

Sharing Your Life

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Muratec Customer Magazine 2 | 2018 | EN

MESSAGE AROUND THE WORLD EXHIBITION INFORMATION PRODUCT INFORMATION NEWS & TOPICS ABOUT MURATEC NICE TO MEET JAPAN >>>MESSAGE

We deeply appreciate your constant patronage to Muratec products. In this ever-changing world environment, we are trying our best in our daily development efforts to produce textile machines that will better meet the needs of each customer.

With the recent advancement of electronic and information technologies, industrial machinery has undergone major changes. Textile machinery is no exception. For example, our automatic winder No.7 MACH CONER series mainly used a cam mechanism. This technology was replaced by small motors and an electronic servo system in our ensuing automatic winders such as No.21C PROCESS CONER and PROCESS CONER II QPRO, making it possible to control the high-speed, complicated winding process. And most recently, the VORTEX spinning system series has made possible an even more elaborate spinning process, thanks to the drastic progress of the spinning mechanism combined with the development of a special sensor.

Given the ongoing technological trends, we must integrate into our future machines such cutting-edge technologies as information networks and IoT, in addition to the never-changing factors expected of all machines such as enhanced production, higher quality, and flexibility, so that they can better adapt to the "smart factory" settings that our customers envision. Muratec Smart Support, with its data server function and failure analysis algorithm, is one such solution that will definitely help our customers reduce their man-hours spent for machine maintenance and production management, and will also improve the efficiency of their machine operation.

We can develop such systems with distinctive features in a timely fashion because of our organizational advantage. Muratec has five unique divisions, each of which has various technologies that we can leverage to strengthen our own division. Also, on the one hand we have departments engaged in technological development, while on the other, there are manufacturing departments committed to quality-oriented production, as well as sales and technical service departments paying heed and catering to the actual needs of each customer. All these departments are working closely and vigorously as a team.

The times will continue changing and the world will undergo many drastic transitions. What will not change is that we will always stay true to the Muratec mind cultivated through your patronage and encouragement, and that we will continue making concerted and sincere efforts to better serve our customers.

Finally, I would like to express my sincere aspiration to see the linkage between you and Muratec last forever into the future.





Director, General Manager of Textile Machinery Division



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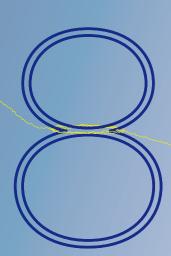
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## >>>AROUND THE WORLD



## **MURATEC** in the world's **booming spinning countries**

Muratec has delivered countless products worldwide since the company's foundation in 1935. If we take a look at our records, we will see that the company has delivered over 2.6 million units for automatic winders, the company's core product, to 88 countries and regions all over the world. Our textile machinery is still preferred by customers in a diverse range of locations with different industrial structures and lifestyles as the best match for their business needs.

Textile machinery is an industrial asset which generally possess a usable lifespan of 10 to 20 years or longer; so there is a strong demand for manufacturers to provide support for maintenance and inspections for their textile machinery, and in response to this demand, our company has established bases of operation worldwide and is continuously working to expand our after-sales service offerings. Our company currently maintains 27 locations for market surveys, sales, and after-sales service of textile machinery, and works day and night to provide customers with peace of mind and reliability.





# **CHINA**

100 million spindles

A leading textile production nation which boasts numerous "world's largest" achievements in the industry, including "number of spinning machines", "production of textile products", "synthetic fiber production", "raw cotton import quantity", and more. Spinning is very active in every region of the country's massive national territory, however, it is particularly concentrated in Shandong Province and the suburbs of Shanghai (Jiangsu Province, Zhejiang Province), and there has also been significant investment in the Xinjiang autonomous region in the northwest of China in recent years. This is also our company's largest market and have over 50 after-sales services and parts support personnel who provide customers with support on a daily basis.

4 times a year per location, we invite customers (plant managers and maintenance staff) who use our company's machinery to study sessions on machine maintenance. With the increasing difficulties with labor shortages and employee retention, this program has received high praise from not only the participants, but also from owners and other high ranking personnel. These study sessions also provide a place for our customers and our company to meet and connect periodically, serving as an indispensable platform for the Chinese market.

