



# SIGNRACER UV

# LED UV Printers







### New Printhead, Greenguard Gold Certification and Safety Features









SIGNRACER Flatbed

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**SIGNRACER 1610** 

**SIGNRACER 2512 SIGNRACER 3020** 

**SIGNRACER Special Flatbeds** 

Page 6-7







**SIGNRACER 2512 HB** 

**SIGNRACER 2512 V SIGNRACER 2512 3D** 

**SIGNRACER Hybrid** 

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**SIGNRACER 1600** 

**SIGNRACER 2500 SIGNRACER 3200** 

### SIGNRACER Roll to Roll

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**SIGNRACER 1800 RTR** 

**SIGNRACER 3200 RTR** 

**SIGNRACER 3200 RTR TURBO** 

### **SIGNRACER Inks and Primers**

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**SR-IN - Industrial** 

**SR-100 HD** 

**SR-200 HD** 

**SR-100 T** 

PREMIUMFLEX HD PRIMER

### Industrial Applications and R&D Facilities

Page 16



**SWITZERLAND** 





**GERMANY** 

**ITALY** 



• Higher carriage speed up to 1.3 m/s vs. 0.8 m/s

• Up to 50% speed performance upgrade

• Smaller drop size of 5 pl vs. 7 pl for finer visual graphics

• Special wave-form development for Signracer inks

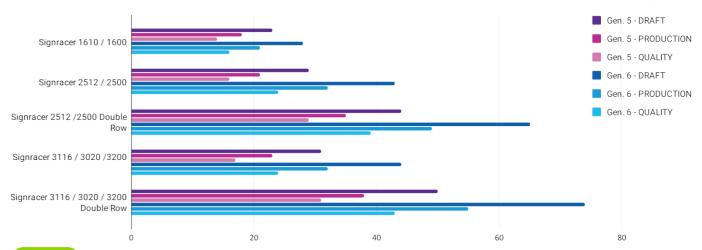
• Improved skin tones and subtle pastel shades

• Industrial grade stainless steel housing

• Easy alignment and high positioning accuracy

New Gen. 6 driver boards and main board













Signracer IN, SR-100 HD and SR-200 HD ink series meet Greenquard Gold certifications for low VOC and formaldehyde emissions, meeting the highest indoor air quality requirements. Find out more about benefits of Greenquard certified products on page 14.

European CE certification makes sure that all components of our printers are in accordance with European standards. In addition we offer technical support through our experienced engineering team for all our customers across Europe.

The Signracer printers meet Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006. This machinery directive defines the safety components to avoid accidents.

**EN ISO 12100** – Safety of machinery - General principles for design - Risk assessment and risk reduction

EN 60204-1:2006+A1:2009+AC:2010 Safety of machinery -Electrical equipment of machines - Part1: General requirements

EN 1010-1:2004+A1:2010 Safety requirements for the design and construction of printing and paper converting machines

Industrial printers meet the category 3 of SN EN ISO 13850 -Safety of machinery - Emergency stop function - Principles for design with Category 3 requires redundant relays and switches. In addition, we are able to integrate light curtains for further safety and protection.

# **INDUSTRIAL FLATBED** PRINTING SOLUTION

Complete range of flatbed printers for the most challenging industrial printing applications which demand high precision and high reliability.





#### **Features**

- New colour sets now include Orange and Violet, Light Black and bright fluorescent colours Neon Yellow and Neon Magenta.
- New digitally printed pri mer for highest industrial adhesion requirements.
- New printer can print colours, white and varnish at the same time.
- High-distance printing accuracy up to 6 mm.
- Anti-static Module

See page 3.

Automated 3D Layer printing.

Antistatic system (optional)

• Signracer SR-IN ink series for for highest

• Signracer meets the newest directive for

Safety of machinery SN EN ISO 13850.

• Anti-crash sensor for improved safety.

industrial adhesion requirements.

Our anti-static is located between the print heads and LED for highest efficiency. Maintenance friendly design allows easy cleaning of antistatic modules. Antistatic carriage module from **KERSTEN** in Germany is chosen for its highest performance. KERSTEN has been the leading supplier of system solutions for electrostatics for over 40 years.



**KERSTEN**°

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 15 mm distance. This technology is already used to print on shoes, tools and components which are not 100% flat.

### DIGITALLY PRINTED PRIMER

Primer is placed on a substrate with extraordinary precision under the printed areas.











