KOHĽS COLOR PROCESS

The Kohl's Color Process has been created for our Li & Fung, Vendors, and Mill partners to understand the expectations of color execution by submit type.



COLOR EVALUATION GUIDELINES

LIGHTING AND STANDARD ILLUMINANTS

- Visual assessments should be performed using a standardized light box
- Kohl's Primary light source is SPX35 (3500)
- Kohl's Secondary light source is Daylight (D65)
- Check the printing on the light bulbs to make sure the correct bulbs are being used
- GTI Graphic Technology is our "preferred supplier" for ordering light bulbs
 - Light bulbs can be purchased at http://www.GTIlite.com
 - For additional assistance, contact sales@gtilite.com or 845-562-7066(US)

COLOR SERVICE PROVIDERS

- Kohl's has 2 primary Color Service Providers for color assessment. They are:
 - Archroma & Archroma Atlas
 - o Pantone
- Refer to the "How to Order" guides at https://link.kohls.com for how to order color standards

COLOR EVALUATION – VISUAL ASSESSMENT PROCEDURES

Conditioning Cabinet:

- Samples for visual assessment need to be conditioned in a textile conditioning cabinet or conditioned room prior to color evaluation. Samples that have not been conditioned will show color sensitivity to moisture and temperature.
- As defined by ASTM (American Standard Testing Methods) a temperature of 21°C +/- 2° and relative humidity 65% +/- 2%, non-condensing. All samples need to be exposed to ambient light and conditioned for at least the minimum time required by the condition cabinet manufacturer prior to measurement.

Proper Procedure for Color Review:

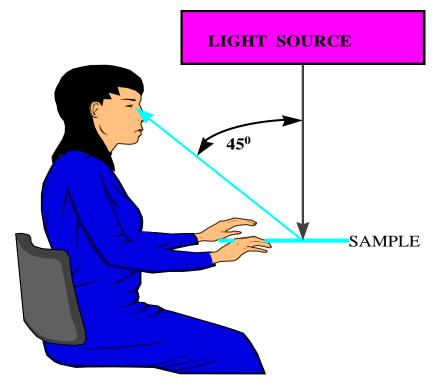
- 1. Before reviewing a submit, pull any and all history on the submit including artwork, storyboards, and color standards
- 2. The viewing area must be cleared of all other samples/submits
- 3. Remove the swatch from the submit form
- 4. Lay the color standard and the fabric swatch flat on the viewing surface, edge to edge
- 5. Place the color standard on the left side and the fabric swatch on the right side
- 6. The fabric swatch must be double folded and reviewed on the correct face side (sheer fabrics must be folded in 4 layers so that the swatch is opaque)
- 7. SPX35 (3500) must be used as a primary light source and D65 (daylight) as a secondary light source
 - The secondary light source is used to check for metamerism. Metamerism is where two objects are perceived to be the same color under a given light source but are not the same under a different light source.
- 8. The color standard and the sample should be illuminated from directly overhead and observed at an angle of 45 degrees (0/45 viewing)

Tips for Color Review:

- Color standards must be stored in protected sheets, in a binder, away from light
- A double layered, non-backed color standard should be used at all times
- Color standards should not be cut and remain in tact
- Do not communicate color language in percentages i.e. 10% lighter etc. as this is subjective to the individual (refer to "Global Color Language" for color comment overview)



SAMPLE ORIENTATION DIAGRAM



0/45 Visual Color Assessment Using the Light Cabinet



WHAT IS METAMERISM?

Most everyone is somewhat familiar with the effect where a colored object appears to be one color under a given light source but appears to change color under another light source. This change in color, which occurs frequently with almost all colored objects, has been erroneously called metamerism. This phenomenon is actually known as "flare" or color inconstancy. (This is a separate topic that will be fully addressed in another column).

Metamerism is the phenomenon where colors of two objects are perceived to be the same under one illuminant, such as daylight (CIE D65), but are not the same under a

different illuminant such as incandescent (CIE A). The goal of most manufacturers and suppliers is to minimize metamerism. Imagine that you have a shirt where the sleeves and body are metameric? In daylight the shirt appears a single color and in cool white and incandescent, the sleeves are a "different" color from the body of the shirt.

To accurately evaluate the presence of metamerism in sample pairs, the samples must be evaluated in multiple illuminants. This can be done both visually and instrumentally. For instrumental assessments there are methods for calculating the degree of metamerism - using the Metamerism Index (MI).



Temperature:	21°C +/- 2°
Relative Humidity (RH): 65% +/- 2%	
Timing:	 Minimum time required by manufacturer to reach required lab conditions For Example: 15 minutes for conditioning cabinet 4 hours minimum for conditioning room
Light Exposure:	Required

Conditioning Requirements

Instrumental Requirements

Instrument:	Spectraflash 600+CT (or similar model)			
Software:	Datacolor TOOLS PLUS version 2.0.1 (or similar software)			
Profiling Software:	Datacolor Maestro or Guardian (or similar software)			
Color Difference:	CMC (2:1)			
Specular Component:	Included (SCI)			
UV Component:	0% UV (Filter FL40)			
Primary Illuminant:	SPX35 (3500)			
Secondary Illuminant:	D65 (6500)			
Observer:	10 degree			
Aperture:	LAV			
Flashes:	2			
Green Tile:	Measured, checked, and stored to the green tile folder daily			
Calibration Interval:	Every 8 hours			
Annual Testing/Calibration:	Yearly			

Measurement Requirements

Sample Handling:	 Make sure sample is not protruding into the sphere Remove any obstructing items from all samples (i.e. labels and backing) Ensure the front (face) of the fabric is facing the aperture port Sample must be flat and not under tension Sample must completely cover the aperture Folded until opaque (no light passing through), usually 2-4 folds
Measurement Technique:	Take an average of 4 readings with 90 degree rotation and repositioning between measurements

Measurement Tolerance Requirements

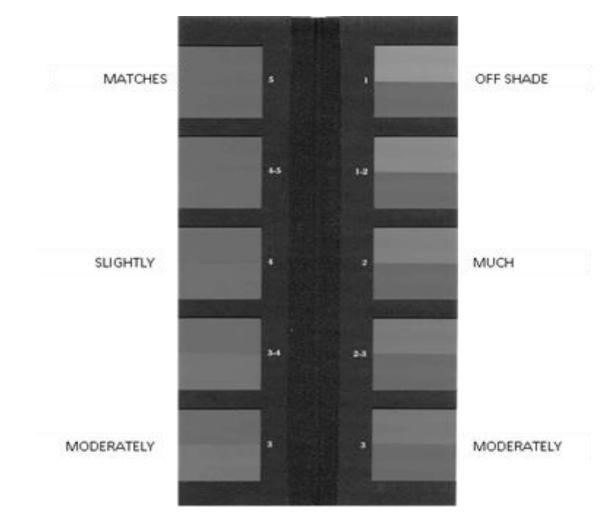
Lab Dip:	0.8 CMC ΔE tolerance for primary light source, 1.2 CMC ΔE tolerance for secondary light source		
Solid Bulk:	0.8 CMC ΔE tolerance for primary light source, 1.2 CMC ΔE tolerance for secondary light source		



GLOBAL COLOR LANGUAGE - ENGLISH

Give comments on what you see (not how to fix

Comment on:	Describe:	Magnitude of difference:	Example:
Lightness / Darkness	Lighter or Darker	Matches, Slightly, Moderately, Much, Off-Shade*	Color is Much too Dark
Chroma	Brighter or Duller	Matches, Slightly, Moderately, Much, Off-Shade⁺	Color is Moderately too Dull
Hue	Red, Green, Yellow, Blue	Matches, Slightly, Moderately, Much, Off-Shade*	Color is Slightly too Red



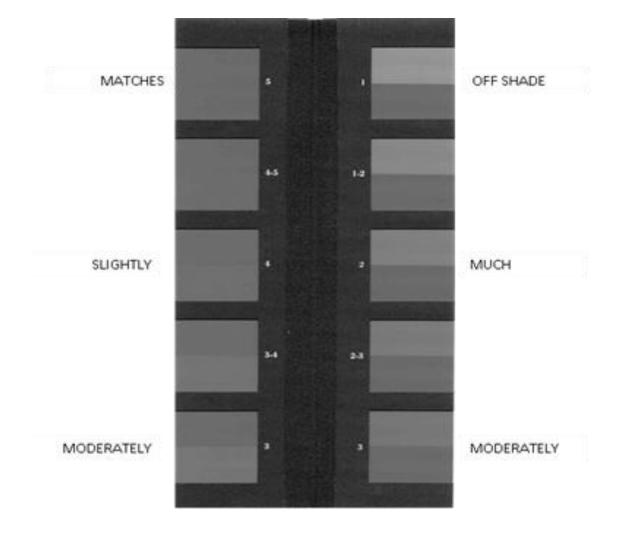
* Based on AATCC Gray Scale for Color Change - can be purchased online from http://www.aatcc.org