VIETNAM

SÃO PAULO

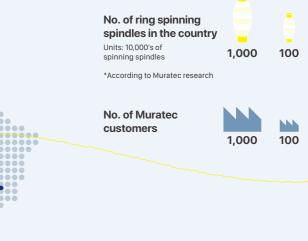
One of the world's largest countries in spinning production, rich with good quality workers who specialize in very detailed and careful work. The country is no. 3 in the world in terms of apparel product export value. In recent years, the country's exports of yarn to China have expanded, and further growth is expected in middle stream industries (fabrics, finishing) going forward.





## CHARLOTTE

MEXICO CITY



## 100

## >>>AROUND THE WORLD

MURATEC in the world's booming spinning countries

# INDIA

A major textile country which is world's largest producer of raw cotton and also boasts world's 2nd largest in terms of number of spinning machines. The textile industry makes up a significant portion of the domestic economy, with the 2nd highest working population behind only the agriculture industry. 100% cotton makes up the vast majority of spinning in the country, with approximately 50% of the spun yarns being exported.

Our company maintains 3 locations in India - Delhi, Mumbai and Coimbatore, with a total of over 50 after-sales service and parts support personnel providing support for a large number of customers. For India, we particularly focus on our Annual Maintenance Contract (AMC) service. This is a paid after-sales service package which guarantees comprehensive and exhaustive on-site maintenance and inspections by highly skilled and experienced veteran staff members 2 times per year (3 days per visit). At present, approximately 50 companies have signed up for this service, and the service has been highly appreciated for the courteous and careful follow-up it provides for not only our current QPRO series automatic winders, but also the previous 21C series.



# INDONESIA 10 million 150

The country enjoys abundant production for man-made fibers (including synthetic fibers and recycled fibers), with man-made fibers making up approximately 75% of the yarn used for spinning in the country. The country also has a population of approximately 260 million people, which gives the country a high level of potential capability for the apparel market.

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Boasts an overwhelming production volume for raw cotton in the central Asia region. In the past, the country exported majority of its raw cotton, however in recent years, its policy has been to focus on cultivating spinning and textile industries, with nearly all of the raw cotton being used for spinning within the country now. Going forward the country will continue to grow its supply chain, expanding to cloth, knit, and other products.

# TURKEY

The country has developed its textile industry as an exporter to Europe, and has also seen growth in exports to Russia and Africa. Capable of carrying out all production processes from processing of raw materials to spinning in-country, production of CSY (Core Spun Yarn), mélange yarn produced using VORTEX spinning, and other yarn types linked to trends in consumer markets is very active in the country.

# BANGLADESH 13 million

Bangladesh boasts the world's no. 2 apparel product exports (mainly to the U.S. and Europe), and spinning demand in the country has grown rapidly in the past 10 years. The scale of both the ring spinning and VORTEX spinning markets are growing in the country.

# PAKISTAN 12.5 million

A major textile industry oriented country which is the world's no. 4 producer of raw cotton with textile products making up approximately 60% of all the country's exports. The raw cotton harvested in Pakistan is well suited from coarse to medium count yarns, with denim and home textile products being particularly prosperous. In addition, the VORTEX market is also growing for application in production of ethnic clothing within the country.



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## MSS PORTAL is available from July 2018 !!

## Production Data at hand Anytime, Anywhere!

MSS PORTAL is a tool which allows customers to view production and operating status for automatic winders (QPRO, 21C) and VORTEX spinning machines (870 • 861) from their smartphone or tablet devices. MSS PORTAL allows viewing of this information from any location via an Internet connection.

View information while enjoying your morning coffee at home, on your drive to work, from a domestic business trip or even during a trip overseas. Check the production status of your company's factory "anywhere" at "anytime". Consider MSS PORTAL to support your future workstyle.

Nuratec Smart Support

## MSS PORTAL launches on your Smartphone!!

## **Production and operation data display**

Check your company group's overall factory production status



## Ranking

Determine your company's factory standing compared to other Muratec users all over the world.