Signracer OEM inks are manufactured by Nutec Digital according to highest quality standards. Our low viscosity ink formulation is running at only 38°C - 40°C, which requires less cleaning during operation and reduced ink aging in the system. We offer industrial print solutions to print on leather (long-term high flexibility) and highest adhesion on all kinds of materials.

Signracer integrated digital primers can print these adhesion promoters under printed areas only. Our high-performance UV LED technology is curing the primers directly or

with delayed curing. Delayed curing forms solid film-like surfaces, suitable for all industrial production purposes with challenging materials. The solid primer film provides the strong adhesion to the material and creates unique effects using white and colour on the top.

The ink bottles are also used as the printer ink reservoirs. We achieve slow aging of the ink because old inks are never mixed with new inks. This results in a very stable printer and no sediments in the bottles because they are always changed.







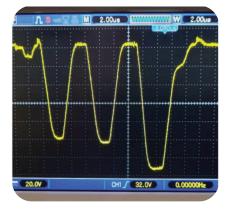


**Digital Primer** 

White

Colour

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 grayscale printing.



# **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 HB was designed especially for those industrial customers who require printing capabilities up to a height of 50 cm. Heavy duty industrial high bridge guarantees precise printing even at the highest speed. The performance of our specially-formulated high-adhesion or flexible UV inks ensures that industrial applications are no longer limited by material type. Plastics, solid metals, wood, glass and even fashion products like leather or artificial leather, can be printed with our inks. This means businesses can diversify their product offerings, enhance branding efforts, and provide unique finishes that weren't possible before. In essence, this printer is not just a tool; it's a comprehensive solution for innovative industries aiming to be market leaders.







**LOW POSITION** 

MEDIUM POSITION

**HIGH POSITION** 

The SIGNRACER 2512 HB now has a new linear motor with a special 1 micron linear encoder. This means it can print with great detail and accuracy even at high printing speeds. Plus, there's now a motorized lifting mechanism on both sides of the high bridge, for highest bridge positioning accuracy and durability. We added these features to provide our customers the best print quality in the class. These new features specially developed for the SIGNRACER 2512 HB make it a unique industrial design in the digital printing market.













# **SIGNRACER 2512V**

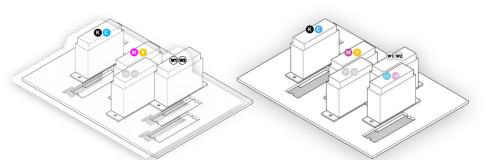
Special flatbed printer with unique set of features, including advanced triple row colour configuration which allows simultaneous printing of white, colour and varnish in a single pass. Specially designed LED module allows varnish curing without additional passes, further saving product time and improving production automation.



# **Triple Row Print Head Configurations**

### **Features**

New triple row configuration with white and varnish enables simultaneous printing and delayed curing of varnish in desired areas with a dedicated UV LED module for perfect glossy effects.





New Special LED module for delayed curing of varnish



# **SIGNRACER 2512 3D**

New software development allows Signracer to automatically print the same file or different files in an unlimited number of layers on top of each other. To keep the highest accuracy in the 3D printing we need to keep the print head in a constanstant distance to the media. This is achieved by the automated adjustment of the carriage. Our technology allows customers (f.i. watch industry) to print 3D effects in the highest possible precision.















