



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

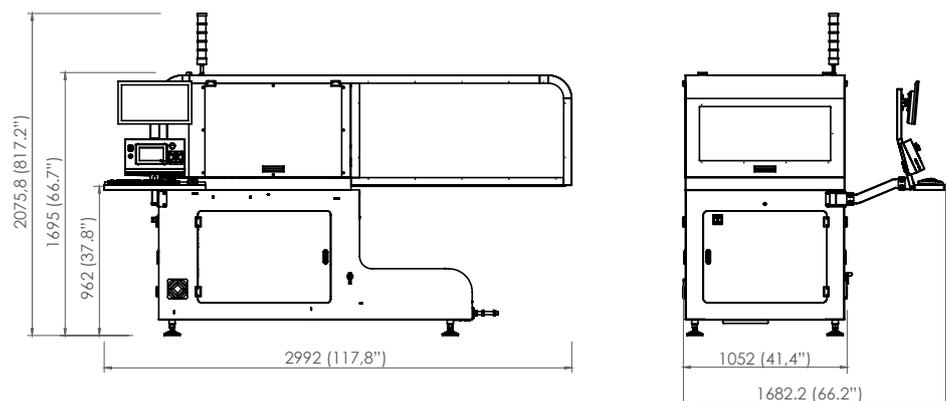
The customer desire for better quality on printing and the need for customization is the reason why the industry has been experimenting with digital printing in the recent past. Having 36 years of experience building automatic screen printing machines, ROQ has a unique position in the market, it harnessed 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
<b>printhead technology</b>	Piezo-Electric / FujiFilm Dimatix	
<b>number of print heads</b>	8, 12 or 18 printheads per station*	
<b>ink set</b>	CMYK / CMYK+2	
<b>printing height range</b> - mm (inch)	1,5mm - 4mm*** (0.06" - 0,16")	
<b>Z axis movement</b> - mm (inch)	up to 18 mm (up to 0.7")	
<b>max. printing area</b> - mm (inch)	500 x 700mm (19.7" x 27.6")	380 x 700mm (14.6" x 27.6")
<b>max. productivity</b>	450 pieces/h*	
<b>resolution</b>	600 x 400 dpi (2 pass) 600 x 800 dpi (4 pass) 600 x 1200 dpi (6 pass) 600 x 1600 dpi (8 pass)	
<b>max. resolution</b>	600x1600 DPI	
<b>RIP Software</b>	ROQ Studio powered by Neostampa	
<b>operating conditions</b>	20°-25°C/68-77°F, humidity 50-70% non-condensing	
<b>power supply**</b>	AC 100-240V, 50Hz, 60Hz, 3300W	
<b>width</b>	1682 mm (66.2")	
<b>length</b>	2992 mm (117.8")	
<b>height</b>	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

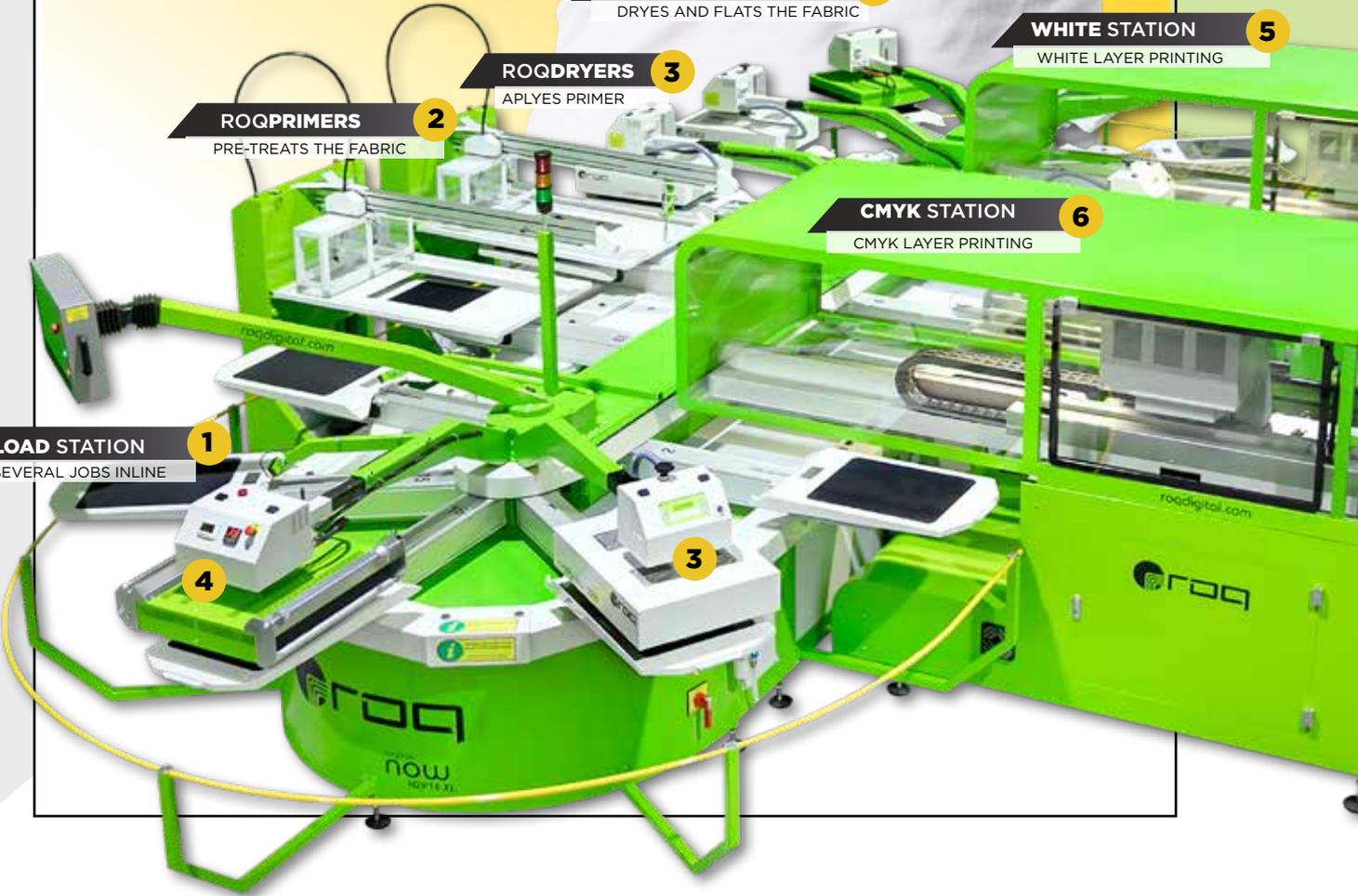
**WHITE STATION 5**  
WHITE LAYER PRINTING

