





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.



Time to take Digital Printing Seriously

Tejas is the optimal solution for you entry into digital printing.

At HGS we have put 2 decades of our experience in textile printing into proven digital technology to help you meet the demands of today's fashion industry. Tejas provides industrial performance and more sustainable, high quality digital printing at a profitable cost level. With fast turnarounds and full application support, Tejas is the optimal solution for your entry into digital printing.

Combining the best of both worlds with the Tejas print engine

The print engine works with RICOH GEN 6 print heads that have a proven long lifetime, while the unique HGS technology ensures consistent print quality even in varying room climate conditions. The variable drop size enables you to produce sharp images, vibrant colours and smooth gradations. An inbuilt reservoir system keeps the ink flow smooth to produce fresh colours and crisp designs anytime.

User friendly

To help you succeed in digital, we made sure the printer is very easy to operate. The Printer comes with Open body for an easy maintenance. The installation is plug & play and the latest colour management engine and colour processing tools are included in the preloaded RIP software. A key operator training comes as a standard, covering user maintenance, working with profiles for smooth gradations and vibrant colours with different fabrics, practical tips & tricks, and more.



A closer look to inspiring details

Features

Printing width

No. of PH

Print heads

Ink

Colours

Environment Conditions

Printer Electronic

Conveyor Cleaning system

Compressed Air

Print head gap

Rip Supported

Electricity load

Print modes /

Production modes

Description

1800 mm

16 or 32

Ricoh Gen 6

Reactive or Pigment

2

Room temperature 20 - 25°C

BYHX

3 Sponge roll & 1 brush roll, Back dryer, fabric supporting roll

Consumption: 0.03m3/min

Air pressure: 0.7Mpa

Up to 10 mm Neo Stampa

16H-26.8kw, 32H-31.7kw (approx.)

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.





Designed for continuous production

Fabric infeed system

- Auto Fabric feeding ensure the fabric pasting easy on conveyour belt.
- Auto tensioning sensor to maintain constant tension throughout the length
- Multiple tensioning roller to control boing in fabric and ensure straight edges
- Guide supported Conveyor with adhesive keeps the fabric even and prevents creases while printing achieving accurate printing results.
- Pneumatic controlled pressure roll ensure the fabric pasting even.
- Special Plateform to stand operator for his easy reach to handle the fabric feed.

Blanket cleaning system

- Equipped with brush roller and water jets to wash off the lint and excess inks on the blanket
- 3 Sponge roller to ensure removal of excess moisture
- Infrared belt dryer with hot air to dry the blanket completely and activate the adhesive on the blanket
- Extra adjustable Supporting fabric roll ensure removal of excess moisture in any condition.

Dryer

- Separate infrared dryer for rapid drying of printed ink on fabric
- Energy efficient radiation for reduced heat dissipation into the room
- Dryer with Hot air runs in diffrent 2 stages optional.

Ink system

- With Ink recirculation system, best for pigment printining
- With Ink cooling option, ensures longer runability of dark color printing & healthy PH life.
- 10 litre ink tanks for long ink refilling cycles
- Latest degassing and bubble removing system to avoid printhead blockage during printing
- Inline ink filters for safety of printhead
- Ink refill during running
- Low ink warning for operator attention

PH Carriage Assembly

- With Anti carriage crash sensor to protect print heads
- Linear servo motor with magnetic drive helps Sapphire to run without noise & performing as per market demand.
- Solid adjustable printer beem ensure more staibility of printer which helps to avoid vibration.
- PH carriage designed systematically by professionals to save time in case of maintainance.
- The unique Inline PH placement ensures NO ligh-dark color effect in bloch color printing, Please Note: Print sharpness comes always better on Inline system in comparison to staggered.



TRISHIKA technologies

Company Profile 2025

Welcome to TRISHIKA Technologies, your ultimate partner in the digital textile printing industry. As a new and innovative supplier, we specialize in offering cutting-edge digital textile printers, both new and refurbished, along with a full range of supporting products and services. Our goal is to empower businesses with advanced printing technology.



