

Be  
brilliant.

# nyloprint® WS

# nyloprint® WS Digital

Water washable, steel based letterpress printing plates for brilliant print quality



## Product features

- + Wide range of applications**
  - + Ideal for laminated tubes, cups and cans printing, continuous business forms, security printing, label printing, female die for blind embossing
  - + Suitable for rotary letterpress, imprinting units and special-purpose printing presses
- + Highest print quality**
  - + High print contrast with an exceptional tonal range
  - + Brilliant halftone gradations due to very fine halftone dots (< 20 micron)
  - + Smooth vignettes
  - + High resolution – up to 10 160 dpi
  - + Excellent solid density due to brilliant ink transfer
  - + Very good durability for long print runs
  - + Reliably reusable for repeat orders
- + Efficient, reliable and fast plate processing**
  - + Wide exposure latitude combined with high intermediate depths
  - + Highly productive and cost saving due to plate processing within 25-35 min
  - + Reduced down times on press due to fast replacement of damaged plates
- + Excellent mounting properties of nyloprint® WS-T**
  - + nyloprint® WS-T and nyloprint® WS-T Digital with excellent adaptation to different cylinders diameters due to very high flexibility of the thin steel base

## Advantages of nyloprint® Digital

- ✓ Higher print quality**
  - + Reproduction of finer details and less dot gain due to digital imaging
  - + High dimensional stability
  - + No defects caused by dust and damaged films
  - + No data loss during transfer
  - + Smoother plate surface can achieve higher density
  - + Highly consistent especially when repeating plate processing
- ✓ Cost effective and environmentally friendly**
  - + No film costs
  - + No chemicals for film development
  - + Electronic filing of graphics, film storage is redundant
  - + Easy and fast data exchange – worldwide

**XSYS**  
Print solid. Stay flexible.

# Where printing meets packaging.

## nyloprint® WS | nyloprint® WS Digital

|   | nyloprint® WS   nyloprint® WS Digital |                           |                               |                  |                           | nyloprint® WS-T   nyloprint® WS-T Digital <sup>1</sup> |
|---|---------------------------------------|---------------------------|-------------------------------|------------------|---------------------------|--|
|   | 43                                    | 58                        | 73                            | 83               | 94                        | 73   |
| <b>Technical characteristics</b>            |                                       |                           |                               |                  |                           |  |
| Base material                               |                                       |                           | steel                         |                  |                           | thin steel   |
| Colour of raw plate                         |                                       |                           | red                           |                  |                           | red  |
| Total thickness <sup>2</sup> (mm)<br>(inch) | 0.43<br>(0.017")                      | 0.58<br>(0.023")          | 0.73<br>(0.029")              | 0.83<br>(0.033") | 0.94<br>(0.037")          | 0.73<br>(0.029")                                       |
| Plate hardness (Shore D)                    | 89                                    | 84                        | 77                            | 76               | 73                        | 77   |
| Relief depth (mm)<br>(inch)                 | 0.20<br>(0.008")                      | 0.32<br>(0.013")          | 0.46<br>(0.018")              | 0.56<br>(0.022") | 0.67<br>(0.026")          | 0.56<br>(0.022")                                       |
| Tonal range (%)<br>at screen ruling         | nyloprint® WS                         | 2-95 at 60 l/cm (150 lpi) |                               |                  | 2-95 at 60 l/cm (150 lpi) |  |
|   | nyloprint® WS Digital                 | 1-98 at 60 l/cm (150 lpi) |                               |                  | 1-98 at 60 l/cm (150 lpi) |  |
| Fine line width (down to µm)                | 100                                   | 100                       | 100                           | 100              | 100                       | 100  |
| Isolated dot diameter (down to µm)          | 200                                   | 200                       | 200                           | 200              | 200                       | 200  |
| Distortion factor (mm)<br>(inch)            | 2.08<br>(0.082")                      | 3.02<br>(0.119")          | 3.85<br>(0.152")              | 4.49<br>(0.177") | 5.19<br>(0.204")          | 4.34<br>(0.171")                                       |
| <b>Processing parameters<sup>3</sup></b>    |                                       |                           |                               |                  |                           |  |
| Main exposure (min)<br>nyloprint® WS        |                                       |                           | 1.0-5.0                       |                  |                           | 3.0-5.0  |
| nyloprint® WS Digital                       |                                       |                           | 1.0-3.5 (without vacuum film) |                  |                           | 1.5-3.5 (without vacuum film)                          |
| Washout at 30°C / 86°F (min)                |                                       |                           | 1.0-3.5                       |                  |                           | 2.5-3.5  |
| Drying time at 80°C / 176°F (min)           |                                       |                           | 15                            |                  |                           | 10-15  |
| Post exposure (min)                         |                                       |                           | 2                             |                  |                           | 2  |

### Processing Equipment

|                             |   |
|-----------------------------|---|
| Suitable equipment          | nyloprint® WS plates can be processed with nyloprint® processing equipment and all similar devices. nyloprint® WS Digital plates can be used with all laser systems suitable for imaging letterpress plates.  |
| Printing inks and varnishes | Suitable for UV and oil based inks and varnishes.   |
| Washout medium              | For washout only tap water is needed.   |
| Processing information      | A detailed description of the individual platemaking steps, as well as detailed information about processing and storing can be found in the nyloprint® User Guide.   |
| Certification               | XSYS printing plates are produced at Willstätt production site, which is certified according to international standards for quality management (DIN EN ISO 9001:2015), environmental management (DIN EN ISO14001:2015) and energy management (DIN EN ISO 50001:2018). |

1) non-standard product 2) standard thicknesses currently available - subject to change 3) All processing parameters depend on, among others, the processing equipment and lamp age. The above mentioned processing parameters were established under optimum conditions on nyloprint® processing equipment. Under other conditions the processing times can differ from these. Therefore the above mentioned values are only to be used as a guide.

### Please contact us for additional information.

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