XpertJet WR Pro Dye Sublimation Printers

Product Guide

MUTOH

October 2022 - Version 1.0

XpertJet PRO

Contents

- Key characteristics
- The three key elements
  - AccuFine
  - i-screen
  - VerteLith
- Quality Up! Speed Up!
- High User Assistance
- Inks

XpertJet PRO

Key Characteristics

XpertJet PRO

Reassuringly Mutoh !

- ❑ Robustly built & reliable printers, delivering **high quality output - first time, every time**
- ❑ New print head technology
- ❑ New weaving algorithms
- ❑ Genuine Mutoh VerteLith RIP software
- ❑ Quality Up! Speed Up!
- ❑ High user assistance for uninterrupted production
- ❑ DS3 series all round dye sublimation inks

XpertJet 1341WR PRO

. 1371 mm media width / 1361 mm print width
. VERY compact footprint : 1.3 m^2 *
. Enhanced maintenance - extra maintenance door
. Now with 3 head heights
. 19 kg non motorized roll off standard
. 30 kg media holder [1]
. 20 kg & 30 kg motorized take up units [1]
. Quality Up! Speed Up!

* (WxDxH) : 1916 x 685 x 1218 mm
[1] Optional items

XpertJet 1642WR PRO

. Successor to ValueJet 1638WX
. 1625 mm media width / 1615 mm print width
. Now with 4 head heights
. 30 kg, 40 kg & 100 kg motorized take up units
. Automated Nozzle Check Unit built-in
. Quality Up! Speed Up!

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XpertJet PRO

Target Public

- Starters and established print service providers
- Budget-sensitive 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 & print/transfer to polyester coated or polyester based substrates

Application Possibilities

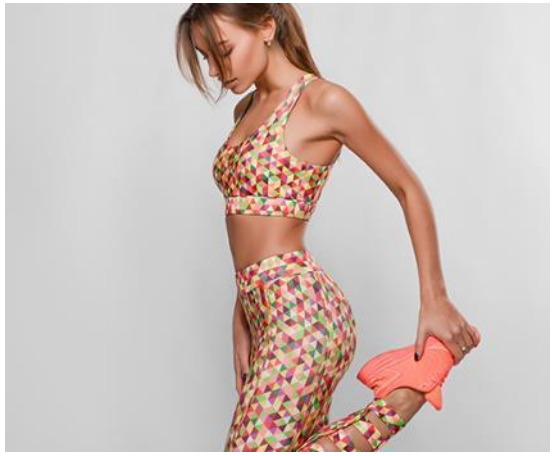
Custom Apparel

Personalised clothing

- Fast fashion
- Blouses
- Shirts
- …

Application Possibilities

Sportswear and Sporting Goods



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

Application Possibilities

Textile / Interior Décor

- Cushions, curtains, carpets, table cloths, …
- Corporate branded textile furnishings

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
- …

XpertJet PRO

The three key building blocks...

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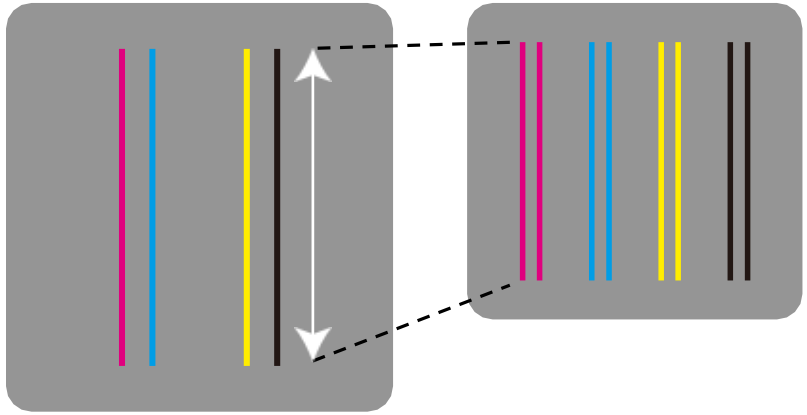
AccuFine 1600 Nozzle Head

