![NCC — Network Clothing Company logo]

Progressive Production Tactics

About
Network Clothing Company

Based in Tirupur, India

Founded in 1995

Produces over 1.2 million pieces per month

Specializes in knits. Produces lingerie, casual wear, and sports wear.

Fully vertical knit producer, with ability to process 10 tons of fabric per day.

Utilizes TUKAcad, SMARTmark, TUKA3D

ISO 9001:2000, SA 8000, and ETI-GSP certified

Customers include GAP, H&M, Marks & Spencer, Mothercare, the North Face, FILA, Volcom, Walt Disney, Ecco, Levi's, OVS, Polo Ralph Lauren, Hanes, Benetton, Columbia and others.

Network Clothing Company's factory in Tirupur.

Network Clothing Company is a progressive garment manufacturer with an impressive client base in the United States, Europe, and Asia. As a knit producer in Tirupur, India's knit production capitol, it can be hard for any single manufacturer to stand out from the pack, but NCC's commitment to high-quality, value-added garments through ecologically and socially responsible business practices has made them one of the leaders in the field. Founded in 1995 by Dr. M. Ravi, Network Clothing Company, or NCC, has become a completely vertical knit manufacturer

with a capacity of 1.2 million garments each month. Primarily a producer of intimate wear, casual wear and sportswear, the company utilizes sophisticated machinery capable of knitting, dyeing, and finishing fine fabrics. The company's exports are split about 60/40 between Europe and the United States. "About 60 percent of all our production we design in house for our customers with the balance done off of customer tech packs," said Akhilesh Anand, Apparel Division CEO.

NCC produces knit garments for a prestigious list of buyers around the world, including GAP, H&M, Marks & Spencer, Mothercare, the North Face, FILA, Volcom, Walt Disney, Ecco, Levi's, OVS, Polo Ralph Lauren, Hanes, Benetton, Columbia and others.

According to Akhilesh, "NCC's progressive policies start at the top with Dr. M. Ravi, Managing Director and Founder of Network Clothing Company. His philosophy as the 'father' of the company is that its name must remain dignified. Living up to this ideal is every employee's goal, from the operators to me." Each aspect of NCC's operation is finely tuned to produce high quality knit garments efficiently, but also serves as an example of progressive social and environmental management practices. As part of their employee empowerment policies, NCC has instituted a unique method of instilling pride within their staff

Brad Whiteley, Director, Tukatech, meeting with Anand Akhilesh, Apparel Division CEO, NCC

members and ensuring that quality standards and deadlines are maintained. Each production program is defined as a project, and each project is named after a member of NCC's staff or product. The employees responsible for the project, from the operators to the project leaders and managers, take full responsible for its completion on time and within the budget. Employees on a particular project are given the responsibility to make key decisions and solve any problems that may arise, and ensure

that the group is able to meet all goals. And, if these goals are met, the entire project team shares the under budget profits.

"The only time I get involved in a project is if the staff has a machinery issue or if a large purchase needs to be made," said Akhilesh. "Otherwise, the only time I hear about a project as at the start and at the conclusion."

Workers at NCC have also been empowered through the formation of employee committees to handle personnel issues.

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> **-Akhilesh Anand**
> **Apparel Division CEO, NCC**

Grievances and employee disputes are frequently solved by staff-elected committee leaders, with only the larger, more complicated problems brought to management.

"I get an update from the HR department regarding committee meetings and activities just to be sure that there are no labor law violation, but the committee itself is usually able to resolve an issue to everyone's satisfaction," said Akhilesh. "It is one of our tenets that the dignity of the com-

attitude also extends to the software it chooses. For the last several years, the company had been using Gerber and Assyst apparel CAD technology to grade and make markers. Despite the purchase and implementation of the software system, NCC's staff was not trained in or shown the benefits of using CAD software to make the patterns, and continued manually producing patterns. Manual patterns are time-consuming, less accurate than digital, and must be digitized, which is a long and difficult process. "With our previous system, we were still making each pattern manu-

unlimited training. "Today, all of our pattern makers can use TUKAcad to make the first pattern off of established graded blocks, completely eliminating our digitizing and grading," said Akhilesh.