\*In order to use MSS PORTAL, Visual Manager (for automatic winders) and V-LABO (for VORTEX spinning machines) must be installed, and data must be transmitted to Murata Machinery Please consult with your supervising sales personnel for information on using MSS PORTAL

## **Parts information**

Check procurement and delivery status of supply parts without submitting an inquiry.



# uratec

## **ITMA ASIA + CITME**

National Exhibition and Convention Center (NECC) No.335 Huaxu Rd. Qingpu District, Shanghaii, CHINA





>>>EXHIBITION INFORMATION

## **Exhibition calendar** 2018AW-2019SS

CAITME Tashkent, UZBEKISTAN 5-7 September

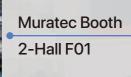
Première Vision Yarns Paris, FRANCE 19-21 September

> KTM Kahramanmaraş, TURKEY 27-28 September

Intertextile Shanghai Shanghai, CHINA 27-29 September



15-19 October





Hokuriku Yarn Fair

Kanazawa, JAPAN 17-18 October

DTG Dhaka, BANGLADESH 9-12 January

**Japan Yarn Fair** chinomiya, JAPAN 20-22 February

> IGATEX Karachi, PAKISTAN 26–28 February

Saigontex

Ho Chi Minh City, VIETNAM 10-13 April

> ITMA Barcelona, SPAIN 20-26 June

\*Exhibition schedule is subject to change without notice.

## What is VORTEX spinning?

A completely new spinning technology which uses spiral flow of air to form the yarn, instead of dependent on physical rotation of spinning components. Invented and practically applied successfully by Muratec. Global sales of the VORTEX technology has been increased in recent years, making up more than 5% of total spinning machine installations (calculated from quantity of yarn production).

## 3 processes integrated into a single process

Achieve drafting, spinning, clearing and winding, all on a single machine. Capable of carrying out continuous production directly in logical arrangements from drawing slivers to packages.

## World's Fastest Spinning

The world's fastest spinning system, achieving the fastest practical spinning speed of 500 m/min. This allows for the productivity of nearly 20 times than that of standard ring spinning.

**Drafting Zone** Spinning Zone

**Clearing Zone** 

## Winding Zone

## Increased adoption of VORTEX YARN

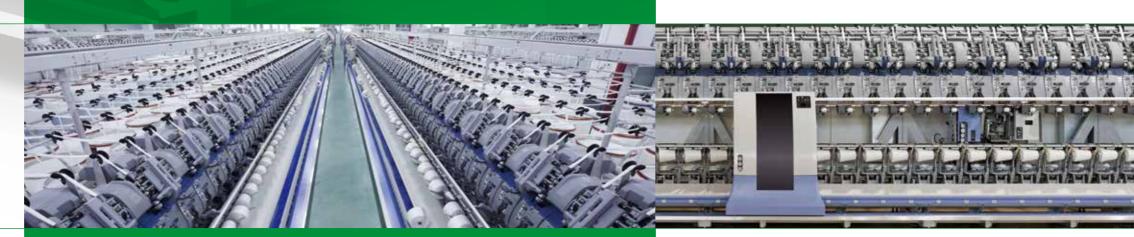
wound fibers.



## **VORTEX YARN & FABRIC features**

- Very little hairiness making for a clear external fabric appearance
- Superior pilling resistance and wear resistance
- High launderability
- Resistant to deformation

# VORIEX Spinning System

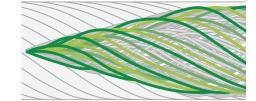


The unique yarn structure produced through VORTEX spinning is both highly functional and highly fashionable. This has resulted in the development and global shipping of new high value added products, using VORTEX YARN by many of the apparel brand manufacturers at the top of the global market.

## VORTEX YARN structure

The structure of VORTEX YARN is created by moving one end of fibers inward, using spiral flow of air, then forming an outer layer by winding the other end of the fibers around previously









## **Division:** Logistics & Automation

## Acquisition of AGVE (Sweden)

Murata Machinery has entered into an agreement whereby Murata Machinery will acquire all of the issued stock of AGVE AB of Goteborg Sweden (hereinafter, AGVE), a leading manufacturer of Automated Guided Vehicle (AGV), from the existing shareholders. AGVE and its subsidiaries will become 100% owned subsidiaries of Murata Machinery.



