C.M.S. Color Matching System

Description
C.M.S. is a water-based Color Mixing System designed to produce brilliant color matches. These vibrant pigments can be used with 100% cotton and various fabric blends. When combined with CCI’s D-Base or W-Base, the results are bright vivid colors with an amazingly soft feel. C.M.S. is a Phthalate and APEO/NPEO free pigment system for 100% cotton fabrics.

Usage
The C.M.S. system is based on a 10% pigment in the formula. Use a mixing color guide or the CCI Color management software (available at www.ccidom.com). Mix 10% pigment to 90% base. If using a color guide, move the decimal point in the guide one digit to the left. Bringing it from 100 to 10. Then follow the formula in the guide and mix 10% pigment to 90% base. Do not over-concentrate the pigment any more than 30% by weight, this can cause problem curing and wash fastness issues.

Example
Following your color reference code and formula, mix in 10% color concentration to achieve a 100% formula. Using your color reference formula, move the decimal point to the left one place. Example: 37.5% would become 3.75%. You now have a 10% color concentration. Scale these numbers up to the size of the batch you want to make. If you want to make 800 grams of ink, then a total of 80 grams (10%) of pigment will be used. Our C.M.S. pigment program will calculate this for you automatically.

Color Recipe for C.M.S. 285

<table>
<thead>
<tr>
<th>Color</th>
<th>RFU / Reference Formula</th>
<th>C.M.S. Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflex Blue</td>
<td>37.50</td>
<td>3.75</td>
</tr>
<tr>
<td>Pro Blue</td>
<td>12.50</td>
<td>1.25</td>
</tr>
<tr>
<td>Mixing White</td>
<td>50.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Base</td>
<td>—</td>
<td>90.00</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Curing Rate: 320° Degrees (160° C)
Fusion Time: 90 seconds depending on the base. Times can be longer for depending on the curing rate of your dryer.
Maximum Pigment load: Not to exceed 30%
Finish Appearance: Matte
Bleed Resistant: None
Squeegee: 70 to 80 Durometer
Squeegee Angle: 45 Degrees
Print Stroke: Maximum speed, lighter pressure
Emulsion: Use WR-14, WR-25, ABSOLUTE, or a water resistant emulsion
Underlay: Discharge white or base with 3% to 6% activator
Mesh Count: 86 to 305 mesh
Modifier / Extender: Use CCI’s WB-Retarder
Thinner: Water
Clean Up: Use Envirosolv or soap and water
Color Range: Pigments and Florescents
Substrate Type: 100% Cotton
Substrate Color: Lights or Darks using the Discharge base and 4 to 6% activator

Recommended Printing Techniques
The screen should have an ample amount of ink in the frame to flood the screen after each print. Always flood the screen to prevent drying in the screen.

- To keep from drying in the screen on longer printer runs, mist a spray of water on the ink to promote wetness of the ink. This will keep it from drying.
- CCI’s WB-Retarder may be used to help keep the ink “flowing” and to keep the ink from drying out. Use a maximum of 5% by weight.
- To test best fusion of the garment, wash test to see if you are getting a complete cure from your dryer.
- Always put a lid on your ink even when printing to keep the ink fresh and keep it from drying. Especially on hot days.