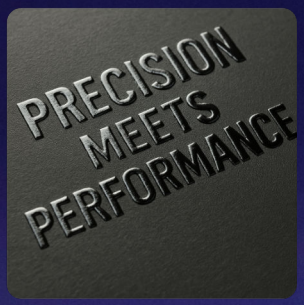
SIGN RACER

INNOVATIVE PRINT SYSTEMS

SIGNRACER

PRECISION MEETS PERFORMANCE

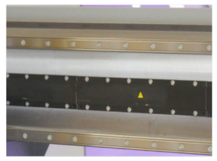
Industrial Flatbed Printers

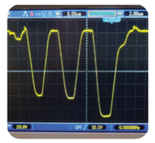


GREENGUARD

PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818

GOLD





SIGNRACER 1610


SIGNRACER 2512


SIGNRACER 3116


SIGNRACER 3020


SIGNRACER 2512 HB


SIGNRACER 2512 HB 3D


SIGNRACER 2512 V


SR-100 HD


PREMIUMFLEX+

SR-200+


Leather

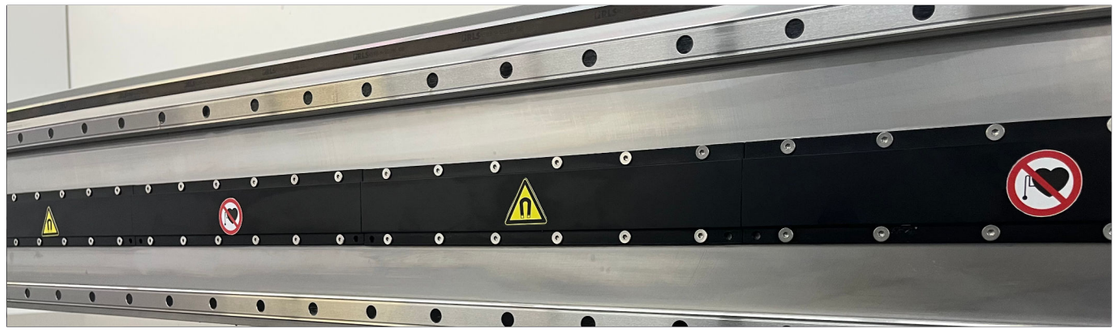

Watch Faces

Tools


Fashion

INDUSTRIAL PRINTING SOLUTIONS

SIGNRACER is advancing all flatbed printers with the newest linear motor technology for demanding industrial applications.



Linear Motor Technology

The integration of a linear motor in SIGNRACER flatbed printers ensures fast and smooth carriage motion. This technological advancement replaces the traditional belt-driven system, providing direct and precise motion control, significantly reducing vibrations and maintenance needs.

Reduced Vibration for Premium Print Quality

The advanced design of SIGNRACER printers significantly lowers vibration levels. This results in smoother carriage movement and superior print quality, especially in high-detail graphics and 3D printing applications. The shift to linear motors in SIGNRACER printers offers remarkable durability improvements. This change reduces mechanical wear, noise levels, and maintenance, enabling reliable and quiet operation in various environments.

Key benefits of linear motor and linear encoder

- Electromagnetic force mechanism.
- Higher speed, for high-speed production.
- Superior precision, with high-resolution output.
- Suitable for industrial environment as linear magnetic encoder is not sensitive to temperature and dirt.

Highest Accuracy with 1-Micron Linear Encoder

Equipped with a 1-micron linear encoder, SIGNRACER printers achieve the highest accuracy in carriage movement. This feature is critical for detailed and wide-format printing, ensuring perfect alignment and uniform print quality across large surfaces.

Higher Resolution 1210 x 1200 DPI

In addition to the standard 605 x 900 DPI resolution, new linear motor offers a high-quality resolution mode of up to 1210 x 1200 DPI, delivering a significant improvement in print quality and color alignment, enabled by the precise 1-micron encoder. This higher resolution ensures ultra-precise output, ideal for high-end graphics, detailed photos, and industrial applications that require the highest precision.

