

Rely on us.™

nyloflex® FRC nyloflex® FRC Digital

User friendly and chip resistant for deep plate relief requirements

Product features

- Specifically designed for the North American corrugated plate market with extreme durability during processing
- Perfect for all corrugated print applications - from challenging graphics and multi-color designs to simple line work
- Outstanding ink transfer, excellent solid area coverage and density, yet minimal dot gain on all substrates
- Perfectly compatible with flat top dot exposure technology to reduce washboarding effect on postprint board
- Optimized formula for fast exposures and processing
- Excellent backing adhesion for superior mounting strength
- Extremely robust and durable material
 - highly resistant to chipping
 - stable print over long runs
 - less mechanical wear
 - low swelling characteristic
 - high resistance to ozone
 - excellent storage capability

Advantages of nyloflex® Digital

- Superior printing quality with sharper images, more open intermediate depths, finer highlight dots and less dot gain, i.e. larger range of tonal values, therefore improved contrast
- Increased productivity and data transfer without loss of quality due to digital workflow
- Consistency in quality when repeating plate processing
- Cost effective and more environmentally friendly in processing, as no film is required



FlintGroup
Flexographic Products

nyloflex® FRC | nyloflex® FRC Digital

	nyloflex® FRC nyloflex FRC® Digital			
	112	125	155	250
Technical characteristics				
Base material	polyester film			
Color of raw plate	red (nyloflex® FRC Digital with black LAMS layer)			
Total thickness¹ (inch)	0.112"	0.125"	0.155"	0.250"
(mm)	(2.84)	(3.18)	(3.94)	(6.35)
Hardness acc. to DIN 53505 (Shore A)	32	32	32	32
Plate hardness (Shore A)	39	37	35	33
Relief depth (inch)	0.040" – 0.055"	0.040" – 0.060"	0.050" – 0.080"	0.080" – 0.130"
(mm)	(1.0 – 1.4)	(1.0 – 1.5)	(1.3 – 2.0)	(2.0 – 3.3)
Tonal range (%)	2 – 95	2 – 95	3 – 95	3 – 95
at screen ruling of	120 lpi	120 lpi	100 lpi	85 lpi
	(48 l/cm)	(48 l/cm)	(40 l/cm)	(32 l/cm)
Fine line width – down to inch (µm)	0.004" (100)	0.004" (100)	0.012" (300)	0.012" (300)
Isolated dot diameter – down to inch (µm)	0.008" (200)	0.008" (200)	0.030" (750)	0.030" (750)
Processing parameters²				
Back exposure (s)	nyloflex® FRC	25 – 50	25 – 50	50 – 90
	nyloflex® FRC Digital	25 – 50	25 – 50	50 – 90
Main exposure (min)	nyloflex® FRC	6 – 12	6 – 12	6 – 12
	nyloflex® FRC Digital	8 – 12	10 – 14	10 – 14
Washout speed (mm/min)		100 – 130	100 – 130	80 – 110
Washout time (min)		(7 – 10)	(7 – 10)	(9 – 13)
Drying time at 60 °C / 140 °F (h)		2.0 – 2.5	2.0 – 2.5	2.5 – 3.0
Post exposure UV-A (min)		10	10	10
Light finishing UV-C (min)		5 – 10	5 – 10	5 – 10

1 Standard thicknesses currently available – subject to change.

2 All processing parameters depend on, among others, 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.

Suitable equipment

The nyloflex® FRC plates can be processed with nyloflex® processing equipment and all similar devices. The nyloflex® FRC Digital plates can be used with all laser systems suitable for imaging flexo printing plates.

Printing inks

Suitable for all water based and alcohol based printing inks.
(ethyl acetate content preferably below 15%, ketone content preferably below 5%)

Washout solvents

Especially good results are achieved with nylosolv® washout solvents.
nylosolv® solvents 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.

