Danaco **Nurt**

PRODUCTION PACK 1.0.0

Print specification

Hot foil gold and silver, blind emboss, colour values and print files

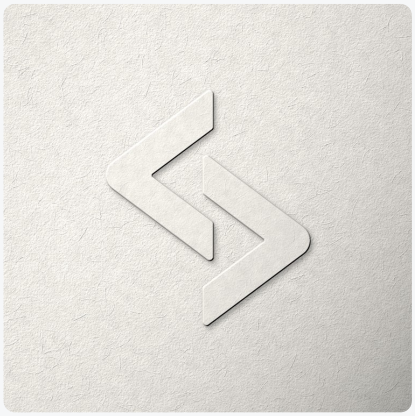
For the printer. Logo of Danaco Nurt, 2026-11-26.



Hot foil gold with registered emboss



Hot foil silver, flat stamping



Blind emboss on cotton paper

CONTENTS

02 Colour values and rich black
03 Spot colour candidates (not verified)
04 Hot foil gold and silver
05 Blind emboss and deboss
06 Combinations, stock and papers
07 Artwork preparation
08 Minimum sizes
09 Shipping checklist

Colour values

CMYK recipes are computed with transicc (LittleCMS 2.17) from sRGB, relative colorimetric intent with black point compensation. Coated paper: ISO Coated v2 (ECI), FOGRA39, coated paper, ink limit 300 %. Uncoated paper: PSO Uncoated ISO12647 (ECI), FOGRA47, uncoated wood-free paper, ink limit 260 %.

Colour	HEX	sRGB	CMYK FOGRA39 (coated)	TAC %	ΔE2000	CMYK FOGRA47 (uncoated)	TAC %	ΔE2000
Graphite	#0B0C0E	11 12 14	60 / 50 / 50 / 100	260	2.2	50 / 40 / 40 / 100	230	5.7
Graphite soft	#15171A	21 23 26	60 / 50 / 50 / 100	260	5.1	50 / 40 / 40 / 100	230	7.2
Black deep	#050506	5 5 6	60 / 50 / 50 / 100	260	1.2	50 / 40 / 40 / 100	230	5.4
Silver	#DDE1E6	221 225 230	16 / 9 / 8 / 0	33	0.0	13 / 7 / 6 / 1	27	0.8
Gold	#C9A15A	201 161 90	20 / 34 / 70 / 8	132	0.4	9 / 28 / 70 / 13	120	0.4
Ink	#2B2F36	43 47 54	75 / 63 / 51 / 65	254	0.0	73 / 53 / 37 / 74	237	1.3
Gold deep	#A3722A	163 114 42	28 / 50 / 89 / 22	189	0.0	14 / 46 / 99 / 24	183	0.4
Paper	#F6F7F8	246 247 248	4 / 2 / 3 / 0	9	0.6	3 / 2 / 2 / 0	7	0.7
Paper warm	#F2EEE6	242 238 230	6 / 6 / 11 / 0	23	0.0	5 / 5 / 8 / 1	19	0.5
Gold ground	#D9BC85	217 188 133	16 / 25 / 53 / 3	97	0.2	9 / 19 / 48 / 8	84	0.5

ΔE2000 is the CIEDE2000 colour difference between the target colour and the colour after the return from CMYK to sRGB, the measure of reproduction (up to 2 within tolerance, 2 to 5 proof needed, above 5 out of gamut). Swatches show the screen colour and are not a proof. All recipes are within the ink limits; no recipe needed a TAC correction. The three near-black colours are darker than the darkest black the paper can print, so they use the rich black recipe below.

Rich black for graphite and large black areas

Paper	Recipe C / M / Y / K (%)	TAC %	L* of the recipe	L* of K 100 alone	ΔE2000 to #0B0C0E
Coated, FOGRA39	**60 / 50 / 50 / 100**	260	12.1	17.4	5.7
Uncoated, FOGRA47	**50 / 40 / 40 / 100**	230	30.8	33.1	18.6

- Coated: 60 / 50 / 50 / 100 lowers L* from 17.4 (K alone) to 12.1 at 260 % ink. A heavier recipe (70 / 60 / 60 / 100, 290 %) gains only 0.7 L* and is not used.
- Uncoated: the range is small (L* 33.1 for K alone, 30.8 for 50 / 40 / 40 / 100). 60 / 50 / 50 / 100 would gain 0.7 L* at the 260 % limit and is not used.
- Thin lines, small text and the black logo: K 100 only, never the rich black (misregistration). Rich black only for areas of 10 mm and larger.

