



WEB TO PRINT
DIRECT TO GARMENT 



HOW CAN ROQ HYBRID HELP YOUR BUSINESS?

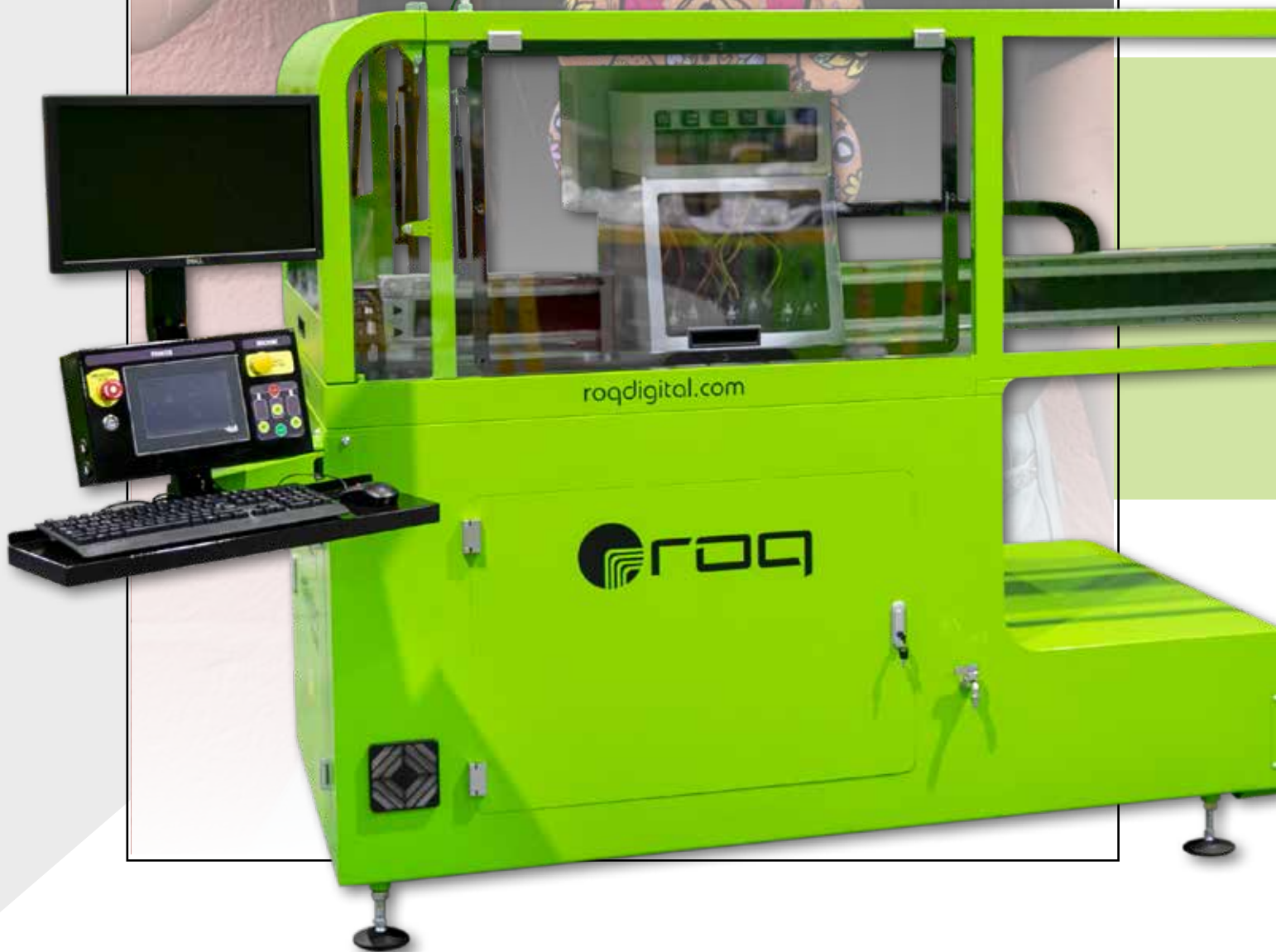
great standards
high production with digital quality

detail and color
sharp and detailed prints
large color gamut

simplicity
easy to operate
simple to maintain

money saving
it only uses two screens
it only needs operator

★
450
PIECES/HOUR*



DIRECT TO GARMENT

SCREEN & DIGITAL

The customer desire for better quality on printing and the need for customization is the reason why the industry has been experimenting with digital printing in the recent past. Having 36 years of experience building automatic screen printing machines, ROQ has a unique position in the market, it harnessed the latest technology in digital printing and its capable of fusing this technology with the accumulated knowledge that it has on screen printing.

The **ROQ HYBRID** combines the detail, the colors, the resolution, with the capabilities of the automatic screen printing machines that ROQ supplies. Using only two screens it is able to output 450 pieces per hour with a fantastic hand touch and printing quality.