- Less vibration, ensuring smoother operation.
- Minimal maintenance, with fewer wear components.
- Higher durability, with robust long-term operation.
- Suitable for high-end, precision-intensive tasks.

SIGNRACER 1610

SIGNRACER 2512

SIGNRACER 3116

SIGNRACER 3020

SIGNRACER features developed for industrial printing

- Extended color gamut ink set with CMYKLcLm, Orange, Violet and Light Black.
- New digitally printed primer for highest industrial adhesion requirements.
- High-distance printing accuracy up to 6 mm.
- Automated 3D Layer printing.
- Signracer SR-200+ ink series for highest industrial adhesion requirements.
- PremiumFlex+ for printing on leather.
- Signracer meets the newest directive for Safety of machinery SN EN ISO 13850 (optional).
- Antistatic system (optional)

Signracer has optimized the printer for distance printing in high quality. With our print heads we can achieve good printing results in a distance of 6-7 mm. Above this distance we have developed a patented technology to achieve good printing results up to 12 mm distance. This technology is already used to print on shoes, tools and components which are not 100% flat.

High Performance UV LED

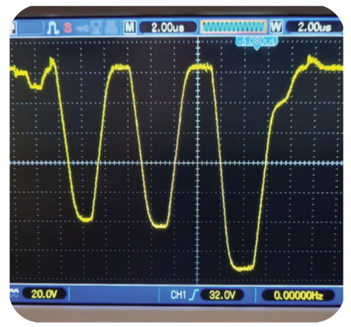
Signracer printers use the IST INTECH LED System, which has very high performance and air cooling (no water cooling tubes in the cable chain!). These LEDs systems are offered with a 3 years warranty. Modular design allows custom LED UV configurations for various applications. LED UV lamps feature long life and light wavelength that perfectly matches the ink. Our LED is adjustable from 10-100% with maximum power of 14 Watt/cm2. High settings allow quick curing and the best adhesion and lower LED performance can be beneficial for further production processes (CNC machining, stretching materials, etc.)

Standardization of Ricoh Gen. 6 print heads across all models

- The Ricoh Gen. 6 assures uniform, high-quality printing with improved resolution and accuracy.
- SIGNRACER 1610 now also available in double row configuration.
- Higher frequency up to 40 KHz in Grey-scale mode
- Higher carriage speed up to 1.3 m/s
- 50% carriage speed improvement over Ricoh Gen. 5
- Smaller drop size of 5,10, 15 pl for finer visual graphics
- Special wave-form development for Signracer inks
- Industrial grade stainless steel housing

RICOH
Gen. 6 inside

Signracer has a development partnership and OEM agreement with Ricoh. Therefore we were one of the first companies offering Ricoh's Gen. 6 printheads on the market. Ricoh's smaller drop print heads are suitable for special applications that demand higher precision like watch faces or industrial components. We develop our own inks and waveforms, which is extremely important for small drop print heads and high frequency like Gen. 6. This feature allows us even higher print output, and top quality at maximum printing speeds without compromise. Signracer waveforms are a perfect match with our ink formulations especially in Grey-scale printing.



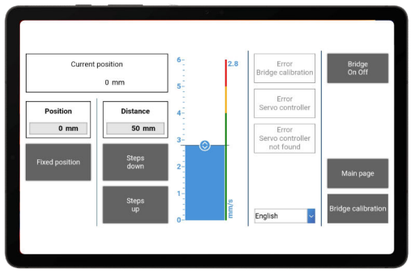
The GREENGUARD Gold Certification ensures the interior products are low in chemical emissions, decreasing indoor pollution levels. This program sets the most stringent guidelines for total VOC emissions. Greenguard Gold Certified products emit minimal gases. They maintain healthy indoor air quality, by reducing our chemical exposure. Low level of formaldehyde emissions specifically, makes them suitable for use in child's room or educational settings which has to meet even stricter standards. Lower emissions mean healthier indoor air, thereby reducing the risk of various irritations and diseases.