GLOBAL COLOR LANGUAGE – CHINESE

Give comments on what you see (not how to fix

Comment on:	Describe:	Magnitude of difference:	Example:
Lightness / Darkness	Lighter or Darker 较戋 或者 较深	Matches, Slightly, Moderately, Much, Off- Shade* 相称, 轺微、明显、 严重、完全不对	Color is Much too Dark 颜白 重采了
Chroma	Brighter or Duller 较艳/ 较音冗	Matches, Slightly, Moderately, Much, Off- Shade* 相称、 轺微、 明显、 严重、 完全不对	Color is Moderately too Dull 颜色明显如韵冗
Hue	Red, Green, Yellow, Blue 红绿 黄 蓝	Matches, Slightly, Moderately, Much, Off- Shade* 相称, 招微、明显、 严重、完全不对	Color is Slightly too Red 颜色铅能工



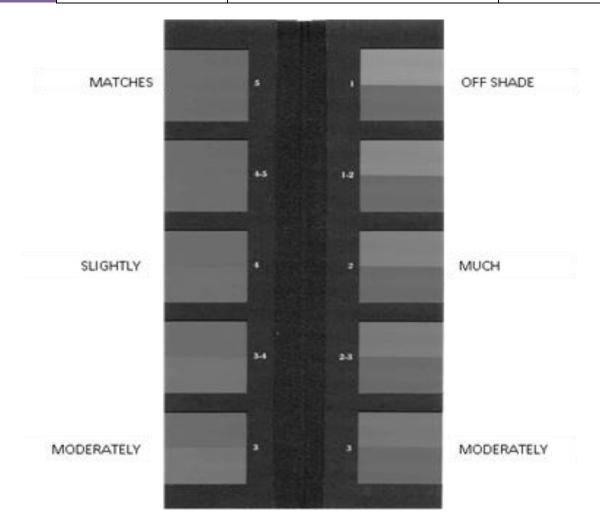
* Based on AATCC Gray Scale for Color Change - can be purchased online from http://www.aatcc.org



GLOBAL COLOR LANGUAGE – SPANISH

Give comments on what you see (not how to fix

Comment on:	Describe:	Magnitude of difference:	Example:		
Lightness / Darkness	Lighter or Darker Mas Claro Mas Oscuro	Matches, Slightly, Moderately, Much, Off- Shade* Similar o Hace match , Llgeramente, Moderadamente, Mucho, Fuera de Tono	Color is Much too Dark El color es demasiado oscuro		
Chroma	Brighter or Duller Mas Brillante, Mas Opaco	Matches, Slightly, Moderately, Much, Off- Shade* Similar o Hace match, Llgeramente, Moderadamente, Mucho, Fuera de Tono	Color is Moderately too Dull El color es moderadamente demasiado aburrido		
Hue	Red, Green, Yellow, Blue Rojo, Verde, Amarillo, Azul	Matches, Slightly, Moderately, Much, Off- Shade* Similar o Hace match , Llgeramente, Moderadamente, Mucho, Fuera de Tono	Color is Slightly too Red El color es un poco demasiado rojo		



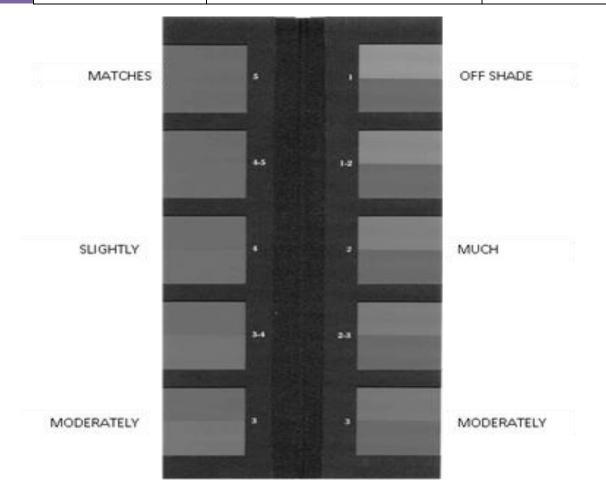
* Based on AATCC Gray Scale for Color Change – can be purchased online from http://www.aatcc.org



GLOBAL COLOR LANGUAGE – KOREAN

Give comments on what you see (not how to fix

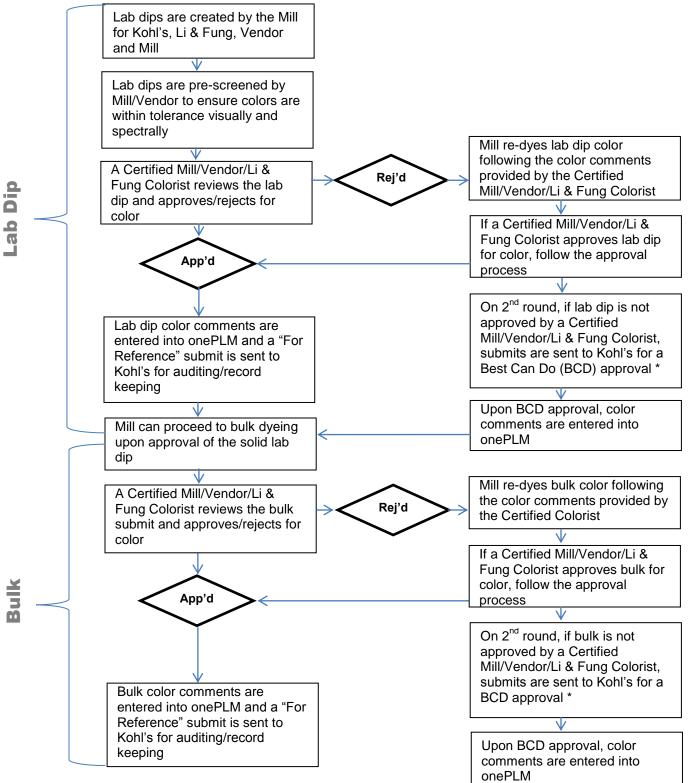
Comment on:	Describe:	Magnitude of difference:	Example:
Lightness / Darkness	Lighter or Darker 연한/농도가연한, 진한/농도가짙	Matches, Slightly, Moderately, Much, Off-Shade* 일치 조금, 중간정도로, 무척, 많이, 완전히 다른/벗어남	Color is Much too Dark 색이 너무 어둡다
Chroma	Brighter or Duller 맑은/선명한 탁한/흐릿한	Matches, Slightly, Moderately, Much, Off- Shade* 일치 조금, 중간정도로, 무척, 많이, 완전히 다른/벗어남	Color is Moderately too Dull 컬러, 중간 너무 무미건조하다.
Hue	Red, Green, Yellow, Blue 빨강, 초록, 노랑, 파랑	Matches, Slightly, Moderately, Much, Off- Shade* 일치 조금, 중간정도로, 무척, 많이, 완전히 다른/벗어남	Color is Slightly too Red 약간 너무 붉은 색



*Based on AATCC Gray Scale for Color Change – can be purchased online from http://www.aatcc.org



SOLID COLOR PROCESS (VISUAL ASSESSMENT)



* Depending on the timing of the negotiated calendar, a 3rd round submit may be requested by Kohl's because of color variance



SOLIDS – VISUAL ASSESSMENT/APPROVAL PROCESS

How to correctly send solid lab dip/bulk submits to Kohl's:

- Submits should be created by the Mill/Vendor for:
 - o Kohl's
 - o Li & Fung Offices
 - o Vendor
 - o Mill
- onePLM submit forms to be used:
 - o "Pre-Dip"
 - o "Lab Dip"
 - o "Solid Bulk"

Solids must be:

- Clearly marked to indicate what approval is needed (i.e. color, quality, etc.)
- o Submitted in the correct color, fiber content, construction, and weight
- \circ 3" x 3" for lab dips with 4 6 options
 - Labeled A, B, C, D, E, and F. The second submission if required should follow the same sequence and be labeled G, H, I, J, K, and L and so on. In addition, each submission round must be labeled 1st, 2nd, etc. For example, the 1st submission would be with lab dip trials A, B, C, D, E, F and the 2nd submission would be with lab dip trials G, H, I, J, K, L.
- $\circ~~$ 6" x 6" for bulks and each lot must be clearly labeled
- o Clearly marked "before wash" and "after wash" for washed programs
- Attached face side up using double sided tape

Color Comment Communication:

The onePLM software is Kohl's system of choice for color comment communication

Color Certified Mills/Vendors:

- Color Evaluation:
 - Certified Colorists have the authority to approve color submits for solid lab dips/bulks on Kohl's behalf based on spectral tolerance and visual evaluation.
 - Certified Colorists are allowed to reject color submits to ensure the lab dips/bulks are meeting Kohl's tolerances.
 - Solid lab dips/bulks must be measured instrumentally using a spectrophotometer to ensure the submits are within Kohl's 0.8 CMC Δ E tolerance in primary light source and 1.2 CMC Δ E tolerance in secondary light source
 - Certain fabrics are unsuitable for effective use of the spectrophotometer velour, corduroy, terry, whites, and bulky sweater knits. These fabrications are exempt for creating spectral data.
 - All solid lab dips need to be reviewed visually against the official Kohl's color standard (Pantone, Archroma).
 - Once a lab dip is approved for color, a bulk needs to be created. The bulk submit should be reviewed against the approved lab dip.
 - For future orders, the bulk should be dyed against the approved lab dip recipe and be reviewed against the color standard for color verification.
 - Kohl's standardized "Global Color Language" must be used when communicating color comments for all submits.
 - AATCC "Grey Scale for Color Change" is used to guide the amount of color variation
 - The Vendor is ultimately responsible for the color integrity of the product shipped to Kohl's.
- Pre-Dips
 - Color Certified Mills do not need to submit pre-dip requests but must maintain delivery based on calendar expectations.



