

Grafica's nano-print

A DREAM MACHINE OF EVERY SCREEN PRINTER

NANO-PRINT is a semi-automatic screen printing machine for every common screen printer across the globe.

- Print area 15" x 20".
- Its easy to start and operate.
- Single Phase
- No compressor required.

Technical Features

1. PLC (Programable logic controller)
2. High quality electrical components
3. AC Motor of Class "F" Insulation
4. VFD (Variable Frequency Drive) for precise speed control
5. Imported geared motor (lifetime lubricated)
6. High quality steel fabrication
7. High quality pressure die-cast aluminum parts
8. Hard anodized aluminum extrusions
9. All moving parts hardened for longer life
10. Honey comb vacuum bed with stainless steel top
11. Zero backlash precision micrometer for vacuum bed movement to get accurate registration
12. Compact powerful vacuum blower to hold substrate firmly while printing
13. Squeegee head motion on precision imported guide rails
14. Imported timing belt for squeegee head movement
15. Independent squeegee and flood bar pressure control
16. Aluminum extruded squeegee holder
17. Aluminum extruded flood bar with 0.5 mm edge to print consistent halftones thus reduces ink deposition
18. Optional stainless steel edged flood bar to print ceramic / glass inks
19. Hard nickel plated metal parts to avoid corrosion
20. Hardened cams and shafts to increase life of machine thus reduces wear and tear
21. Castor wheels for easy mobility
22. Foot switch for easy operation
23. Auto mode to bypass foot switch
24. Safety bars to avoid accident
25. High safety standards



nano-print advantages

1. Single phase (plug n play)
2. No expensive air compressor required
3. Reduces manpower
4. Minimum maintenance
5. Minimum settings
6. Quick job changeover, faster production
7. No hidden cost, it's fully featured
8. Lower squeegee rubber cost (8 x 30 mm)
9. Requires less space 3.3' x 3.5' = approx. 12 sq. ft.
10. Screen frame holder compatible with aluminum, metal & wooden frames
11. Print with any types of solvent, plastisol and UV inks
12. Minimum investment, faster returns
13. Electrical consumption (Rs. 5 / Hr / Mumbai) = Rs. 40/Shift = Cheaper then helpers salary
14. Non stop speed 900/per hour

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What's inside NANO-PRINT

- AC Motor with Class "F" Insulation
- AC frequency inverter, sensor less vector control drive for precise speed control
- Imported geared motor pre-lubricated with zero backlash hardened gears
- High quality aluminum casting parts, to avoid blow holes and air bubbles
- Wire cut cams for very high accuracy
- Hardened WPS steel used for all cams
- All moving parts fully hardened for longer life
- High quality CRC sheet metal parts
- Squeegee head movement on precision guide rails
- Hard anodized aluminum extrusions
- Honey comb vacuum bed increases strength
- Stainless steel vacuum bed for high scratch resistant
- Micro meter for vacuum bed (+/- 0.01 mm)
- Imported timing belt with steel wires
- High quality electrical components



Precision Guide Rail



Quick change over of aluminum extruded squeegee and flood bar



High Quality AC Geared Motor



PLC (Programmable logic controller) and High Quality Electrical Components



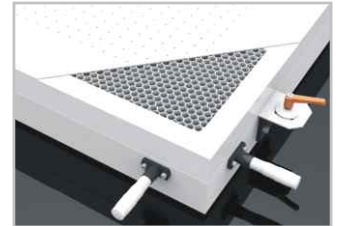
Imported timing belt for squeegee head movement



Compact Powerful Vacuum Blower



VFD (Variable Frequency Drive) for precise speed control



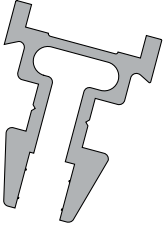
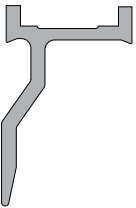
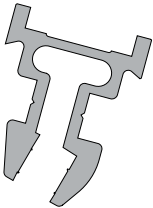
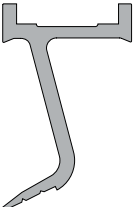



Sturdy, light weight honey comb vacuum bed with stainless steel top and precision micrometer to get accurate registration