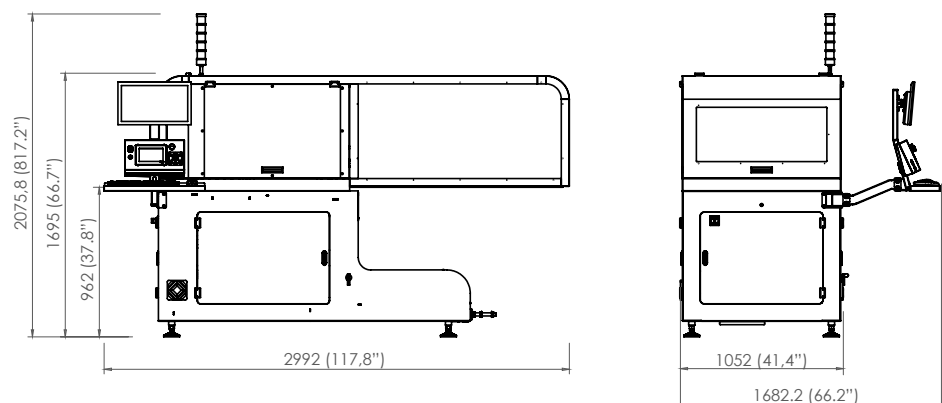
The **ROQ NOW** is the first 100% digital printing machine by ROQ. This concept will give all the customization that the customer needs for their garments. ROQ keeps on pushing the boundaries of digital printing on textile by presenting solid solutions to the market.

ROQ HYBRID	FC5070C	FC3870C
printhead technology	Piezo-Electric / FujiFilm Dimatix	
number of print heads	8, 12 or 18 printheads per station*	
ink set	CMYK / CMYK+2	
printing height range - mm (inch)	1,5mm - 4mm*** (0.06" - 0.16")	
Z axis movement - mm (inch)	up to 18 mm (up to 0.7")	
max. printing area - mm (inch)	500 x 700mm (19.7" x 27.6")	380 x 700mm (14.6" x 27.6")
max. productivity	450 pieces/h*	
resolution	600 x 400 dpi (2 pass) 600 x 800 dpi (4 pass) 600 x 1200 dpi (6 pass) 600 x 1600 dpi (8 pass)	
max. resolution	600x1600 DPI	
RIP Software	ROQ Studio powered by Neostampa	
operating conditions	20°-25°C/68-77°F, humidity 50-70% non-condensing	
power supply**	AC 100-240V, 50Hz, 60Hz, 3300W	
width	1682 mm (66.2")	
length	2992 mm (117.8")	
height	2075 mm (817.2")	

* productivity for A4 size work, 600 x 800 dpi resolution at medium speed

** the advertised power is only for the digital station without any other equipment

*** adjustable up to 18 mm



HOW CAN ROQ NOW HELP YOUR BUSINESS?



upload artwork



choose recipe



print

its fully automated workflow allows for:

flexibility

upload the artworks you want
black and white t-shirt templates

time saving

very quick production
short delivery times

100% digital

no screens needed

money saver

only one operator

customization

in different products

worry free

without min. production

★
300
PIECES/HOUR*

ROQPRESS LEVEL

4

DRYES AND FLATS THE FABRIC

ROQDRYERS

3

APPLIES PRIMER

ROQPRIMERS

2

PRE-TREATS THE FABRIC

WHITE STATION

5

WHITE LAYER PRINTING

CMYK STATION

6

CMYK LAYER PRINTING

LOAD STATION

1

SEVERAL JOBS INLINE

4

3

WEB TO PRINT

PRINT ON DEMAND

ROQ NOW

minimum print stations	16*
maximum print area (length x width) - mm (inch)	450 x 340 (17.7" x 13.4")
productivity - (pieces/hour)	300**
pallets type	Special pallets with fabric hold down system
RIP software	RoqStudio and RoqServer Special Edition
jobs management software	RoqNowSW
operating conditions	20°-25°C/68-77°F, humidity 50-70% non-condensing
electrical requirements	3x400V AC 50 Hz, 44 kVA, 3ph + N + PE****
compressed air pressure	0.7 Mpa 120L/min., 17.6 cfm
ink type	Aquarius (by Dupont Artistri)

WHITE & CMYK DIGITAL STATION

number of printheads	8, 12 or 18 printheads per station*
printhead technology	Piezo-Electric / FujiFilm Dimatix
printing height range - mm (inch)	1,5 - 4*** (0.06" - 0.16")
Z axis course - mm (inch)	
resolution available	600 x 400 dpi (2 pass) 600 x 800 dpi (4 pass) 600 x 1200 dpi (6 pass) 600 x 1600 dpi (8 pass)
printhead recirculation	integrated
sub-tank recirculation	integrated (only White Digital)

