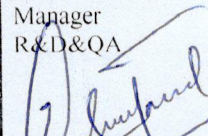
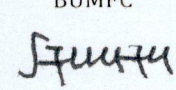


<b>PACKAGES CONVERTORS LIMITED</b>  <b>(BU – FC)</b>	Document type <b>FINISHED PRODUCT SPECIFICATIONS</b>  Title <b>RELEASE SPECIFICATIONS FOR PRINTED PAPER/ BOARD  CARTONS, HINGELIDS, SHELLS, LABELS, TUCKS,  DISPENSARS, DISPLAY CARTONS ETC.</b>
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Prepared by Asad Javed Manager R&D&QA 	Approved by Salman Fazlur Rahman BUMFC 	PAGE  1(7)	REV  <b>16</b>	DATE  <b>01.07.2024</b>	DOC NO.  SPQA/PROD/BU-FC/01
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Reviewed on (Date):  Reviewed by:	Reviewed on (Date):  Reviewed by:	Reviewed on (Date):  Reviewed by:	Reviewed on (Date):  Reviewed by:
Approved on (Date):  Approved by:	Approved on (Date):  Approved by:	Approved on (Date):  Approved by:	Approved on (Date):  Approved by:

UN-GLUED CARTONS:

PARAMETER	TOLERANCE	TEST METHOD	CRITICAL
<b>PRINTING FAULTS:</b>			
Color Variation	As per shade card or approved / reference sample	Visual	Yes
Embossing Missing	No missing of key elements and /or text	Visual	Yes
<ul style="list-style-type: none"> <li>Print/Text Missing</li> <li>Varnish Missing</li> <li>Smudging / Filling In</li> <li>Lines / Scratches / wrinkles</li> <li>Stains / Spots</li> <li>Picking</li> <li>Hickies (Skin)</li> <li>Rubbing</li> <li>Offsetting</li> </ul>	<ul style="list-style-type: none"> <li>Not acceptable: If visible at arm's length.</li> <li>Acceptable: If visible on closer inspection</li> </ul>	Visual	Yes
<b>REGISTRATION FAULTS:</b>			
<ul style="list-style-type: none"> <li>Print to Print</li> </ul>	0.4 mm	Visual (scale)	Yes
<ul style="list-style-type: none"> <li>Cut To Print</li> </ul>	1.0 mm	Visual (scale)	Yes
Embossing To Print	1.0 mm	Visual (scale)	Yes
<b>GENERAL FAULTS:</b>			
<ul style="list-style-type: none"> <li>Uncut Flaps</li> </ul>	<ul style="list-style-type: none"> <li>All lines should be completely and cleanly cut through. No tearing may occur while separating the cut line.</li> </ul>	Manual	Yes
Creases Cut Through	The flap should not detach at creases.	Visual	Yes
Board Cracking On Creases	Board should not crack / fracture when folded at creases.	Manual	Yes
Curl	± 5.0 mm	WIQA/BU-FC/8.2.4/10	Yes
<ul style="list-style-type: none"> <li>Grammage</li> </ul>	As per job card ± 4 % for Duplex board Jobs and 5% for Bleach board Jobs	WIQA/BU-FC/8.2.4/36	Yes
<ul style="list-style-type: none"> <li>Lamination (For E-flutes)</li> </ul>	No delamination of liner.	Visual	Yes
Crease Stiffness	20 N-cm/m maximum for all creases (Std. value will be 18 Ncm/m Max. for crease 1 – 6		No



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Prepared by Asad Javed Manager R&D&QA	Approved by Salman Fazlur Rahman BUMFC	PAGE 2(7)	REV 16	DATE 01.07.2024	DOC NO. SPQA/PROD/BU-FC/01
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	and 14 Nem/m for crease 7).	WIQA/BU-FC/8.2.4/04	
Varnish position *	<ul style="list-style-type: none"> <li>6 mm max. from crease to edge line of varnish.</li> </ul>	Manual	Yes
Cutting	<ul style="list-style-type: none"> <li>No cutting burr, no un-even cutting, no damage due to cutting blade.</li> </ul>	Visual	Yes
Carton damage	<ul style="list-style-type: none"> <li>Cartons should not be damaged due to hammering or handling.</li> </ul>	Visual	Yes
**Bad Smell	<ul style="list-style-type: none"> <li>Smell the sample with nose , Sample should be smell free.</li> </ul>	Manual	Yes
Dust/Burr	As per Standard Sample.	Visual	Yes
Orientation	<ul style="list-style-type: none"> <li>Orientation of cartons will be check visually.</li> </ul>	Visual	Yes

