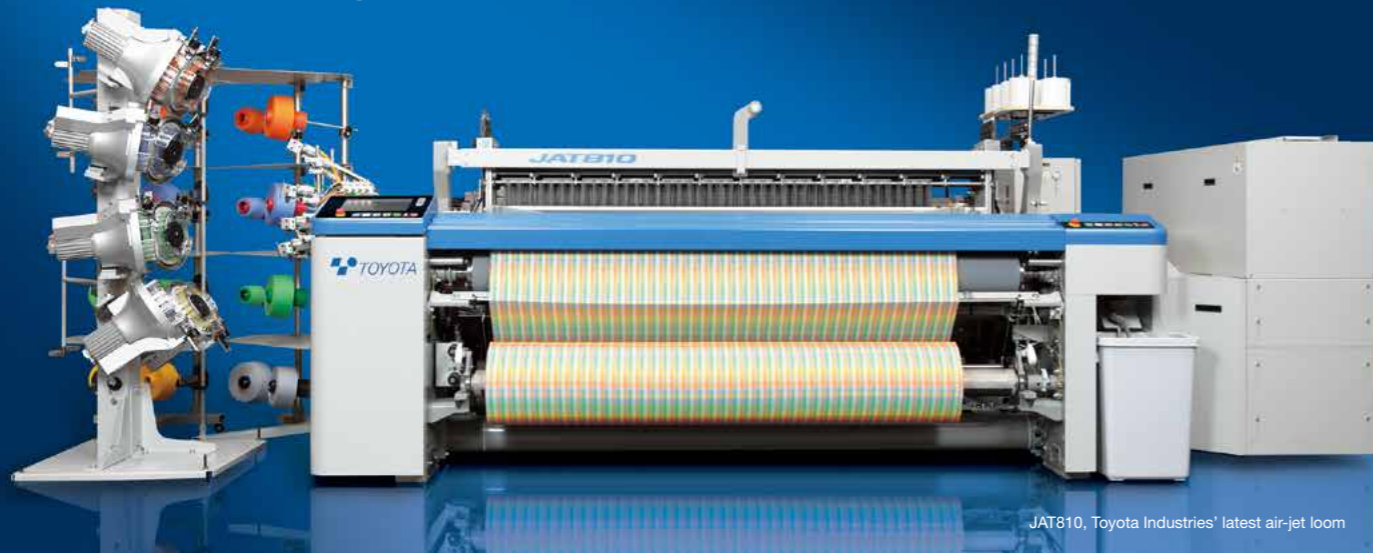


—Contributing to Customers' Businesses with Advanced Technologies and Services—  
**Toyota Industries' Air-Jet Looms Undergoing Evolution Together with Customers Worldwide**



JAT810, Toyota Industries' latest air-jet loom

Sakichi Toyoda, the founder of Toyota Industries Corporation, devoted his passion to the invention of automatic looms. Inheriting such dedication, our air-jet looms have evolved into a product that incorporates a number of advanced technologies and continue to claim the No. 1 global market share\*.

On the back of economic expansion in such emerging countries as China, India and ASEAN nations, the growth rate of the textile industry is expected to surpass the global population growth rate. As such, we anticipate our air-jet looms will provide vital support to the development of the textile industry.

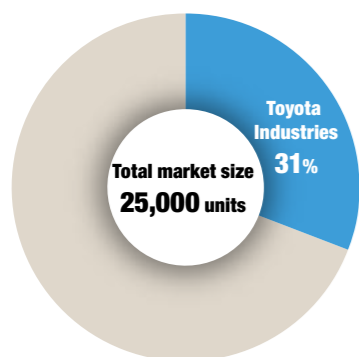
Toyota Industries' air-jet looms are capable of weaving a vast range of products, including standard fabrics for shirts and sheets; comfortable denim with extensive design possibilities; soft and exceptionally absorbent high-end towels; and light and highly functional sportswear featuring excellent breathability and quick drying. What's more, our air-jet looms can be used to manufacture such industrial products as materials for electronic components. These expansive capabilities are highly acclaimed by numerous customers worldwide.