	2		-		_		
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. 5	2–4 Print Heads	2–8 Print Heads	-	4–5 Print Heads	2-8 Pr	int Heads	Ricoh Gen. 5
Ricoh Gen. 6	2–4 Print Heads	2–8 Print Heads	2–8 Print Heads	4–5 Print Heads	2-8 Pri	int Heads	Ricoh Gen. 6
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. 5	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
Ricoh Gen. 6	-	1.3 m/s	1.3 m/s (Linear Motor)	1.3 m/s	1.3 m/s	1.3 m/s	Ricoh Gen. 6
Nozzle Quantity I Drop size							Nozzle Quantity I Drop size
Ricoh Gen.5	1280 nozzles   7 - 21 pl grayscale	1280 nozzles   7 - 21 pl grayscale	-	1280 nozzles   7 - 21 pl grayscale		Ricoh Gen.5	
Ricoh Gen.6	1280 nozzles   5 - 15 pl grayscale	1280 nozzles   5 - 15 pl grayscale	1280 nozzles   5 - 15 pl grayscale		1280 nozzles   5 - 15 pl grayscale		Ricoh Gen.6
Dimensions			·				Dimensions
(height × width × depth) *without PC arm and media table	1300 × 3100 × 1700 mm	1320 × 4670 × 1960 mm	1320 × 4960 × 1960 mm	1320 × 4670 × 1960 mm	1350 × 5230 × 2220 mm	1350 × 5230 × 3200 mm	(height × width × depth) *without PC arm and media table
Weight	760 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
ax. 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 W
Media Type	Rigid and flexibl	e (PVC Boards, Aludibond, PS, PP, Acry	lat, PET-G, Glass)	Rigid and flexible	(PVC Boards, Aludibond, PS, PP, Acry	ylat, PET-G, Glass)	Media Type
Media Thickness	Maximum 100 mm	Maximum 500 mm	Maximum 100 mm	Maximum 100 mm		Media Thickness	
Media Curing System	I	LED UV curing with variable power leve	ls	LED UV curing with variable power levels		Media Curing System	
Single Row	90 mm / 14 Watt/cm²	90 mm / 1	14 Watt/cm²		120 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	Double Row
Triple Row		210 mm / 16 Watt/cm²		120 mm Colour + 30 mm Varnish 14 Watt/cm²		210 mm / 16 Watt/cm²	Triple Row
Printing Speeds							Printing Speeds
Ricoh Gen. 5	Single Row	Single Row	Single Row / Double Row	Triple Row	Single Row / Double Row	Single Row / Double Row	Ricoh Gen. 5
<b>Draft</b> (4 pass, 600x900 dpi)	23 m²/h	29 / 44 m²/h	-	21 m²/h	31 m²/h / 50 m²/h	31 m²/h / 50 m²/h	<b>Draft</b> (4 pass, 600x900 dpi)
Production (6 pass, 600x900 dpi)	18 m²/h	21 / 35 m²/h	-	14 m²/h	23 m²/h / 38 m²/h	23 m²/h / 38 m²/h	Production (6 pass, 600x900 dpi)
<b>Quality</b> (9 pass, 600x900 dpi)	14 m²/h	16 / 29 m²/h	- -	10 m²/h	17 m²/h / 31 m²/h	17 m²/h / 31 m²/h	<b>Quality</b> (9 pass, 600x900 dpi)
Ricoh Gen. 6	Single Row	Single / Double / Triple Row	Single / Double / Triple Row	Triple Row	Single Row / Double Row	Single / Double / Triple Row	Ricoh Gen. 6
<b>Draft</b> (4 pass, 600x900 dpi)	-	40 m²/h / 60 m²/h / 84 m²/h	28 m²/h / 49 m²/h / 63 m²/h	33 m²/h	41 m²/h / 69 m²/h	44 m²/h / 74 m²/h / 97 m²/h	<b>Draft</b> (4 pass, 600x900 dpi)
Production (6 pass, 600x900 dpi)	-	30 m²/h / 46 m²/h / 65 m²/h	24 m²/h / 42 m²/h / 56 m²/h	24 m²/h	30 m²/h / 51 m²/h	32 m²/h / 55 m²/h / 70 m²/h	Production (6 pass, 600x900 dpi)
<b>Quality</b> (9 pass, 600x900 dpi)	-	22 m²/h / 36 m²/h / 44 m²/h	16 m²/h / 30 m²/h / 40 m²/h	16 m²/h	22 m²/h / 40 m²/h	24 m²/h / 43 m²/h / 49 m²/h	<b>Quality</b> (9 pass, 600x900 dpi)
Ink Specifications							Ink Specifications
Certified Ink Series	SIGNRACER 100, SIGNRACER 200, PREMIUMFLEX HD, SR-IN (Industrial), PRIMER AM			SIGNRACER 100, SIGNRACER 200, PREMIUMFLEX HD, SR-IN (Industrial), PRIMER AM			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				1 1			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		

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# **Next Generation Hybrids**

New triple row print head configuration includes unique colour configurations and printing even on rigid materials with included media table.



#### **Features**



### High Performance UV LED

Signracer printers use the UV integration 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.)



### **Reliable Driving System**

Cable chain from IGUS in Germany for 24/7 operation. Cable chains are referred to as the lifeline of modern machinery. These durable cable carriers ensure a safe supply of energy, data and inks while under constant motion. Tested for over 2 Million cycles! In combination with linear motor technology it allows a much higher carriage speed of 1.5 m/s compared to 0.8 m/s for the belt system. In addition, the acceleration of the carriage is faster and there is much less vibration and noise.