PRE-TREATMENT STATION

method of deposition /number of nozzles	sprinkler / 2
tank size (L)	10
pre-treatment deposition	10 - 50 gr.
control method	uni and bidireccional

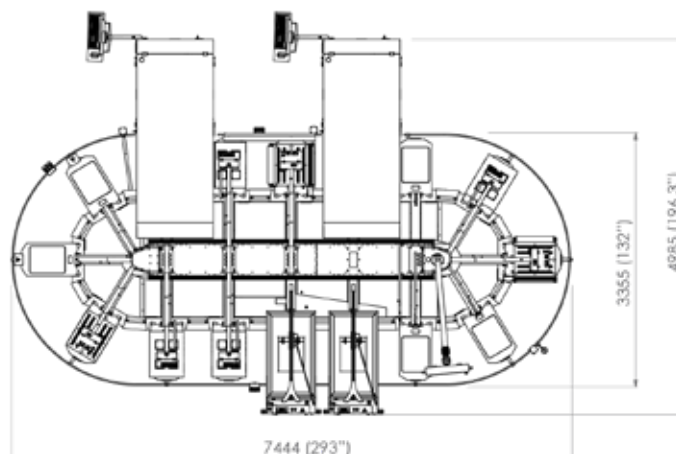
DRY STATION

power	7,2 kVA
power / area	3,8 (W/cm ²)
number of heating lamps	6 x 1200W

PRESSING STATION

power	4 kVA
power / area	2 (W/cm ²)

* available for other configurations upon request. **productivity for A4 size work, 600 x 1200 dpi resolution at average speed for repeated jobs ****the greater the distance between the surface to be printed and the print head, the lower the definition.



ROQ HYBRID



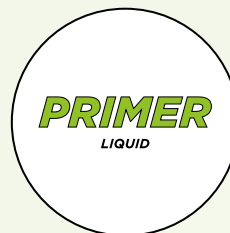
micropigment

for textile digital printing

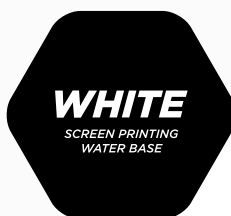
MicroPigment Ink is the water-based ink for piezoelectric printheads for inkjet printing on textile. After the pre-treatment with Primer Paste or Primer Liquid and the heat curing, it provides fine print with vivid colors and soft hand effect. This product can be used for various types of substrate; from textiles/garments to industrial materials.



The Primer Paste is applied using the screen-printing process, giving a foundation for the digital ink to adhere the white base. The Primer Paste prevents smearing & bleeding of the digital inks hence it helps the digital inks to remain vivid without inhibiting the hand feel.



Primer Liquid is a special product to be applied on white fabric that will work as a binder for the digital inks. It gives to the print high sharpness/definition, good hand feel, high brightness/colour strength and wet and dry rubbing fastness. In order to guarantee a suitable application of pre-treatment the following equipment is needed: ROQPrimer (machine)



White Paste is the water-based Paste that is applied on dark fabric by screen printing process. This white base gives the garment a foundation for Digital Inkjet printing.



An Inkjet printhead is a very sensitive device that can malfunction with irregular viscosity, surface-tension or because of the particles on the ink. Therefore, the whole system, including the tanks, pipings and the internal ink delivery system need to be completely flushed and cleaned before introducing MicroPigment Inks into the system. The Cleaning Solution is also used for the daily maintenance.

ROQ NOW



AQUARIUS

powered by
DuPont™ Artistri®

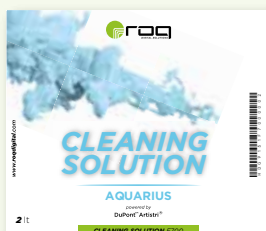
DuPont™ Artistri® digital textile inks are a step-change in technology, offering a 30% improvement in color compared to previous generation digital DTG inks. The Artistri® ink system significantly streamlines the DTG workflow, saving both time and manpower and providing the ROQ NOW with a deep colour gamut, image sharpness and excellent wash fastness.



The ROQNOW pre-treatment solutions enable clean and consistent printing. Different pre-treatments are used for white and coloured substrates. There are many advantages in using the right pre-treatment:

- It works as binding agent of the ink to substrate
- Allows to print cotton and cotton/polyester blend fabrics
- Improves white ink opacity on dark and colored cotton garments
- Faster white ink set-up
- Improve the wash fastness and also the color yield
- Improve the color gamut and image sharpness

The ROQ primer module will guarantee a pre-treatment uniform layer over all the fabrics.



This solution is specific to maintain the ROQ NOW printheads in good condition. Used on daily prevention and for specific cleaning the cleaning solution is mandatory to keep the ROQ NOW running in proper conditions.



www.roqinternational.com



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