The same values with the exact transicc commands and the computed ladders: print-colour-values.md and print-colour-values.json.

Spot colour candidates

NOT VERIFIED

Every entry on this page is a "kandydat do potwierdzenia wzornikiem": a candidate to be confirmed against a physical swatch book. There is no Pantone swatch book, no spectral data and no Pantone Lab table on the production server. The candidates were chosen from memory by colour family (hue, lightness, metallic or solid). They are not measured or computed matches, and no hex or Lab values of Pantone colours are given because none could be verified.

Brand colour	Candidate (kandydat do potwierdzenia wzornikiem)	Kind	Certainty of the recollection and note
Graphite #0B0C0E	PANTONE Black 6 C	solid ink, non-metallic	name: high; match: medium. Neutral-cool very dark ink; alternative to the rich black recipe on coated paper.
Graphite #0B0C0E	PANTONE Neutral Black C	solid ink, non-metallic	name: high; match: medium. Neutral black; check the undertone against the cool graphite.
Silver #DDE1E6	PANTONE 877 C	metallic ink	name and type: high; match to #DDE1E6: low (metallic silver prints mid-grey). Standard metallic silver; the screen silver #DDE1E6 is much lighter than the printed ink.
Silver #DDE1E6	PANTONE Cool Gray 2 C	solid ink, non-metallic	name: high; match: medium. Light cool grey for a printed (non-foil) silver.
Silver #DDE1E6	PANTONE Cool Gray 3 C	solid ink, non-metallic	name: high; match: medium. Slightly darker alternative to Cool Gray 2 C.
Gold #C9A15A	PANTONE 871 C	metallic ink	name and type: high; match to #C9A15A: medium. Metallic gold of the Pantone Metallics range; usually darker and greener than the screen gold.
Gold #C9A15A	PANTONE 874 C	metallic ink	name and type: medium; match: low. Neighbouring metallic gold of the same range; compare with 871 C on the fan deck.
Gold #C9A15A	PANTONE 8003 C	metallic ink (named in the brief)	existence and hue: low, not verified. Taken over from the brief; check that it exists in the guide edition in use before it is quoted.
Gold #C9A15A	PANTONE 7562 C	solid ink, non-metallic	name: medium; match: medium. Non-metallic gold-brown for a printed (non-foil) gold; no metallic lustre.
Ink #2B2F36	PANTONE 433 C	solid ink, non-metallic	name: medium; match: low. Dark blue-grey; check on the fan deck.
Ink #2B2F36	PANTONE 432 C	solid ink, non-metallic	name: medium; match: low. Slightly lighter blue-grey than 433 C.
Gold deep #A3722A	PANTONE 872 C	metallic ink	name and type: medium; match: low. Darker metallic gold for use on light grounds.
Gold deep #A3722A	PANTONE 875 C	metallic ink	name and type: medium; match: low. Bronze metallic; probably too brown, check on the fan deck.

No candidate is given for: Graphite soft, Black deep, Paper, Paper warm, Gold ground. No candidate given: no certain Pantone name could be recalled for this colour. It is reproduced with the process recipe of this document, as a tint, or by the stock itself.

How a candidate is confirmed

- Compare the candidate with the physical Pantone Formula Guide (Coated and Uncoated) and the Pantone Metallics Guide under D50 light; note the edition of the guide.
- Metallic inks cannot be matched by Lab values; judge the lustre and the hue on the real stock with a printed drawdown.
- For hot foil the Pantone candidate is only a reference for the hue: the foil is chosen from the printer's foil swatches (page 4).
- Record the confirmed colour here and in print-colour-values.json, with the guide edition and the date; until then the process recipes of page 2 apply.

OPEN DECISION FOR DANACO OFFICIAL

Choice of the metallic gold and silver ink (if ink is used at all) and of the Pantone for the dark ground at the first print run, after the printer's swatches have been seen.