CERTIFICATE
OF COMPLIANCE
GREENGUARD GOLD
Nutec
Signracer SR-200+
Certificate Number
Certificate Period
Certified
Status
UL 2818 - 2021 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

SIGNRACER 2512 HB

HB stands for High Bridge, direct printing on higher objects, by moving the bridge up to 50 cm height.

The SIGNRACER 2512 HB50 was designed for industrial customers requiring printing heights up to 50 cm, featuring motorized lifting mechanisms on both sides of the high bridge. In combination with a linear motor and 1-micron encoder, we can achieve the same accuracy as standard SIGNRACER flatbeds, even at the highest bridge position.



Portable WiFi Enabled Touchscreen User Interface on Tablet

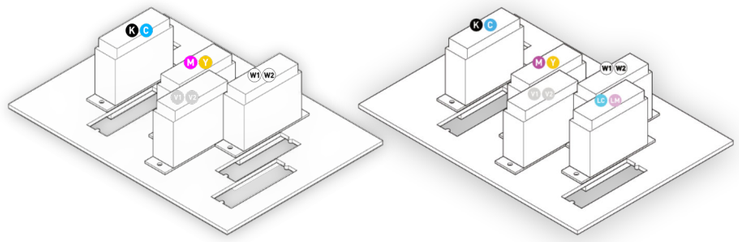
To ensure perfect alignment and precision, the tablet-controlled software enables wireless fine-adjustment of the high bridge positioning, allowing operators to make real-time corrections with micron-level accuracy while being close to printed products on the flatbed. This intuitive user interface enhances workflow efficiency, minimizes errors, and guarantees highest print quality in every height position and on challenging surfaces.

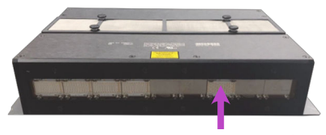
Direct Printing on High Objects

SIGNRACER 2512V

V stands for simultaneous printing of White, Color and Varnish.

SIGNRACER 2512V is a special flatbed printer with triple row configuration and a sophisticated LED especially designed for this application. This printer can print and cure white, colour and varnish in one production process. The special LED uses a low-intensity curing module for the delayed curing of the varnish. This allows finer control over the varnish curing process, resulting in a superior solid and gloss finish.





New special LED module for delayed curing of varnish

SIGNRACER 2512 HB 3D

Signracer has customers in the Swiss watch industry who need high-precision 3D printing. For this purpose, ink layers of 10-40 microns are applied to create a few mm height. To build up the printed structure precisely, an innovative laser scanning of the printed surface is required. The laser scanner determines the highest point of the digitally printed layer and automatically adjusts the height of the bridge during the printing process. The biggest advantage of this technology is super high precision printing with controlled distance to the media and the fact, that printing doesn't have to be interrupted.

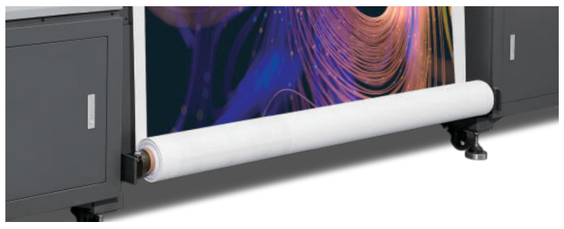
Flatbed Specifications
SIGNRACER
PRECISION MEETS PERFORMANCE