Non-Certified Mills/Vendors:

- Prior to submitting lab dip/bulk submits, the Mill/Vendor will measure the reflectance values instrumentally using a spectrophotometer to ensure they fall within the 1.0 CMC ∆E tolerance compared to the Master Digital Standard (MDS).
 - Certain fabrics are unsuitable for effective use of the spectrophotometer velour, corduroy, terry, whites, and bulky sweater knits. These fabrications are exempt for creating spectral data.
- The Mill/Vendor will review submits visually in a light box compared to the color standard that has been selected.
- Only lab dip/bulk submits that pass spectral tolerance and the visual inspection should be sent to a Li & Fung Certified Colorist (it is possible that the lab dip/bulk submits may be rejected that fall within the 1.0 CMC ∆E tolerance based on visual evaluation).
 - Mills/Vendors have authority to internally reject submits prior to sending to a Li & Fung Colorist for final color approval.
- Once a lab dip is approved for color, a bulk needs to be created. The bulk submit should be reviewed against the approved lab dip.
 - For future orders, the bulk should be dyed against the approved lab dip recipe and be reviewed against the color standard for color verification. The bulk submits should be submitted to a Li & Fung Colorist for final color approval.

Best Can Do (BCD) Requirements:

- BCD requests are submits that the Mill cannot achieve correct color matching due to technical limitations/dyestuff.
 - All submit forms must have an explanation as to why the color cannot be achieved and why it is being requested as BCD. A stamp should be indicated on the submit form if the submit is "BCD Timing" vs. "BCD Technical".
 - A Certified Mill / Vendor / Li & Fung Colorist can approve a lab dip/bulk that is metamerizing if the metamerism index is 1.0 or below.
- If the garment has multiple matching components (i.e. mixed media), a visual assessment must be conducted by a Li & Fung Certified Colorist to ensure color cohesiveness.
- Lab dips/bulks must require at least two submit rounds for BCD color approval.
 - Each lab dip round is required to have a minimum of 4-6 options to select from.
 - Depending on the timing of the negotiated calendar, a 3rd round submit may be requested by Kohl's because of color variance. It is the responsibility of the supplier to achieve the closest color match to the standard as possible.
 - All BCD submits need to be routed through a Li & Fung Certified Colorist for review.
 - BCD submits that cannot be approved by a Li & Fung Certified Colorist are sent to Kohl's for final color approval.

Li & Fung:

- Li & Fung Certified Colorist reviews the solid lab dips against the physical color standards to ensure proper color matching. Solid bulks must be reviewed against the approved lab dip.
 - The Mill/Vendor will be immediately contacted if the lab dip/bulk submits are rejected for color.
 - Lab dip/bulk submits that cannot be approved by the Li & Fung Certified Colorist because of color variation must be sent to Kohl's for a Best Can Do approval.
- Upon Li & Fung Certified Colorist's approval of the lab dip/bulk, a "For Reference" submit is sent to Kohl's for auditing and record keeping.
- Li & Fung is responsible for attaching the spectral data measurement to the submit job in onePLM if the Mill/Vendor is unable to do so.

Kohl's:

- Li & Fung Certified Colorists will be responsible for the approval of lab dip/bulk submits.
 - Kohl's will receive lab dip/bulk "For Reference" submits for auditing and record keeping.
 - Lab dip/bulk submits that cannot be approved by the Li & Fung Certified Colorist because of color variation will be sent to Kohl's for a Best Can Do approval.
- C.I.P. (Correct in Production) approval status will not be accepted. Submits that do not meet Kohl's color requirements must be approved as Best Can Do.

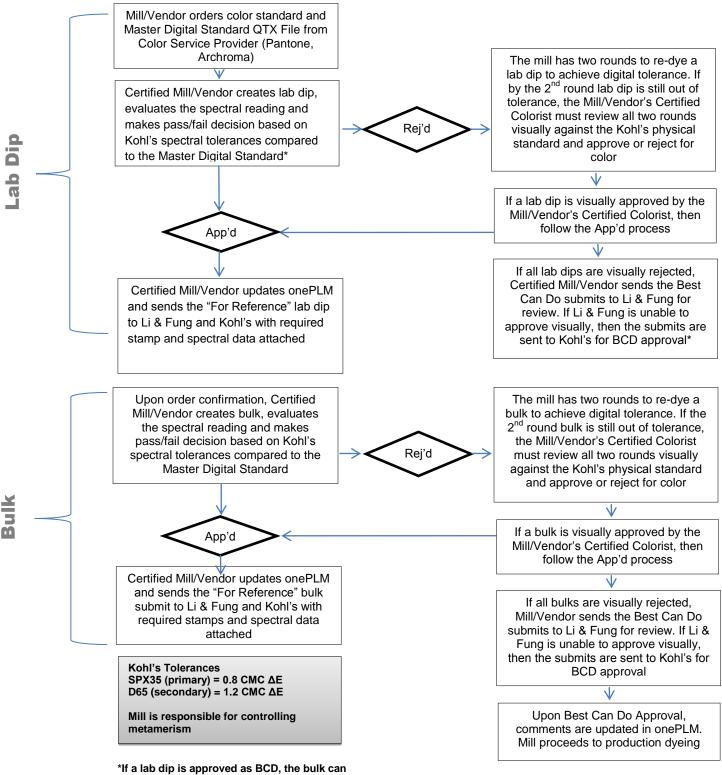


Additional Comments:

- Sweaters & Brushed Fabrics
 - Lab dips and solid bulks can be approved visually by a Certified Colorist if the spectral data fails and is outside the spectral tolerance of 1.0 CMC ΔE .
- onePLM Enhancements
 - A Certified Colorist can approve a lab dip for multiple styles and brands if the mill/fabrication/color is the same.
 - Once a lab dip is marked as "approved" in the Color Submit Module within onePLM, a new lab dip does not need to be re-submitted. Multiple bulks can continuously be created from the original approved lab dip if the same mill/fabrication/color applies.



SOLID COLOR PROCESS (DIGITAL ASSESSMENT)



*If a lab dip is approved as BCD, the bulk can be approved digitally against the approved BCD lab dip



SOLIDS – DIGITAL ASSESSMENT/APPROVAL PROCESS

Program Objective:

Kohl's Digital Color Approvals use spectral and numerical data for color approval to increase speed and reduce workload for our color certified Mills/Vendors.