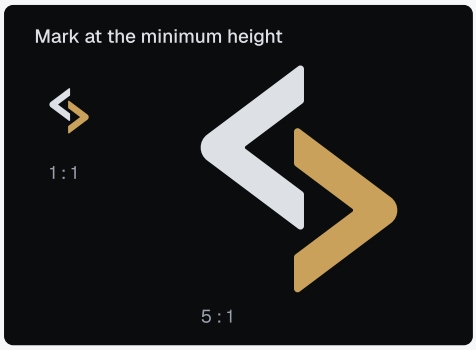
Hot foil: gold and silver

Hot foil stamping transfers a metallised layer from a carrier film to the stock with a heated metal die. The logo is foiled in one colour (gold or silver) or in two foils registered to each other (silver chevron and wordmark, gold chevron). The rules below apply to the foiled artwork at the final size.

Rule	Value	Consequence for the logo
Minimum line width	0.25 mm (0.7 pt)	Mark stroke reaches it at 1.76 mm mark height
Minimum clear gap between foiled shapes	0.4 mm	Stream between the chevrons reaches it at 5.62 mm mark height
Minimum mark height in foil	6 mm	At 6 mm: stroke 0.85 mm, stream 0.43 mm
Micro detail	Nothing below the two minima	Gaps narrower than 0.4 mm fill in, lines narrower than 0.25 mm break; the narrowest letter gap of the wordmark (pair rt) sets the foil minimum widths of the lockups (page 8)
Distance to trim, fold and score	at least 3 mm	Recommendation, to be confirmed with the printer

The two minima shown at 8 : 1

Minimum foil line	0.25 mm
Mark stroke at 6 mm height	0.85 mm, passes
Minimum foil gap	0.40 mm
Mark stream at 6 mm height	0.43 mm, passes narrowly



Foil material (requirements, no catalogue numbers)

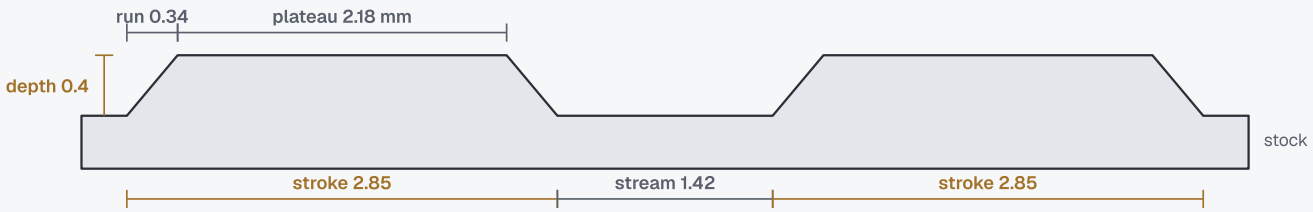
- Type: Hot foil stamping (foliowanie na gorąco) with a heated metal die; blind or registered emboss from a separate or combined die.
- Layers: Foil on a polyester carrier film with release layer, protective lacquer, metallised layer and adhesive layer; the adhesive grade must suit the stock (black board, cotton paper). A typical carrier thickness of 12 micrometres is common; the exact value is the printer's choice.
- Finish: High gloss (połysk). Metallised foil for gold and silver. A pigment (opaque, non-metallic) gloss foil is only an option for a non-metallic colour; the brief names pigment gloss foil, which is confirmed or replaced by metallised foil with the printer.
- Gold: warm yellow gold with a slight red component, neither lemon-green nor copper-red; lightness comparable to the brand gold #C9A15A (L* about 70) as a screen reference only. Ask for at least three gold swatches (pale, rich, warm) stamped on the real stock.
- Silver: bright neutral to slightly cool silver, mirror gloss, no brushed or hologram effect unless ordered. Ask for at least two silver swatches stamped on the real stock.
- No manufacturer, series or catalogue number is specified in this document. The choice is made from the swatches (próbniki) that the printer supplies; record the chosen foil type and number in the brand book after the first print.
- Request a stamping test on the actual stock (black board 400 to 600 g/m² and cotton paper 300 to 600 g/m²) with the smallest mark size to be produced, before the order is released.

Blind emboss and deboss

Dry embossing presses the stock between a male and a female die without ink or foil: raised relief (emboss) or sunk relief (deboss). The relief of the logo is a single level with flat top and sloped walls. The parameters are limits for the die; the printer confirms them for the stock.