Specifications	SIGNRACER 1610	SIGNRACER 2512	SIGNRACER 2512 HB	SIGNRACER 2512V	SIGNRACER 3116	SIGNRACER 3020	Specifications
Print technology	Multi-drop technology			Multi-drop technology			**Print technology**
Print Heads							**Print Heads**
Ricoh Gen. 6 (Standard)	2–8 Print Heads	2–8 Print Heads	2–8 Print Heads	4–5 Print Heads	2–8 Print Heads		**Ricoh Gen. 6 (Standard)**
Ricoh Gen. 5 (Optional)	2–4 Print Heads	2–8 Print Heads	-	4–5 Print Heads	2–8 Print Heads		**Ricoh Gen. 5 (Optional)**
Printbed	1600 × 1000 mm	2500 × 1250 mm	2500 × 1250 mm	2500 × 1250 mm	3100 × 1600 mm	3050 x 2050 mm	**Printbed**
Flatbed	Honeycomb 2 zones vacuum table with registration pins	Honeycomb 4 zones vacuum table with registration pins		Honeycomb 4 zones vacuum table with registration pins			**Flatbed**
Carriage Speed							**Carriage Speed**
Ricoh Gen. 6 (Linear motor)	1.3 m/s	1.3 m/s	1.3 m/s	1.3 m/s	1.3 m/s	1.3 m/s	Ricoh Gen. 6 (Linear motor)
Ricoh Gen. 5 (Belt)	0.8 m/s	0.8 m/s	0.8 m/s	0.8 m/s	0.8 m/s	0.8 m/s	Ricoh Gen. 5 (Belt)
Nozzle Quantity I Drop size							**Nozzle Quantity I Drop size**
Ricoh Gen.6 / 40 KHz	1280 nozzles I 5 - 15 pl grayscale	1280 nozzles I 5 - 15 pl grayscale	1280 nozzles I 5 - 15 pl grayscale	1280 nozzles I 5 - 15 pl grayscale			**Ricoh Gen.6 / 40 KHz**
Ricoh Gen.5 / 20 KHz	1280 nozzles I 7 - 21 pl grayscale	1280 nozzles I 7 - 21 pl grayscale	-	1280 nozzles I 7 - 21 pl grayscale			**Ricoh Gen.5 / 20 KHz**
Dimensions (Length × Width × Height) *without PC arm	3550 mm x 1720 mm × 1400 mm	4670 mm × 1960 mm ×1320 mm	4970 mm × 2120 mm × 1550 mm	4670 mm ×1960 mm ×1320 mm	5230 mm × 2220 mm × 1350 mm	5230 mm × 3200 × 1350 mm *Width is 2080 mm w/o extension	**Dimensions** (height × width × depth) *without PC arm
Weight	900 kg	1380 kg	1450 kg	1380 kg	1610 kg	1760 kg	**Weight**
Energy Consumption	4 kW	6 kW	6 kW	6 kW			**Energy Consumption**
Media / Curing							**Media / Curing**
Max. Media Width / Max. Print Width	1640 mm / 1600 mm	2540 mm / 2500 mm	2540 mm / 2500 mm	2540 mm / 2500 mm	3150 mm / 3100 mm	3100 mm / 3050 mm	**Max. Media Width / Max. Print Width**
Media Type	Rigid and flexible (PVC Boards, Aludibond, PS, PP, Acrylat, PET-G, Glass)			Rigid and flexible (PVC Boards, Aludibond, PS, PP, Acrylat, PET-G, Glass)			**Media Type**
Media Thickness	Maximum 100 mm	Maximum 100 mm / 250 mm (optional)	Maximum 500 mm	Maximum 100 mm			**Media Thickness**
