

# Oryx

Hybrid Inkjet-System



swissprint

A high-end inkjet-system, designed as much for the graphic industry as it is for industrial purposes. One capable of high-precision printing onto everything from the smallest panel, through roll stock, to oversize media, all with widely differing properties. With a high-performing vacuum system that has even heat-sensitive substrates under control. And boasting first-class quality, not just in its robust design and construction, but also in the printed results. That is Oryx.

## Remarkable standard

Even the standard Oryx comes with some outstanding capabilities. The robustly built printing table handles panels up to 400 kg in weight and 50 mm thick.

The UV-cured ink adheres lastingly to surfaces as difficult as acrylic sheet.

And that ink will not crack during the cutting process.

Banding is unheard-of with Oryx, even on large areas of single colour.

Beyond that, its strengths include impressive edge sharpness on tiny lettering, lines and geometrical shapes - this thanks to apparent print resolution as high as 1200 dpi. Intelligent control steers the print

head with micrometre precision and uses sophisticated algorithms for placing individual droplets of ink.

Full-bleed printing is possible without further ado. And should the base catch some ink in the process, that is no cause for concern. A scraper and a few drops of alcohol are all it takes to get the anodised surface of the printing table clean in a jiffy, ready for the next job.



Multiple small-format media arranged in rows and columns, or one large panel on its own: Oryx prints them with the same single-droplet precision. And - get this - double sided jobs print in perfect alignment, thanks to unique register pins.

## Oversized formats under control

Oryx can handle oversized formats up to 2.5 m × 4 m. All it takes are additional roller-tables that simply dock with the main unit. The oversized portion then feeds on and off the tables. Here, Oryx presents a trump card with its ingenious hybrid feed principle that keeps space requirements down to a minimum. The chief attraction: roll media acts as a conveyor belt to transport the substrate over the printing table. Driving it is a built-in control system that ensures precise, regular feeding even with heavy panels. The roller surfaces of the additional tables fold down while not in use, thus saving storage space on "standby".

The Oryx control centre, namely the output software running on the integrated PC, is quite simply universal because it accommodates the full amount of parameterisation. So it is possible to make fine adjustments even after the RIP process, or to freely position differing or identical images. Technicians can gain access to yet more functions - like a 500-times magnified view of the printing jets, delivered from a high-resolution CCD camera.



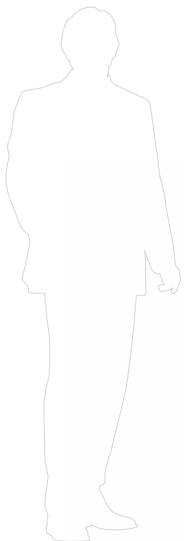
Space-saving in its purest form: when an XXL format reaches the end of the table, the printing beam takes over the remaining distance.

## Impressive handling of roll media

Oryx can optionally carry rolls as large 36 cm in diameter and weighing 80 kg - say banner, paper, fabric or just about any stock up to 2.5 m wide. Setting up is child's play. And once started, the system can continue operating unattended. Oryx works a night shift for no extra pay.

The well thought-out, stable roll handling system unwinds media over the printing table and winds it up again neatly and tidily on the opposite side. A built-in control system monitors and regulates the traction force to ensure a flawless printed image. Where required, multiple ink layers can be

applied in a single pass, so everything stays in perfect register. Printed media can subsequently be deformed without fear of stress whitening - because the ink is sufficiently flexible to take the strain.

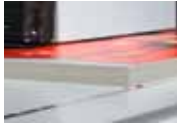


Whether for a panel, or roll media fed over the table, Oryx delivers the same 38m<sup>2</sup> per hour printing speed.

# Characteristics

## Remarkable substrate dimensions

Oryx prints panels up to 2.5 m × 4 m in size, and 50 mm thick - and that with amazingly modest space requirements.



## Record-breaking printing speed

Whether there is rigid or flexible material under the jets, Oryx prints 38m<sup>2</sup> per hour in draft mode - which incidentally offers very presentable quality. In production mode it hums away at an efficient 18m<sup>2</sup> per hour.

## Four to eight colours

The CMYK standard is extensible up to eight colours: light colours for natural reproduction of skin tones, white, varnish, or spot colours. All of them adhere optimally to many different materials: acrylic, (rigid foam) PVC, polyester, polycarbonate, polystyrene, Dibond, flexible foam panels, wood, mesh, banners, vinyl films, etc.



## White stays homogenised

White ink is well known for its tendency to form sediments. Oryx keeps it agitated, for guaranteed printing reliability at any time regardless of how frequently the white is used.

## Multiple points of origin

The simple, quickly set register pins are unique. In addition to the zero-origin itself, they can also act as mechanical end-stops - independently of the format, with however many it takes to make efficient use of the printing table area.



## Vacuum where it is needed

The vacuum system is infinitely adjustable along the broadside. Masking is largely superfluous. A higher-powered vacuum option is available for industrial applications.



## Made in Switzerland

Developed and manufactured in Switzerland, Oryx means precision, long service life, and robust quality right down to the details.

# Technical Specifications

Hybrid high-end inkjet printing system for rigid and flexible materials

## Print Technology

Piezoelectric inkjet technology (DOD)  
UV-cured ink  
Binary or 4 grey scale levels  
8 colour channels

## Resolution

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

## Productivity

Draft mode 38 m<sup>2</sup> per hour  
Production mode 18 m<sup>2</sup> per hour  
Quality mode 12 m<sup>2</sup> per hour

## Software / RIP

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

## Interface (data)

1000 base T

## Colours

Standard: CMYK, light C, light M and white  
Optional: varnish or spot colours such as orange, green and blue

## Inkjet Supply

Integrated inkjet supply with colours in 5-litre canister  
White in 1-litre bottle  
Continuous level meter for each colour  
Full-automated white supply and service system

## Ink

Odourless UV-cured inks  
Optimised for flexible as well as rigid materials  
For indoor and outdoor applications  
Solvent-free (no VOC)

## Format

2.5 m × 1.5 m printing area, full bleed  
Oversize formats, longer than 1.5 m with roller feed  
Media thickness up to 50 mm  
Max. panel weight 400 kg  
Max. roll width 2.5 m  
Max. roll weight 80 kg

## Dimensions

Width 4.5 m  
Length 2.3 m  
Height 1.3 m

## Weight

800 kg

## Safety Standards

Complies with currently valid guidelines

## UV Drying System

"Stand by" function saves energy and extends the life span of the bulb. Lamps with reduced IR radiation allow printing of heat-sensitive substrates.

## Power / Performance

3 × 400 V/230 V + N + E  
16 A 50/60 Hz  
approx. 2.5 kVA

## Temperature Range

+15°C - +30°C

## Operating Humidity

35% - 80% non-condensing

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