



Mid-range direct-to-vinyl mild solvent printers



-  i² Intelligent Interweaving print technology incorporated
-  Impeccable printing quality, effortlessly reproducible at 16.5 m²/h
-  For volume production of signs and prints with medium durability for outdoor use
-  Print directly onto uncoated vinyls and banners
-  Mild solvent friendly concept





> IT SIMPLY FITS TOGETHER !

The Spitfire 65 Extreme (1651 mm) and Spitfire 90 Extreme (2280 mm) use mild solvent inks to print direct to vinyl and perfectly meet the needs of typical sign makers focusing on volume production of outdoor prints with medium-term durability. They offer high to medium printing speed on standard available outdoor uncoated substrates.

Targeted at speed-intensive sign production applications, Spitfire mild solvent inks have excellent drying and drop fixation characteristics to perform at high print speeds on a wide range of popular self-adhesive PVC substrates. Spitfire 65/90 Extreme printers deliver impeccable printing quality at 16.5 m²/h (@ 540 dpi) on standard uncoated vinyls, time and time again. Typical applications include corporate signs, stage and window graphics, POS displays, backlit box signage, construction announcements, vehicle graphics, indoor graphics such as photo blow ups, floor graphics and much more...



Intelligent Interweaving



High Performance Spitfire Mild Solvent Ink



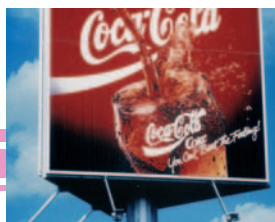
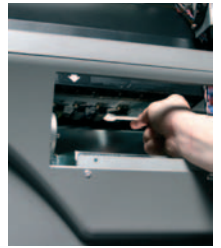
Wide Media Acceptance



User & Mild Solvent Friendly Machine

Worry-Free Printing

Mutoh's Spitfire Extreme 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 every Spitfire Extreme, Mutoh supplies a "Good Shape Kit" that has everything needed to carry out periodical maintenance quickly and simply over the first six months.



Speed / Performance

When speed is the main requirement, the Spitfire Extreme printer engine can reach speeds above 35 m²/h. When quality is the top consideration, the optimum speeds below will deliver impeccable printing quality time and time again on a wide range of standard uncoated substrates.

Printing onto uncoated self-adhesive PVC, banner, soft signage textile..., impeccable output quality* is obtained:

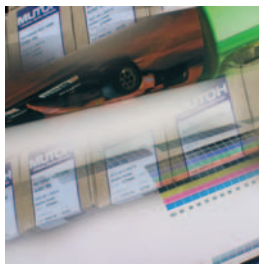
- > For "Sign" images at 6.5, 8.25, 11 and 13 m²/h
- > For "Picture" images at 6.5, 8.25, 11, 13 and 16.5 m²/h

* Free from typical inkjet printing artefacts such as horizontal banding, ink bleed and media step mismatch banding, even when viewed close to (< 1 m).



Wide Media Acceptance

Printing is possible on a wide array of uncoated, eco-coated and coated substrates 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 media profiles are freely available at all times on www.mutoh.be / www.mutoh.eu.



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 permit individual adjustment of ink droplet size. The result: high speed, high quality printing and low ink consumption.



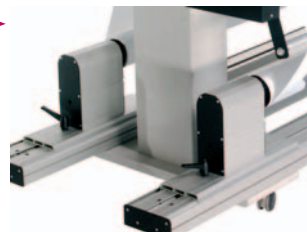
Spitfire Mild-Solvent Ink

Spitfire high performance mild-solvent inks provide good saturation, resulting in brilliant colours and a comfortably wide colour gamut. These inks have excellent drying and drop fixation characteristics, for fast printing on uncoated media. For speed-intensive, volume-oriented users, Mutoh has an optional Bulk Ink System, providing ink autonomy of 4.3 litres per bottle.



Ready for Volume Printing

Unattended roll-to-roll printing is possible with the fully motorised heavy-duty unwinding/winding system for media rolls up to 100 kg. The unwinder/winder 100 system ensures the Spitfire Extreme is ready to handle volume production.



Durable Prints

Spitfire mild-solvent inks resist cleaning products, detergents and commercially available degreasers as well as true solvent inks. Outdoor durability of prints is up to 3 years*.

General purpose signs do 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. Allow stabilising time before laminating.



