

Impala

Hybrid inkjet system



swissprint

Impala. That is the name for the new secret weapon for the graphic industry and industrial companies who place their bets on up-to-date printing technology. Universal and modular, this premium inkjet system is future-oriented and multi-talented when it comes to applications. It is robust, works with exceeding precision and delivers outstanding print quality - because Impala is Swiss-made through and through. Moreover, a maximum printing speed of 134 m²/hr. makes it the present leader in its class.

Highly-equipped basic model

Versatile and robust, Impala is a flatbed printing system that is expandable as required. For example, the standard CMYK may be supplemented by as many as five additional channels - including industrial protective lacquers, or primer for printing onto media that have traditionally resisted inkjet methods. In any case, the UV-hardening ink set adheres to highly diverse materials and does not crack even during trimming, which broadens the production portfolio to include numerous attractive applications.

A steplessly adjustable vacuum system retains standard panels just as securely as heat-sensitive substrates and fabrics. The printing table, anodised for easy maintenance, can carry media as heavy as 400 kg. In contrast to this weighty muscle, printing is absolute high precision. The intelligent controller positions every droplet with micrometre exactitude. Uniform colour expanses are a particular speciality of Impala.



Impressive: 1200 dpi x 1200 dpi visual print resolution guarantees razor-sharp edges even with fine lines, geometric shapes and tiny character sizes.

Giant formats

Take optional roller tables plus a clever feed principle, and easily print oversized formats up to 2.5 x 4 metres. That is the Impala recipe for success, which incidentally hits the spot with its extremely modest space requirements. A conveyor belt advances the substrate across the table. And once the area of the product remaining to be printed fits entirely on the table, the pressure beam takes

over the remaining stretch. While this process is underway, an integrated control system regulates the feed - precisely, uniformly, even with heavy media. And when the oversized job is done, the roller tables detach, fold down and store away in a corner.



Remarkable: Produce formats up to 2.5 m x 4 m, despite minimal space requirements. Solid roller tables and a hybrid feed principle make it possible.

By the metre

Paper, fabric, blueprints or other roll stock – Impala can handle practically every one. And that across the full 2.5-metre printing width. The optional roll set is ready to go in next to no time, and jobs unwind virtually by themselves. Impala processes multiple ink layers, such as process colours on a white background, in a single pass for guaranteed register accuracy. And thanks to the universal ink's high elasticity, appropriate materials may be printed and then deformed without stress whitening.

The Impala nerve-centre is a built-in PC that provides enormous freedom for individual parameterisation. The output software allows post-RIP adjustments and free positioning of differing or identical print images. And as a further example of the various additional functions: a high-resolution CCD camera in the printing table delivers a 450× magnified on-screen view of the printing jets, to facilitate their visual adjustment.



Roll to roll: Rolls up to 80 kg in weight and 360 mm diameter reliably unwind and wind. An integrated controller monitors and regulates the traction force for a flawless print image.

Features

Breathtaking print speed

Whether there is rigid or flexible media under the jets, Impala can operate in draft mode that prints at an impressive 134 m²/hr. and yet produces highly presentable results. Performance in production mode is an efficient 45 m²/hr.

Remarkable substrate dimensions

Impala prints panels up to 2.5 m x 4 m and 50 mm thick - and this with surprisingly modest space requirements.



Four to nine colour channels

The standard CMYK is expandable by a further five channels: light colours for lifelike skin tones, white, effect or protective lacquers, spot colours and even primer for special printing jobs.

Media diversity

UV-hardening inks adhere to acrylic, dibond, wood, blueprints, polyester, polycarbonate, polystyrene, (high-density) PVC foam sheet, vinyl films, flexible foam panels and - with a bonding agent - even to glass and similar special materials.



Targeted suction power

The vacuum system is steplessly adjustable along the broad side, so masking is largely unnecessary. A higher-powered vacuum option is available for industrial applications.



Homogenous white

White ink has a well-known tendency for sedimentation. Impala keeps it agitated. Reliable print results are thus assured, regardless of how often white is actually used.

Multi-purpose registration pins

The simple, quickly set registration pins are a unique feature. Next to defining the zero-origin, they also provide additional mechanical attachment points: format-independent, with as many as required to make efficient use of the printing table area.



Made in Switzerland

Developed and manufactured in Switzerland, Impala is all about precision, long service life and robust quality right down to the details.

Technical specifications

Printing technology

Piezoelectric inkjet technology (DOD)
UV-hardening inks
Binary or greyscale
9 colour channels

Resolution

Variable drop sizes from 14 to 42 picolitres
Addressable from 360 dpi to 720 dpi
Visual resolution up to 1200 dpi

Productivity - flatbed

Draft mode 134 m²/hr.
Speed mode 67 m²/hr.
Production mode 45 m²/hr.
Quality mode 22 m²/hr.

Productivity - roll to roll

Draft mode 123 m²/hr.
Speed mode 61 m²/hr.
Production mode 40 m²/hr.
Quality mode 20 m²/hr.

Software / RIP

Output software on integrated PC
Caldera RIP-Server (Linux or OSX)
Other RIPs available

Interface (data)

1000base-T

Colours

Standard: CMYK, light C, light M, light K and white
Optional: Primer, varnish or spot colours like orange, green and blue
Pantone® colours also available on request

Ink supply

Integrated ink supply with colours in 5 litre containers
White in 1 litre container
Continuous fill-level display for each individual colour
Fully automated white feed and maintenance system

Inks

Low-odour UV-hardening inks
Optimised for flexible and rigid materials
For indoor and outdoor applications
Solvent-free (no VOCs)

Formats

2.5 m × 1.5 m print area, bleed-off
Oversized formats 2.5 m × 4 m with Roll- or Boardoption
Substrate clearance height up to 50 mm
Max. panel weight 400 kg
Max. roll width 2.5 m
Max. roll weight 80 kg
Max. roll diameter 350 mm

Dimensions

Width 4.7 m
Length 2.2 m
Length 1.3 m

Weight

1000 kg

Safety standards

Fulfils applicable directives

UV hardening system

Stand-by function saves energy and prolongs burner service life. Reduced IR lamps enable printing of heat-sensitive substrates.

Power connection / rating

3 × 400 V/230 V + N + E
16 A 50/60 Hz
approx. 6 kVA

Temperature range

+15°C to +30°C

Relative air humidity

35 % to 80 % non-condensing

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