Program Benefits:

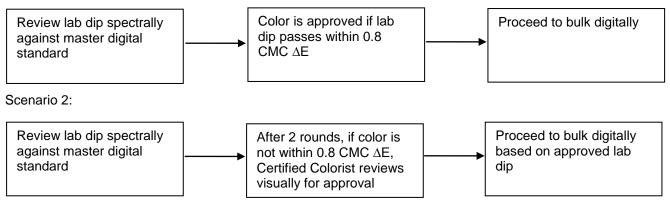
- No visual color evaluation
- Increased first round approval rating
- Reduced cycle time in approving submits
- Reduced color development time
- Cost savings

Color Certified Mills/Vendors:

- Color Evaluation:
 - Certified Colorists have the authority to approve color submits for solid lab dips/bulks on Kohl's behalf based on spectral tolerance. Fabrics must be flat surfaced (non-shiny) such as interlock, jersey, rib, etc.
 - These fabrications/colors are exempt from creating spectral data and being used for digital color approvals velour, corduroy, terry, bulky sweater knits, heathers, high shine fabrics, whites, and neons
 - For Kohl's primary light source (SPX35), the spectral tolerance for digital color approvals is **0.8 CMC** ΔE to the Master Digital Standard (MDS) for lab dip and bulk
 - For Kohl's secondary light source (D65), the spectral tolerance for digital color approvals is **1.2 CMC** Δ **E** to the MDS for lab dip and bulk
 - If all lab dip options are within digital tolerance of **0.8 CMC** Δ **E**, select the lab dip that has the best DH value for final color approval
 - Color can be approved if the metamerism index is 1.0 or below
 - Contrast & DTM trims do not qualify for digital color approvals. Trims must be evaluated visually to the approved body fabric color.
 - Refer to the beginning of this document for "Color Evaluation Guidelines" regarding instrument set up and conditioning requirement
 - If lab dip is approved digitally, bulk can proceed to digital color approval
- Best Can Do (BCD) Submits:
 - If lab dip or solid bulk is rejected digitally by 2nd round, the Mill/Vendor's Certified Colorist must review all two rounds visually against the Kohl's physical standard and approve or reject for color. If Certified Mill/Vendor is unable to approve visually, then the lab dip submits are sent to Li & Fung for BCD approval

Color Review Outline:

Scenario 1:





Submit Forms:

- Only onePLM un-altered Color Approval Forms must be used
- All forms must be filled out correctly
- Correct stamps must be indicated on submit forms (see below for examples)
 - "Digital Appd" or "Digital Rej" stamp showing if the submit was digitally approved or digitally rejected
 - "For Reference Only" or "BCD Request" stamp in upper right hand corner
 - "Colorist Name" stamp with Colorist's signature

"FOR REFERENCE" STAMP EXAMPLE

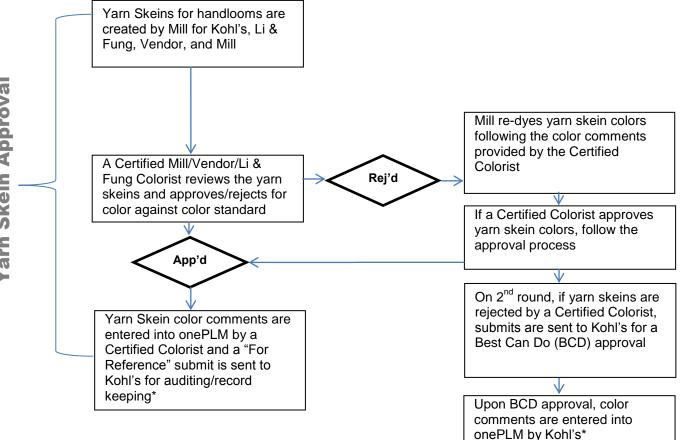
Kohl's: NEW W	HITE 70,968	SOLID BULK	(Page 1 of FOR REFERENCE ONLY-		
SUBMIT OVERVIE	W				
Style(s)	CB24009A	Supplier Mill	PACIFIC TEXTILES LTD.	Colorist :	
Eval Path	A/V + KOHLS	Agent/Vendor	LI & FUNG KOREA		
Material	COTTON SPANDEX 95/5 180	Parent Co.	HANSAE CO., LTD.		
Color Name	NEW WHITE	A/V Colonist	PRETTY LI		
Service Name	CSI	Agent MR	NICOLE LEE		
Service No.	212-155	Kohl's Colorist	CHAO YANG		
Combo Name		PM	JULIANNE BARTELS	Aget Vede Mill :	
Artwork Name		Season	SP14		
Link ID		Brand	CROFT & BARROW		
Master		Division	WOMENS	PACIFIC	
Master Submit No.		Dept	013	COLOR OFFICE	
Related Submit(s)		In DC Date	05/04/2014	SEP 29 2910	
Status	MILL APPROVED	Astwork Rec'd Date			
Referenced Submit	70,290	Target Approve Date		DIGITAL APPD	
View Only Parties					

"BCD REQUEST" STAMP EXAMPLE

Kohl's: NFW W	HITE 70,968	SOLID BULK		BCD REQUEST-	
SUBMIT OVERVIE			_		
Style(1)	CB34009A	Supplier Mill	PACIFIC TEXTILES LTD.	Colorist :	
Eval Path	A/V + KOHLS	Agent Vendor	LI & FUNG KOREA		
Material	COTTON/SPANDEX 95/5 180	Parent Co.	HANSAE CO., LTD.		
Color Name	NEW WHITE	A/V Colorist	PRETTY LI		
Service Name	CSI	Apeat MR	NLOLE LEE		
Service No.	212-155	Kohl's Colorist	CHAO YANG		
Combo Name		PM	JULIANNE BARTELS	Apst/Vade/Mill :	
Artwork Name		Season	5214		
Link ID		Brand	CROFT & BARROW		
Master		Division	WOMENS	PACIFIC	
Master Submit No.		Dept	013	COLOR OFFICE	
Related Submit(s)		In DC Date	05/04/2014	SEP 29 2010	
States	MILL APPROVED	Artwork Rec'd Date			
Referenced Submit	70,290	Target Approve Date		DIGITAL REJ	
View Only Parties				DIGITIAL REP	



YARN SKEIN PROCESS



*Yarn skeins are a submit type in onePLM. However, excel forms are still being accepted at this time. If comments are not able to be added into onePLM, a "for reference" submit on an excel form can be sent to Kohl's.

Yarn Skein Color Submit Approvals							
Submit Type	Certified L&F Colorist	Certified Mill/Vendor Colorist	Kohl's				
Clear/Solid Yarns	Х	Х					
Single-dye Yarns			Х				
Heather Yarns	Х	х					
Marl Yarns			х				



YARN SKEIN APPROVAL PROCESS

How to correctly send Yarn Skein submits to Kohl's:

- Submits should be created by the Mill/Vendor for:
 - o Kohl's
 - o Li & Fung Offices
 - o Vendor
 - o Mill
- Submit forms to be used:
 - o onePLM *Pre-Yarn Skein" Form
 - o onePLM "Yarn Skein" Form
 - Excel "Lab Dip" Form (yarn-skeins only)
- Forms must include:
 - Each color name and code listed correctly
- All fields should be filled in correctly
- Yarn Skeins should be submitted as:
 - \circ 2 3 yarn skein options per color for approval and should be 4" long, $\frac{3}{4}$ " wide in size



Yarn Skein Library for Kohl's:

- Mills and Vendors should keep a Kohl's library of approved yarn skein qtx file records. Upon
 request of a new yarn dip, please check your library to see if this color has already been created
 and approved for Kohl's. If yes, no need to re-develop the color. If color has not been developed,
 begin the pre-dip process.
- Yarns that have been approved can be used for <u>ALL</u> Kohl's brands if the yarn content is the same. No need to dip yarns if the color / content are the same across multiple brands.

Mill/Vendor/Li & Fung Approval:

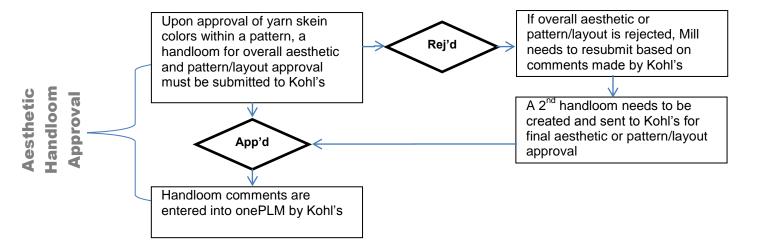
- A Certified Mill / Vendor / Li & Fung Colorist will review the yarn skein submits against the physical color standards to ensure proper color matching and approve or reject for color.
 - If the same color is applied on multiple patterns, the yarn skein only needs to be approved once and can be applied to all patterns.
 - Once all of the yarn skeins have been approved within a pattern for color, the handloom should be submitted to Kohl's for overall aesthetic and pattern/layout approval.
 - Yarn skein submits that cannot be approved by the Certified Mill / Vendor / Li & Fung Certified Colorist because of color variation must be sent to Kohl's for a Best Can Do approval after two rounds.
- Upon a Certified Mill / Vendor / Li & Fung Colorist's approval of a yarn skein, a "For Reference" submit is sent to Kohl's for auditing and record keeping. Yarn Skeins

Kohl's Approval:

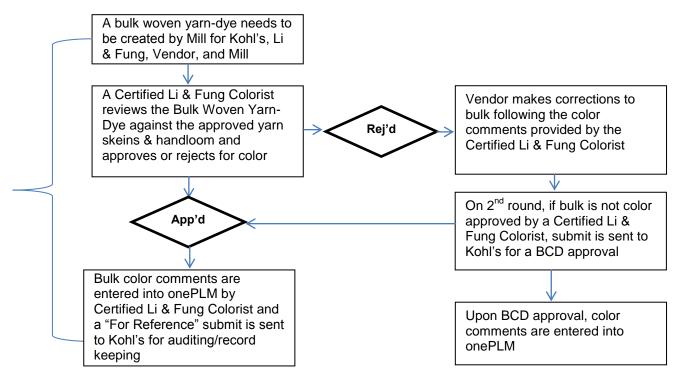
- Kohl's will receive the yarn skein submits for auditing and record keeping that have been approved by Certified Mill / Vendor / Li & Fung Colorist.
- Submits that cannot be approved by the Certified Mill / Vendor / Li & Fung Colorist because of color variation must be sent to Kohl's for a Best Can Do approval.