Increased nozzle row length

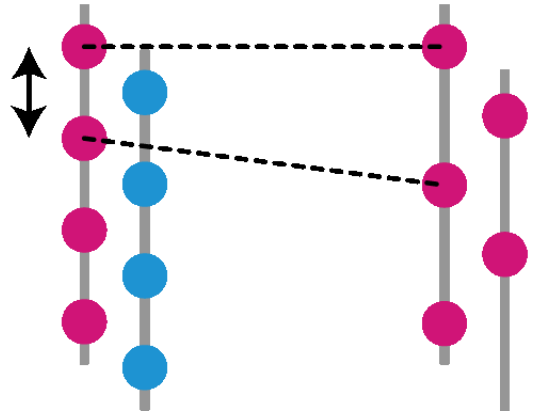
AccuFine 【PH 1638WX/1682WR】



Benefit： higher productivity

High density nozzle pitch

AccuFine 【PH 1638WX/1682WR 】



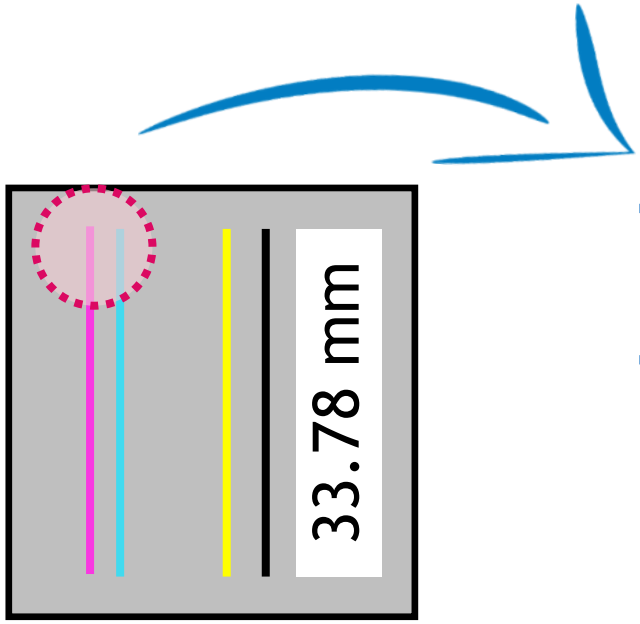
Benefit : higher image quality

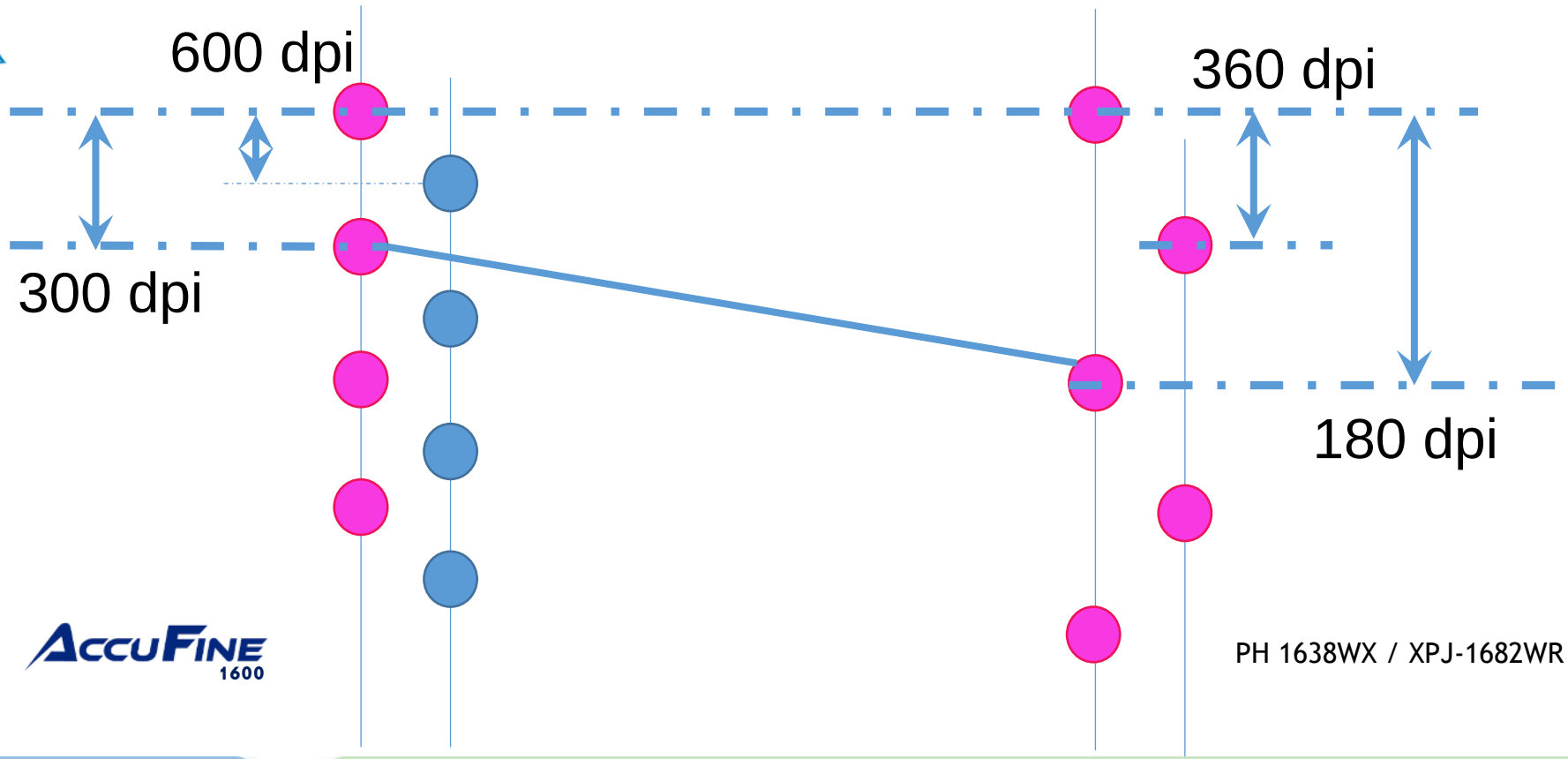
33% Wider

11% More Nozzles

Faster Firing of Drops

AccuFine 1600 Nozzle Head - Layout

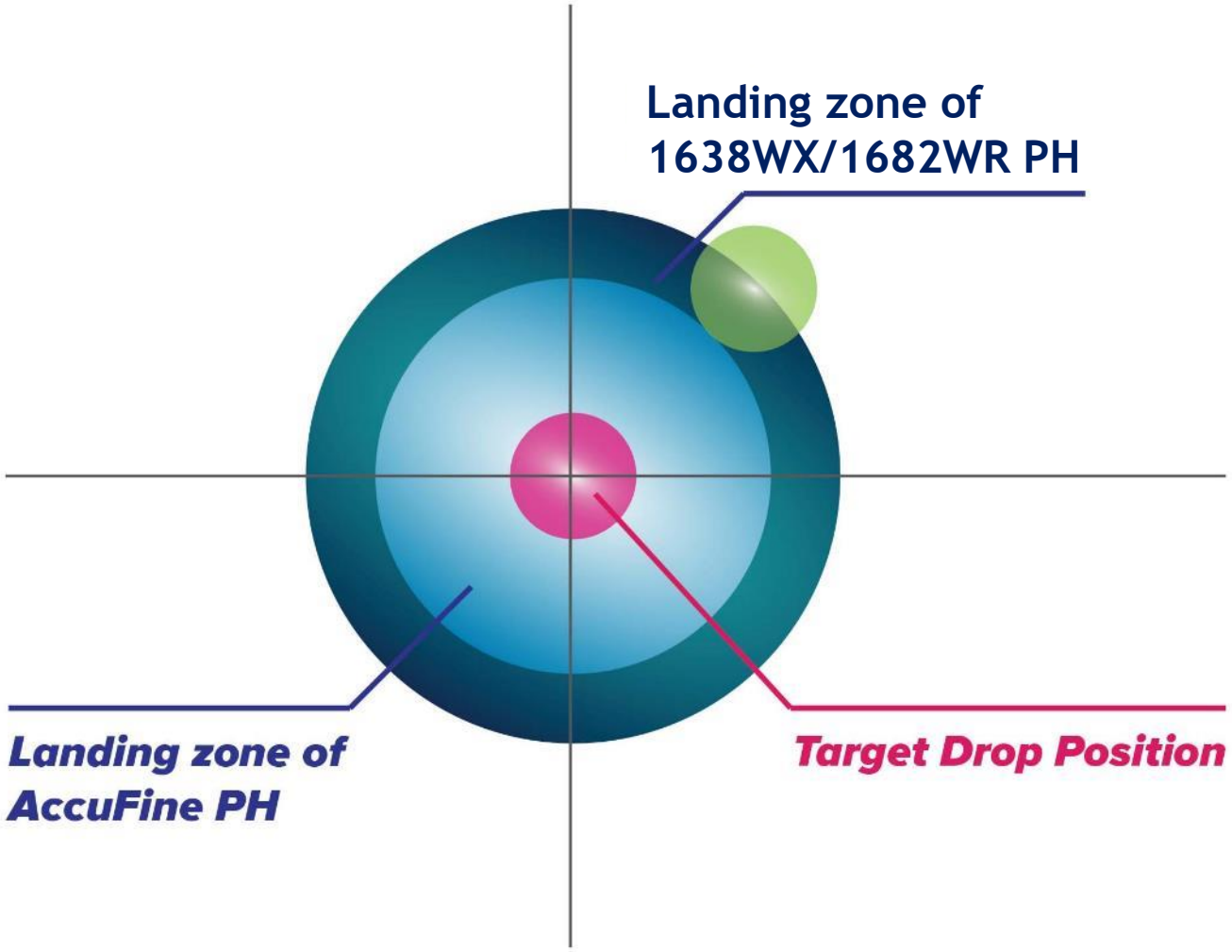




Better Drop Landing Accuracy

Nozzle density from 180 dpi to 300 dpi

Drop Landing Accuracy – Close Up



New i-screen Weaving Technology

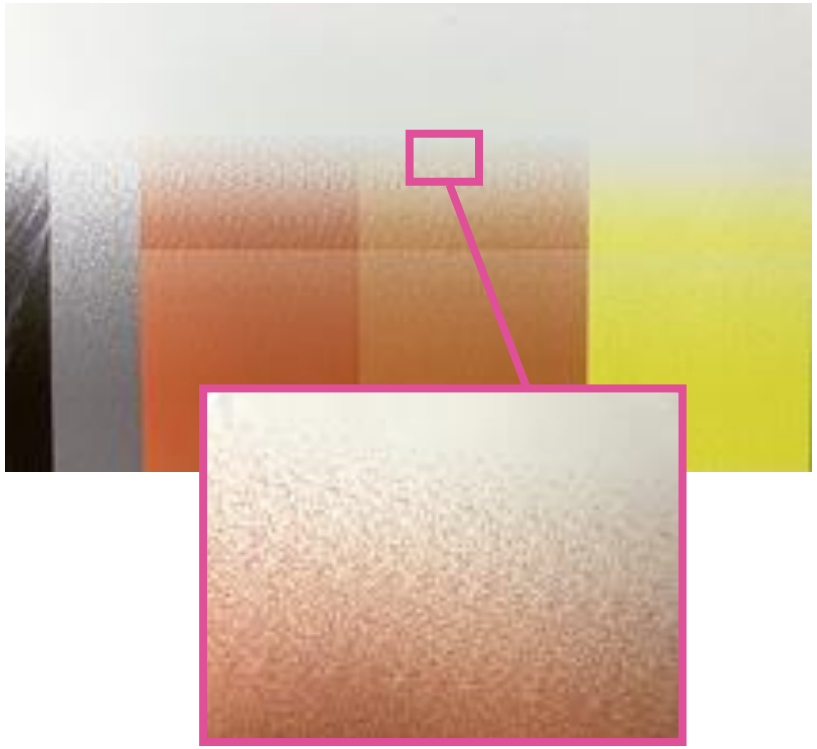
- New weaving algorithms
- Multiple new print effects
- Overall higher print quality
- Banding free output over wider speed range