Media Curing System	LED UV curing with variable power levels			LED UV curing with variable power levels			**Media Curing System**
Single Row	90 mm / 14 Watt/cm²	90 mm / 14 Watt/cm²			90 mm / 14 Watt/cm²	90 mm / 14 Watt/cm²	**Single Row**
Double Row	180 mm / 14 Watt/cm²	180 mm / 14 Watt/cm²			180 mm / 14 Watt/cm²	180 mm / 14 Watt/cm²	**Double Row**
Triple Row		210 mm / 16 Watt/cm²		120 mm Color (14 Watt/cm²) + 30 mm Varnish (Low Intensity)		210 mm / 16 Watt/cm²	**Triple Row**
Printing Speeds							**Printing Speeds**
Ricoh Gen. 6	**Single Row / Double**	**Single / Double / Triple Row**	**Single / Double / Triple Row**	**Triple Row**	**Single / Double / Triple Row**	**Single / Double / Triple Row**	**Ricoh Gen. 6**
Draft (4 pass, 605x900 dpi)	24 m²/h / 41 m²/h	29 m²/h / 51 m²/h / 68 m²/h	29 m²/h / 51 m²/h / 68 m²/h	29 m²/h	30 m²/h / 53 m²/h / 75 m²/h	30 m²/h / 53 m²/h / 75 m²/h	**Draft** (4 pass, 605x900 dpi)
Production (6 pass, 605x900 dpi)	20 m²/h / 34 m²/h	24 m²/h / 42 m²/h / 57 m²/h	24 m²/h / 42 m²/h / 57 m²/h	24 m²/h	25 m²/h / 44 m²/h / 63 m²/h	25 m²/h / 44 m²/h / 63 m²/h	**Production** (6 pass, 605x900 dpi)
Quality (9 pass, 605x900 dpi)	15 m²/h / 25 m²/h	16 m²/h / 30 m²/h / 41 m²/h	16 m²/h / 30 m²/h / 41 m²/h	16 m²/h	17 m²/h / 32 m²/h / 45 m²/h	17 m²/h / 32 m²/h / 45 m²/h	**Quality** (9 pass, 605x900 dpi)
Ricoh Gen. 5	**Single Row**	**Single Row**	**Single Row / Double Row**	**Triple Row**	**Single Row / Double Row**	**Single Row / Double Row**	**Ricoh Gen. 5**
Draft (4 pass, 605x900 dpi)	20 m²/h	24 m²/h / 36 m²/h	-	21 m²/h	27 m²/h / 43 m²/h	27 m²/h / 43 m²/h	**Draft** (4 pass, 605x900 dpi)
Production (6 pass, 605x900 dpi)	16 m²/h	18 m²/h / 30 m²/h	-	14 m²/h	20 m²/h / 33 m²/h	20 m²/h / 33 m²/h	**Production** (6 pass, 605x900 dpi)
Quality (9 pass, 605x900 dpi)	11 m²/h	14 m²/h / 21 m²/h	-	10 m²/h	15 m²/h / 27 m²/h	15 m²/h / 27 m²/h	**Quality** (9 pass, 605x900 dpi)
Ink Specifications							**Ink Specifications**
Certified Ink Series	SR-100 HD, SR-200+, PREMIUMFLEX+			SR-100 HD, SR-200+, PREMIUMFLEX+			**Certified Ink Series**
Colour Configurations	CMYK + LC + LM + White + Varnish / CMYK + LC + LM + LK + White			CMYK + LC + LM + White + Varnish / CMYK + LC + LM + LK + White			**Colour Configurations**
	CMYK + Orange + Violet + Light Black + White			CMYK + Orange + Violet + Light Black + White			
Ink Consumption							**Ink Consumption**
Ricoh Gen.5	10 ml/m²			10 ml/m²			Ricoh Gen.5
Ricoh Gen.6	8 ml/m²			8 ml/m²			Ricoh Gen.6

