



GRAPHOLUX



## Technical target values

100% TCF (Totally Chlorine Free)

| Grammage (g/m <sup>2</sup> )<br>ISO 536 | 51   | 54   | 57   | 60   | 65   | 70   | 80   |
|-----------------------------------------|------|------|------|------|------|------|------|
| Brightness %<br>ISO 2470 D65            | 76   | 76   | 78   | 78   | 78   | 78   | 78   |
| Opacity %<br>ISO 2471                   | 90   | 91   | 92   | 92.5 | 94   | 95   | 96   |
| Gloss, %<br>Hunter ISO 8254-1           | 43   | 46   | 48   | 50   | 51   | 52   | 52   |
| Bulk, cm <sup>3</sup> /g<br>ISO 534     | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  |
| L*<br>ISO 5631 D65                      | 89   | 89   | 90   | 90   | 91   | 91   | 91   |
| a*<br>ISO 5631 D65                      | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 |
| b*<br>ISO 5631 D65                      | -0.3 | -0.3 | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |

*The values given are target values and variations occur.***Producer**

SCA Ortviken, Sweden.

**Areas of applications**

Magazines, supplements and inserts printed in heatset web offset.

**Reel diameters**

Standard diameters are 100, 120 and 125 cm.

**Reel width**

Available range is 400 - 2860 mm.

**Web length**

| g/m <sup>2</sup> | 51    | 54     | 57     | 60     | 65     | 70     | 80     |
|------------------|-------|--------|--------|--------|--------|--------|--------|
| Ø 100 cm         | 16000 | 15 500 | 15 000 | 14 000 | 13 000 | 12 200 | 11 000 |
| Ø 120 cm         | 24000 | 22 500 | 21 500 | 20 500 | 18 000 | 17 700 | 16 000 |
| Ø 125 cm         | 26500 | 24 500 | 23 500 | 22 000 | 19 000 | 19 100 | 18 000 |

**Environment**

The mill is certified in accordance with ISO 9001 and 14001. Only TCF (totally chlorine free) bleaching is used. Chain of Custody in accordance with FSC and PEFC.

**Wrapping**

Reels are wrapped in polyethene laminated liner inner end shields of corrugated board and polyethene coated outer end shields.

**Packing**

Reels less than 600 mm in width are always co-packed and marked with a red stripe. We recommend co-packing of reels up to 900 mm.

**Surface pH value**

The surface pH value of the paper is &gt;6.

Rev. 2017-02-23

For further information and samples, please contact:

**SCA GRAPHIC PAPER UK LTD.**Bradbourne House  
New Road, East Malling  
GB-KENT ME19 6DZ  
Tel. +44 17 3252 38 88



**Norske Skog**

# Bruck Norcote H

**End use:** Magazines, catalogues, supplements, direct mail, inserts/flyers

| Basic properties  | ISO                       |                      |      |      |      |      |      |      |      |
|-------------------|---------------------------|----------------------|------|------|------|------|------|------|------|
| Basis Weight      | (ISO 536)                 | (g/m <sup>2</sup> )  | 51   | 54   | 57   | 60   | 65   | 70   | 80   |
| Thickness         | (ISO 534)                 | (µm)                 | 47   | 49   | 51   | 52   | 56   | 60   | 67   |
| Bulk              | (ISO 534)                 | (cm <sup>3</sup> /g) | 0.92 | 0.91 | 0.89 | 0.87 | 0.86 | 0.86 | 0.84 |
| Brightness D65    | (ISO 2470)                | (%)                  | 75   | 75   | 75   | 76   | 76   | 76   | 76   |
| CIE Whiteness     | (ISO 11475)               | (%)                  | 71   | 71   | 71   | 71   | 72   | 73   | 74   |
| L-value D65       | (ISO 5631-2)              | (D65/10°)            | 90   | 90   | 90   | 90   | 91   | 91   | 91   |
| a-value D65       | (ISO 5631-2)              | (D65/10°)            | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 | -0.2 |
| b-value D65       | (ISO 5631-2)              | (D65/10°)            | 1.5  | 1.5  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  |
| Opacity           | (ISO 2471)                | (%)                  | 90   | 91   | 92   | 92   | 93   | 93   | 95   |
| Gloss (Lehmann)   | (ISO 8254-1) (Tappi T480) | (%)                  | 47   | 48   | 50   | 54   | 56   | 58   | 58   |
| Smoothness PPS 10 | (ISO 8791-4)              | (µm)                 | 1.3  | 1.3  | 1.3  | 1.2  | 1.2  | 1.2  | 1.2  |

| Pre-press data | ISO       |        |     |     |     |     |     |     |     |
|----------------|-----------|--------|-----|-----|-----|-----|-----|-----|-----|
| CIE L*-value** | 13655, M1 | D50/2° | 91  | 91  | 91  | 91  | 91  | 91  | 91  |
| CIE a*-value** | 13655, M1 | D50/2° | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| CIE b*-value** | 13655, M1 | D50/2° | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |

