



spitfire
MUTOH

Mid-range direct-to-vinyl mild solvent printers



- > For typical sign businesses focusing on volume production of prints for mid-term outdoor use
- > Print directly onto a wide array of standard available uncoated vinyls and banners
- > Deliver real-time production speeds of 13 m²/hour on uncoated vinyl
- > Mild solvent friendly concept





> IT SIMPLY FITS TOGETHER !

The Spitfire 65 (1653 mm) and Spitfire 90 (2280 mm) direct-to-vinyl mild solvent printers will perfectly address the needs of typical sign makers, focusing on volume production of outdoor prints, who require mid-term outdoor use and high to medium printing speed on standard available outdoor uncoated substrates.

Targeted at speed-intensive sign production applications, the Spitfire mild solvent inks have excellent drying and drop fixation characteristics, allowing fast print speeds on a wide range of popular self-adhesive PVC substrates. For commercial production prints on standard uncoated vinyls (720 dpi, 2 pass per colour), Spitfire offers real-time print speeds up to 13 m²/h. Application possibilities encompass production of mid-term outdoor durable signs, such as corporate signs, stage and window graphics, POS displays, backlit box signage, construction announcements, vehicle graphics, indoor graphics such as photo blow ups, floorgraphics, etc....



**High Performance
Spitfire
Mild Solvent Ink**



**Wide Media
Acceptance**



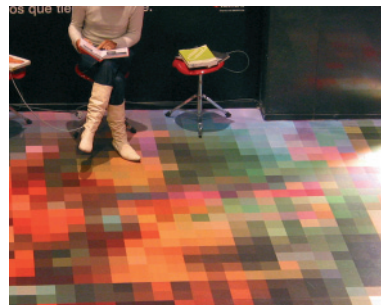
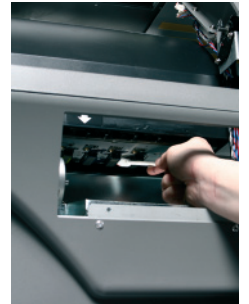
**Standard Motorised
Unwinder / Winder
100 System**



**User & Mild Solvent
Friendly Machine**

Worry-Free Printing

Mutoh's Spitfire printer is a "mild solvent friendly" printer. All parts of the ink supply path (ink supply tubings, head caps, pumps, etc.) are solvent resistant. Together with the machine, Mutoh is supplying a "Good Shape Kit" (6 months autonomy), with all necessary parts to perform periodical maintenance in a trice.



Speed / Performance

Top quality output (720 dpi, 4 pass)

Commercial production prints (720 dpi, 2 pass)

High speed mode (360 dpi, 1 pass uni-directional)

Draft speed mode (360 dpi, 1 pass bi-directional)

6 m²/h or slower

13 m²/h

20 m²/h

35 m²/h



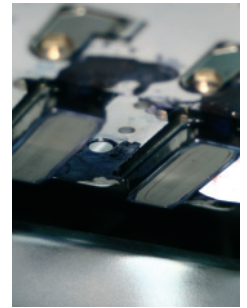
Wide Media Acceptance

Printing on a wide array of uncoated, eco-coated and coated substrates is possible thanks to the combination of the unique characteristics of Mutoh's Spitfire mild solvent inks, the incorporated piezo print heads and four built-in digitally controllable heating elements. Latest media compatibility information and free of charge media profiles are at all times available on www.mutoh.be.



High-End Piezo Technology

Four latest generation 360 nozzle/colour piezo-electric drop-on-demand inkjet heads with incorporated Dynamic Variable Dot Imaging technology, allow production of multiple and unique ink dots and the possibility to individually adjust the size of ink droplets. The result : high speed, high quality printing and low ink consumption.



Spitfire Mild-Solvent Ink

The high performance Spitfire mild-solvent ink offers a high saturation, resulting in brilliant colours and a wide comfortable colour gamut. Moreover, the inks have excellent drying and drop fixation characteristics, allowing fast print speeds on uncoated media.

