APPENDIX 3

ANOVA ON WICKING PROPERTIES OF WKSF WITH THICKNESS AND STRUCTURE

The following Tables (A3.1 to A3.10) show Two-Way ANOVA analyse of vertical wicking and in-plan wicking properties for WKSF with its fabric thickness and structure.

Table A3.1  Two-Way ANOVA without replication on vertical wicking of fabric front side in course direction with thickness and wicking time

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-Value</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wicking time</td>
<td>98.76667</td>
<td>4</td>
<td>24.69167</td>
<td>339.7936</td>
<td>5.83E-09</td>
<td>3.8378</td>
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<tr>
<td>Fabric thickness</td>
<td>4.305333</td>
<td>2</td>
<td>2.152667</td>
<td>11.07853</td>
<td>0.0002</td>
<td>4.4589</td>
</tr>
<tr>
<td>Error</td>
<td>0.581333</td>
<td>8</td>
<td>0.072667</td>
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</tr>
<tr>
<td>Total</td>
<td>103.6533</td>
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Table A3.2  Two-Way ANOVA without replication on vertical wicking of fabric backside in course direction with thickness and wicking time

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
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<th>F</th>
<th>P-Value</th>
<th>F crit</th>
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<tbody>
<tr>
<td>Wicking time</td>
<td>80.90267</td>
<td>4</td>
<td>20.22567</td>
<td>1379.023</td>
<td>2.2E-11</td>
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<tr>
<td>Fabric thickness</td>
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<td>2</td>
<td>0.204667</td>
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<td>0.002463</td>
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<td>Error</td>
<td>0.117333</td>
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<td>0.014667</td>
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### Table A3.3  Two-Way ANOVA without replication on vertical wicking of fabric front side in wales direction with thickness and wicking time

<table>
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<th>P-Value</th>
<th>F crit</th>
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<tbody>
<tr>
<td>Wicking time</td>
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<td>25.911</td>
<td>281.6413</td>
<td>1.23E-08</td>
<td>3.8378</td>
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<tr>
<td>Fabric thickness</td>
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<td>0.138667</td>
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<td>0.278293</td>
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<td>8</td>
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### Table A3.4  Two-Way ANOVA without replication on vertical wicking of fabric backside in wales direction with thickness and wicking time

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<td>0.002358</td>
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<td>0.019833</td>
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### Table A3.5  Two-Way ANOVA without replication on vertical wicking of fabric front side in course direction with structure and wicking time

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<tbody>
<tr>
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<td>18.37433</td>
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<tr>
<td>Fabric structure</td>
<td>15.64133</td>
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<td>7.820667</td>
<td>19.80751</td>
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<td>Error</td>
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<td>8</td>
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Table A3.6 Two-Way ANOVA without replication on vertical wicking of fabric backside in course direction with structure and wicking time

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<tr>
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<td>16.37433</td>
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<tr>
<td>Fabric structure</td>
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Table A3.7 Two-Way ANOVA without replication on vertical wicking of fabric front side in wales direction with structure and wicking time

<table>
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<tr>
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Table A3.8 Two-Way ANOVA without replication on vertical wicking of fabric backside in wales direction with structure and wicking time

<table>
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<th>Source of Variation</th>
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Table A3.9  Two-Way ANOVA without replication on in-plan wicking of fabric with thickness and water uptake

<table>
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<tr>
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<th>MS</th>
<th>F</th>
<th>P-Value</th>
<th>F crit</th>
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</thead>
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<td>Fabric thickness</td>
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<td>Water uptake</td>
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<td>Error</td>
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<td>0.134295</td>
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</table>

Table A3.10 Two-Way ANOVA without replication on in-plan wicking of fabric with structure and water uptake

<table>
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<th>SS</th>
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<th>F</th>
<th>P-Value</th>
<th>F crit</th>
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</thead>
<tbody>
<tr>
<td>Fabric thickness</td>
<td>9.534707</td>
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<td>0.68105</td>
<td>5.470282</td>
<td>8.58E-06</td>
<td>1.9350</td>
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<td>Water uptake</td>
<td>170.3786</td>
<td>3</td>
<td>56.79288</td>
<td>422.8968</td>
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