



nyloflex[®] FTH Digital

A flat top dot flexo plate that can be customized to meet the specific needs and printing conditions of printers.



- Hard photopolymer flexo plate with inherent flat top dots
- Easy creation of flat top dots with your standard solvent processing equipment
- Developed especially for the flexible packaging market, for printing on foil substrates with solvent-based inks
- Smooth plate surface is able to hold customized surface screening patterns (e.g. Pixel+ and Nano)



Exceptional print quality

- Reproduce finest details through sharpened highlights
- Reduced bump-up for extended gamut
- High print resolution – precise reproduction of fine elements (e.g. first stable tonal value 1.6% at 60 l/cm)



Reduce operating cost

- Reduce cost, save time: No additional equipment, no time consuming LED exposure or any consumables required
- Reduce your ink consumption thanks to optimum solid ink density and improved ink laydown achieved through surface screening



Improve productivity and consistency

- Decrease your press downtime – no ink fillings thanks to optimised plate formulation for solvent based inks
- Less dot gain tolerances – on press the flat top dots are less impression sensitive than standard digital dots resulting in improved production consistency

nyloflex® FTH Digital

Hard inherently flat top flexo plate with a smooth plate surface for surface screening, ideal for the flexible packaging market



Technical characteristics	nyloflex® FTH 114 Digital	nyloflex® FTH 170 Digital
Color of raw plate	light blue	light blue
Total thickness (mm) (inch) ¹	1.14 (0.045")	1.70 (0.067")
Hardness acc. to DIN 53505	62	62
Plate hardness (Shore A)	79	73
Recommended relief depth (mm)	0.5 – 0.6	0.5 – 0.8
Tonal range (%)	1 – 98	1 – 98
at screen ruling (l/cm)	60	60
Fine line width (down to µm)	100	100
Isolated dot diameter (down to µm)	200	200
Processing parameters²		
Back exposure (s)	10 – 20	30 – 50
Main exposure (min)	8 – 10	8 – 10
Washout speed (mm/min)	250 – 300	200 – 250
Drying time at 60 °C / 140 °F (h)	1.5 – 2.0	2
Post exposure UV-A (min)	8	8
Light finishing UV-C (min) ³	2	2
Laser intensity (J/cm ²)	Approx. 10% higher than for standard nyloflex® digital plates	

Processing information

Suitable equipment	The nyloflex® FTH Digital can be processed with nyloflex® processing equipment and all similar devices and can be used with all laser systems suitable for imaging flexo printing plates.
Printing inks	Suitable for all solvent based printing inks and conditionally suitable for water based and UV inks. ⁴ (ethyl acetate content preferably below 15%, ketone content preferably below 5%).
Washout solvents	Especially good results are achieved with nylosolv® washout solvents. nylosolv® can be distilled and reused.
Processing information	A detailed description of the imaging, exposure and finishing steps, as well as detailed information about handling and storing, can be found in the nyloflex® User Guide.
High quality standard	nyloflex® printing plates are manufactured according to DIN ISO 9001, DIN ISO 14001 and DIN ISO 50001 standards and requirements. This process guarantees our customers consistent high quality products and services.

1) Standard thicknesses currently available – subject to change 2) All processing parameters depend on, among other things, the processing equipment, lamp age and the type of washout solvent. A minimum exposure intensity of $\geq 17 \text{ mW/cm}^2$ is recommended. The above mentioned processing times were established under optimum conditions on nyloflex® processing equipment and using nylosolv® washout solvents. Under other conditions the processing times can differ from these; therefore, the above mentioned values are only to be used as a guide. 3) Depending on longevity of the tubes. 4) Suitability with UV inks is dependant on the ink type and temperature – these factors could affect the performance of the plate and consistency of the print.

Find out more about the flat top family. Please contact us for additional information.

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