SR-100 HD

Multi-purpose ink with high solvent and scratch resistance suitable for roll-to-roll and many rigid materials.

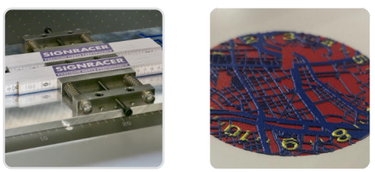
- **Ink Type:** LED UV
- **Viscosity:** Low
- **Certification:** GREENGUARD Gold
- **Print Head Temp:** 38°C Colours, 40°C White
- **Colours:** CMYK, White
- **Adhesion:** Good
- **Flexibility:** Good, Short Term
- **Scratch Resistance:** High
- **Solvent Resistance:** Good
- **Curing:** Very Good
- **Application:** Roll-to-Roll, Rigid Materials
- **Use Case:** Multi-purpose ink with high scratch & solvent resistance
- **Finish:** Smooth



SR-200+

Industrial ink with high adhesion for challenging materials and long term flexibility with plasticizer resistance.

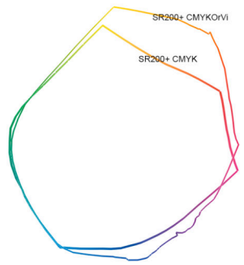
- **Ink Type:** LED UV
- **Viscosity:** Low
- **Certification:** GREENGUARD Gold
- **Print Head Temp:** 42°C
- **Colours:** CMYK, LC, LM, LK, Orange, Violet, White, Varnish
- **Adhesion:** Very Good
- **Flexibility:** Good, Long Term
- **Scratch Resistance:** Good
- **Solvent Resistance:** Good
- **Curing:** Good
- **Application:** Rigid + Roll
- **Use Case:** Superior adhesion and wide color range for demanding materials (metal, wood, glass).
- **Finish:** Non-sticky Matte



PREMIUMFLEX+

Flexible ink developed for leather and artificial leather, offering excellent stretching properties and durability.

- **Ink Type:** LED UV
- **Viscosity:** Medium
- **Certification:** GREENGUARD Gold
- **Print Head Temp:** 46°C
- **Colours:** CMYK, LC, LM, White, Varnish
- **Adhesion:** Good
- **Flexibility:** Excellent, Long Term
- **Scratch Resistance:** Good
- **Solvent Resistance:** Good
- **Curing:** Good
- **Application:** Flexible Surfaces (Leather)
- **Use Case:** Fashion and industrial-grade applications requiring stretch and long-term durability. Bally Test compliant.
- **Finish:** Stretchable



SR-200+ Extended Gamut

New Magenta and Yellow pigments significantly widen the color gamut of the standard CMYK inkset, while the addition of **Orange** and **Violet** inks pushes the limits even further:

- **Orange** improves saturation in the red-yellow range - perfect for **skin tones, branding, and packaging.**
- **Violet** boosts richness in purples and deep blues—essential for **luxury goods, fashion, and high-end industrial printing**.

Nickel-Free Yellow – Prevent Allergy

Nickel is a skin contact allergen and classified as a Substance of Very High Concern **(SVHC)** under **REACH** regulations. SIGNRACER's Nickel-Free Yellow eliminates exposure risks, making it ideal for applications like watch housings, fashion accessories, and wearable devices.

Our innovative SR-200+ formulation delivers a vibrant, lemon-yellow tone that significantly enhances the color gamut. While its outdoor performance is tailored to optimize safety and brilliance, it offers a unique balance of aesthetic appeal and functionality.

GREENGUARD Gold Certification – Indoor Air Safety

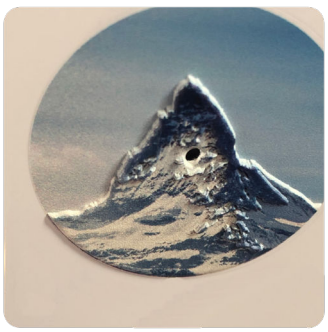
SIGNRACER inks are GREENGUARD Gold Certified, meeting rigorous standards for low VOC emissions, ensuring cleaner indoor air and safety for children and vulnerable groups. Ideal for sensitive indoor environments—such as schools, hospitals, public buildings, and retail interiors—they align with EU and Swiss health standards, support sustainable printing practices, and differentiate your offerings for clients seeking safe, green-certified solutions.

Highest Adhesion with SR-IN White

SIGNRACER's SR-IN White has the highest adhesion properties, making it an effective alternative to traditional primers. Fully compatible with all SIGNRACER ink series, SR-IN White eliminates the need for additional priming steps—streamlining your workflow, reducing costs, and ensuring consistent print quality.





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