	SIGNRACER 1600	SIGNRACER 2500	SIGNRACER 3200		
Printing Technology	Multi-drop technology				
Print Heads					
Ricoh Gen.5	2–8 Print Heads	2–8 Print Heads	2–8 Print Heads		
Ricoh Gen.6	2–8 Print Heads	2–8 Print Heads	2–8 Print Heads		
Print Width	1600 mm	2500 mm	3200 mm		
Hybrid	Conveyor vacuum belt with 3 zones and startbar for media positioning	Conveyor vacuum belt with 5 zones and startbar for media positioning	Conveyor vacuum belt with zones and startbar for medi positioning		
Carriage Speed			· ·		
Belt Ricoh Gen. 5	0.8 m/s	0.8 m/s	0.8 m/s		
Belt. Ricoh Gen. 6	1.3 m/s	1.3 m/s	1.3 m/s		
Nozzle Quantity I Drop size					
Ricoh Gen.5	1280 nozzles   7-21 pl grayscale				
Ricoh Gen.6	1280 nozzles   5 - 15 pl grayscale				
<b>Dimensions</b> (height × length × width) *without monitor PC arm	1310 × 3700 × 870 mm	1350 × 4850 × 1030 mm	1450 × 5480 × 1420 mm		
Weight	900 kg	1300 kg	2460 kg		
Energy consumption	4 kW	6 kW	6 kW		
Media / Curing					
Maximum media width	1600 mm	2500 mm	3200 mm		
Media Type	Rigid and flexible (PVC Boards, Aludibond, PS, PP, Acrylat, PET-G, Glass)				
Media Thickness	Maximum 50 mm				
Media Curing System	LED UV curing with variable power levels				
	90 mm / 14 Watt/cm²	120 mm / 14 Watt/cm²	90 mm / 14 Watt/cm²		
Single Row -			90 mm / 14 Watt/cm <sup>2</sup>		
Single Row  Double Row					
Double Row		180 mm / 14 Watt/cm²	180 mm / 14 Watt/cm²		
Double Row Triple Row					
Double Row Triple Row Printing Speeds		180 mm / 14 Watt/cm²	180 mm / 14 Watt/cm²		
Double Row Triple Row Printing Speeds Ricoh Gen. 5	23 m²/h	180 mm / 14 Watt/cm² Single Row   Double Row	180 mm / 14 Watt/cm² 210 mm / 16 Watt/cm²		
Double Row Triple Row Printing Speeds Ricoh Gen. 5 Draft (4 pass, 600x900 dpi)	23 m²/h 18 m²/h	180 mm / 14 Watt/cm²  Single Row   Double Row  29 m²/h / 44 m²/h	180 mm / 14 Watt/cm <sup>2</sup> 210 mm / 16 Watt/cm <sup>2</sup> 31 m <sup>2</sup> /h / 50 m <sup>2</sup> /h		
Double Row Triple Row Printing Speeds Ricoh Gen. 5 Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi)	18 m²/h	180 mm / 14 Watt/cm²  Single Row   Double Row  29 m²/h / 44 m²/h  21 m²/h / 35 m²/h	180 mm / 14 Watt/cm <sup>2</sup> 210 mm / 16 Watt/cm <sup>2</sup> 31 m <sup>2</sup> /h / 50 m <sup>2</sup> /h 23 m <sup>2</sup> /h / 38 m <sup>2</sup> /h		
Double Row Triple Row Printing Speeds Ricoh Gen. 5 Draft (4 pass, 600x900 dpi)	18 m²/h 14 m²/h	180 mm / 14 Watt/cm²  Single Row   Double Row 29 m²/h / 44 m²/h 21 m²/h / 35 m²/h 16 m²/h / 29 m²/h	180 mm / 14 Watt/cm² 210 mm / 16 Watt/cm²  31 m²/h / 50 m²/h 23 m²/h / 38 m²/h 17 m²/h / 31 m²/h		
Double Row Triple Row Printing Speeds Ricoh Gen. 5 Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Quality (9 pass, 600x900 dpi) Ricoh Gen. 6	18 m²/h 14 m²/h Single Row	180 mm / 14 Watt/cm <sup>2</sup> Single Row   Double Row  29 m <sup>2</sup> /h / 44 m <sup>2</sup> /h  21 m <sup>2</sup> /h / 35 m <sup>2</sup> /h  16 m <sup>2</sup> /h / 29 m <sup>2</sup> /h	180 mm / 14 Watt/cm² 210 mm / 16 Watt/cm²  31 m²/h / 50 m²/h 23 m²/h / 38 m²/h 17 m²/h / 31 m²/h  Single   Double   Triple Rov		