Ready for Volume Printing

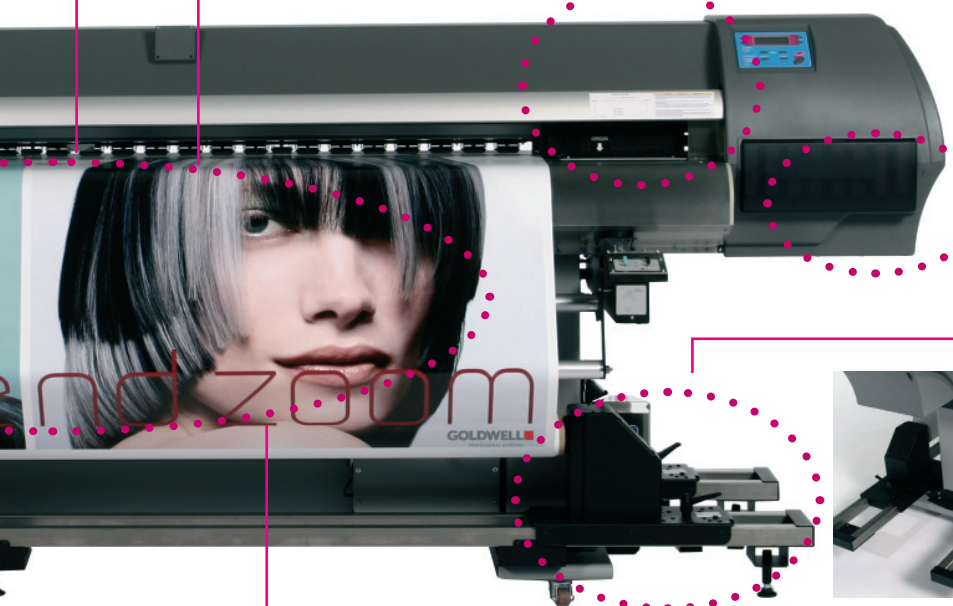
The standard incorporated fully motorised heavy-duty unwinding/winding system for media rolls up to 100 kg allows unattended roll-to-roll printing and makes sure the Spitfire is ready to handle volume production.

Durable Prints

Spitfire mild solvent inks will resist to cleaners, detergents and commercially available degreasers as good as true solvent printer ink. Outdoor durability of prints goes up to 2 years*. General purpose signs will not require lamination**.

* : Based on accelerated weather tests. Northern European Standards.

** : For heavy-duty applications where mechanical stress is involved (floor & vehicle graphics), lamination is required. Prior to lamination, stabilisation time is required.





> Spitfire 65": 1.6 m width

> Spitfire 90": 2.2 m width



Maximum Media / Print Width

Spitfire 65 : max. media width : 1653 (65.07") / max. print width : 1643 (64.68")

Spitfire 90 : max. media width : 2280 (89.76") / max. print width : 2250 (88.58")

Inkjet Technology / Output Resolutions

A Spitfire printer incorporates four 360 nozzle heads and has 8 ink channels.

Drop-on-demand variable drop piezo inkjet

720 x 720 dpi, 720 x 360 dpi, 360 x 360 dpi

Ink Set-Up

Speed + Autonomy set-up : 2 x CMYK (440 ml per colour)

Tone Rendering Set-Up : CMYK Lc Lm (220 ml per colour)

Inks

Ink comes in safe and easy-to-use 220 ml ink cassettes.

Mutoh Spitfire mild solvent inks are specifically tuned for the sign industry. The inks have an outstanding colour gamut, capable of rendering saturated, brilliant colours. Spitfire inks also allow printing of 3/4 tones and deep shadows. Because of their high saturation, ink restrictions can be set high, resulting in low ink consumption, although keeping much brilliance throughout the entire colour pallet at all luminance levels.

Performance

Engine Speed Range	Spitfire 65 / Spitfire 90	
Ink Set-Up	2 x 4 Colours (CMYKCMYK)	6 Colours (CMYKLcLm)
360 x 360 ●●●●	6.0 – 42.0 (*)	3.0 – 22.0
720 x 360 ●●●●	5.8 – 22.8	2.9 – 11.5
720 x 720 ●●●●	3.0 – 13.0	1.5 – 6.5
●●● Variable Drop		● Fixed Drop

Typical production speeds on uncoated self-adhesive PVC : up to 13 m²/hour (**)

Typical production speeds on banner media : up to 22 m²/hour (**)

* : Engine top speed applicability needs to be judged on individual basis.

** : Speeds mentioned are real-time measurements for true production set-ups, using 1.5 m centre-loaded media in combination with the unwinder / winder functionality

Environmental Conditions :

Temperature : 18° C – 27° C / Relative Humidity (non-condensing) : 40 % RH – 65 % RH

Standard Included

- Set of start-up liquids and ink starter set (2 x CMYK)
- Motorised media unwinder / winder system, including media tensioning bars, compatible with media rolls of up to 100 kg
- 20.3 GB hard disk for stand-alone reprint functionality
- Printer network interface card
- Professional PostScript RIP software (Mutoh Edition of Onyx RIPCenter or PhotoPRINT SE)
- Good shape kit to keep your printer in excellent condition (6 months autonomy)

Options

- Mutoh Air Purification System for Spitfire Series Printers
 APS Quatro Mini 3-stage Air Purification System
 The APS Quatro Mini will take care of unpleasant and annoying smells and will bring solvent levels in the working area far below the accepted safety levels.

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