

NCS

Pre-order

Production

Content

Content	2
NCS pre-order production 2020	3
NCS QUALITY LEVELS	4
PRODUCTION RESULTS	5

NCS pre-order production 2020

STOCKHOLM, MAY 27TH 2020

To ensure a high quality and hassle-free colour communication, NCS Colour AB has set up the NCS Reference Lab in Stockholm to provide accurate colour products that meet various professional needs.

All productions of NCS Colour Products are rigorously checked, controlled and certified by the NCS Reference Lab to ensure that the final products have the perfect colour appearance. The target for the colour matching is a tolerance below $0.3 \Delta E_{2000}$ to ensure the best result. The final result is always controlled on random samples. Our NCS Quality Management ensures that the NCS samples are produced with EU-approved pigments and accordingly to the primary standard on global-leading colour accuracy and consistency.

Each production of certified NCS Original or customized colour products is documented. This report includes graphs for the quality outcome, where the results shown are from the final production.

For final products, NCS Colour AB has launched two clear quality levels to meet professional requirements; NCS Quality Level 1 and NCS Quality Level 2. This years production has achieved exceptionally good result. 100% of the colours have a maximum deviation of $0.6 \Delta E_{2000}$ and 90 % less than $0.3 \Delta E_{2000}$ in D65.

We are proud to be able to say that we can offer you the best quality on the market that ensures your quality, colour communication and your customer trust and confidence. Please note that NCS - the Natural Colour System®© is a registered trademark and may only be used commercially after a license agreement has been signed with NCS Colour AB.

Controlled and certified,



ANDERS NILSSON
NCS Quality Centre Manager

NCS COLOUR AB
Igeldammsgatan 30
P.O. Box 49022
SE-100 28 Stockholm

+46 (0)8 617 47 00
info@ncscolour.com
ncscolour.com



NCS QUALITY LEVELS

NCS QUALITY LEVEL 1

Fans and professional working tools for industry, research and design.

Tolerances from NCS Primary Standards:

80% $\Delta E_{2000} < 0.6$

100% $\Delta E_{2000} < 1.0$

Gloss 15-20

NCS QUALITY LEVEL 2

Products such as take-away cards

Tolerances from NCS Primary Standards:

70% $\Delta E_{2000} < 0.6$

90% $\Delta E_{2000} < 1.0$

100% $\Delta E_{2000} < 1.5$

Gloss 13-22

LIGHT SOURCES: D65, A, F11

All evaluation of colour differences is done in the three light sources D65, A and F11. D65 is standard daylight, A is tungsten light and F11 is a representative three-band fluorescent light.

MEASUREMENT CONDITIONS

Measurement values are evaluated according to CIE 15:2004. Measurement geometry $d_i:8^\circ$ (diffuse illumination, specular component included), UV component included, readings every 10 nm from 360 to 750 nm. All $\Delta E_{2000}(1:1:1)$ values are calculated according to CIE DE2000 in accordance with CIE 142-2001. NCS S 0500-N (white) is used as a sample backing in reflectance measurement. Standard light sources used are D65, A and F11 (CIE 15:2004). Gloss measurements in accordance to ISO 2813, 60° .