Mutoh's 4th generation weaving technology

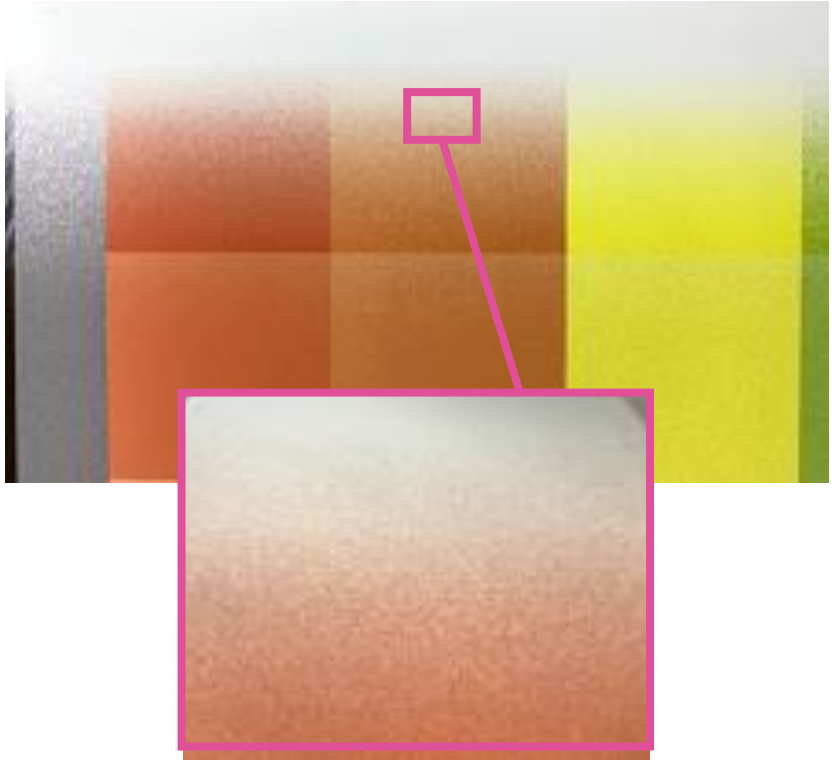
i-screen Weaving Technology – Close Up

i-screen
From the inventors of Intelligent Interweaving

Fine/Fog Effect



NEW i-screen Effect



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VerteLith - MUTOH GENUINE RIP SOFTWARE

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

VerteLith – RIP Software – Top 5 Features

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

VerteLith – RIP Software – Top 5 Features

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

VerteLith – RIP Software – Top 5 Features

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

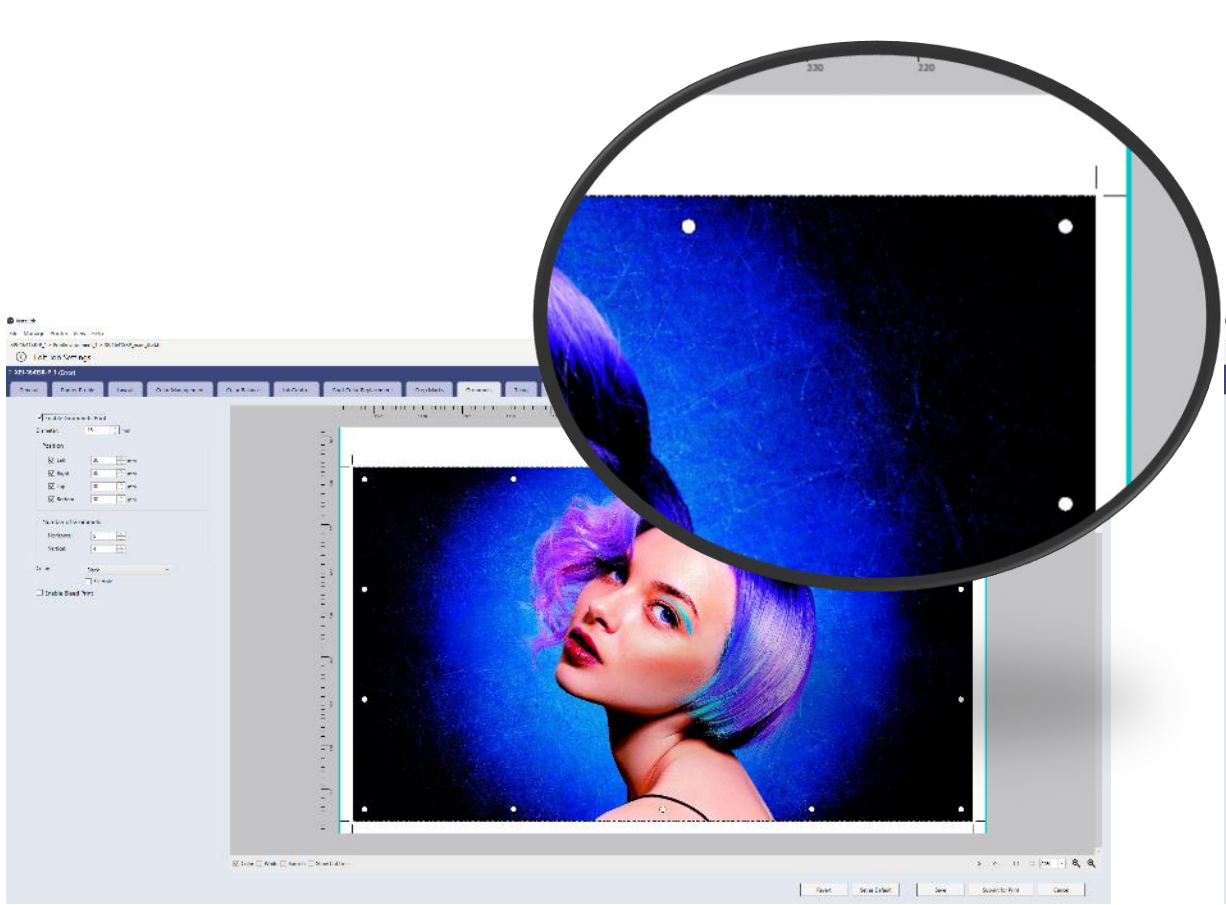
VerteLith – RIP Software – Top 5 Features