\* Only for PTC jobs

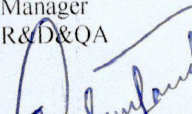
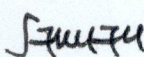
\*\*Only for paper cups skilllets

#### GLUED CARTONS:

PARAMETER	TOLERANCE	TEST METHOD	CRITICAL
PRINTING FAULTS:			
Color Variation	As per shade card or approved / reference sample	Visual	Yes
Embossing Missing	No missing of key elements and /or text	Visual	Yes
<ul style="list-style-type: none"> <li>Print/Text Missing</li> <li>Varnish Missing</li> <li>Smudging / Filling In</li> <li>Lines / Scratch/wrinkles</li> <li>Stains / Spots</li> <li>Picking</li> <li>Hickies (Skin)</li> <li>Rubbing</li> <li>Offsetting</li> </ul>	<ul style="list-style-type: none"> <li>Not acceptable: If visible at an arm's length.</li> <li>Acceptable: If visible on closer inspection</li> </ul>	Visual	Yes
Bad Smell	Smell the sample with nose , Sample should be smell free.	Manual	Yes
Dust/Burr	As per Standard Sample.	Visual	Yes
Folding	Folding miss-alignment up to 2 mm Max.	Visual	Yes
REGISTRATION FAULTS:			
<ul style="list-style-type: none"> <li>Print To Print</li> </ul>	0.4 mm	Visual (scale)	Yes
<ul style="list-style-type: none"> <li>Cut To Print</li> </ul>	1.0 mm	Visual (scale)	Yes
Embossing To Print	1.0 mm	Visual (scale)	Yes
Hot foil Registration	1.0mm	Visual (scale)	Yes



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#### GENERAL FAULTS:

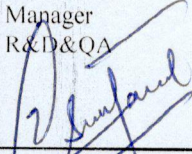
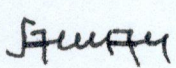
<ul style="list-style-type: none"> <li>Uncut Flaps</li> </ul>	<ul style="list-style-type: none"> <li>All lines should be completely and cleanly cut through. No tearing may occur while separating the cut line.</li> </ul>	Manual	Yes
Creases Cut Through	The flap should not detach at creases.	Visual	Yes
Board Cracking On Creases	Board should not crack / fracture when folded at creases.	Manual	Yes
Glueability	Strong enough with fiber picking; Not easy to open by hand; No glue missing.	Manual	Yes
<ul style="list-style-type: none"> <li>Grammage</li> </ul>	As per job card $\pm 5\%$	WIQA/BU-FC/8.2.4/36	Yes
<ul style="list-style-type: none"> <li>Lamination (For E-flute)</li> </ul>	No delamination of liner.	Visual	Yes
Window patching	<ul style="list-style-type: none"> <li>No missing of window patching and should be aligned to window.</li> </ul>	Visual	Yes
Perforation	<ul style="list-style-type: none"> <li>No missing of perforation should be easy to open.</li> </ul>	Manual	Yes
Carton damage	<ul style="list-style-type: none"> <li>Cartons should not be damaged due to hammering or handling.</li> </ul>	Visual	Yes
Sticking	<ul style="list-style-type: none"> <li>Cartons should not stick with each other due to gluing, varnish, UV coating or any other process</li> </ul>	Visual	Yes
Dust/Burr	As per Standard Sample.	Visual	Yes
Orientation	<ul style="list-style-type: none"> <li>Orientation of cartons will be check visually.</li> </ul>	Visual	Yes
Proof Reading	<ul style="list-style-type: none"> <li>For Pharma Jobs /As per CMS/Approved Samples</li> </ul>	Visual	Yes
Tuck In	<ul style="list-style-type: none"> <li>Flap shoulde tuck in when close the ctn.</li> </ul>	Visual	Yes
Bar code readability	<ul style="list-style-type: none"> <li>Bar Code shoulde readable ,Check bar code with bar code reader.</li> </ul>	Visual	Yes
Stiffner height/Length	<ul style="list-style-type: none"> <li>Stiffner Height Should be more than Cartons Height and Stiffner Should be 5 ply.</li> </ul>	Visual	Yes
Poly packing	<ul style="list-style-type: none"> <li>check and ensure material packed in poly for specific jobs.</li> </ul>	Visual	Yes
Seepage	<ul style="list-style-type: none"> <li>To check seepage of poly apply on gable top jobs.</li> </ul>	Manual	Yes