**ROQDRYERS 3**  
APLYES PRIMER

**ROQPRIMERS 2**  
PRE-TREATS THE FABRIC

**CMYK STATION 6**  
CMYK LAYER PRINTING

**LOAD STATION 1**  
SEVERAL JOBS INLINE



# WEB TO PRINT

## PRINT ON DEMAND

### ROQ NOW

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

### WHITE & CMYK DIGITAL STATION

<b>number of printheads</b>	8, 12 or 18 printheads per station*
<b>printhead technology</b>	Piezo-Electric / FujiFilm Dimatix
<b>printing height range</b> - mm (inch)	1,5 - 4*** (0,06" - 0,16")
<b>Z axis course</b> - mm (inch)	
<b>resolution available</b>	600 x 400 dpi (2 pass) 600 x 800 dpi (4 pass) 600 x 1200 dpi (6 pass) 600 x 1600 dpi (8 pass)
<b>printhead recirculation</b>	integrated
<b>sub-tank recirculation</b>	integrated (only White Digital)

### PRE-TREATMENT STATION

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

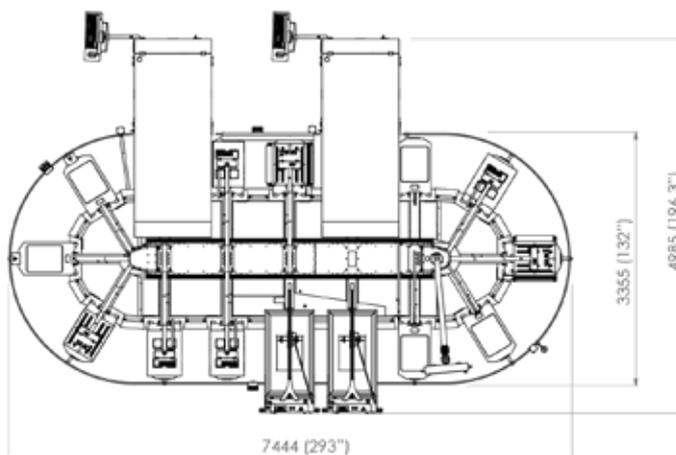
### DRY STATION

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

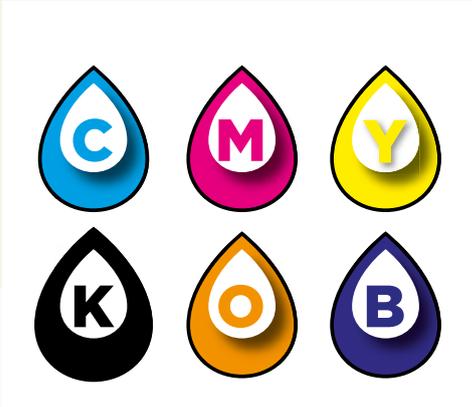
### PRESSING STATION

<b>power</b>	4 kVA
<b>power / area</b>	2 (W/cm <sup>2</sup> )

\* 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



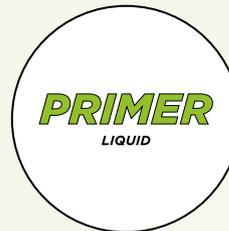
## micropigment

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](http://www.roqinternational.com)



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