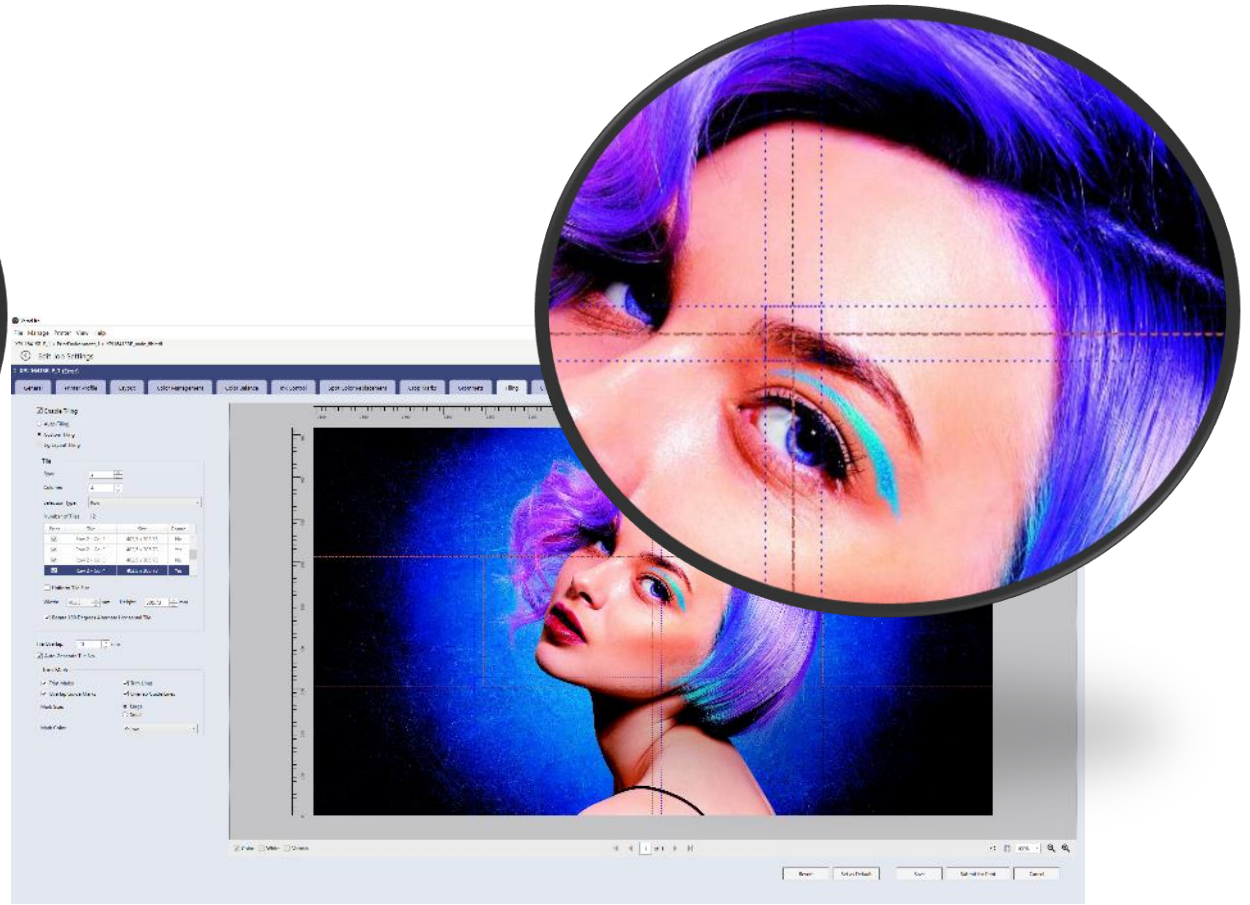
4

Workflow Efficiency & Finishing Tools

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

VerteLith – Workflow Efficiency & Finishing Tools
Grommets & Tiling

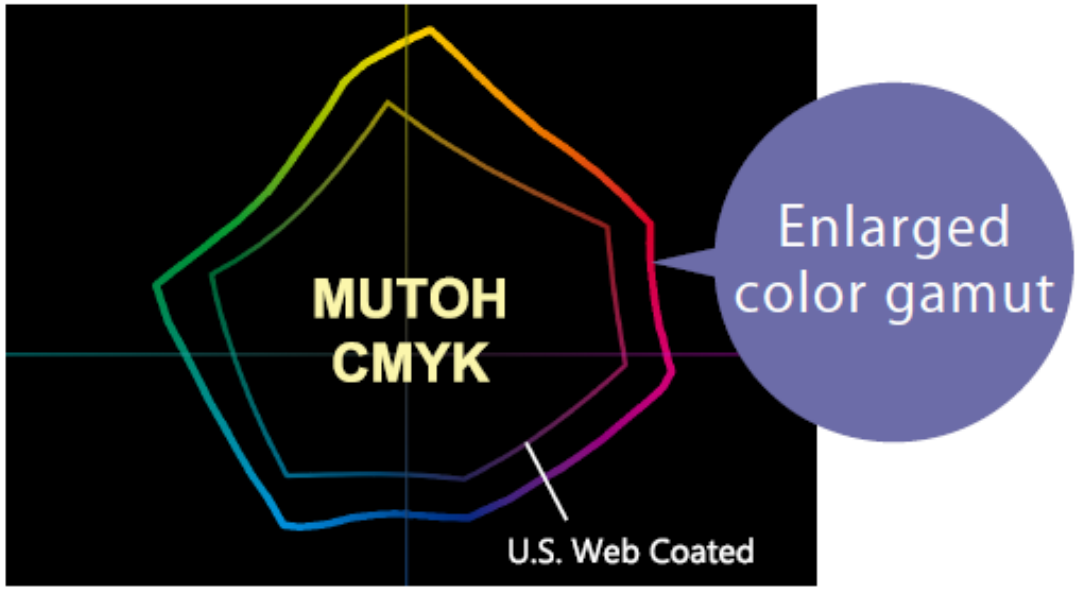




VerteLith – RIP Software – Top 5 Features

5

Wide color gamut ICC profile
MUTOH CMYK

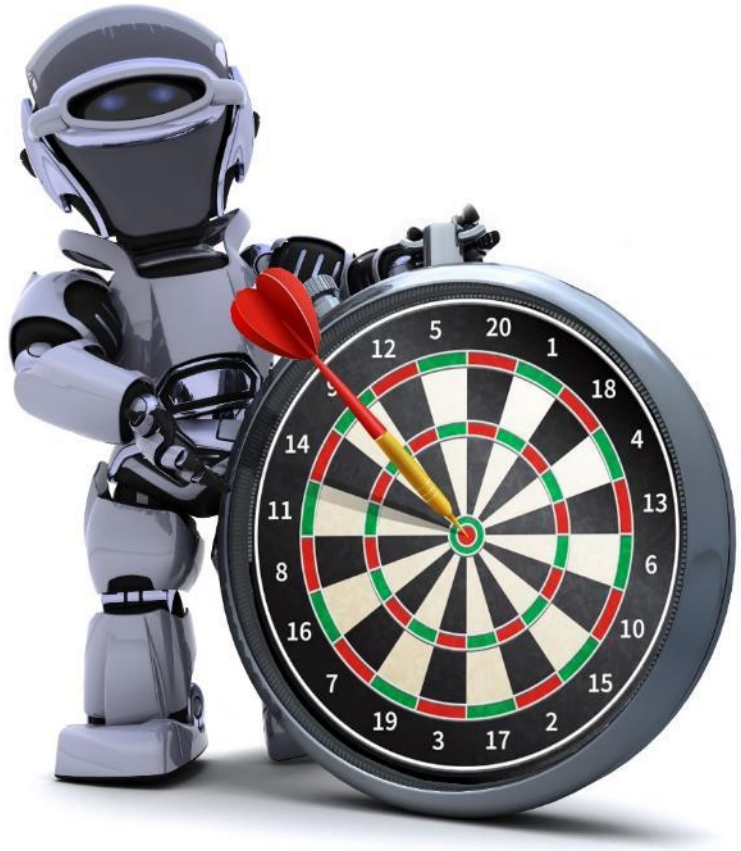