| Printer specifications | | Spitfire 65 Extreme | Spitfire 90 Extreme |
|-------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------|
| Technology | | Drop-on-demand Micro Piezo Inkjet Technology. Variable drop mass output between 5.4 ng and 41.5 ng | |
| Maximum Media Widths | | 1651 mm | 2280 mm |
| Maximum Print Widths | | 1641 mm | 2240 mm |
| Media | Thickness | Range: 0.08 mm – 1.1 mm | |
| | Diameter / Core | Maximum: 300 mm / 2" or 3" | |
| | Weight | Maximum: 100 kg | |
| Media Thickness Compensation | | Automatic media thickness compensation. Variable – RIP controlled – Head Height | |
| Resolutions | | 360 x 360 dpi, 720 x 360 dpi, 540 x 720 dpi & 720 x 720 dpi | |
| Colour Channels | | 8 colour channels – 4 or 6 process colour output | |
| Inks | | Spitfire Mild Solvent 2xCMYK speed set-up Spitfire Mild Solvent CMYKLcLm photo tone rendering set-up | |
| Ink Capacity / Type | | 220 ml & 440 ml / smart chip ink type & order sensing Bulk bottles 1 & 5 liter | |
| Print Modes & Panel Control Options | | Uni & Bi-directional output, Intelligent Interweaving, Mirror Output, Multi Copy, Ink Status, Origin Control. | |
| LCD Display | | Backlight LED – 4 lines x 20 characters | |
| Interface | | Centronics, IEEE 1284 compatible / Network, High Speed Interface (standard high-speed interface card – 4 Mb/s). | |
| Graphics Command Language | | RTL-PASS | |
| Print Engine Working Environment using Mild Solvent Inks | | Temperature: 18 – 27 °C | |
| Relative Humidity | | 40 – 65 % (no condensation) | |
| External Dimensions in mm (W x D x H) (Excl. Winder Unwinder 100) | | 3100 x 750 x 1250 mm | 3700 x 750 x 1250 mm |
| Weight | | 195 kg | 215 kg |
| Power Consumption | | 1300 VA 80 VA in stand-by mode | 1400 VA 100 VA in stand-by mode |
| Power Supply | | AC 100 – 120V / AC 220 – 240V auto-switching | |
| Noise Level | | Operating: 54 dB or less | |
| Standard | | VCCI (Class A), FCC (Class A), UL, CE, CCIB | |

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The machines depicted on this brochure do not necessarily show a standard configuration. For some products, customised configurations are available.
For further information, please contact your nearest Mutoh Authorised Reseller.

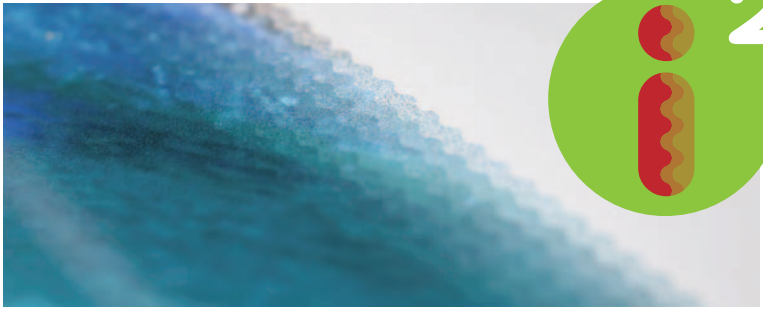
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i² - a revolution in print technology

- > Intelligent Interweaving, i² technology from Mutoh, provides impeccable digital printing quality for both Photo and Sign printing.
- > Quick and simple to set up, printing with i² saves time and trouble while producing outstanding results.

Mutoh has taken a totally new approach with i² technology (pronounced i squared). Ink is laid down in carefully optimised wave forms, not the straight lines used by all other wide-format inkjet printers. The result is a drastic reduction or even total elimination of the typical difficulties inherent in conventional digital inkjet printing. i² technology means the end of defects such as horizontal banding, step mismatch banding, ink mottle and bleed and the visible effects of missing or mis-firing nozzles.

i² technology benefits

- > Impeccable print quality.
- > Excellent workflow as user-friendly set up saves time even with the most challenging images.
- > Bi-directional printing of all images, even the most critical jobs, as wave sequences eliminate banding.
- > Increased ink density yield as the wave patterns superimpose thin ink layers to create an even coating with superb image definition.
- > Boosted colour gamut, compared with conventional straight-line printing. Ready-programmed, dedicated i² profiles boost the colour gamut and, with the increased ink density yield, reduce ink consumption by as much as 10%

Depending on the incorporated head technology and ink type, Mutoh is programming printer-specific optimised print weaving modes for both sign and picture applications.




Sign/Quality: Signage and poster applications containing big areas with solid colours, typography and critical gradients

Picture/Speed: Non sign images, pictures and photographs



Spitfire 65/90 Extreme Performance

Below table explains you what Mutoh's i² technology will offer you, depending on the **type of image** you need to print, **the material type** as well as the **viewing distance**.

| Banner & Soft Signage |  | | | | | |  |
|---------------------------------------|-----------------------------------------------------------------------------------|------|----|----|------|----|-----------------------------------------------------------------------------------|
| Uncoated SA - PVC |  | | | | | | |
| Speed m ² /h Resolution | 6,5 | 8,25 | 11 | 13 | 16,5 | 22 | |
| 720 x 720 | S | | S | P | | | |
| 540 x 720 | | S | | S | P | | |
| 720 x 360 | | | | | | | B |
| 360 x 360 | | | | | | | B |

i² = free from typical inkjet artefacts such as horizontal banding, ink bleed and media step mismatch banding, even when viewed close to.



= i² compatible modes, viewing distance < 1m



= viewing distance > 5 m



= applicability needs to be judged on individual basis

S = All Images

P = Pictures Photographs

B = Billboard mode, applicability needs to be judged on individual basis

Mutoh authorised resellers

Mutoh products are distributed and supported by an extensive network of certified Mutoh authorised resellers extensively trained by the Mutoh headquarters for sales and after-sales support. Mutoh authorised resellers will offer you further product information & insight, possible product configurations, product pricing and return on investment figures to meet your company's objectives. Contact your nearest Mutoh authorised reseller at www.mutoh.eu.