## Division: Clean FA

## Awarded Intel's Prestigious Supplier Continuous Quality Improvement Award

Murata Machinery has been recognized by Intel as a recipient of its prestigious 2017 Supplier Continuous Quality Improvement (SCQI) award. The SCQI award is Intel' s most prestigious recognition and signifies an elite performance in all critical management systems supporting quality, cost, availability, technology, customer service, and sustainability. Companies like Murata Machinery that receive this award are considered to be industry role-models that provide unparalleled supply chain support to Intel.

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## Division: Textile Machinery

## Receipt of Textile Machinery Society of Japan Award for Technology

The high speed traverse mechanism utilizing servo control in automatic winders developed by Murata Machinery was selected as the recipient of the FY2018 Textile Machinery Society of Japan Award for Technology. This mechanism is incorporated into the PROCESS CONER I FPRO Plus automatic winder series, and contributes to forming of packages with superior unwinding performance with no ribbon as well as improvements in productivity and quality for soft packages for dyeing. It also allows for forming of packages in a variety of forms to suit different applications.

## \*The Textile Machinery Society of Japan

Established in Japan in 1948 as an academic organization for textiles and textile machinery. The society's Award for Technology is awarded for research and technological developments which are original and provide high technological value.



## Autonomous Transportation robot Development



## nuratec

## Continually creating innovative tecnologies for the fulfillment of a prosperous society

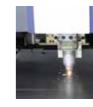


Textile Machiner -Automatic Winder -VORTEX Spinning System



Machine Tool -Twin spindle CNC chucker -In-line opposed twin spindle CNC turning machine

Logistics Systems / Factory Automation Systems -Sortina Systen



Sheet Metal Machinery -Laser punch press -Press brake -Fiber Laser cutting machine



Muratec's Research and Development Division is working on the development of Autonomous transportation robots as part of its development of component technologies. The company began working on the development of robots in 2001, bringing to market its own original autonomous transportation robot control system which incorporates the sensing, image processing, communications, travel mechanism, control, and other technologies required for autonomous transport. This system was incorporated into floor cleaning devices used in airports and other venues, is well as the world's first mobile digital signage and air purifier robot.

Thus, the company has developed a number of successful examples of the practical application of the system in the service robot field.

Among these technologies, the SLAM (Simultaneous Localization and Mapping) technology, which makes self-location recognition and automated mapping possible, has been incorporated into transport machinery products including the AGV (automated guided vehicles) of the L&A Division which provides materials handling systems. Look forward to even greater developments from Muratec's robot technologies in the future.



-Automated Storage & Retrieval Systems (AS/RS)





Automated Material Handling Systems for Clean Rooms -AMHS for Semiconductor Fab. MCS (Material Control Systems)



Communication Equipment -MFP (Multifunctional Peripheral) -Facsimile

>>>NICE TO MEET JAPAN

Summer, Sunset, Kyoto





Both the temperature and humidity are high during Japan's summers and it is especially muggy almost every day from July to September. As a result, one can find a number of uniquely clever and innovative ways of staving off the heat in Japanese lifestyles. The Noryoyuka (literally "floor or platform for enjoying the cool") is one of these methods and is one of the most iconic of Kyoto's seasonal symbols of summer. The Noryoyuka is the enjoyment of food and drink on platforms or balconies which overhang the Kamo River which flows through the center of the city while basking in the cool evening breeze that comes off the river. It's also very common to see groups of friends and couples looking to escape the heat and enjoy the cool breezes relaxing along the shore of the river.

This tradition and spirit of using the river for both the coolness of the water and as scenery for enjoyment may be something that is only found in Japan.

日本的夏天高温高湿,尤其7月~9月,每天都是闷热的天气。因此,日本人的生活中处处可见防 暑的独特智慧与用心。京都的夏季风情诗"纳凉床"便是其中之一。流经市中心的鸭川上面搭起高脚座 席,人们坐在上面,迎着河面上吹拂而来的凉爽夜风,享受美食佳肴。另外,河边还能看到亲密的朋友 或恋人们坐着那里乘凉休闲的场景。 求凉于水,又将其作为一道风景加以欣赏的这份情趣,也许是日本所独有的吧!