Enlarges the color gamut of MUTOH printers & enables vivid colours

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

XpertJet PRO

Quality Up! Speed Up !



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XpertJet PRO

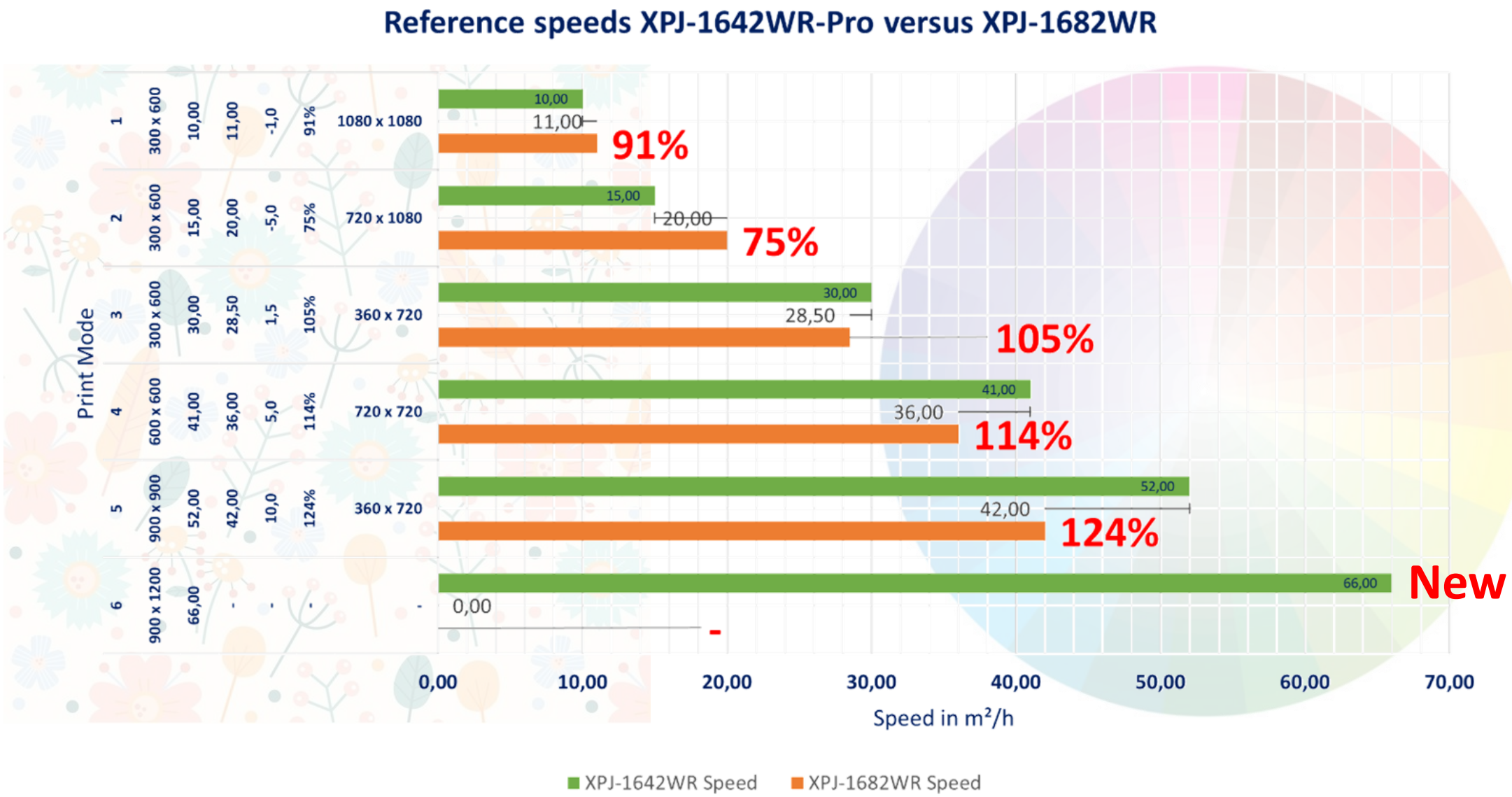
Quality Up! Speed Up !

Comparing corresponding print modes (1642WR-P vs. 1682WR / 1341WR-P vs VJ-1304W) :

