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nyloflex[®] NEF Digital

Enhanced performance in combination with the nyloflex[®] NExT exposure technology

Outstanding print quality with nyloflex[®] NExT exposure

- High durometer plate for flexible packaging and labels, especially designed for the nyloflex[®] NExT exposure technology
- Developed for creation of Flat Top Dots and excellent reproduction of surface screenings
- Significantly improved ink lay-down and high solid ink density due to distinct reproduction of surface screen patterns
- For outstanding print results on film, foil and coated paper substrates
- Perfection in every detail: precise reproduction of finest details in highlights
- Allows a reduced bump-up while reaching first tonal values on plate of e.g. 1.2% at 60 l/cm (152 lpi) thus expanded gamut

Flexibility and efficiency

- High productivity due to short exposure times and quick washout
- Excellent process stability, reliability and consistency in plate processing, and in print
- Also suitable for regular tube exposure with the following benefits compared to other digital plates:
 - Requires less bump up – reproduction of more grey levels and an expanded gamut
 - Allows reproduction of surface screens resulting in a more even ink laydown

Advantages of nyloflex[®] NExT exposure technology:

- Efficient creation of flat top dots and reproduction of surface screenings
- The combination of UV LEDs and UV tubes allows the definition of various dot shapes and shoulder angles of relief elements
- No additional consumables, no additional processing steps required
- Easy implementation in existing workflows

FlintGroup
Flexographic Products

nyloflex® NEF Digital

	nyloflex® NEF Digital	
	114	170
Technical characteristics		
Base material	Polyester foil	
Colour of raw plate	Light blue	
Total thickness¹ (mm) (inch)	1.14 (0.045")	1.70 (0.067")
Hardness acc. to DIN 53505 (Shore A)	62	62
Plate hardness (Shore A)	78	70
Relief depth (mm)	0.5 – 0.6	0.5 – 0.8
Tonal range (%) at screen ruling (l/cm)	1 – 98 60	1 – 98 60
Fine line width (down to µm)	100	100
Isolated dot diameter (down to µm)	200	200

Processing parameters²		
Back exposure (s)	15 – 20	25 – 45
Recommended exposure settings for NExT (mm/min)	3 x 250 2 x 1000 + 2 x 200	3 x 250 2 x 1000 + 2 x 200
Exposure with regular tubes (min)³	8 – 10	8 – 10
Washout speed (mm/min)	240 – 290	210 – 260
Drying time at 60 °C / 140 °F (h)	2.0	2.0
Post exposure UV-A (min)	8	8
Light finishing UV-C (min)⁴	1 – 4	1 – 4

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. The above mentioned processing times were established under optimum conditions on nyloflex® processing equipment and using nylosolv® washout solvents. The values for the main exposure of digital plates were determined at an exposure intensity of > 15mW/cm². Under other conditions the processing times can differ from these; therefore, the above mentioned values are only to be used as a guide.

³ Minimum exposure intensity of ≥ 17 mW/cm²

⁴ Depending on longevity of the tubes.

⁵ 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.

Suitable equipment

The nyloflex® NEF 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

The nyloflex® NEF Digital is suitable for all alcohol based printing inks and conditionally suitable for water based and UV inks.⁵ (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 individual platemaking steps, as well as detailed information about processing and storing, can be found in the nyloflex® User Guide.

High quality standard

nyloflex® printing plates are manufactured according to DIN ISO 9001 and DIN ISO 14001 standards and requirements. This process guarantees our customers consistent high quality products and services.

You are welcome to contact us for further information.

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