CONTROLLED AND CERTIFIED

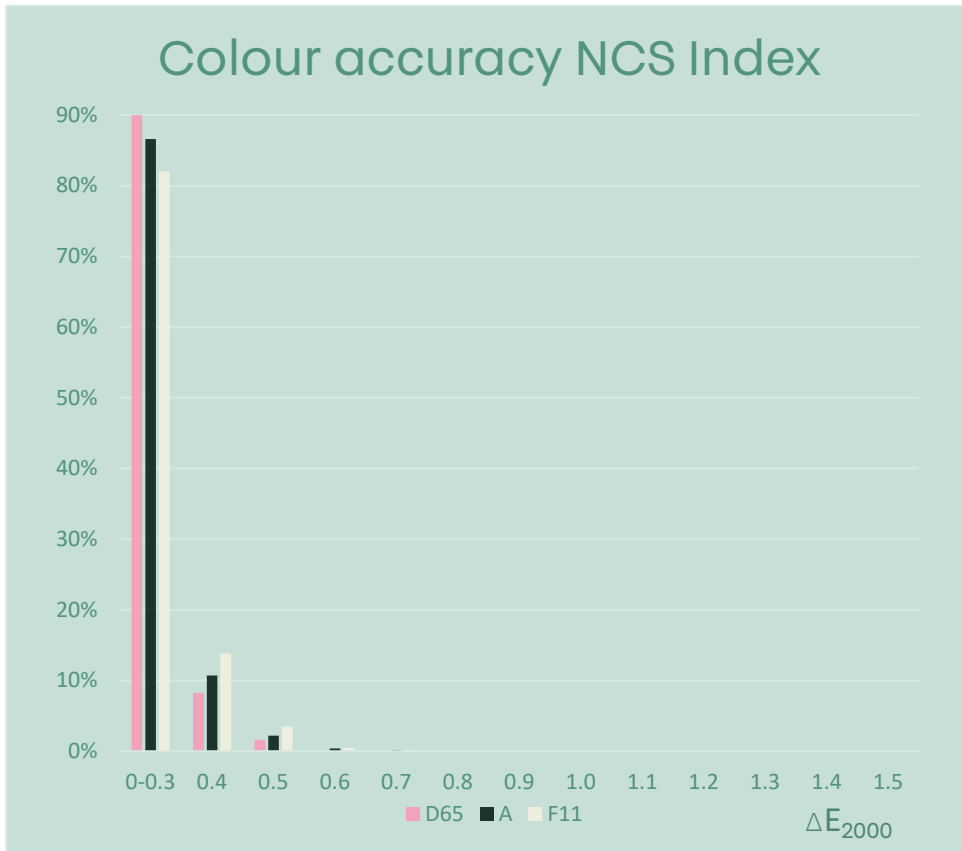
Products that are controlled by NCS Reference Lab and meet all the NCS Quality Management requirements may be marked with the Quality symbol.



PRODUCTION RESULTS

INDEX, QL1 2020

Difference between production and the NCS Primary standard, colour accuracy.

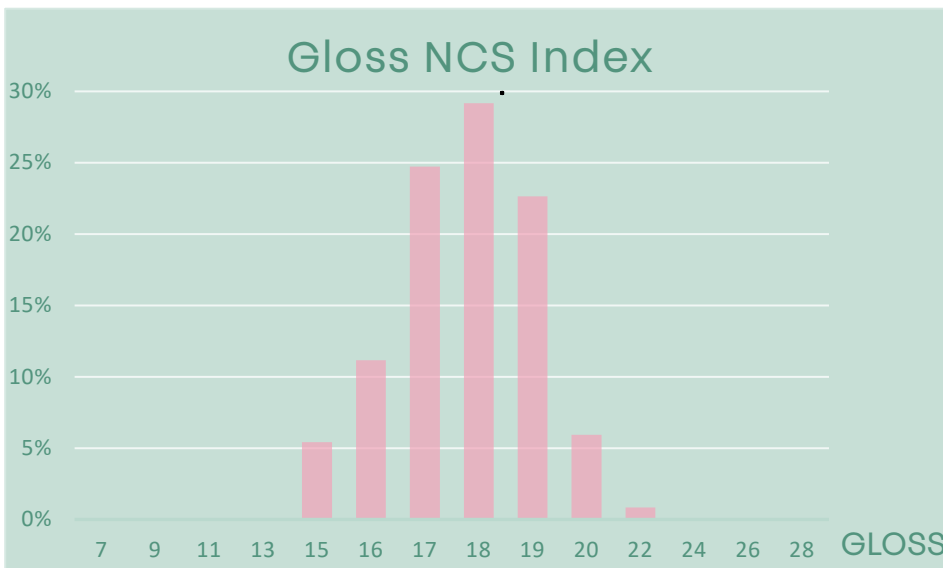


ΔE_{2000}	D65	A	F11
0-0.3	90.1%	86.6%	82.0%

NCS Quality Level 1, 2020 (Index)

ΔE_{2000}	D65	A	F11
0-0.6	100.0%	99.9%	99.9%
0.6-1.0	0.0%	0.1%	0.1%
1.0-1.5	0.0%	0.0%	0.0%
SUM:	100.0%	100.0%	100.0%

INDEX, QL1 2020
Gloss accuracy.



NCS Quality Level 1 2020 (Index)

GLOSS 60°	FRACTION
11	0.0%
13	0.1%
15	5.4%
16	11.1%
17	24.7%
18	29.2%
19	22.6%
20	5.9%
22	0.8%
24	0.0%