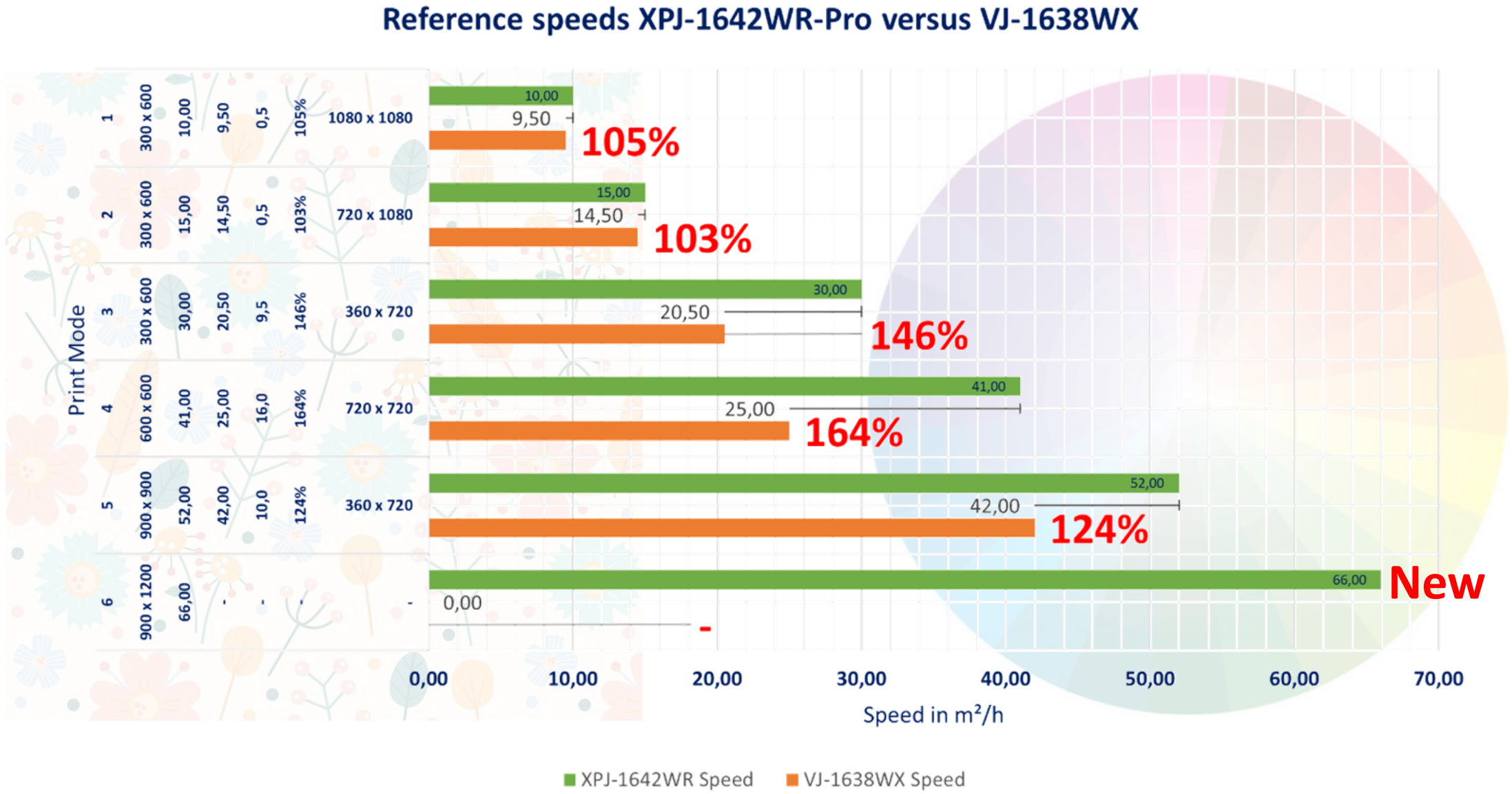
1. Significant speed gain!
   - ❑ 1642WR is **up to 124 % faster** vs. 1682WR
   - ❑ 1642WR is **up to 164 % faster** vs. 1638WX
   - ❑ 1341WR-P is **up to 301 % faster** vs. VJ-1304W

2. Highest speed gain is obtained in the most popular speed range
3. Productivity up!

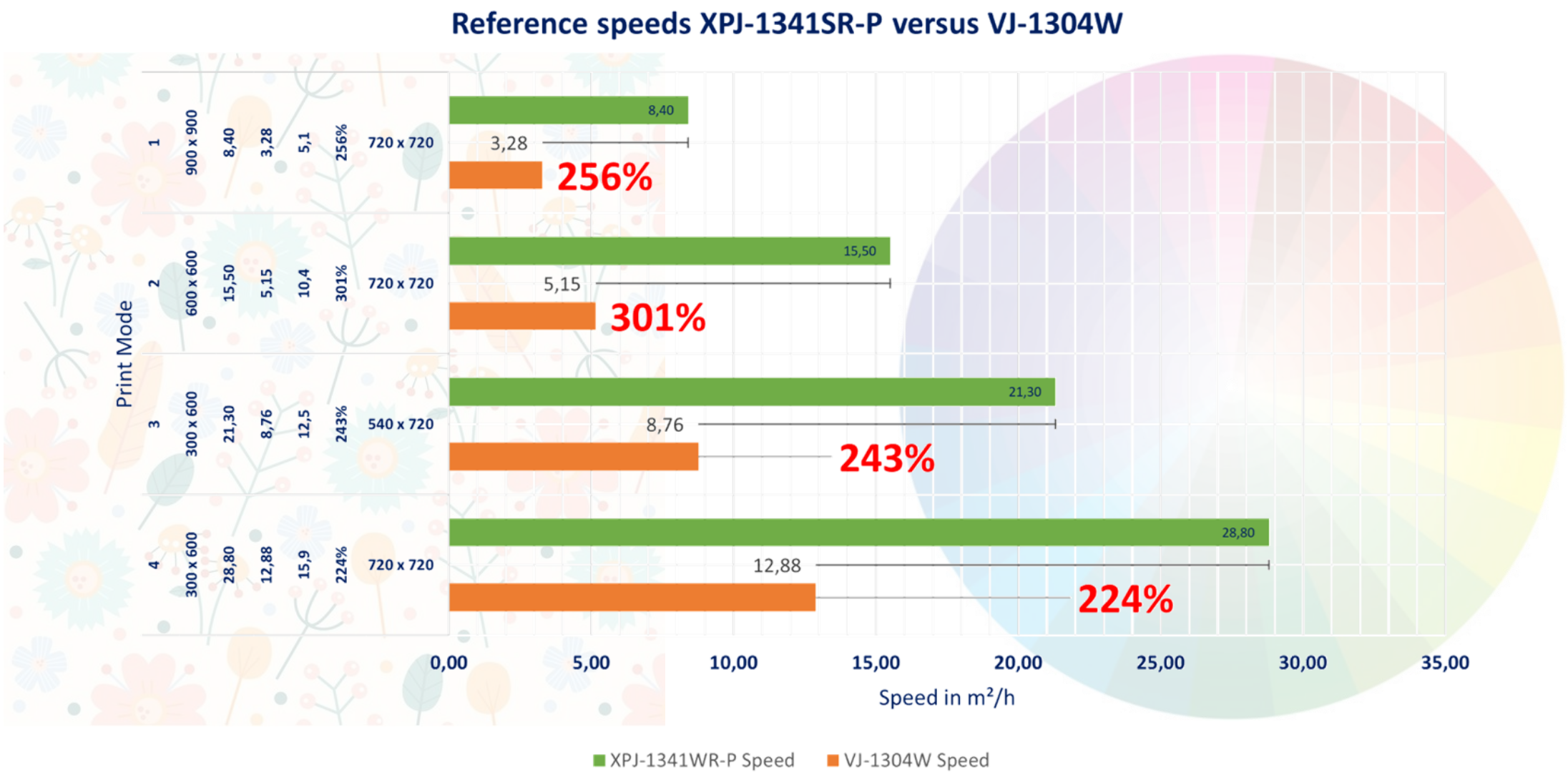
Expansion Of The Useful Speed Range vs XPJ-1682WR



Expansion Of The Useful Speed Range vs VJ-1638WX



Expansion Of The Useful Speed Range



XpertJet PRO

High User Assistance

DropMaster 2

FEED MASTER

Media Tracker

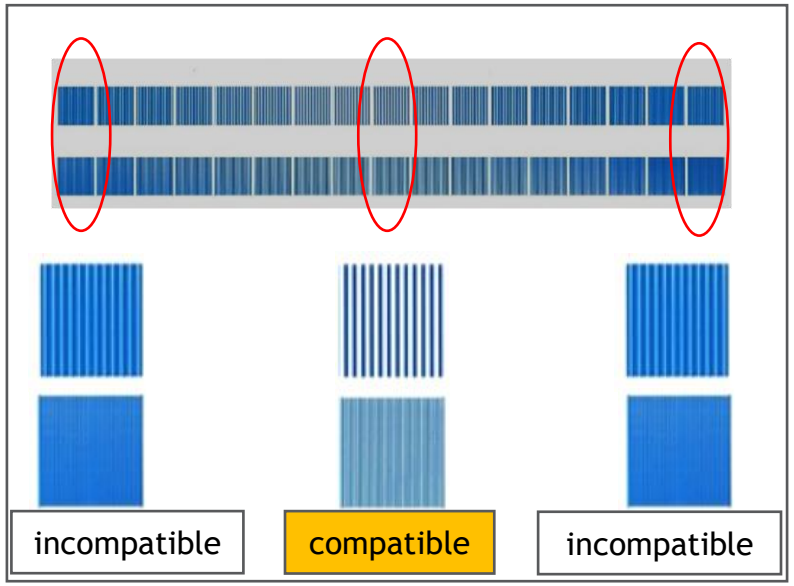
Nozzle Area Select

DropMaster 2

Automated bi-directional alignment through built-in colour sensor

Benefits :

