



## How to dye buttons

by William Morley

How the plastic button is dyed in a commercial application.

Around 12 years ago, I worked as button dyer in a button manufacturing plant in Melbourne; they were a well-established and had a good reputation for quality button-making & supply. As I had been in the 'rag trade' for over 5 years prior, it was a new transition in my career to do the job of dyeing buttons. Where as a batch of cloth can take a few hours or more to be dyed to the correct and desired shade of colour - a batch of buttons takes only a few minutes to process with one exception. The buttons that are dyeable are the 2 plastics being polyester and nylon, wood is also dyeable, and corozo nut is also able to be done. Each kind of button requires a different type of dyestuff to colour it. As I stated the exceptional button that takes almost an hour to dye is the nut button because of its structure and composition being a natural substance.

The plastics are dyed and do not achieve a solid colour - that is the outer surface is only dyed the dyestuff does not permeate completely through the plastic fully so if the button is scratched the white/clear plastic will then show through. The main way a batch of buttons is dyed is in stainless steel pots of boiling hot water, chemicals and the various colours of dye. Initially the depth of colour of the dye bath is quite light and can always be added to so the concentration and thus shade of colour made darker. Of course, dye is added regularly so the exhausted ( used ) dyestuff is replaced. The batches of buttons are sorted into the different types as the nylon dyes will not colour the polyester button, and it's preferable to use specific dye for these ones. Also the colour from light to dark is accounted for.

The batch of buttons which may be any quantity from 10 to over one thousand to any one colour will have a colour swatch to match the button to - perhaps it is a piece of fabric the size of one' hand or even a button itself that was done prior. The batch of buttons is placed into a stainless steel mesh handled basket this allows the dye bath liquid to mix thru it easily and dye the buttons evenly. With polyester buttons, one can move the basket from one pot of dye to another without a problem. However, nylon cannot do this. This problem is if for example dyeing the shade of green, if you move from yellow dyebath to a blue one - the colours will go on unevenly with nylon and various shades of green & even patchiness may result. Polyester does not have this effect. Usually the following colours of dye are in the pots to create the 1000's of shades that are desired by the customer for their garments. - RED - SCARLET - YELLOW - BLUE x 2 - BLACK - BROWN - VIOLET. Others of course can be added and as mentioned weaker solutions are started with and can be added to.

The basket of course fits easily into the pots and is immersed and rotated to provide even dye colour solution to flow into, around and through it. Larger amounts of buttons will require a stir with a rod to assist them receive colour on the dyeable surfaces. Usually after just a short time of 10 seconds is required to gain an initial colour on the button, to check the progress of the colouration a button is taken from the basket and wiped dry and placed against the sample of cloth to see how it looks. The colour-matching is done by eye only as the human eye can distinguish 14 Million shades of colour and rapidly too. If the colour is not good enough the sampled button is placed back into the basket and the subsequent dunking of it into the pots is done to achieve the desired colour. Each time a button is taken it is placed back into the basket - however often when the colour is close that button is kept aside so the next time a comparison can be made between the 2 shades. The swatch of cloth is the main way to see if a button looks good against it and blends in and does not stand out in contrast to what was wanted by the end consumer making the garments. If it did not match, then minor alterations could be done to the colour with a weak solution of dye to shift it slightly to make it right. If the colour was a blue or red sometimes violet would be the colour that would alter it enough to make it visibly different but not darken the shade.

Once the desired colour is achieved the hot and wet buttons are dispensed from the basket to a mesh sieve to dry. The sieve is placed over a bin and another bin with a small quantity (less than 500 grams)

of sawdust is then tipped onto it to absorb the moisture from the hot buttons. That sawdust flows off easily into the bin and the fresh batch of dyed buttons is then removed from the first sieve and placed into a box or bag finished and ready to be despatched. Larger amounts 2000+ buttons are dispensed into a small spindry unit for a minute and this expels the surface moisture off them.

The corozo nut button, is a natural material from a special palm tree - Tagua Palm. These are unique in that they have a smooth grainy texture that is unique to each button like a fingerprint and when dyed this shows up and makes for an interesting effect added a special look to them. The other wooden buttons that are sometimes dyed black are coconut and other light timbers. Often coconut is left in a neutral colour stated but can be used with a light inner side or dark outer shell for the desired colour. The corozo nut is expensive and also is the one which can take a few hours to dye effectively and of course take a specific dye - in fact are dyes used for cotton fabric dyeing and in the time taken to dye this will permeate thru it not just on the surface.

The firm i worked for made all manner of buttons and had over 15,000 styles each with differing sizes, platings, number of holes (2-4) and stocktakes were not a fun exercise to do...I did appreciate what i learnt there although only for 6 months. I had an accurate colour matching skill but not the production and quantity output that my colleague did. The 7am starts made Monday's a challenge but it was a job i enjoyed and was good at.

Next time you see a colour matched button you can now know more about the way that was done for your garment. If it's not colour matched it was probably done by a guy who could not colour match as girls normally have better colour vision and do not have the genetics of colour blindness.

Thank you. I hope you enjoyed this article.

*Copyright © 2002-2010 Helium, Inc. All rights reserved.*