HGS MACHINES

BLAZE

Unleash Unmatched Speed & Precision –

High-Performance Textile Printing at Its Best!

Redefining Machines.

Everything is possible

High-end digital printing

The Sapphire from HGS Machines offers unsurpassed quality and value to textile printers who are taking the first step into digital production. It also offers a step up to high-performance, high-quality production for printers who wish to delelop their digital capabilities further. Sapphire uses several printing modes and 16 or 32 Ricoh Gen 6 printheads with a resolution of 1200 & 600 dpi. Apart from ease, accuracy and productivity, Sapphire offers flexibility and may be used with Reactive inks and different drying methods.

Save time, space and money

Digital printing has many benefits. It makes short-run, fast-turnaround jobs affordable for customers and profitable for printers. It eliminates screen preparation time and makes more time available for printing full production runs on scren printing lines.

Multitude of applications

Open creative possibilities with the wide range of natural fabrics, both knitted as well as woven. Blotches and gradations can be printed with intense colors and smoothness thanks to the variable dropsize technology combined with the unique, unrivalled native 1200 dpi resolution. This also allows the printing of very fine lines and geometric designs that no other digital printer on the market can match.

Engineered for performance

Full control in one integrated system

The Sapphire is a complete system, designed and engineered to make a complete solution. All elements are made to work together: printheads, inks, substrate conveyor, and dryer. With Sapphire from HGS, configuring the right combination for your requirements is possible without compromising results.

Nova+Pro unrivalled image quality and long printhead life

The Sapphire comes standard with the Nova+Pro waveform, which ensures perfect drop positioning on the fabric for flawless image quality without striping. The Inline placement of printheads ensures no light-dark color effet in bloch color printing, increasing print speed while preventing the "Soccerfield effect." Additionally, this system extends printhead lifespan and minimizes issues like misaligned or missing nozzles, ensuring optimal printing results.

End-to-end support of your business

With HGS you can access decades of experience in textile printing, right from the source. Our application support specialists are dedicated to help you explore new possibilities and will share everything there is to know to keep your Sapphire in perfect condition. And when outstanding results matter, rely on HGS´ ink technology. Our performance inks are specially formulated to deliver optimum performance. Our inks guarantee unattended printing without nozzle blockages or print head failures while adhering to the highest standards and legislation on sustainability.

End-to-end control for quality output

The right balance of technology incorporated in Sapphire, internationally recognized inks and our full support ensures end-to-end control for consistent high-quality output. Whereas Sapphire is built to control high speed and high quality in two different configurations. The Sapphire with 16 printheads is a great option for entering in digital printing, where the Sapphire with 32 printheads is the preferred choice for high volume printing. A Sapphire can be later upgraded at the customer site from 16 to 32 printheads. The combination of RICOH GEN 6 print heads, Ink recercullation, chilling plant and our specially formulated performance inks ensures excellent runnability and longer print head lifetime. Most importantly, you can count on strong and vivid colours at the lowest possible ink consumption.

A closer look to inspiring details

Features	Description
Printing width	1800 mm
No. of PH	16 or 32
Print heads	Ricoh Gen 6
Ink	Reactive or Pigment
Colours	8
Environment Conditions	Room temperature 20 - 25°C
Printer Electronic	BYHX
Conveyor Cleaning system	3 Sponge roll & 1 brush roll, Back dryer, fabric supporting roll
Compressed Air	Consumption: 0.03m3/min Air pressure: 0.7Mpa
Print head gap	Up to 10 mm
Rip Supported	Neo Stampa
Electricity load	16H- 26.8kw, 32H- 31.7kw (approx.)

