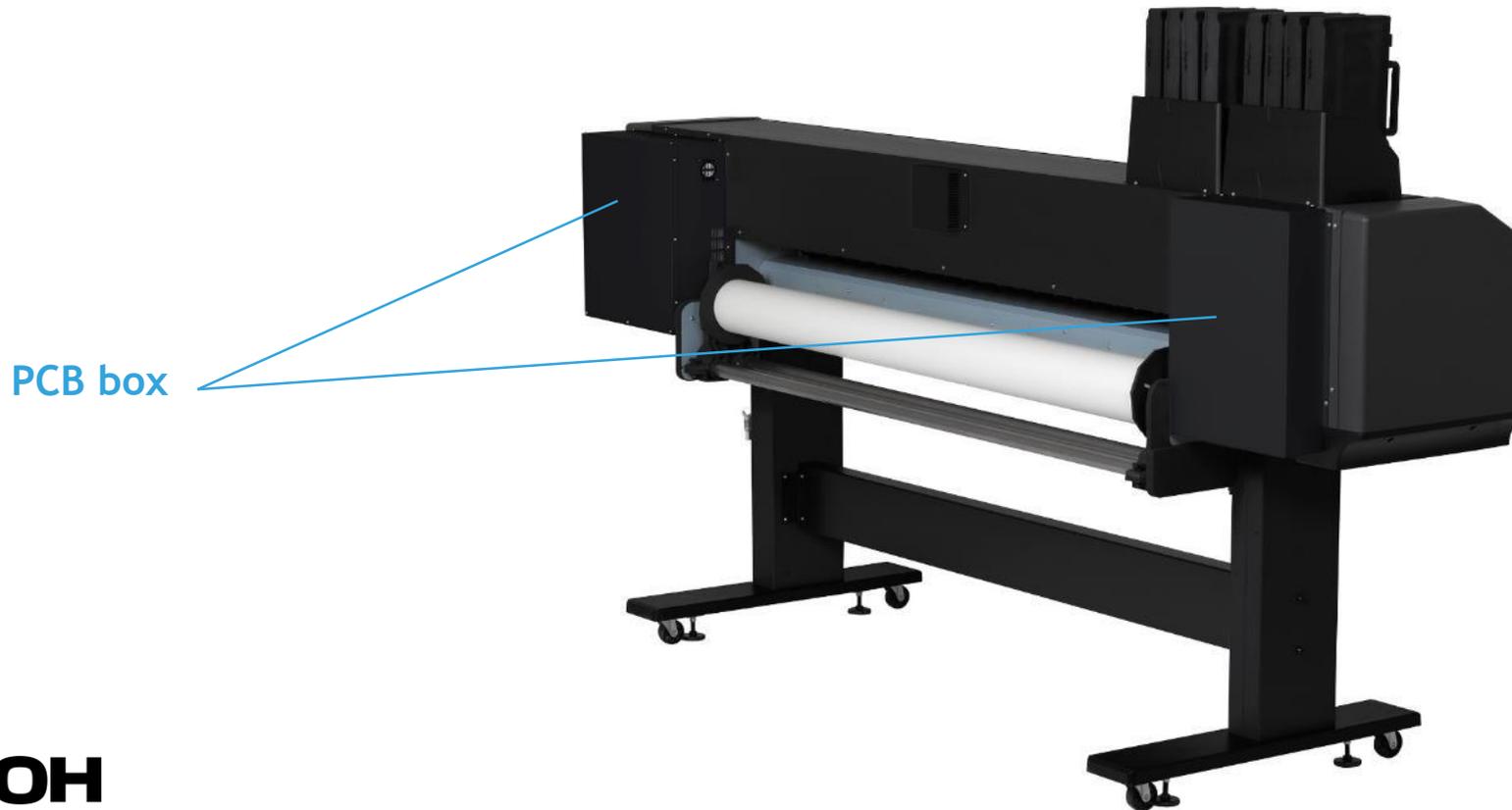
Enhanced Serviceability & Maintenance
Enhanced Periodical Maintenance

Enhanced periodical maintenance by operator

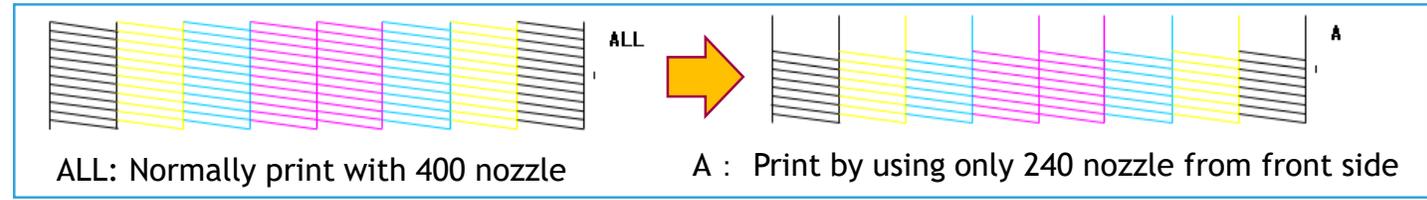- Possibility to clean heads individually – less waste
- User replaceable wiper

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Nozzle Area Select

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

ALL: Normally print with 400 nozzle

A : Print by using only 240 nozzle from front side

With Nozzle Area Select

| Printing | Missing Nozzle | Clean head | Still Missing Nozzle | Disable nozzle area | Continue printing | Technical intervention |

Print heads can be cleaned individually

Nozzle area can be disabled to keep printing

Without Nozzle Area Select

| Printing | Missing Nozzle | Clean head | Still Missing Nozzle | No printing | Technical intervention |

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

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