HANDLOOM PROCESS



BULK WOVEN YARN-DYE PROCESS





HANDLOOM AESTHETIC & BULK WOVEN YARN-DYE APPROVAL PROCESS

How to correctly send Handloom & Bulk Woven Yarn-Dye submits to Kohl's:

- Submits should be created by the Mill/Vendor for:
 - o Kohl's
 - o Li & Fung Offices
 - \circ Vendor
 - o Mill
- onePLM submit forms to be used:
 - o "Pre-Handloom"
 - o "Handloom"
 - o "Woven Yarn Dye Bulk"
- Forms must include:
 - Each color name and code listed correctly
- All fields should be filled in correctly
- Handlooms should be submitted:
 - Using approved yarn skeins for that pattern (please note that yarn skeins do not need to be attached to submit form or handloom unless it is Vendor's preferred method of choice)
 - As a minimum of 6"x6" swatch with full pattern repeat
- Bulk Woven Yarn-Dyes should be submitted:
 - o Using approved yarn skeins
 - Referencing the approved handloom
 - As a minimum of 6"x6" swatch with full pattern repeat

Color Comment Communication:

 The onePLM software is Kohl's system of choice for color comment communication for Handlooms and Woven Yarn-Dye Bulks.

Kohl's Approval:

- Handlooms
 - Kohl's Designer reviews handloom aesthetically for color. If the overall aesthetic is rejected, Designer will select new color standard(s) and a new handloom is required.
 - o Kohl's Designer reviews and approves or rejects for pattern/layout.
 - Comments for handloom are updated in onePLM.
 - Bulk Woven Yarn-Dyes
 - Kohl's will receive the bulk yarn dye submits for auditing and record keeping that have been approved by the Li & Fung Certified Colorist.
 - Kohl's reviews all Best Can Do submits for approval.

Mill/Vendor Screening:

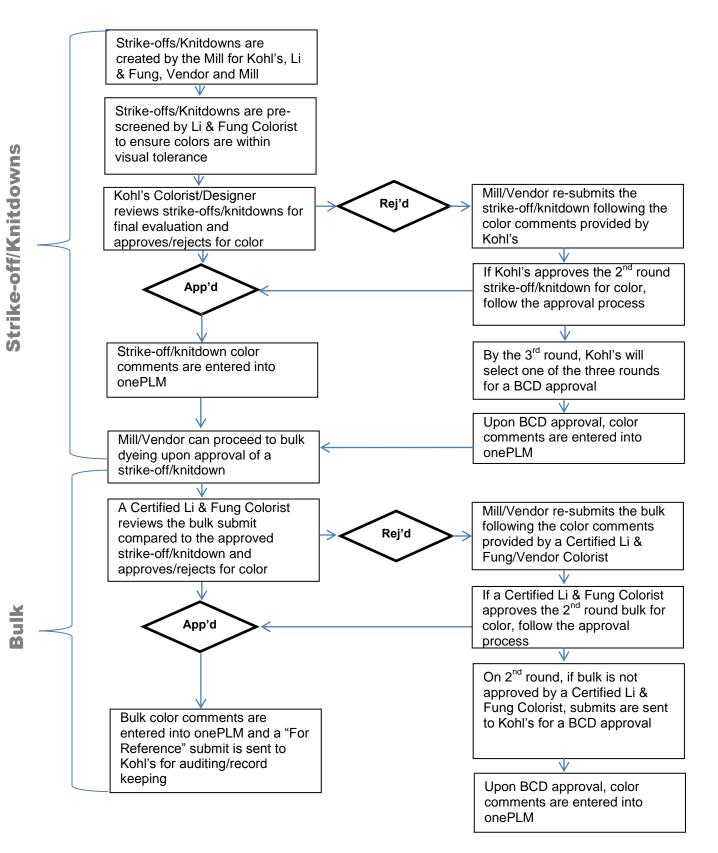
 Prior to submitting bulk yarn dye submits, the Mill/Vendor should review the color against the approved yarn skeins and handloom to ensure proper color matching.

Li & Fung Approval:

- A Certified Li & Fung Colorist will review the bulk submits against the approved yarn skeins & approved handloom to ensure proper color matching.
 - The Mill/Vendor will be immediately contacted if the bulk woven yarn-dye is rejected for color
 - After 2 rounds, bulk woven yarn-dye submits that cannot be approved by the Li & Fung Certified Colorist because of color variation must be sent to Kohl's for a Best Can Do approval
 - Upon a Certified Li & Fung Colorist's approval of a bulk woven yarn-dye, a "For Reference submit is sent to Kohl's for auditing and record keeping.



PRINT & KNITDOWN COLOR PROCESS





PRINT & KNITDOWN APPROVAL PROCESS

Allover, Placement & Knitdowns

How to correctly send strike-off/knitdown/bulk submits to Kohl's:

- Submits should be created by the Mill/Vendor for:
 - o Kohl's
 - o Li & Fung Offices
 - o Vendor
 - o Mill
- onePLM submit forms to be used:
 - o "Pre-Strikeoff"
 - o "Strikeoff"
 - o "Print Bulk"
 - o "Pre-Knitdown"
 - o "Knitdown"
 - o "Knit Yarn Dye Bulk"
 - "Pre-Space Dye Lab Dip"
 - "Space Dye Lab Dip"
 - o "Space Dye Bulk"
- Forms must include:
 - Printing method used, i.e. pigment, reactive, discharge, etc.
 - A list of each color name and code within the print/pattern
 - The "Approval" box marked correctly to clearly indicate what the submit needs to be approved for (i.e. color, quality, etc.)
- Allover/placement prints & knitdowns must be:
 - Submitted in the correct color, fiber content, construction, and weight
 - \circ $\,$ A representation of each color used in the print/pattern
 - A minimum of 6" x 6" in size
 - Include one full pattern repeat if the repeat is larger than 6"
 - Repeat must be clearly marked with tape for easy identification
 - Submitted on the correct ground color
 - If the ground color on a placement print has not yet been approved, the submit should be sent on a close available ground and noted as "available" on the submit form.
 - o Clearly marked "before wash" and "after wash" for washed programs
 - Attached face side up using double sided tape

Color Comment Communication:

The onePLM software is Kohl's system of choice for color comment communication



PRINT & PATTERN

Allover/Placement/Knitdowns

Mills/Vendors:

- Prior to submitting strike-off/knitdowns submits, the Mill/Vendor should review the ground color and each individual color within the print against the physical color standards to ensure proper color matching.
 - It is the Mill/Vendor's responsibility to internally reject submits that do not match the color standards.
 - Submits should only be sent to Kohl's for approval if all colors are approvable based on visual evaluation.
- If the print has to coordinate with a solid, the submits must be visually reviewed together to ensure proper color matching.
 - Any artwork flagged with "CM" (critical match) is a key color and/or that needs to coordinate with another garment.
- Bulk prints/patterns must match the approved strike-off or knitdown for color approval.

Li & Fung:

- Li & Fung Certified Colorist reviews the bulk submits compared to the approved strike-off/knitdown.
 - The Mill/Vendor will be immediately contacted if the bulk submits are rejected for color.
 - Bulk submits that cannot be approved by the Li & Fung Certified Colorist because of color variation must be sent to Kohl's for a Best Can Do approval.
- Upon Li & Fung Certified Colorist's approval of the bulk, a "For Reference" submit is sent to Kohl's for auditing and record keeping.