#### PAPER CUPS:

PARAMETER	TOLERANCE	TEST METHOD	CRITICAL
PRINTING FAULTS:			
<ul style="list-style-type: none"> <li>Print/Text Missing</li> <li>Varnish Missing</li> <li>Smudging / Filling In</li> <li>Lines / Scratch/wrinkles</li> <li>Stains / Spots</li> <li>Picking</li> <li>Hickies (Skin)</li> </ul>	<ul style="list-style-type: none"> <li>Not acceptable: If visible at an arm's length.</li> <li>Acceptable: If visible on closer inspection</li> </ul>	Visual	Yes



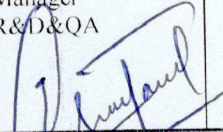
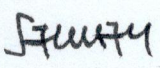
<b>PACKAGES CONVERTORS LIMITED</b>  <b>(BU – FC)</b>	Document type <b>FINISHED PRODUCT SPECIFICATIONS</b>  Title <b>RELEASE SPECIFICATIONS FOR PRINTED PAPER/ BOARD  CARTONS, HINGELIDS, SHELLS, LABELS, TUCKS,  DISPENSARS, DISPLAY CARTONS ETC.</b>
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<ul style="list-style-type: none"> <li>• Offsetting</li> <li>• Rubbing</li> </ul>			
Bad Smell	Smell the sample with nose , Sample should be smell free.	Manual	Yes
Dust/Burr	As per Standard Sample.	Visual	Yes
Colour Variation	As per shade card or approved / reference sample	Visual	Yes
REGISTRATION FAULT:			
Print to print	0.4 mm	Visual (scale)	Yes
GENERAL FAULTS:			
<ul style="list-style-type: none"> <li>• Grammage</li> </ul>	As per job card $\pm 4\%$	WIQA/BU-FC/8.2.4/3 6	Yes
Seal ability	No leakage by filling water, after 10 minutes.	Manual	Yes
Lip Formation	As per approved sample	Visual	Yes
Grease/burn marks on cups	No grease/burn marks should present on cup	Visual	Yes
Bottom Folding	As per approved sample	Visual	Yes
Cup formation	As per approved sample	Visual	Yes



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UN-GLUED CARTONS (FOR PAKISTAN TOBACCO CO.):

PARAMETER	TOLERANCE	TEST METHOD	CRITICAL
<b>PRINTING FAULTS:</b>			
Color Variation	As per shade card or approved / reference sample	Visual	Yes
Embossing Missing	No missing of key elements and/or text	Visual	Yes
• Varnish Missing	'A' fault if varnish is missing. 'B' if varnish is not applied as intended rough feel. 'C' improper application of varnish	Visual	Yes
• Smudging/Filling In	If unprinted area in the design gets ink called filling in. If ink seems to be dragged down from the printed text design called smudging. 'A' fault if visible at arm length. 'B' faults if visible on closer inspection.	Visual	Yes
• Lines/Scratch / wrinkles	Not Acceptable - if visible at an arm's length.	Visual	Yes
• Stains / Spots	Acceptable - if visible on closer inspection.	Visual	Yes
• Picking/Hickies (skin)	When tiny white spots appear on the printed area is considerable (up to 5) in quantity is picking. 'A' fault if size of Pickies/Hickies is 3mm or more. 'B' faults if size of Pickies/Hickies is up to 2 mm. 'C' faults if size of Pickies/Hickies is up to 1 mm.	Visual	Yes
• Offsetting	Occurs when the ink from the top of one sheet imprints the back of the sheet.	Visual	Yes
• Rubbing	In case of varnished material ink is detached when rubbed. 'A' fault in case of varnished material ink is detached when rubbed.	Visual	Yes
• Print/text missing	'A' fault if any of the key element or color is missing.	Visual	Yes
• Bade smell	Smell the sample with nose, Sample should be smell free.	Manual	Yes
<b>REGISTRATION FAULTS:</b>			
• Print to Print	0.20 mm for Offset printing 0.25 mm for Rotogravure printing (Lemanic)	Visual (scale)	Yes
• Cut to Print	0.9 mm side to side & 0.5 mm top to bottom for Offset printed material 0.6 mm horizontally & vertically for Rotogravure (Lemanic) printed material	Visual (scale)	Yes
Emboss to Print	0.5 mm horizontally & vertically irrespective of panel for Offset printed material 0.4 mm horizontally & vertically on flat bed die for	Visual (scale)	Yes