Parameter	Value	Note
Relief depth	0.3 to 0.5 mm	Nominal 0.4 mm; the deeper end only on board of 400 g/m² and more
Smallest line width of the relief	0.5 mm	Mark stroke reaches it at 3.5 mm mark height
Wall angle	45 to 55 degrees	Nominal 50 degrees: the wall run is 0.336 mm at 0.4 mm depth (0.500 mm at 0.5 mm and 45 degrees)
Smallest inner corner radius	at least 0.15 mm	The mark has an inner corner of 0.6 unit on the 96 unit grid (table below)
Distance to trim, fold and score	at least 3 mm	Recommendation, to be confirmed with the printer

Cross-section across stroke, stream and stroke, mark 20 mm high (20 : 1)



Dimensions in mm, depth 0.4 mm and wall angle 50 degrees; the relief is drawn at 20 : 1 and the stock is not to scale.

Inner corner radius in millimetres

The mark box is 67.0 x 77.28 units; the inner corner radius is 0.6 unit. The mark height is the height of the box (outer extent of both chevrons).

Mark height	Width (mm)	Stroke (mm)	Stream (mm)	Inner radius (mm)	Radius ≥ 0.15 mm	Radius if 96 unit canvas is that height	Channel floor (mm)
12 mm	10.40	1.71	0.85	**0.093**	**fails**	0.075	0.18
20 mm	17.34	2.85	1.42	**0.155**	**passes**	0.125	0.75
30 mm	26.01	4.27	2.14	**0.233**	**passes**	0.188	1.46

SMALLEST EMBOSSED SIZE

The smallest embossed mark is 19.3 mm high (16.8 mm wide): there the inner corner radius is exactly 0.15 mm. The 12 mm size fails the rule (0.093 mm); 20 mm passes with a small margin (0.155 mm), 30 mm is comfortable. If 12 mm or 20 mm refers to the full 96 unit canvas instead of the ink box, the radii are 0.075 mm and 0.125 mm and both fail: the column before the last shows these values.

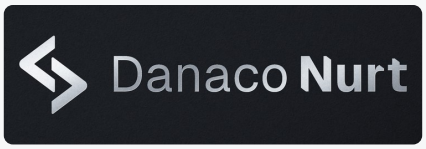
- Deboss uses the same limits with the dies reversed. The channel floor between the chevrons stays open at every size of the table above (last column).
- Blind emboss of lockups with the wordmark: see page 8; the mark inside the lockup and the gaps between the letters set the minimum width.

Combinations, stock and papers

Finish	Files	Remarks
Hot foil, flat	FOIL_GOLD or FOIL_SILVER	Foil die only; slight sinking of 0.05 to 0.1 mm is normal.
Hot foil with registered emboss	FOIL_GOLD or FOIL_SILVER and EMBOSS_DIE	Both dies from the same outline; the foil sits on the raised relief. Registration tolerance to be agreed with the printer.
Two foils registered	FOIL_SILVER and FOIL_GOLD (two-foil files)	Silver chevron and wordmark, gold chevron. Stream between the chevrons of at least 0.4 mm.
Blind emboss	EMBOSS_DIE	Relief without ink or foil; best on cotton paper and black board.
Ink and foil	CMYK or K 100 and FOIL_x	Ink first, foil on top; keep foil objects overprinting; no ink trap needed under the foil.



Gold foil, registered emboss, black board



Silver foil, flat stamping, graphite board



Two foils registered, black board

Previews are a simulation (height map with 50 degree walls, light from the upper left), not a photograph of a sample.

Recommended stock

- Black board 400 to 600 g/m², matt, uncoated or with a very light surface: foil gold and silver, with or without registered emboss.
- Cotton paper 300 to 600 g/m², white or natural white: blind emboss, one foil, black or colour print.
- Uncoated wood-free paper (FOGRA47 recipes): print, foil only after a test.

Avoid

- Glossy substrates (coated gloss, laminated gloss, cast-coated, metallised board): foil adhesion is uncertain and the foil loses contrast against a shiny ground.
- Very smooth, silicone-treated or heavily sized surfaces without a foil-compatible primer: only after a stamping test.
- Substrates under 300 g/m² for emboss deeper than 0.3 mm: the relief shows through on the back.