Kohl's:

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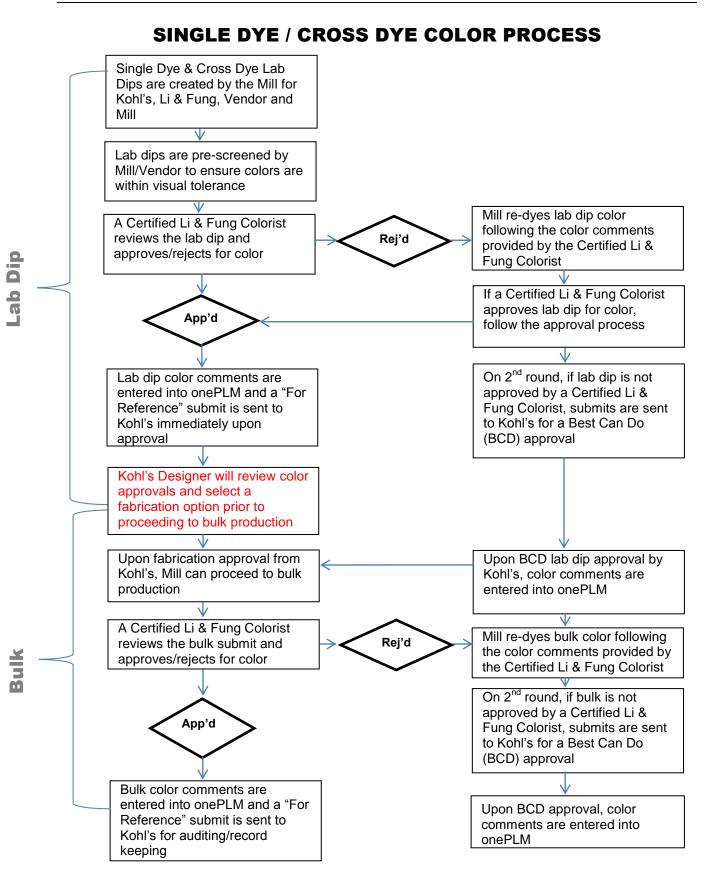
- Kohl's Design/Color team reviews strike-off/knitdown submits for overall color aesthetic and approves or rejects for color.
- If the strike-off/knitdown has to coordinate with a solid, the submits must be visually reviewed together to ensure proper color matching.
- All colors within one submit round should be approved to avoid approvals of individual colors on multiple rounds.
- C.I.P. (Correct in Production) approval status will not be accepted. Submits that do not meet Kohl's color requirements must be approved as Best Can Do.
 - Li & Fung Certified Colorists will be responsible for the approval of bulk submits.
 - Kohl's will receive bulk "For Reference" submits for auditing and record keeping.
 - Bulk submits that cannot be approved by the Li & Fung Certified Colorist because of color variation must be sent to Kohl's for a Best Can Do approval.

Additional Comments:

- "Pre" Strike-offs/Handlooms/Knitdowns
 - "Pre" submits are color submits that are created <u>before</u> a style # or a silhouette has been assigned by Kohl's.
 - If a submit was approved as a pre-strike-off or pre-knitdown, the vendor can proceed to bulk upon order placement. A new submit does not need to be re-submitted once a "pre" submit has been approved.
- Legend Key
 - On the fabric salvage, please print the "legend key" for strike-offs and placement prints for visual reference (please see example below).









SINGLE DYE, CROSS DYE

How to correctly send lab dip/bulk submits to Kohl's:

- Submits should be created by the Mill/Vendor for:
 - o Kohl's
 - o Li & Fung Offices
 - o Vendor
 - o Mill
- onePLM submit forms to be used:
 - Pre-Single Dye Lab Dip"
 - Single Dye Lab Dip"
 - Single Dye Bulk"
 - "Pre-Cross Dye Lab Dip"
 - "Cross Dye Lab Dip"
 - "Cross Dye Bulk"
- Submits must be:
 - o Clearly marked to indicate what approval is needed (i.e. color, quality, etc.)
 - o Submitted in the correct color, fiber content, construction, and weight
 - \circ 3" x 3" for lab dips with 4 6 options
 - Labeled A, B, C, D, E, and F. The second submission if required should follow the same sequence and be labeled G, H, I, J, K, and L and so on. In addition, each submission round must be labeled 1st, 2nd, etc. For example, the 1st submission would be with lab dip trials A, B, C, D, E, F and the 2nd submission would be with lab dip trials G, H, I, J, K, L.
 - 6" x 6" for bulks and each lot must be clearly labeled
 - Clearly marked "before wash" and "after wash" for washed programs
 - Attached face side up using double sided tape

Color Comment Communication:

The onePLM software is Kohl's system of choice for color comment communication



SINGLE DYE, CROSS DYE, SPACE DYE

Li & Fung

- Color Evaluation:
 - Certified Li & Fung Colorists have the authority to approve color submits for Single Dye & Cross Dye lab dips/bulks on Kohl's behalf based visual evaluation.
 - Certified Colorists are allowed to reject color submits to ensure the lab dips/bulks are meeting Kohl's tolerances.
 - All Single Dye & Cross Dye lab dips need to be reviewed visually against the official Kohl's color standard (Archroma, Archroma Atlas, Pantone).
 - Once a lab dip is approved for color, a "for reference" submit must immediately be sent to Kohl's for final review. Kohl's will confirm fabrication selection prior to proceeding to bulk production.
 - Once a lab dip option for fabrication is confirmed by Kohl's, a bulk submit should be created.
 - The bulk submit should be reviewed against the approved lab dip

Mills / Vendors:

- The Mill/Vendor will review submits visually in a light box compared to the color standard that has been selected.
- Only lab dip/bulk submits that pass the visual inspection should be sent to a Li & Fung Certified Colorist
 - Mills/Vendors have authority to internally reject submits prior to sending to a Li & Fung Colorist for final color approval.
 - o Kohl's will have final validation on fabrication option selection prior to proceeding to bulk.
 - Upon Kohl's final confirmation, a bulk needs to be created. The bulk submit should be reviewed against the approved lab dip
 - The Vendor is ultimately responsible for the color integrity of the product shipped to Kohl's.

Best Can Do (BCD) Requirements:

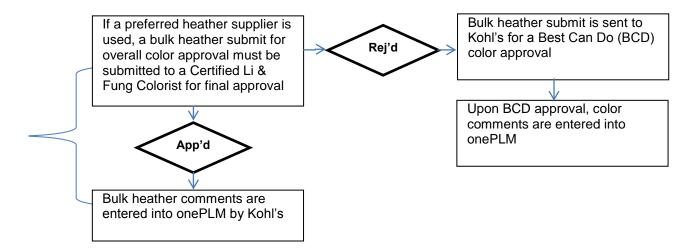
- BCD requests are submits that the Mill cannot achieve correct color matching due to technical limitations/dyestuff.
 - All submit forms must have an explanation as to why the color cannot be achieved and why it is being requested as BCD. A stamp should be indicated on the submit form if the submit is "BCD Timing" vs. "BCD Technical".
 - Lab dips/bulks must require at least two submit rounds for BCD color approval.
 - All BCD submits need to be routed through a Li & Fung Certified Colorist for review.
- If the garment has multiple matching components (i.e. mixed media), a visual assessment must be conducted by a Li & Fung Certified Colorist to ensure color cohesiveness.
- BCD submits that cannot be approved by a Li & Fung Certified Colorist are sent to Kohl's for final color approval.

Kohl's:

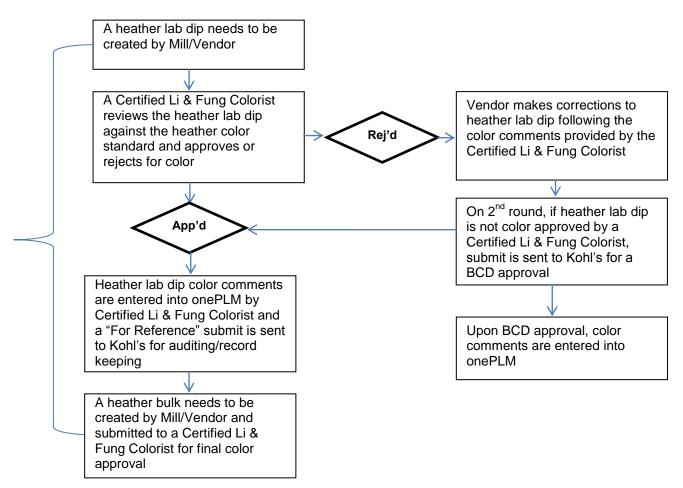
• Lab dip/bulk submits that cannot be approved by the Li & Fung Certified Colorist because of color variation will be sent to Kohl's for a Best Can Do approval.