Double Row Triple Row Printing Speeds Ricoh Gen. 5 Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Quality (9 pass, 600x900 dpi) Ricoh Gen. 6 Draft (4 pass, 600x900 dpi)	18 m²/h 14 m²/h <b>Single Row</b> 26 m²/h / 43 m²/h	Single Row   Double Row  29 m²/h / 44 m²/h  21 m²/h / 35 m²/h  16 m²/h / 29 m²/h    Double Row  40 m²/h / 60 m²/h	180 mm / 14 Watt/cm² 210 mm / 16 Watt/cm²  31 m²/h / 50 m²/h  23 m²/h / 38 m²/h  17 m²/h / 31 m²/h  Single   Double   Triple Rov		
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Double Row Triple Row Printing Speeds Ricoh Gen. 5 Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Ricoh Gen. 6 Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Quality (9 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Quality (9 pass, 600x900 dpi)	18 m²/h 14 m²/h <b>Single Row</b> 26 m²/h / 43 m²/h	180 mm / 14 Watt/cm <sup>2</sup> Single Row   Double Row  29 m <sup>2</sup> /h / 44 m <sup>2</sup> /h  21 m <sup>2</sup> /h / 35 m <sup>2</sup> /h  16 m <sup>2</sup> /h / 29 m <sup>2</sup> /h    Double Row  40 m <sup>2</sup> /h / 60 m <sup>2</sup> /h  30 m <sup>2</sup> /h / 46 m <sup>2</sup> /h	180 mm / 14 Watt/cm² 210 mm / 16 Watt/cm² 210 mm / 16 Watt/cm²  31 m²/h / 50 m²/h 23 m²/h / 38 m²/h 17 m²/h / 31 m²/h  Single   Double   Triple Rov 41 m²/h / 69 m²/h / 97 m²/h 30 m²/h / 51 m²/h / 70 m²/h		
Double Row Triple Row Printing Speeds Ricoh Gen. 5 Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Quality (9 pass, 600x900 dpi) Ricoh Gen. 6 Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi)	18 m²/h 14 m²/h <b>Single Row</b> 26 m²/h / 43 m²/h 20 m²/h / 37 m²/h	Single Row   Double Row  29 m²/h / 44 m²/h  21 m²/h / 35 m²/h  16 m²/h / 29 m²/h    Double Row  40 m²/h / 60 m²/h  30 m²/h / 46 m²/h  22 m²/h / 36 m²/h	180 mm / 14 Watt/cm² 210 mm / 16 Watt/cm²  31 m²/h / 50 m²/h  23 m²/h / 38 m²/h  17 m²/h / 31 m²/h  Single   Double   Triple Rov		
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Double Row Triple Row Printing Speeds Ricoh Gen. 5  Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Quality (9 pass, 600x900 dpi) Ricoh Gen. 6  Draft (4 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Production (6 pass, 600x900 dpi) Quality (9 pass, 600x900 dpi) Ink Specifications	18 m²/h 14 m²/h <b>Single Row</b> 26 m²/h / 43 m²/h 20 m²/h / 37 m²/h	Single Row   Double Row  29 m²/h / 44 m²/h  21 m²/h / 35 m²/h  16 m²/h / 29 m²/h    Double Row  40 m²/h / 60 m²/h  30 m²/h / 46 m²/h  22 m²/h / 36 m²/h	180 mm / 14 Watt/cm² 210 mm / 16 Watt/cm² 210 mm / 16 Watt/cm²  31 m²/h / 50 m²/h 23 m²/h / 38 m²/h 17 m²/h / 31 m²/h  Single   Double   Triple Rov 41 m²/h / 69 m²/h / 97 m²/h 30 m²/h / 51 m²/h / 70 m²/h		

