



TS Designs Takes Cotton “From Dirt to Shirt”

TS Designs is a company that’s doing it right. Located in Burlington, they print and dye tee-shirts made from cotton grown, ginned, spun, and sewn into tees right here in North Carolina. On a tour of their facility, you’ll hear about the triple-bottom-line they use to measure success. You’ll see everything

from chickens, bees, and an organic garden for employees, to solar panels and a windmill. And you’ll learn about Cotton of the Carolinas, the program that works “from dirt to shirt” to create a totally local tee as well as 700 jobs in North Carolina.

Founded in 1977, TS Designs quickly grew to over 100 employees, printing shirts for big brands like Nike and Polo. After the 1993 implementation of NAFTA, however, those brands took their business to Mexico for its lower labor cost. Rather than give up, CEO Tom Sineath and president Eric Henry turned to fellow business owner and long-time friend Sam Moore, who introduced them to a triple-bottom-line business model with three equally-important bottom lines: People, Planet, and Profits.

TS Designs already had some aspects of a socially responsible company, like health care and retirement plans for employees. They changed their mission statement to include the triple-bottom-line and began considering it with every product they bought or service they used. Now with 17 employees, considering the triple-bottom-line with every decision they make is ingrained in their system.



On a tour of the grounds, Eric shows us many permaculture principles in place. Shade trees planted near the building will lose their leaves in the winter to allow the sun to heat the walls; a “green wall” of Virginia creeper is being tested on the south side for the same purpose. Apple trees and blueberry bushes line a walking trail that loops the building.

Loaner chickens from Fickle Creek Farm have been used to clear and fertilize a new garden patch and to provide eggs for employees; the chickens eat food scraps from The Company Shops, the co-op in Burlington.

Peppers and okra grow in the organic garden that employees tend for at least 30 minutes each week. Gardening is so foreign to some employees that they'd be too intimidated to participate on their own, but they work in teams and do tasks planned by the garden manager. The group makes lunch together weekly to help employees understand how to use the variety of vegetables they produce. One employee expressed an interest in hydroponics, so they gave him space for a system and a solar hookup to pump water through it.



Parking spots are reserved for “green” cars: hybrid, electric, biofuel, or 35+ mpg. Multiple solar arrays and a wind turbine provide power. Inside, they altered the lighting and AC to be task specific: instead of one switch turning on overhead lights in the whole facility, low-hanging lights hover above work areas, and switches turn on only the lights that are needed. Likewise, tubes blow air into work areas rather than seeking to cool the entire cavernous space. A solar tube lights the bathroom, while catch water from the AC and ice machine flush the toilet. You

can see all the ecological elements at TS Designs on their virtual map. (<http://tsdesigns.com/about/virtual-tour/>)

Most screen-printers use “plastisol” inks that sit on top of the shirt and over time peel away. These inks contain PVC and phthalates that have negative environmental and health effects and leech into the wastewater stream after multiple washes. TS Designs uses special water-based inks that are within the shirt, not resting on top, meaning they never crack or wash out and can be ironed. Their “Rehance” process allows them to print on dark shirts; the design is printed on white tees that are dyed after printing.

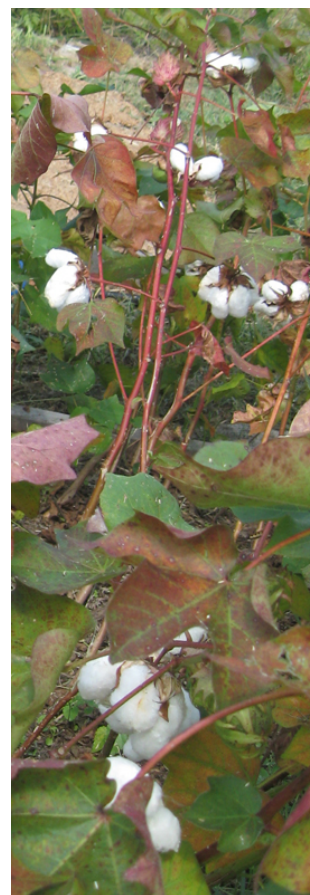




TS Designs developed three tee-shirts: one organic, one made with recycled soda bottles, and one made of North Carolina cotton. But each tee had flaws in its “sustainability story”: the organic yarn came from overseas, the recycled tee combined polyester (which is recyclable) and cotton (which is biodegradable) into a mix that couldn’t be reused, and the Carolina cotton was conventional GMO cotton. In 2011, however, the first field of certified organic cotton was planted in North Carolina, in Nash County. Eric waited to see if it was high quality enough for tees. “If we’re successful with the quality of the cotton coming out of the fields in Nash County,” he said, “we have the opportunity to make the world’s most sustainable tee-shirt. And I define that as, it will have the smallest

transportation footprint, it will be certified organic cotton, and it will have a completely transparent supply chain.” Happily, it was, and they harvested enough cotton to make 5000 tee-shirts; Weaver Street Market signed up to buy half of them. Starting in June 2012, our tee-shirts will be printed on organic Cotton of the Carolinas.

Anyone can get a cheaper tee, but buying the TS Designs “Cotton of the Carolinas” tee keeps the cotton here. North Carolina is the third largest grower of cotton, but most of it we ship overseas to gin and spin, even if it is shipped back to the United States to be sewn into tee-shirts. By processing the cotton in our state, Cotton of the Carolinas impacts 700 North Carolina jobs and helps the sustainable local agriculture movement, as well as reducing the transportation footprint of the final product to 900 miles (compared to 17,000 miles for a tee that involves China).



Read more about TS Designs on their website. (<http://tsdesigns.com/>) Watch a Youtube video of our visit to TS Designs. (<http://youtu.be/uWDY4I8bo3A>) TS Designs does tours on the tenth of each month. You can stop by to browse the \$5 bins of extra tees on any day during business hours. There’s even free coffee in the morning! Everyone is welcome.