> TEST BEFORE THE RUN
>
> Request a stamping test on the actual stock (black board 400 to 600 g/m² and cotton paper 300 to 600 g/m²) with the smallest mark size to be produced, before the order is released.

Artwork preparation

Rules for the files

- All text and the logo as outlines (curves); no live text and no strokes: every shape is a filled path.
- Spot colours with exactly these names: FOIL_GOLD, FOIL_SILVER, EMBOSS_DIE (Separation colour spaces, 100 percent tint).
- Foil and emboss objects set to overprint; never to knock out of the CMYK layer. No trapping between foil and ink; keep ink away from the foil area or print the ink under the foil with the foil file as reference.
- Registration: foil and emboss of one design come from the same outline; the printer produces the dies from the files. Mark registration with crop and registration marks outside the bleed.
- Bleed 3 mm on every side where artwork touches the trim. Foil and emboss at least 3 mm from the trim and from folds and scores.
- Vector PDF 1.4 or later; no raster images for the logo; no transparency or effects on the logo objects.
- CMYK colour version: ISO Coated v2 (FOGRA39) for coated paper, PSO Uncoated (FOGRA47) for uncoated paper; values in print-colour-values.json.
- Black text and black logo: 100 percent K only, never rich black for thin lines or small text. Large black areas: rich black recipes of print-colour-values.json.

Spot colours

Name	Value	Use	Attribute	Alternate CMYK
FOIL_GOLD	100 % tint	Gold foil artwork	Overprint	20 / 34 / 70 / 8 (display only)
FOIL_SILVER	100 % tint	Silver foil artwork	Overprint	16 / 9 / 8 / 0 (display only)
EMBOSS_DIE	100 % tint	Emboss die (raised area, positive)	Overprint	0 / 100 / 0 / 0 (display only)

Delivered separation files

File	Content	Size of the artwork
print-foil-gold-<layout>.pdf	FOIL_GOLD 100 %, whole logo	horizontal 100 mm wide, vertical 60 mm wide, mark 30 mm high
print-foil-silver-<layout>.pdf	FOIL_SILVER 100 %, whole logo	same sizes
print-foil-duo-gold / silver-<layout>.pdf	Two foils: gold chevron / silver chevron and wordmark	same page and registration as the whole-logo files
print-emboss-die-<layout>.pdf	EMBOSS_DIE 100 %, whole logo	same sizes
print-black-k100-<layout>.pdf	K 100 %	same sizes
print-colour-cmyk-<layout>.pdf	Silver, gold, wordmark in CMYK FOGRA39, rich black ground	same sizes

Each file is one vector page, PDF 1.4, in millimetres, cropped to the artwork with a 3 mm margin (art box = artwork, page = artwork plus 3 mm). The files are scalable; the printer scales them to the final size within the minimum sizes of page 8. The colour file carries the ground as the first object (delete it for a transparent logo).

Minimum sizes

Minimum sizes of every layout in millimetres. The kit column is the value of the identity files (MIN_SIZES). The computed columns apply the rules of ink, foil and emboss to the outlines of the current logo files. Every measure is the width of the layout, except the mark, which is the height of the mark box.

Layout	Kit minimum, print (mm)	Ink, computed (mm)	Foil, computed (mm)	Emboss, computed (mm)	Emboss limited by
Mark (height)	6	6	**6.0**	**19.3**	mark inner radius
Horizontal (width)	28	16.1	**40.8**	**95.6**	mark inner radius
Vertical (width)	20	12.2	**30.8**	**51.7**	channel
Compact (width)	20	7.6	**20.2**	**52.0**	mark inner radius
Wordmark (width)	22	12.2	**30.8**	**51.7**	channel

Rules: foil line ≥ 0.25 mm and gap ≥ 0.4 mm, mark height in foil ≥ 6 mm; emboss line ≥ 0.5 mm, inner radius ≥ 0.15 mm, gap between shapes ≥ 0.67 mm so that the channel floor stays open at 0.4 mm depth and 50 degrees; ink: line and gap ≥ 0.15 mm (assumption of this document, to be confirmed with the printer).