### **SIGNRACER 1800 RTR**

Tripple row Ricoh Gen. 6 print head configuration with special colour configurations up to 6 colours, plus White and Varnish.



#### **Features**

- Suitable for wide range of roll to roll media, including vinyl, banner, paper and more.
- Conveyor vacuum belt with 3 zones for even heavier media transport.
- Reliable media winding system with tension for uninterrupted print production.
- Over 20 colour configurations with full

colour range including Lc, Lm, White and Varnish.

- High quality OEM inks for superb performance and industrial grade ink resistance.
- Advanced ink formulations with matching UV LED system for perfect curing.

### **SIGNRACER 3200 RTR TURBO**

Super-wide, super speed, super all around solution for high-volume production on banners and roll media.









#### **Features**

- Very fast carriage speed up to 1.7 m/s.
- Double row Kyocera KJ4A print heads.
- Up to 156 m<sup>2</sup>/h with a linear motor.
- High Performance 16W Air Cooled LED.
- Linear motor for high speed carriage, long term durability, less noise and vibration.
- New safety cover with premium design.
- Support for more printing materials.
- Convenient manual ink purge.
- Turbo has a better performance at wrinkling when printing.
- Double roller unit for material transport.

### **SIGNRACER 3200 RTR**

High Speed production with exceptional print quality and better media versatility.

#### **Features**

- Super wide format printing up to 3.2m.
- Single row Kyocera KJ4A print heads.
- High print speed up to 87 m<sup>2</sup>/h
- New SIGNRACER SR-100T inks.
- High-density print mode for backlit.
- LED light box for backlit inspection.
- Max. material thickness up to 2mm.



- Rolls up to 200 kg in weight.
- Kyocera 2/4 printhead configuration.
- Reliable media feeding and tension bar.
- Adjustable suction system.
- Mesh printing kit without liner included.
- Antistatic system (optional).

Specifications SIGNRACER 1800 RTR		SIGNRACER 3200 RTR	SIGNRACER 3200 RTR Turbo	
Print Heads	Ricoh Gen.6	Kyocera KJ4A (2-4)	Kyocera KJ4A (4-10)	
Nozzle Quantity 1280		2656	2656	
Physical Resolution	600 dpi	2*300 dpi	2*300 dpi	
Drop Size	Variable 5 - 15 pl	Variable 4-6-10pl	Variable 4-6-10pl	
Max. Frequency	40 kHz	30 KHz	30 KHz	
Print Head Width	54.1 mm	112.35 mm	112.35 mm	
Media Curing System	LED UV curing with variable power levels			
Single Row		180 mm / 14 Watt/cm <sup>2</sup>		
Double Row	180 mm / 14 Watt/cm <sup>2</sup>		270 mm / 16 Watt/cm <sup>2</sup>	
Triple Row + Varnish	120 mm + 30 mm / 14 Watt/cm²			
Triple Row Others	210 mm / 16 Watt/cm <sup>2</sup>			
Print Head Rows	Double Row / Triple Row	Single Symmetrical Row	Double Symmetrical Row	
Colour Configuration	CMYK + WH CMYKLcLm + WH CMYKLcLm + WH + VAR	4 PH - DS_CMYK 2 PH - CMYK	4 PH - DS_CMYK 5 PH - W + DS_CMYK 8 PH - DA_YMCKKCMY_ 10 PH - DA_YMCKWWKCMY	
Printing Speed	Double Row / Triple Row			
Carriage type	Belt	Belt	Linear Motor	
Carriage speed	1.3 m/s	1.3 m/s	1.7 m/s	
Draft	51 m²/h / 65 m²/h	87 m²/h	156 m²/h	
Production	42 m²/h / 56 m²/h	63 m²/h	115 m²/h	
Quality	31 m²/h / 41 m²/h	49 m²/h	82 m²/h	
Media Specification				
Max. Media   Max. Print Width	1800 mm   1800 mm	3200 mm   3200 mm	3200 mm   3200 mm	
Media Type		Roll Materials		
Max. Media Weight	200 kg rolls			
Media Thickness	50 mm	Maxim	ım 2 mm	
Roll printing Single roll printing		Single roll printing	One roll or two rolls printing optional	
Optional printing		Mo	esh kit	
Ink Specification	 			
Certified Inks		SR-100 HD, SR-100 T		
Ink Consumption		8 ml/m²		

### SIGNRACER OEM INKS

**Inks Overview** 



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. Greenquard 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 asthma, allergies, respiratory diseases; eye, nose, throat irritation; reproductive and developmental defects; various diseases and forms of cancer.