- Save time : fully automated calibration[1]
- 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 calibration[1]
- 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
3. Upon reloading roll, printer will read bar code and detect how much media is left on roll

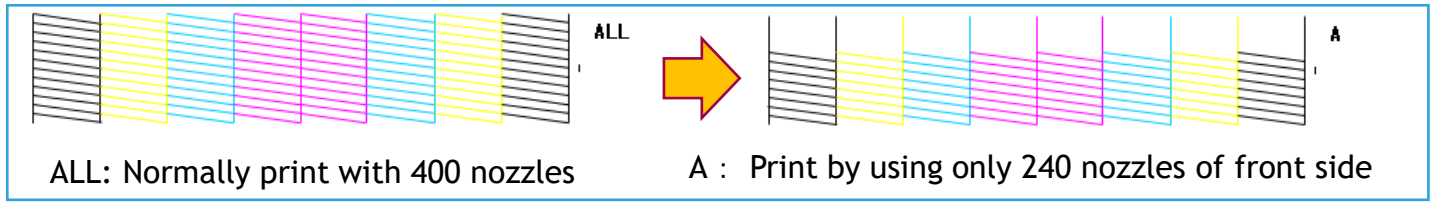
   → **no waste of media, quick start!**

   => ideal for businesses with multiple operators - increased efficiency

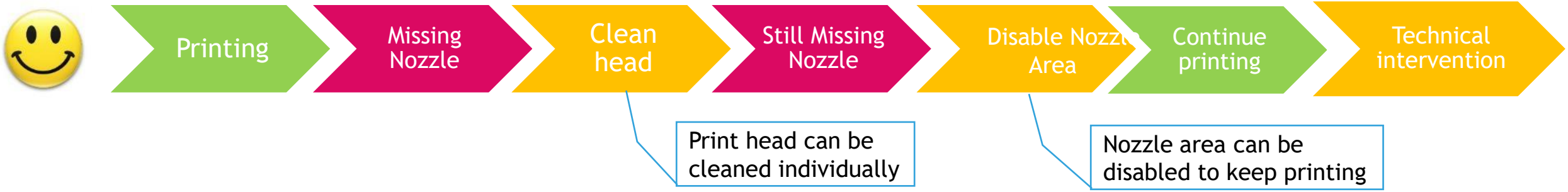
Nozzle Area Select

Nozzle Area Select

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



With Nozzle Area Select



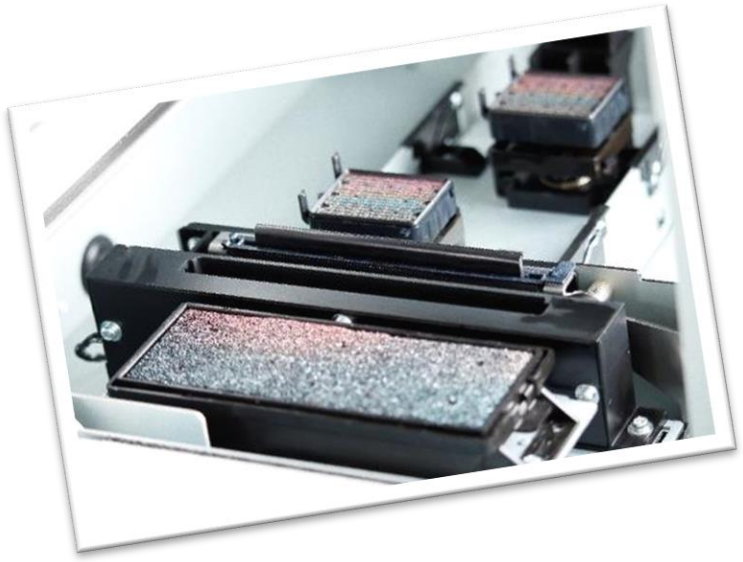
Traditional Printer

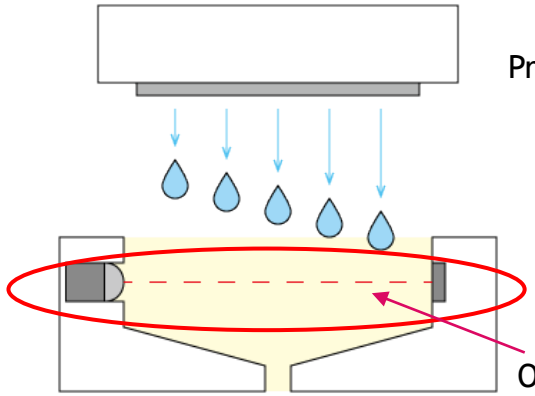
* : Reducing the amount of active nozzles will reduce the output speed.

XPJ-1642WR Pro : Incorporated Nozzle Check Unit – IJ-NZMD-01

XpertJet 1642WR PRO

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



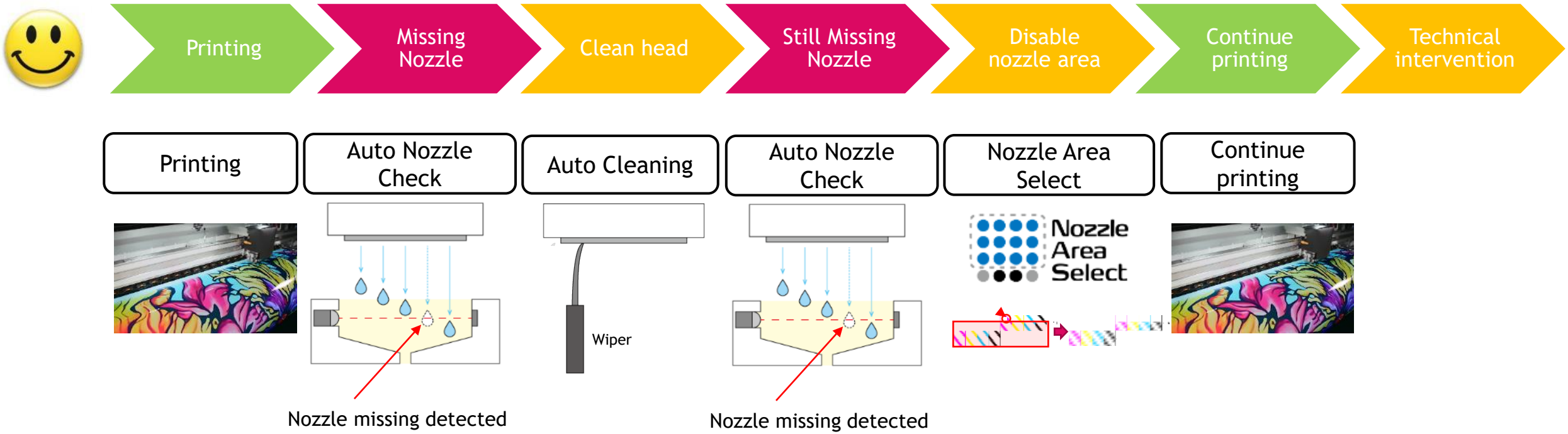


1. Jetting at the drop sensor unit
2. Sensor detects ink droplets passing through the optical axis
3. Continue /resume printing when all nozzles are detected

XPJ-1642WR Pro : Incorporated Nozzle Check Unit – IJ-NZMD-01

XpertJet 1642WR PRO

Fully Automatic in combination with Nozzle Area Select!