Technical Data

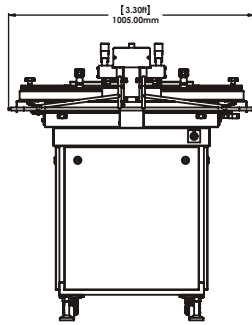
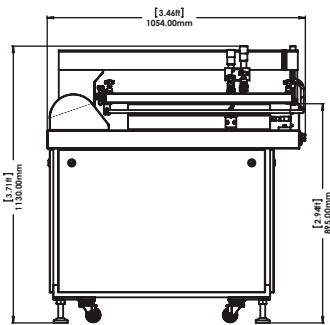
Description	Model: GF-1520 Nano-Print
Max Print Area	15" x 20" Inches (381 x 508 mm)
Vacuum Bed	22.8" x 27.8" (580 x 707 mm)
Vacuum Bed Movement for Registration	± 10 mm
Screen Frame Size	26" x 30" (660 x 762 mm) min & 30" x 36" (762 x 914 mm) max
Max Off-Contact	10 mm
Max Substrate Thickness	5 ~ 7 mm (Depends on mesh tension)
Squeegee Holder	15.75" (400 mm) min & 22" (560 mm) max
Flood Coater	15.75" (400 mm) min & 23" (585 mm) max
Max Non-Stop Speed	900 Impressions per hour
Power Consumption	1 HP (0.745 kW) Single Phase
Dimensions	As shown in the illustration on last page
Weight	270 Kg

NANO-PRINT - Standard Accessories & Terms (Version Wise)

Description	NANO-PRINT (Ver 1.0)	NANO-PRINT (Ver 2.0)	NANO-PRINT (Ver 3.0)
Digital Cycle Counter 	Not Included	Included	Included
Squeegee Rubber 75° shore hardness 	One Roll (1 meter length)	Two Rolls (1 Meter Length / Each)	Two Rolls (1 Meter Length / Each)
Squeegee Holder 15° Angle For Fine Lines/Halftones 	Length 22" (In) - 1 No Length 16" (In) - 1 No.	Length 22" (In) - 1 No Length 16" (In) - 1 No.	Length 22" (In) - 1 No Length 16" (In) - 1 No.
Standard Flood Coater 	Length 30" (Inch) - 1 No Length 20" (Inch) - 1 No.	Length 30" (Inch) - 1 No Length 20" (Inch) - 1 No.	Length 30" (Inch) - 1 No Length 20" (Inch) - 1 No.
Squeegee Holder 30° Angle For Solid Ground & Thick Ink Deposit 	Not Included	Length 22" (In) - 1 No Length 16" (In) - 1 No.	Length 22" (In) - 1 No Length 16" (In) - 1 No.
Special Flood Coater For Fine Lines/Halftones 	Not Included	Length 30" (Inch) - 1 No Length 20" (Inch) - 1 No.	Length 30" (Inch) - 1 No Length 20" (Inch) - 1 No.
Vacuum by Foot Switch For Curly & Unstable Papers/Substrates 	Not Included	Not Included	Included

NANO-PRINT v/s MANUAL PRINT

Points to be considered between	NANO-PRINT	MANUAL PRINT
Production speed	Consistent	Varies piece to piece even with same operator
Print quality & sharpness	Consistent	Varies piece to piece even with same operator
Squeegee pressure	Consistent	Varies piece to piece even with same operator
Squeegee angle	Consistent	Varies piece to piece even with same operator
Density & dot percentage	Consistent	Varies piece to piece even with same operator
Color accuracy	Consistent	Varies piece to piece even with same operator
Register accuracy	Consistent	Varies piece to piece even with same operator
Flood coater advantage	Achieve high quality print with sharp edges, even ink deposition, consistent dot reproduction, consistent ink thickness and color accuracy with special extruded advance flood bars	Causes uneven ink deposition, increases ink deposition, decreases sharpness and occurs ink smearing and smudging because flooding is done through squeegee with excess pressure
Ink deposition	Even and consistent	Uneven and not consistent due to uneven squeegee pressure
Man power	If any conveyor dryer used then only 1 person or else max. 2 persons are required	Three person required one to lift the screen if the screen is bigger or heavier one person to print with squeegee one person to feed the material and one person to lift the material, so minimum 3 to 4 persons required to operate one manual table
Skill	No much skill labor required and no dependency on any labor	Skill and experience labor required and completely dependent on labor
Recurring cost	Except electricity no much cost involved	Monthly salary, bonus, incentive etc. etc.
Other advantages	Runs 24 hrs 365 days non stop	Major problem like labor issues, holidays, over time, health problems which are common issues in manual printing. Also any skill labor cannot print consistent for 24 hours 365 days with same quality and accuracy. Skill labor many times overrules the seniors and owners because he knows his value and takes advantage of it



Dimensions mentioned below are in mm or else specified
All dimension and specification are subject to change without notice



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