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	Rotogravure (Lemantic) printed material 0.3 mm horizontally & vertically on rotary die for Rotogravure (Lemantic) printed material		
GENERAL FAULTS:			
• Uncut Flaps	• All lines should be completely and cleanly cut through. No tearing may occur while separating the cut line.	Manual	Yes
Creases Cut Through	The flap should not detach at creases.	Visual	Yes
Board Cracking on Creases	Board should not crack/fracture when folded at creases.	Manual	Yes
Crease Stiffness	20 Ncm/m maximum for all creases (Std. value will be 18 Ncm/m Max. for crease No. 1 – 6 and 14 Ncm/m for crease No. 7).	WIQA/BU- FC/8.2.4/04	No
CURL /TWIST	-2 to + 3 mm maximum Where (+) indicates curl towards unprinted side and (-) indicates curl towards printed side	WIQA/BU- FC/8.2.4/10	Yes
• Varnish Position	A Fault - more than 8mm B Fault- 7- 8 mm C Fault - up 7mm	Manual	Yes
• Grammage	As per job card $\pm 4\%$	WIQA/BU- FC/8.2.4/36	Yes
• Solvent retention	210 mg/m <sup>2</sup> max.	WIQA/8.2.4/4 0	No
• Moisture %	6.5 $\pm$ 0.5	WIQA/BU- FC/8.2.4/19	No
• Stacking of Bundle	Bundle should be stack properly.	Visual	Yes
• ***Nicks	0.4mm	Visual(Scale)	Yes
• Dust/Burr	Weight in gms/2000 units(A. 0.8and over, B.0.65- 0.80,C.0.50-0.65)	Weighing scale	Yes

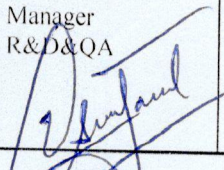
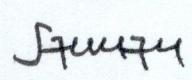
\*\*\* For Roto material only.

GLUED CARTONS (FOR PAKISTAN TOBACCO CO.):

PARAMETER	TOLERANCE	TEST METHOD	CRITICAL
PRINTING FAULTS:			
Color Variation	As per shade card or approved / reference sample	Visual	Yes
Embossing Missing	No missing of key elements and/or text	Visual	Yes



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<ul style="list-style-type: none"> <li>• Varnish Missing</li> <li>• Smudging/Filling In</li> <li>• Lines / Scratch / Wrinkles</li> <li>• Stains / Spots</li> <li>• Picking</li> <li>• Hickies (skin)</li> <li>• Offsetting</li> <li>• Rubbing</li> <li>• Print/text missing</li> <li>• Bad Smell</li> <li>• Dust/Burr</li> </ul>	Not Acceptable - if visible at an arm's length. Acceptable - if visible on closer inspection.         Smell the sample with nose , Sample should be smell free. As per Standard Sample.	Visual	Yes
Folding	Folding mis-alignment upto 2 mm Max.	Visual	Yes
<b>REGISTRATION FAULTS:</b>			
• Print to Print	0.20 mm for Offset printing	Visual (scale)	Yes
• Cut to Print	0.9 mm side to side & 0.5 mm top to bottom for Offset printing	Visual (scale)	Yes
Embossing to Print	0.5 mm horizontally & vertically irrespective of panel for Offset printed material	Visual (scale)	Yes
<b>GENERAL FAULTS:</b>			
Creases Cut Through	The flap should not detach at creases.	Visual	Yes
Board Cracking on Creases	Board should not crack / fracture when folded at creases.	Manual	Yes
Glueability	No glue missing / side opening of shells Glue bond strong enough with fiber pick, not easy to open by hand.	Manual	Yes
• Grammage	As per job card $\pm 4\%$	WIQA/BU-FC/8.2.4/36	Yes