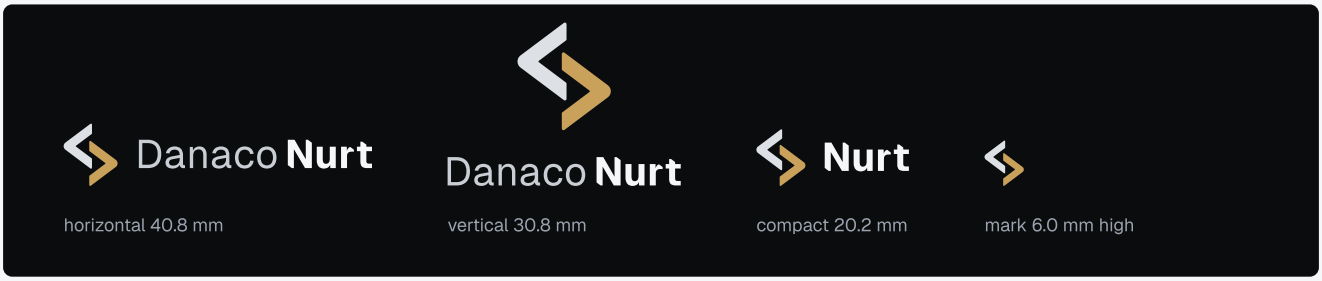
MEASURED ON THE CURRENT OUTLINES

Thinnest line of the wordmark 10.13 units (cap height 100). Gaps between neighbouring letters, exact distances: Da 16.4, an 17.04, na 18.59, ac 18.11, co 13.34, Nu 17.38, ur 18.7, rt 10.68 units. The narrowest gap is the pair rt (10.68 units), the next one co (13.34 units). The mark has stroke 11 and stream 5.5 units; the mark limits foil only through its 6 mm rule.

Correction of the kit values and reason

- Ink: the computed values (16.1, 12.2, 7.6 and 12.2 mm) lie below the kit values, so the kit values (mark 6 mm; horizontal 28 mm, vertical 20 mm, compact 20 mm, wordmark 22 mm) are kept.
- Foil: the kit values are too small for foil, because the 0.4 mm gap rule applies to the narrowest letter gap (pair rt, 10.68 units). Corrected: horizontal 40.8 mm instead of 28 mm, vertical 30.8 mm instead of 20 mm, compact 20.2 mm instead of 20 mm, wordmark 30.8 mm instead of 22 mm. The mark stays at 6 mm (5.2 mm wide).
- Emboss (new, the kit has no value): the mark is limited by the inner corner radius, 19.3 mm high and 16.8 mm wide. The horizontal lockup inherits it (95.6 mm wide, its mark must be that high); the vertical lockup (51.7 mm) and the wordmark alone (51.7 mm) are limited by the gap between letters.
- The kit table MIN_SIZES should be extended with a foil column and an emboss column with these values (decision of Danaco Official).

Minimum sizes in foil at 1 : 1



Shipping checklist

Tick every item before the order and the files are sent to the printer.

- [ ] Job name, quantity, format, stock (name, weight, finish, manufacturer) and delivery date stated.
- [ ] Printer has the files: separation PDFs FOIL_GOLD / FOIL_SILVER / EMBOSS_DIE, black K100, CMYK colour version.
- [ ] Spot colour names are exactly FOIL_GOLD, FOIL_SILVER and EMBOSS_DIE in the delivered files.
- [ ] Logo size is not below the minimum sizes of the specification for the finish used (foil, emboss, ink).
- [ ] Line widths and gaps of the foil artwork are at least 0.25 mm and 0.4 mm at the final size, including the narrowest letter gap of the wordmark (pair rt).
- [ ] Emboss: relief depth, wall angle and the smallest inner radius approved by the printer; die type (single level, sculptured) agreed.
- [ ] Foil type, gold and silver swatches (próbniki) requested; the chosen foil is noted in writing.
- [ ] A stamping test on the real stock is approved before the production run.
- [ ] Bleed 3 mm, registration marks and crop marks present; foil and emboss at least 3 mm from trim and folds.
- [ ] All fonts converted to outlines; no RGB or Pantone-library colours in the process layers.
- [ ] A hard-copy or digital contract proof (FOGRA39 / FOGRA47 as agreed) approved for the CMYK layers.
- [ ] Contact person and approval of the first sheet (press check) arranged.

Order data

Job name _____

Quantity and format _____

Stock (name, weight, finish, manufacturer) _____

Foil (type and number from the printer's swatches) _____

Delivery date _____

Approved by and date _____