Signracer OEM inks are produced by Nutec Digital according to highest quality standards. Our low viscosity ink formulation is running at only 38°C - 40°C, which requires less cleaning during operation and reduced ink aging in the system. We offer industrial print solutions to print on leather (long-term high flexibility) and highest adhesion on all kinds of materials.

Signracer integrated digital primers can print these adhesion promoters under printed areas only. Our high-performance UV LED technology is curing the primers directly or with delayed curing. Delayed curing forms solid film-like surfaces, suitable for all industrial production purposes with challenging materials. The solid primer film provides the strong adhesion to the material and creates unique effects using white and colour on the top.

The ink bottles are also used as the printer ink reservoirs. We achieve slow aging of the ink because old inks are never mixed with new inks. This results in a very stable printer and no sediments in the bottles because they are always changed.





### **SIGNRACER IN - INDUSTRIAL**

- Greenquard Gold Certified
- New colours Light Black, Orange, Violet
- Low viscosity ink developed for LED
- Highest adhesion on industrial materials
- Limited solvent resistance
- High flexibility and colour density

### **SIGNRACER SR-100 HD**

- Greenquard Gold Certified
- Low viscosity ink developed for LED
- Good adhesion on roll and rigid material
- Good flexibility
- High density colours
- Highest solvent and scratch resistance







### SIGNRACER SR-200 HD

- Low viscosity ink developed for LED
- Very good adhesion on roll and rigid materials
- Limited solvent resistance
- High flexibility and density colour





### **SIGNRACER SR-100 T**

- Low viscosity ink developed for LED
- Developed for high volume Roll to Roll printers
- Only available in 5 litre bottles and CMYK
- Multipurpose ink
- Good flexibility
- High density colours
- Highest solvent and scratch resistance



### SIGNRACER PREMIUMFLEX HD

- Low viscosity ink developed for LED
- Developed for leather, fake leather and other flexible materials
- Good adhesion on above material
- High density colour
- Best long term flexibility and stretch ability



#### SIGNRACER PRIMER AM/ VARNISH PF

- Low viscosity primer developed for LED
- Highest adhesion on most industrial materials like plastics
- Advantage of using primer only under printed area
- Can be applied with direct curing before inks
- Highest adhesion with delayed curing which creates a primer film

Ink Type	Colours	Print Head Temperature	Key Features	
SIGNRACER SR-100 HD	CMYK	38°C	Multi-purpose ink with high	
SIGNRACER SK-100 HD	WH	40°C	solvent and scratch resistance.	
SIGNRACER SR-100 T	СМҮК	38°C	Multipurpose, Roll to Roll ink for high volume customers.	
SIGNRACER SR-200 HD	CMYK, LC, LM	38°C	Very good adhesion on roll and	
SIGNRACER SR-200 HD	WH, VAR	40°C	rigid materials.	
	CMYK, LC, LM	40°C	Long term flexibility on special materials like leather, fabrics and	
SIGNRACER PREMIUMFLEX HD	Clear, WH, VAR	42°C	materials like leather, fabrics and melamine.	
SIGNRACER IN - Industrial	CMYK, LC, LM, LK, Orange, Violet	38°C	Highest adhesion for industria	
	WH, VAR	40°C	applications.	
SIGNRACER PRIMER AM/ VARNISH PF	Clear	38°C	Highest adhesion for industrial applications.	



### **Industrial Applications**

SIGNRACER is specialized on industrial applications. SIGNRACER IN ink series are dedicated for production in industries which require strong ink adhesion on challenging materials like metals, glass, acrylics, polycarbonates, MDF, and many more.









Automotive parts

Watch faces

Tools

Instruments

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Website: www.signracer.ch

### **R&D** Facilities



#### **SWITZERLAND**

Signracer is designed in Switzerland, where it is constantly tested and upgraded in our R&D center. All our new features, inks and applications are rigorously tested over the period of six months prior to production. We develop system solutions with pre-treatment, priming, printing and surface coatings which can be integrated in the production processes at our clients.



### **GERMANY**

In 2019 we moved to our new 600m2 production facility in Trier, Germany. There we do assembly, quality control, and further printer customizations for our customers. With our growing production capacity in Germany, we ensure stable and quick delivery as well as good stock of all machines.



### **ITALY**

Our newest European R&D and production facility is operating in Torino, Italy. In Italy we specialize in water-based inks including full inline solutions with Mega rollers, cutters and stackers. These include our HydroSpeed printer series for printing on paper and our TEX printer series for dye-sublimation printing on transfer paper or direct to fabric.