In this special feature, we look back on how we have forged deep relationships with our customers and how our air-jet looms have become their weaving machine of choice.

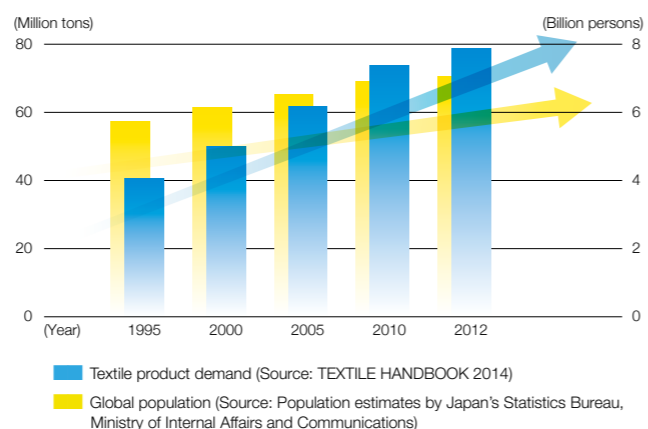
\* Survey by Toyota Industries Corporation

**Air-Jet Loom Market Share (2013)**

Total market size and share:  
 Survey by Toyota Industries Corporation



**Textile Product Demand and Global Population Growth**



**Toyota Industries' Textile Machinery Winning Trust Spanning Generations**

in the Textile Industry That Drives Pakistan's Economy

Established in 1951, Nishat Mills, Ltd is one of the largest textile companies in Pakistan and has since become the country's representative conglomerate, with its businesses encompassing not only textiles, its founding business, but also banking and insurance. Since Nishat Mills' establishment, Toyota Industries has been involved in an excellent business relationship with the company across generations as a main supplier of spinning and weaving machinery.

For this special feature, we spoke with Mr. Muhammad Mansha, Chairman of the Nishat Group, about his thoughts on Toyota Industries' textile machinery and the long-standing history between the two companies.



**Toyota Industries Providing Support since Our Foundation**

Nishat Mills began its remarkable journey when my father established a small spinning mill in 1951 in Pakistan. With the purchase of shuttle looms from Toyota Industries (hereafter, Toyota) in the mid-1950s, the company entered the weaving business. In 1962, we established a spinning mill in what was then East Pakistan (currently Bangladesh) and installed Toyota's spinning machinery. After inheriting the business from my father, we introduced Toyota's RY spinning frames in 1981 and from there we dramatically expanded our spinning business. In the mid-1990s, we constructed a dyeing and finishing plant, in which we subsequently established the weaving division in 2003, and purchased Toyota's JAT710 air-jet loom for the first time. Since then, our textile business really took off.



Mr. Muhammad Mansha  
 Chairman of MCB Bank;  
 Chairman of Nishat Group

From the very beginning of our existence until now, Toyota has always been there for us, supporting our growth

with their technologies and services. What is remarkable about Toyota is that they not only offer state-of-the-art machinery but also provide our factory operators with meticulous guidance on the optimum methods of operation and maintenance specifically suited to our business through close observation of the operational status at our factories by Toyota's developers and service staff. With this kind of support, we have been able to manufacture products by eliciting the maximum performance of the machines at all times. When machines are not working well, we can depend on Toyota to offer quick and comprehensive maintenance support. If improvements are required, they make sure these will be reflected in the development of the successor model. In these ways and others, we have absolute faith in their sincerity and integrity.