Since the implementation of Tukatech's system, NCC has seen a tremendous increase in productivity, with more than twice as many patterns made by the same sized staff in the same amount of time. The improved production process is now allowing NCC to increase the number of styles that are designed and developed in-house. Before Tukatech was installed, 60% of NCC's styles were created by NCC staff, but today the percentage is more than 75%. "By increasing the number of styles we design in house, we now have better control of our product mix and development cycle time."

Alongside TUKAcad, NCC implemented Tukatech's SMARTmark marker making software. SMARTmark uses an advanced algorithm to place pieces along a marker in the absolute most efficient positioning possible, providing enormous savings in fabric costs. The implementation of SMARTmark has allowed NCC to completely eliminate manual marker making, and the company is now saving an average of 3% in fabric costs for each style. "Using SMARTmark, we recouped our expenses for the entire Tukatech system in less than two months just from the money we saved on fabric," said Akh-

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pany, workers and committees stays intact."

These practices have not gone unnoticed among Tirupur residents, as NCC has become the premier employer in the area. "When we have job openings or need to increase headcount, we let our staff know about new positions," said Akhilesh. "The next day, we always have a line of people waiting to interview in front of our factory. Our staff loves working here, and they want their family, friends and neighbors to work here too."

NCC's progressive production

ally, then digitizing them into the computer for digital grading and marker making," said Akhilesh. Once the decision was made to install Tukatech's TUKAcad and SMARTmark systems, Tukatech's training and installation staff ensured that NCC's operators and managers had a full understanding every feature of the software. Tukatech employs a dedicated training and customer service staff that has experience in the garment industry and understands the needs of manufacturers, and guarantees a successful installation through

TUKATECH

ilesh.

NCC is saving more than money. The company is committed to "green" business practices like generating their own power, reducing their carbon footprint and aggressive recycling programs. NCC takes advantage of the strong Tirupur winds to generate power for their factory, so much so that they have begun selling electricity back to the India power grid, and completely done away with the gasoline powered backup generators that are common in the area.

NCC is also working with the research and development department of a nearby university to develop methods of converting fabric scraps and rinse water into new building materials. Even NCC's garbage is sent to local farmers for compost or recycling programs. "Being 'green' is not as costly as we expected," said Akhilesh. "In fact, we are even saving money through our various initiatives!"

Tying into their efforts to be greener, NCC is currently in the process of implementing TUKA3D, Tukatech's three-dimensional CAD and fit development software. TUKA3D allows pattern-makers to build life-like simulated clothing samples and test the fit on customized virtual models. "By using TUKA3D to design, develop, and modify samples, we will eliminate the need to cut and sew physical samples for prototype development," said Akhilesh. "We will also be able to develop a greater quantity of virtual samples in a shorter amount of time, and give customers a wider variety of samples to choose from without using excessive amounts of material."

"The virtual samples will help us save on development costs, improve our partnership with our customers, and reduce our overall carbon footprint," said Akhilesh.

NCC will continue to pursue new technology and cutting edge techniques in their efforts to produce the finest knit garments available. The company has plans to expand energy generation with solar panels, institute division wide water reclamation, and improve the sustainability of the yarn processing. "We will apply for our Green Certificate later this year," said Akhilesh.

"Today, we have so much amazing technology, whether it is self-generated electrical power, waste water reclamation processes, or apparel development solutions like Tukatech, and they are all helping our company become better corporate citizens and neighbors."•

NCC is known for producing high quality, value-added knit garments.

About TUKATECH

Tukatech is a Los Angeles-based company that provides 2D and 3D software solutions and manufacturing equipment to garment producers. It also provides web-based product development services and PDM/PLM systems, supported by brick and mortar centers strategically located in garment hubs worldwide. With over 12,000 systems sold and about 3,500 competitive systems replaced, Tukatech is the fastest growing garment CAD/CAM company in the world. Tukatech has been ranked by Apparel Magazine as the #1 Apparel software company in the world.