Reduce the risk of production loss during unattended operation

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

XpertJet PRO

DS3 Inks

All round dye sublimation inks

DS3 Inks

- C, M, Y K – 1 kg packs
- Wide colour gamut - very vivid, bright colours
- High-definition and image sharpness
- Lightfast and washable output
- Low ink consumption
- Convenient drying
- Compatibility with lightweight papers for transfer to polyester fabric or rigids
- Direct print on to polyester textile

DS3 Inks – ISO Standards

Tested according to ISO standards for:

- Light fastness
- Colour fastness towards rubbing
- Colour fastness towards washing
- Colour fastness towards perspiration

	Cyan	Magenta	Yellow	Black
Light fastness (EN ISO 105B02)*	3 - 4	4	4	4
Rubbing fastness (EN ISO 105X12)**	4 - 5	4 - 5	4 - 5	4 - 5
Wash fastness (EN ISO 105C04)**	4 - 5	4 - 5	4 - 5	4 - 5
Perspiration fastness (EN ISO 105E02)**	4 - 5	4 - 5	4 - 5	4 - 5

** : rating 1 - 8 ; 8 = best // ** : rating 1 - 5; 5 = best*

DS3 Ink Compatibility

Printer Model	DS3
XPJ-1341WR-P	1 L [1]
XPJ-1642WR-P	1 L [2]

[1] : Requires ink pack adapter - VJ-HCIPADPT

[2] : Ink packs fit in standard XpertJet Pro ink cases

: Available

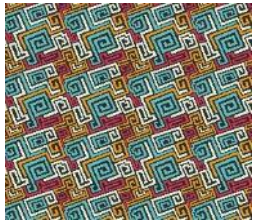
Average Ink Consumption

Typical photographical image :

ISO cafetaria image (photographical – coverage of 67 %)

- Average ink consumption = 8.5 ml/m²

Typical dye sublimation images :



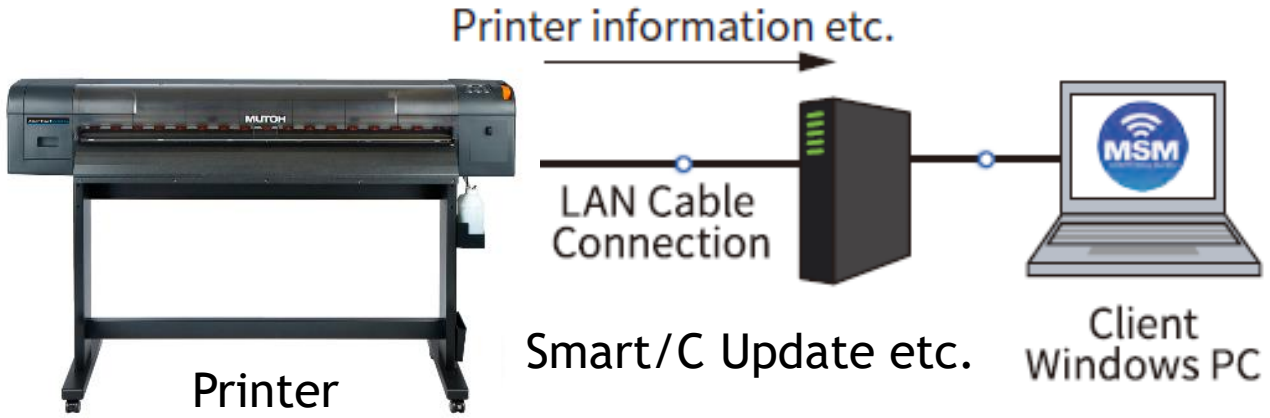
- Average ink consumption = 6 ml/m²

- Average ink consumption = 3.2 ml/m²

MUTOH Status Monitor（MSM）

XpertJet PRO

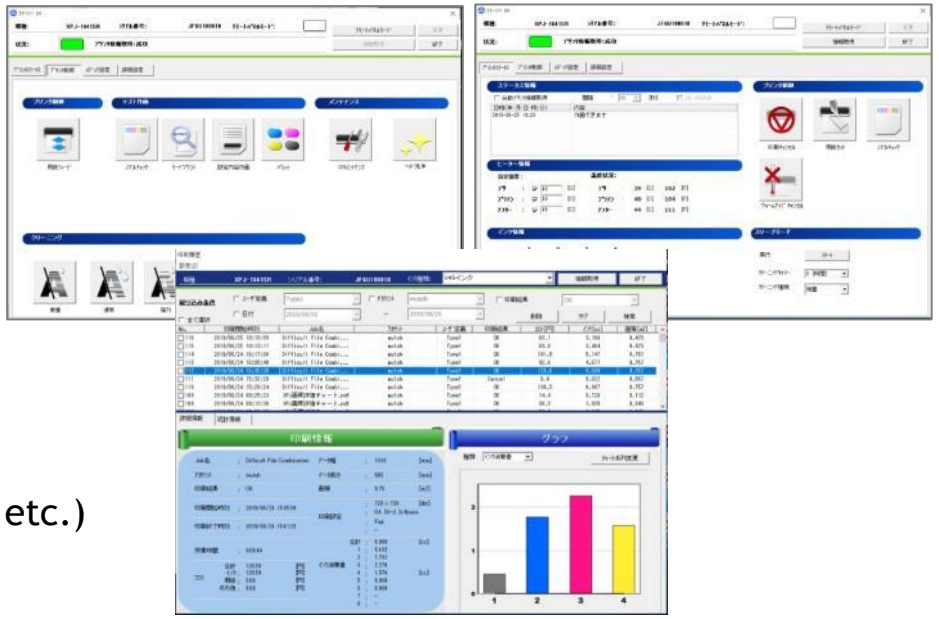
- MUTOH Status Monitor (MSM) checks the printer's operation status in real time



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.



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XPJ-1341WR 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.

BACK Media holder 30 kg

- **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-1341WR 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 unit[1] (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-1642WR-P Roll Off System / Media Feed Flanges

New Roll Off System

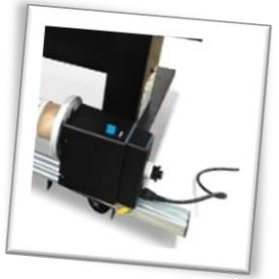
Media roll rests on movable sliders

New media feed flanges

XPJ-1642WR Pro – Motorised Take Up Systems

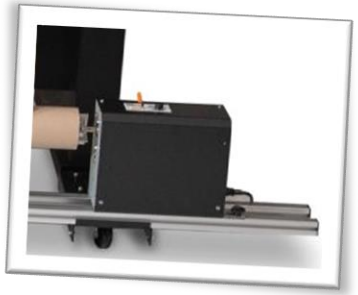
- 30 kg torque controlled continuous motorised take-up system
- VJ1619-TUP30

Maximum roll-up diameter of 150 mm



- 40 kg torque controlled continuous motorised take-up system
- 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