**Contributing to the Development of the Textile Industry with the Latest Air-Jet Looms**

In 2014, we completed a new textile mill, which features the latest JAT810 air-jet looms. Under the concept of the world's best energy-saving textile mill, the factory is fitted with lighting fixtures, air conditioners and other equipment that incorporate the latest advancements in environmental technologies. We believe it's one of the most environmentally conscious textile mills not only in Pakistan but also throughout the world. Needless to say, we demanded extremely strict environmental

**Toyota Industries' After-Sales Service Network (Overseas Service Centers)**

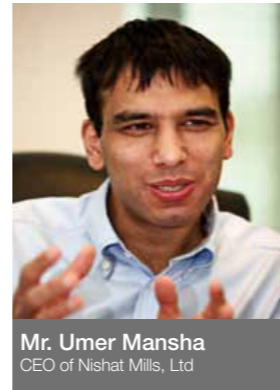


performance of weaving machines because they will play a central role at this factory. After closely comparing Toyota's and their competitors' products, we decided to install Toyota's JAT810 air-jet looms. We know we made the right decision because the textile mill as a whole has been able to save energy by up to 20%.

Although Pakistan has been plagued with unstable power supplies, as the country's representative conglomerate the Nishat Group is tackling the problem head on. We are striving to take the initiative in energy savings, thus contributing to the development of our country's industries.

My son, Umer Mansha, has now taken over the Nishat Group's textile business. I hope he will continue to cherish and carry on the relationship of trust with Toyota well into

the future, just as I did when I succeeded my father. I have a special affinity for the textile business, which represents the roots of the Nishat Group. Likewise, Toyota began its corporate journey with the textile machinery business. I sincerely hope the two companies will continue to grow while contributing to the development of society.



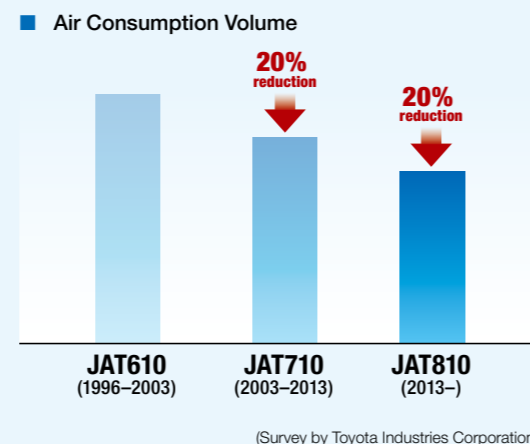
Mr. Umer Mansha  
CEO of Nishat Mills, Ltd



JAT810 air-jet looms in operation at Nishat Mills, Ltd

### ■ Excellent Energy-Saving Performance of JAT810 Air-Jet Loom

The most prominent feature of air-jet looms is to insert the weft yarn at a high speed by injecting compressed air to weave fabrics. This is done using a large compressor, a process that requires the largest amount of energy. Consequently, the key to energy savings is how to minimize waste and efficiently insert weft yarn with little air. In other words, using less air equals consuming less power. Our JAT series of air-jet looms has consistently featured better air-saving performance that surpasses competitor products. For the JAT810, innovations were made to such devices as the sub-nozzle, which injects air, and the air path. All these innovations and more led to a yet another reduction of approximately 20% in air consumption compared with the previous JAT710, also a highly energy-saving model.



## Toyota Industries Supporting a Cutting-Edge Business in Taiwan's Electronics Industry that Contributes to the Global Economy

The electronics industry accounts for a large portion of the Taiwanese economy.

Nan Ya Plastics Corporation (NPC) is a member of the Formosa Plastics Group, one of the largest conglomerates in Taiwan, and engages in the manufacture of such products as cloths for printed circuit boards of mobile phones and PCs as well as glass fibers for weaving these cloths. As one of the world's most prominent players in the glass fiber field, NPC is a significant contributor to the electronics industry in Taiwan and operates more than 3,000 air-jet looms made by Toyota Industries.

Mr. William Wong, Chairman of the Formosa Plastics Group, to which NPC belongs, talked about the role Toyota Industries' air-jet looms are playing in the manufacture of high value-added products for the electronics industry.



### Air-Jet Looms Suitable for the Production of High-Quality Cloths for Printed Circuit Boards

The Formosa Plastics Group was established by my father, Wang Yung-tsai, and his older brother, Wang Yung-ching, to produce polyvinyl chloride products. It has grown into one of the largest conglomerates in Taiwan, with businesses encompassing petrochemistry, electronic components, medical care, education, transportation and other areas.

