

# Technology takes the wrinkles out of textiles manufacturing

Hong Kong-based TAL has become a leading shirt supplier through technical expertise and standardisation, writes **Alexandra Harney**

While many of the world's clothing buyers and manufacturers wring their hands last year amid the uncertainty caused by the trade spat over Chinese textile exports, it was business as usual for one Hong Kong company.

TAL, supplier to Brooks Brothers, L.L.Bean, Nordstrom and others, was churning out parts of shirts and trousers at its factory in Dongguan, in southern China's Guangdong province. Through a scheme known as an outward processing arrangement, TAL then assembled these pieces in a plant in Hong Kong, bypassing restrictions on exports from the Chinese mainland.

The group's reliance on the former British colony set it apart from competitors who tried to rush orders through their Chinese factories before the so-called "safeguards" came into effect or had to scramble to set up facilities in other countries.

"We could predict that safeguards were going to come," says Harry Lee, TAL's managing director. "We just kept [with] the status quo."

Mr Lee's level-headed response was typical of TAL. Although TAL is unknown outside the industry, its approach to manufacturing and customer service has made the nearly 60-year-old company an exemplar for others in the garment trade.

"Everybody tries to copy their model," says Willy Lin, vice-chairman of the Textile Council of Hong Kong and a friend of Mr Lee.

Under Mr Lee's direction, TAL has woven technology into its manufacturing process to make it more efficient and bring it closer to its customers. A retail industry executive speaks admiringly of the bar codes attached to

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every garment at the Dongguan factory. It has also pioneered wrinkle-free fabric for smart shirts and makes one in every seven men's smart shirts sold in the US. In an industry known for its under-the-table dealings,



Harry Lee: TAL managing director

TAL has earned a reputation as an honest company.

Yet Mr Lee never set out to be in business. An engineer by training, he earned his doctorate in electrical properties and materials at Brown University. His first job was at Bell Labs, working on a project to improve an imaging device for a video phone.

"The way they wanted to do it, it was almost impossible. Nobody wanted to do it. So they gave it to me," Mr Lee said in a recent interview in Hong Kong. After he failed to make much headway with the project, he realised his career prospects at Bell Labs were limited and moved on to research methanol fuel cells at Esso.

Only then did Mr Lee realise he wanted to be a businessman. "My boyhood dream was doing research inventing something new," he recalls. He resolved to enrol in a night-time MBA course at a nearby university, but was disappointed when his boss at the time urged him to focus on his research.

Instead, Mr Lee accepted an offer from a cousin to work at TAL, his uncle's textile and apparel manufacturing business. From the Malaysian plant where he was first assigned, Mr Lee worked his way up the corporate ladder. After TAL's textile business split off under the control of Toray of Japan in 1983, Mr Lee became the managing director of the garment operations, which became known as TAL Apparel.

The group's reputation for technological expertise stems in part from its devel-

opment of what it calls "pucker-free" seams, which use a heat-sensitive bonding tape that binds two pieces of fabric together to prevent any shrinkage of thread or fabric along the seam. After four years of research and development, TAL started using these seams in wrinkle-free shirts in late 1997.

Less well-known is TAL's application of technology to the lowest levels of its business: the factory floor. Everything in TAL's factories is standardised, from the layout of the assembly lines to the type of lighting. Even the position of the pipes on the walls is the same.

S.N. Yip, the TAL director who oversees the Dongguan factory, explains this is the best way to ensure that quality and efficiency is constant across the company. "It facilitates efficiency, it facilitates implementation of methods or schemes" at factories in different countries, he says in an interview at the factory.

The Dongguan plant looks like a paragon of efficiency. Purpose-built by TAL, it employs about 5,000 people, most of them migrant workers from the Chinese countryside. They work in small teams: in one area, one woman irons shirts and then hands them to a colleague who folds them and hands them to another woman who tucks the shirts neatly into plastic sleeves.

The system gets results. TAL can turn around an order within a week of receiving it in its Dongguan plant, and within four days at its plant in Taiwan.

In an industry frequently accused of relying on "sweatshops", TAL makes unusual efforts to treat its workers well. On Sundays, Mr Yip goes to the home of

one of his assembly-line employees to visit their families, bringing with him cigarettes or a stiff Chinese liquor known as *maotai*.

"The softer side of things helps," Mr Yip says, adding that the trips are "part of a caring atmosphere".

Still, these techniques do not completely insulate TAL from the problems affecting the industry. Migrant workers are in shorter supply in Guangdong province than they used to be, as rising rural incomes make staying home on the farm more attractive.

"Five years ago, you couldn't get past the main door... there would be so

many people out there [waiting for a job]. Nowadays the crowd is smaller," admits Mr Yip. The Dongguan factory loses about 4-6 per cent of its workforce every month now, up from 3-5 per cent two years ago - much less than at other factories in the region but more than before.

Despite TAL's size and position as a high-end manu-

facturer, retailers and buyers continue to put pressure on the company to lower its prices.

"Our margins are always under constant and severe pressure," says Mr Yip.

And doing business in China these days also carries the threat of being accused of exporting products outside China below the cost

price. Such dumping allegations are mounting against China as it continues to gain manufacturing clout. That, for companies such as TAL, creates another difficult variable.

"What happened [with the safeguard quotas] is predictable," says Mr Lee. "But with the anti-dumping, there's a lot of uncertainty."

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