Print modes / Production modes

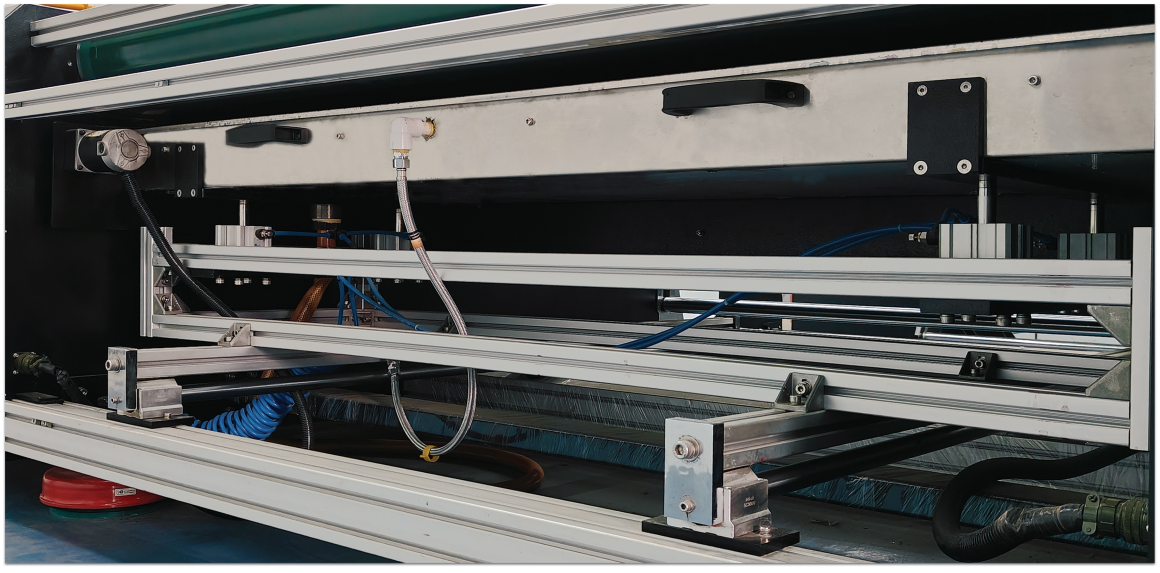
Sapphire with 16H

Passes	DPI	Productivity (sq mtr)
1	600 * 600	220
2	600 * 1200	130

Sapphire with 32H

Passes	DPI	Productivity (sq mtr)
1	600 * 600	400
2	600 * 1200	250

* Actual performance may depend on the specific type of system and application settings.



A closer look to inspiring details

Features	Description
Printing width	1800 mm
No. of PH	8 or 16
Print heads	Ricoh Gen 6
Ink	Reactive or Pigment
Colours	8
Environment Conditions	Room temperature 20 - 25°C
Printer Electronic	BYHX
Conveyor Cleaning System	3 Sponge roll, 1 brush roll, Fabric Supporting roll
Compressed Air	Consumption: 0.03m3/min Air pressure: 0.7Mpa
Print head gap	Up to 10 mm
Rip Supported	Neo Stampa
Power Supply	3 phase

Print modes / Production modes

Chrome with 8H

Passes	DPI	Productivity (sq mtr)
2	600 * 600	120
3	600 * 900	90

Chrome with 16H

Passes	DPI	Productivity (sq mtr)
1	600 * 600	220
2	600 * 1200	130

* Actual performance may depend on the specific type of system and application settings.

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About HGS Machines

Since inception in the year 2005, the HGS Machines Pvt. Ltd. has come into view after its merger with HGS engineering. Its leadership is marked by many successful challenges our constant chase of `excellence` and considered among the India's Digital Textile Printers Industry. HGS Group has supervised by young entrepreneurs under the guidance of Our Founder Director Mr. Prashant Mohan Vats, Who have a vast technical knowledge of industry. HGS had engineered the conveyer belt system in 2007, which was one of first innovation in the Indian digital textile industry. The objective was very clear to provide the highly competent & Global standard printers with the Economical price. At HGS, We understand the changing needs of printing industry. For execute your new collections every time, we make highly innovative & cost saving printers every time, which bears the exceptionality of high definition digital printing. We have also become a key player in the market for digital printing. In 2010 we were the first in the industry who manufactured a digital textile printer.

We have built a network in Pan India in more than 30 cities. We take pride in putting our customers first, letting their ambitions inspire us, and deploying our expertise, resources and network to help them to achieve their goals. Our solutions are designed to empower customers worldwide in all stages of the printing process; from pre-press to printing, from textile to industrial – and beyond. That is the impact of a key player.

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