Our business with Toyota Industries (hereinafter, Toyota) began in the 1970s when Formosa Chemicals & Fiber Corporation, one of the Formosa Plastics Group companies, purchased spinning frames from Toyota. Formosa Chemicals & Fiber has been a continuous user of Toyota's air-jet looms as well since installing the machine's very first generation.

Our relationship further expanded in 1994 when NPC, which manufactures electronic components, introduced air-



Mr. William Wong  
Chairman of the Formosa Plastics Group  
Executive Board

Photo courtesy of cnYES  
<http://www.cnyes.com>

jet looms to weave glass fibers.

Compared with common clothing fabrics, printed circuit board cloths made of glass fibers require extremely delicate quality management because the tiniest defect, which is unrecognizable to the naked eye, could possibly cause malfunctions. Toyota's air-jet looms come equipped with highly sophisticated technologies, such as for realizing gentle weft yarn insertion by reducing air pressure to inject yarn even during high-speed operations, enabling us to meet such rigorous demands and weave high-quality cloths. Valuing such strengths, we decided to switch from weaving machinery produced by other manufacturers that we were using. Currently, we operate a total of more than 3,000 Toyota air-jet looms at our factories.

### Fulfilling Expectations through Ever-Evolving Machine Performance and Sincerity of Toyota Staff

As smartphones and a growing variety of electronic devices rapidly gain popularity, demand for electronic components is exploding all over the world. In response, we need to maximize the capabilities of weaving machinery in our operations. For us, it is of extreme importance that we efficiently manufacture top-quality cloths.

Toyota's air-jet looms constantly meet such exacting demands at a high level while its service staff quickly arrive

### ■ Various Products That Toyota Industries' Air-Jet Looms Can Weave



Shirt



Denim



Towels



Printed circuit board

on the scene when we need them and make necessary adjustments so that the machines will operate in optimal condition. We believe Toyota's attitude of always being sincere in meeting extremely severe requirements for quality and productivity in the manufacture of electronic components is reflected in the product capabilities of its air-jet looms and the level of its services.

Electronic components represent one of Taiwan's core industries, making significant contributions to the global economy. With Toyota as our essential business partner, we intend to play a central role in Taiwan's progressively growing electronics industry.

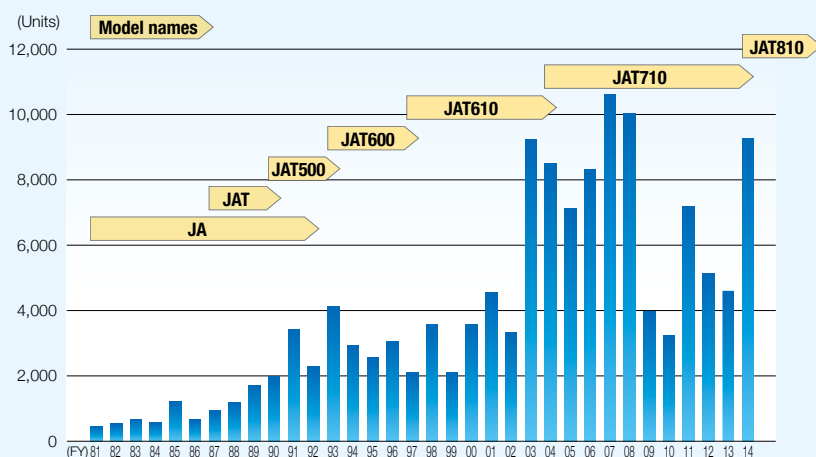


Nan Ya Plastics Corporation's glass fibers



JAT710 air-jet looms in operation at Nan Ya Plastics

## History and Unit Sales of Our Air-Jet Looms



## Future Development

In addition to technologies accumulated to date, we are tapping into the world's top-level sensor technologies and information processing technologies developed by Switzerland-based Uster Technologies AG, which became a member of the Toyota Industries Group in 2012, in our efforts to create revolutionary new products.

We are striving to further enhance customer trust by strengthening our products along with honing our prompt and meticulous service capabilities.