HEATHERS PREFERRED SUPPLIER



HEATHERS NON-PREFERRED SUPPLIER





HEATHERS

How to correctly send heather submits to Kohl's:

- Submits should be created by the Mill/Vendor for:
 - o Kohl's
 - o Li & Fung Offices
 - \circ Vendor
 - o Mill
- onePLM submit forms to be used:
 - o "Heather Lab Dip"
 - o "Heather Bulk"
- Forms must include:
 - Each color name and code listed correctly
 - The "Approval" box marked correctly to clearly indicate what the submit needs to be approved for (i.e. color, quality, etc.)
- Heather Lab Dips/Bulks must be:
- o Submitted in the correct color, fiber content, construction, and weight

Color Comment Communication:

• The onePLM software is Kohl's system of choice for color comment communication

Mills/Vendors:

- Kohl's Design team will advise heather color standard
- Yarns ordered directly thru our preferred heather suppliers (Huafu & Bros) can proceed directly to bulk
 - All bulk submits should be sent to a Certified Li & Fung Colorist for color evaluation / approval
 - Bulk heather color approvals will be reviewed against the color standard for final color approval
 - Any submit that cannot be approved by a Certified Li & Fung Colorist will be sent to Kohl's for a Best Can Do (BCD) approval
- Yarns not ordered directly thru a preferred heather supplier, lab dips must be submitted.
 - All lab dips will be reviewed by a Li & Fung Certified Colorist for color evaluation / approval compared to the color standard.
 - Any lab dip submits that cannot be approved by a Certified Li & Fung Colorist will be sent to Kohl's for a Best Can Do (BCD) approval

Li & Fung:

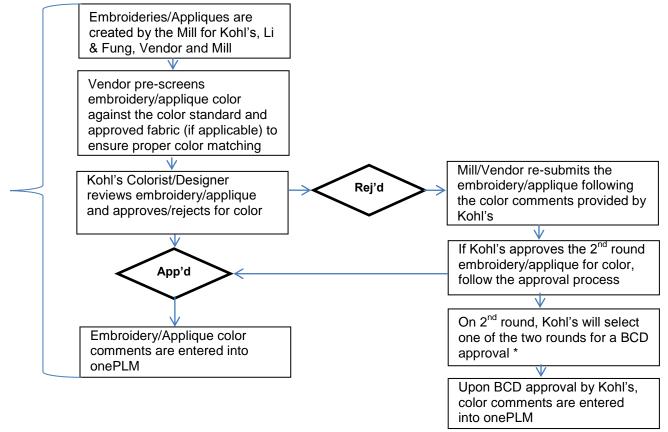
- A Certified Li & Fung Colorist will review all heather lab dips and heather bulks compared to the color standard
- Any submit that cannot be approved by a Certified Li & Fung Colorist will be sent to Kohl's for a Best Can Do (BCD) approval

Kohl's:

• Lab dip/bulk submits that cannot be approved by the Li & Fung Certified Colorist because of color variation will be sent to Kohl's for a Best Can Do approval.



EMBROIDERIES/APPLIQUES COLOR PROCESS





EMBROIDERIES/APPLIQUES

How to correctly send embroidery/appliqué submits to Kohl's:

- Submits should be created by the Mill/Vendor for:
 - o Kohl's
 - o Li & Fung Offices
 - o Vendor
 - o Mill
- onePLM submit forms to be used:
 - o "Embroidery/Appliqué"
- Forms must include:
 - o Each color name and code listed correctly
 - The "Approval" box marked correctly to clearly indicate what the submit needs to be approved for (i.e. color, quality, etc.)
- Embroidery/Appliqués must be:
 - o Submitted in the correct color, fiber content, construction, and weight
 - Submitted on correct ground color
 - If ground color has not yet been approved, embroidery/appliqué should be submitted on a close available ground and noted as "available" on the submit form
 - The entire embroidery/appliqué pattern for proper color evaluation
 - Attached face side up using double sided tape

Color Comment Communication:

The onePLM software is Kohl's system of choice for color comment communication

Mills/Vendors:

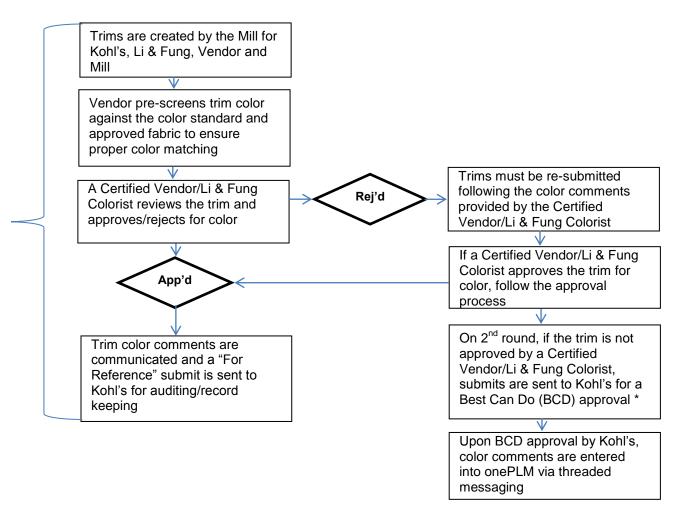
- Prior to submitting embroidery/appliqué submits, the Mill/Vendor should review the colors against the physical color standards to ensure proper color matching.
 - It is the Mill/Vendor's responsibility to internally reject submits that do not match the color standards.
 - Submits should only be sent to Kohl's for approval if all colors are approvable based on visual evaluation.
- If the embroidery/appliqué has to coordinate with a solid/print, the submits must be visually reviewed together to ensure proper color matching.

Kohl's:

 Kohl's Design/Color team reviews embroidery/appliqué submits for overall color aesthetic and approves or rejects for color.



CONTRAST & DTM (DYED TO MATCH) TRIM COLOR PROCESS





TRIMS – CONTRAST & DTM (dyed to match)

How to correctly send <u>Contrast & DTM trims</u> submits to Kohl's:

- Submits should be created by the Mill/Vendor for:
 - o Kohl's
 - o Li & Fung Offices
 - o Vendor
 - \circ Mill

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- Submit forms to be used:
 - \circ $\,$ Trim & Findings Form (Excel) $\,$
 - "Contrast Trim & Findings" (onePLM once available)
 - "DTM Trim & Findings" (onePLM once available)
- Forms must include:
 - Type of trims being submitted (i.e. button, zipper, twill tape, pocket lining, rib trim, etc.)
 - Each color name and code listed correctly
 - The "Approval" box marked correctly to clearly indicate what the submit needs to be approved for (i.e. color, quality, etc.)
- Contrast & DTM trims must be:
 - o Submitted in the correct construction or ornamentation for proper evaluation
 - o Submitted as a mock-up on approved fabric
 - o Attached face side up using double sided tape

Mills/Vendors:

 Prior to submitting Contrast & DTM trim submits, the Mill/Vendor should review the color against the physical color standards and approved fabric (solid, strike-off, etc.) to ensure proper color matching.

Li & Fung/Vendor Certified Colorists:

- Vendor/Li & Fung Certified Colorists will review the Contrast & DTM trim submits against the physical color standards and approved fabric (solid, strike-off, etc.) to ensure proper color matching.
 - The Mill/Vendor will be immediately contacted if the trim submits are rejected for color.
 - Trim submits that cannot be approved by the Vendor/Li & Fung Certified Colorist because of color variation must be sent to Kohl's for a Best Can Do approval.
- Upon Vendor/Li & Fung Certified Colorist's approval of a trim, a "For Reference" submit is sent to Kohl's for auditing and record keeping.

Kohl's Approval:

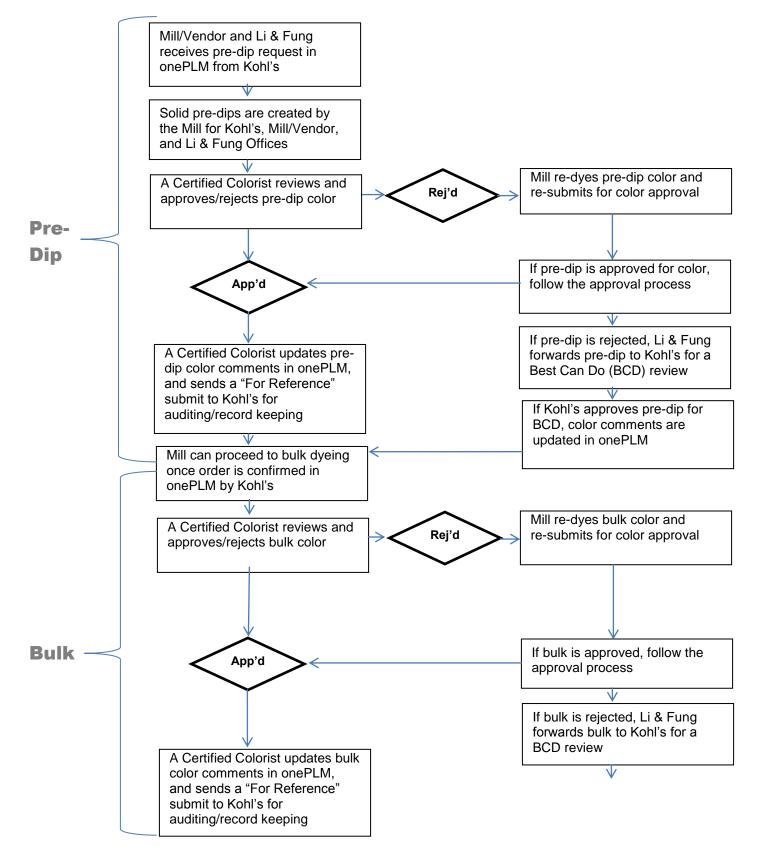
- Kohl's will receive the Contrast & DTM trim submits for auditing and record keeping that have been approved by the Vendor/Li & Fung Certified Colorist.
- Submits that cannot be approved by the Vendor/Li & Fung Certified Colorist because of color variation must be sent to Kohl's for a Best Can Do approval.

