

D-CORE ® THREAD DYED AS INDIGO USED FOR EMBROIDERY

March 25, 2009 (updated Jan. 11, 2011)

D-Core® *Indigo* dyed threads were designed to be used as Seaming Threads in denim applications so the thread would wash-down similar to the indigo dyed denim it is sewn

into. *D-Core*® *Indigo* is made by dyeing the cotton wrapper with actual Indigo dyes which are, by design, less stable and color fast. The result after package dyeing are cones that may have varying degrees of indigo shading prior to sewing and laundering, which is normal for indigo dyed threads.

D-Core® Indigo dyed threads offer unique wash down properties, similar to what would be expected with the denim fabrics sewn into. Customer's using Indigo should always test the threads under the wash process that production would be exposed to assure satisfactory end-results will be obtained.

Customers have started using *D-Core® Indigo* as an embroidery thread, desiring the same type of wash-down appearance as with seaming applications where Indigo threads have been used for many years. However, it has been observed in isolated incidents where the embroidery pattern using *D-Core® Indigo* gave <u>less than satisfactory results</u> due to some inconsistencies in the wash-down throughout the pattern or from jean to jean. This occurs more on embroidery patterns because there is

a concentration of stitches in a relatively small area. This concentration of stitches and the increased amount of Indigo dyes which may be trapped in the pattern and may cause the threads not to wash down consistently and will also become more subject to the potential for "Cross Staining". This is where the indigo from the fabric redeposits on the thread or other trim items during the



laundry cycle. Usually this can be overcome in the laundry by using proper chemicals and rinsing techniques. One way to check for this is to look at the pocket lining or the care labels. If they are very blue, rather than their original color, this would indicate that the laundry process needs to be improved.

On the other hand, some retailer and brand designers have stated that they actually like the inconsistencies in wash-down because it gives each pair of jeans a unique look. Even under the best conditions the wash-down of Indigo will have varying degrees of consistency, based on the wash code and how well it is controlled. However, when Indigo is placed into an embroidery pattern, the potential for consistent wash down

becomes much more sensitive and ability to control the process in the laundry becomes even more critical.

Because of the issues discussed above, A&E will not guarantee consistent wash-down results using *D-Core® Indigo* threads. Again, Customers must take responsibility for conducting in-depth testing for all applications using *D-Core® Indigo*, especially when placing Indigo into Embroidery patterns. A&E will not take liability for shade wash-down issues of products sewn with *D-Core® Indigo*.



Notice the inconsistency of the Embroidered back pocket to the left. The top of the pocket is darker than the bottom of the pocket. This could have been due to the pocket flap covering the pocket some of the time during the wash-cycle. A&E will not take liability for shade wash-down issues like this of products sewn with *D-Core® Indigo*.

<u>Customers must take responsibility</u> for conducting in-depth testing for all applications using *D-Core® Indigo* to assure that the end result will meet their customer's needs.