**Recommended ICC-Profile:** FOGRA 46L (PSO LWC Standard / ISO 12647-2:2013)

**PRODUCT FAMILY:**  
Norcote

**FINISH:**  
Gloss

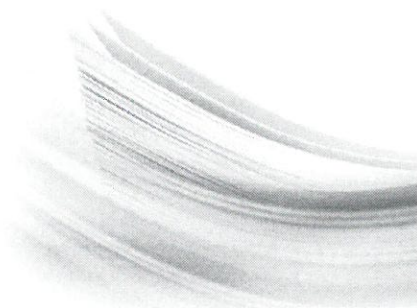
**Norske Skog Bruck is  
certified according to:**

**PRINTING METHOD:**  
Heat set web offset

**PRODUCER:**  
Bruck

Paper Profile 2016  
PEFC (ENG)  
FSC  
EU Ecolabel  
ISO 9001:2008  
ISO 14001:2004  
ISO 18001: 2007  
PEFC (DE)

*Last Updated:*  
April 2017



## UPM COTE H

When you have to make large, good quality print runs, but still be cost-effective, you can't go wrong with UPM Cote. It's a balanced and competitive combination of optical properties with the widest basis weight range in the market.

### UPM COTE H :

|                                 |                                                                                                                                                    |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Category:</b>                | Heatset web offset papers                                                                                                                          |
| <b>Grade:</b>                   | Lightweight coated (LWC)                                                                                                                           |
| <b>End use:</b>                 | Advertising material, Books, Brochures, Catalogues, Direct mailing, Magazines                                                                      |
| <b>Finish:</b>                  | Gloss                                                                                                                                              |
| <b>Furnish:</b>                 | Chemical pulp, Coating colour, Fillers, Mechanical pulp, Recycled fibre                                                                            |
| <b>Printing Method:</b>         | Heatset web offset                                                                                                                                 |
| <b>Format/Size:</b>             | Reels                                                                                                                                              |
| <b>Reel Diameter (cm) :</b>     | 100.0 - 125.0                                                                                                                                      |
| <b>Reel Width (cm) :</b>        | 35.0 - 380.0                                                                                                                                       |
| <b>Core (mm):</b>               | 76.0 / 150.0                                                                                                                                       |
| <b>Wrapping:</b>                | Strong kraft paper, Strong moisture proof polyethylene laminated kraft paper                                                                       |
| <b>Certificates and Labels:</b> | EMAS, EU Ecolabel, FSC Chain-of-Custody, ISO 14001, ISO 50001, ISO 9001, OHSAS 18001, PEFC Chain-of-Custody                                        |
| <b>Note:</b>                    | Recycled fibre from Augsburg. PEFC™ and FSC® on request but subject to availability. Energy Management system ISO 50001 in place at Augsburg mill. |

## TECHNICAL TARGET VALUES

|                                            |      |      |      |      |      |      |      |      |      |      |
|--------------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Basis Weight (ISO 536) (g/m <sup>2</sup> ) | 36.0 | 39.0 | 42.0 | 45.0 | 48.0 | 51.0 | 54.0 | 57.0 | 60.0 | 65.0 |
| Bulk (ISO 534) (cm <sup>3</sup> /g)        | 1.00 | 1.00 | 0.95 | 0.95 | 0.95 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Brightness D65 (ISO 2470-2) (%)            | 67.0 | 68.0 | 69.0 | 70.0 | 70.0 | 71.0 | 72.0 | 73.0 | 74.0 | 75.0 |
| L-value D65 (D65/10°) (ISO 5631-2)         | 88.0 | 88.0 | 88.0 | 88.0 | 89.0 | 89.0 | 89.0 | 90.0 | 90.0 | 90.0 |
| a-value D65 (D65/10°) (ISO 5631-2)         | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | -0.7 |
| b-value D65 (D65/10°) (ISO 5631-2)         | 2.5  | 2.5  | 2.5  | 2.5  | 2.5  | 2.5  | 2.5  | 2.5  | 2.5  | 1.2  |
| Opacity ISO (2471) (%)                     | 86.0 | 86.0 | 87.0 | 89.0 | 89.0 | 90.0 | 91.0 | 92.0 | 92.0 | 93.0 |
| Gloss Hunter (ISO 8254-1) (%)              | 37.0 | 39.0 | 42.0 | 45.0 | 46.0 | 50.0 | 52.0 | 56.0 | 60.0 | 60.0 |
| Smoothness PPS 10 (ISO 8791-4) (μm)        | 1.7  | 1.7  | 1.6  | 1.5  | 1.5  | 1.4  | 1.3  | 1.2  | 1.2  | 1.2  |

36 g/m<sup>2</sup> available upon request

Please note: Technical values are informative and subject to production variations

## PREPRESS GUIDELINES

|                                 |                          |
|---------------------------------|--------------------------|
| CIE L*-value (D50/2°) WB        | 91.2                     |
| CIE a*-value (D50/2°) WB        | 0.1                      |
| CIE b*-value (D50/2°) WB        | 2.4                      |
| Max. Total Area (TAC%)          | 300                      |
| ICC Paper profile               | PSO_LWC_Standard.eci.icc |
| Characterisation data           | FOGRA46L.txt             |
| TVI Curve                       | B(CMY), C(K)             |
| AM Screen recommendation (l/cm) | 60                       |
| FM Screen recommendation (μm)   | 25                       |
| Measurement condition for D50   | ISO 13655, M0; D50/2°    |
| Measurement equipment           | Techkon RS800            |