Additional Comments:

- Designer will flag approval exceptions on trim sheet when Kohl's need to handle final trim approvals due to the complexity of the garment.
- Thread approvals
 - Vendors have the approval authority to approve thread color on Kohl's behalf.
 - Any thread approval that cannot be approved because of color variation must be sent to a Certified Li & Fung Colorist for final color approval.
 - A Designer may request multiple contrast thread options for selection. These thread options should to be sent to Kohl's Designer for final color approval.
- Heat seals need to be approved by Kohl's and do not need to be pre-screened by a Li & Fung Certified Colorist.



SOLID PRE-DIP COLOR PROCESS





PRE-DIPS - SOLIDS

What is Pre-dipping?

Pre-dipping is strategic pre-season color lab dipping targeted for core programs. If a pre-dip is approved, mill can proceed to bulk dyeing once the order is confirmed in onePLM.

Benefits:

- Establish key core and fashion fabrics/colors ahead of season
- Color approval completed prior to style creation
- Identify potential color execution risks
- Speed to market
- Mill can proceed to bulk once order is confirmed
- Better pricing for downtime production
- Flexibility in color selection

Pre-dip Creation:

- Pre-dip requests are created by Kohl's in onePLM
 - If a solid pre-dip request was sent to a Color Certified Mill, the mill does not need to lab dip as a certified mill controls their own dyeing and time and action calendars

Pre-dip Life Cycle:

- The approved pre-dip color will last continually if the fabric / mill / color are the same.
 - If a pre-dip was approved as a BCD, a new lab dip must be sent the next time that same color/fabric is requested.

Non-Certified Mills/Vendors:

- Prior to submitting pre-dip/bulk submits, the Mill will measure the reflectance values instrumentally
 using a spectrophotometer and visually pre-screen all pre-dip/bulk submits to ensure they fall within
 the 1.0 CMC ΔE tolerance compared to the Master Digital Standard (MDS).
- Only pre-dip/bulk submits that pass spectral tolerance and the visual inspection should be sent to a Li & Fung Certified Colorist.
 - $\circ~$ It is possible that the pre-dip/bulk submits may be rejected that fall within the 1.0 CMC ΔE tolerance based on visual evaluation.
 - Bulk fabric is compared and read against the Master Digital Standard (MDS) unless the pre-dip is approved off shade or as a Best Can Do. In that case, the bulk color must match to the BCD pre-dip.
- Prior to submitting pre-dip/bulk submits, the Mill will review the submits visually in a light box compared to the Kohl's Color Standard that has been selected.
 - It is the vendor's responsibility to pre-screen pre-dip/bulk submits and reject for color if the submits do not meet Kohl's requirements or do not match the color standards Kohl's selected.

Certified Mills:

- Mills that have been certified by Kohl's do not need to submit pre-dip requests. The supplier is
 responsible for managing color orders received by Kohl's and maintains the deliveries agreed upon.
- Upon order confirmation of a solid color, please follow the "Kohl's Color Process".

Certified Li & Fung Colorists:

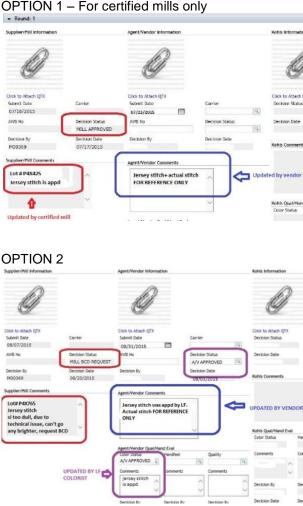
- Li & Fung Certified Colorist will review pre-dip/bulk submits against the physical color standards to ensure proper color matching.
 - Upon Li & Fung Certified Colorist's approval of a pre-dip/bulk submit, a "For Reference" submit is sent to Kohl's for auditing and record keeping.



SWEATER STYLES - SOLIDS

Color Process Requirements:

- If a lab dip is being sent for a sweater: •
 - Mill should use a jersey stitch for color approval. 0
 - For Color Certified Mills: 0
 - If a lab dip is failing spectrally but visually matches compared to the color standard, the lab • dip can be approved for color.
- If a bulk submit is being sent for a sweater:
 - The bulk submit should be sent in a jersey stitch and compared to approved lab dip for color 0 consistency.
 - A "For Reference" submit must be sent in jersey stitch if approved by a Certified Colorist. 0
 - Another "For Reference" submit must be sent in the actual yarn quality, size, gauge, and stitch 0 for record keeping. Each stitch must be represented. If a style has multiple stitches, each stitch should be sent together as "for reference".
- The submit needs to be clearly marked that the lab dip/bulk is in available stitch. In the "Comments" section in onePLM, please note that it is a jersey and available stitch. See screen shots below for 2 examples for clarification.



OPTION 1 – For certified mills only



SWEATER STYLES – KNITDOWNS

Color Process Requirements:

- If a knitdown is being sent for a sweater:
 - All main and accent colors within the knitdown should be as close to the color standard as possible for color approval.
 - If the same yarn color is being used on multiple patterns and is approved on one pattern, the approval can be applied for multiple styles.
 - Mark the submit forms when a color has been previously approved on another pattern
 - Use the "Sweater Submit Color Approval Tracking" for tracking of color approvals for both solids and knitdowns.

COLOR NAME	COLOR CODE	REFERENCE #	ARTWORK #	PATTERN NAME	1st Round Knitdown	2nd Round Knitdown	Including Pattern No.	COMMENTS
		EXAMPL				9/5 approved submit	HY4SNM390A - RED CRM HB HY4SNM394B - NVY GRN HB	
1. Evening Blue	19-3815 TCX	17,111	FA4SNM385A	NVY BLU TN	red, and deeper	78,569		

- All knitdowns need to be sent on a onePLM "knitdown" submit form.
- Top Dye
 - Solid Effect
 - Follow solid color approval process.
 - o Heather Effect
 - Must be submitted as lab dip or a knitdown. Follow solid color approval process.
- Melange
 - If using a preferred supplier (Huafu or Bros), a knitdown is not required. A bulk submit can be sent directly to a Certified Li & Fung Colorist for final color approval.
- Counter samples still need to be sent to Product Development for meetings in addition to a knitdown for submit approval. Cannot use PD color samples as substitute for knitdown submit approval.
- If a bulk submit is being sent for a sweater:
- The submit should be color correct and compared against the approved knitdown for color accuracy.
- o A Certified Li & Fung Colorist can approve the bulk submit on Kohl's behalf.
 - A "For Reference" submit must be sent to Kohl's for auditing/record keeping.
 - If a Li & Fung Colorist cannot approve the bulk, the submit should be sent to Kohl's for a Best Can Do (BCD) approval.



MIXED MEDIA STYLES

Definition: When there are two or more fabrications on a garment that have the same color and must match to each other. For example: A top that has a chiffon front, a jersey back and a lace trim. All these components must match aesthetically and visually to create one cohesive garment.

Requirements:

- For all body fabrics:
 - Lab dips or strike-offs need to be submitted for each component.
 - Submit forms need to indicate that the approval is for a mixed media style.
 - Any DTM/Contrast trims should be submitted upon approval of the main body fabric(s).

Vendor Screening:

- Vendor (Certified or Non-Certified) manages the mixed media process and owns the execution of color for the garment
- Vendor communicates expectations of mixed media style to suppliers dyeing the components within the garment
- Vendor coordinates all mixed media color submits for consistent color matching
- Please see Mixed Media Color Process for specific color review/approval instructions

FAST TRACK STYLES

Definition: When there are emerging trends that have a short development cycle and consists of fashion and fashion basic styles.

Color Process Requirements:

 Please follow the T&A discussed with the Kohl's Product team for details on the number of submit rounds required for fast track styles.

REPEAT STYLES

Definition: A style that is carried over into another season or into the following year where the color, fabric and Mill remain the same.

Color Process Requirements:

- If a color is being carried over into the next season, lab dips will not be required to be submitted for color approval.
 - If the lab dip was approved as a BCD due to timing, the Mill must re-submit lab dips for the new season.
- A bulk submit must be re-submitted every season for final confirmation/approval to maintain color accuracy.

REPLENISHMENT STYLES

Definition: An existing style that is continuously replenished throughout the year.

Color Process Requirements:

- If a color is being replenished:
 - o A bulk submit must be re-submitted every season for final approval to maintain color accuracy.
 - The submit form needs to clearly state that the submit is a replenishment style.
 - It is the Mills/Vendors responsibility to achieve the replenished color by following the dye formula.