

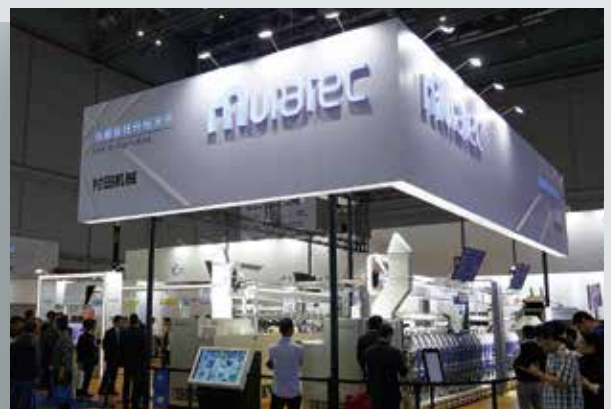
# SYL

Sharing Your Life



## MESSAGE

VOICE FROM MSS USERS  
EXHIBITION INFORMATION  
PRODUCT INFORMATION  
NEWS & TOPICS  
ABOUT MURATEC  
NICE TO MEET JAPAN





We would like to take this opportunity to sincerely thank all of our customers who regularly use Murata Machinery products. Thanks to you all, in recent years we have successfully increased shipments of our products (Automatic Winder, VORTEX Spinning Machine, Muratec Smart Support) to countries throughout the world.

We truly believe that this is not only the result of our own efforts, and would not have been possible without the opinions and views of the customers. You have provided us with instruction on how to move forward with machine design concepts for the future, and sometimes even given us some hard-to-hear criticisms, but for us your opinions have been a most valuable asset that have helped us set the path for our development.

It is our joy to utilize the latest technologies to achieve these goals and provide you with products and satisfaction and to continue to work towards and achieve even greater and further development with this valuable asset. The continued repetition of this cycle is our company's management policy.

We are also focusing on marketing activities to better read and predict the marketplace in order to accelerate this cycle. Our company's management and sales staff

will continue to visit customers in locations throughout the world, and to build relationships with our customers' customers, and even further downstream customers, to remain aware of trends in how yarn is made into products, and attempt to always think and see ahead based on trends in production and development of raw materials including natural and synthetic fibers. We will continue to keep abreast of the trends and needs of each market and calculate major future trends for fibers and textiles and connect this awareness to advanced development aimed at fulfilling needs still to come.

We truly believe that maintaining and accelerating these cycles, and providing customers with satisfying products, parts, and technical services will allow us to continually improve the MURATEC brand.

As implied by the title of this public relations magazine, "Sharing Your Life", we promise that we will continue to strive to earn the recognition the MURATEC brand by aiming to be a partner company whose values are shared with each of you and move together, hand-in-hand towards future development, and that is the spirit in which I send this greeting to all of you.



Tsuranori Nomura  
Operating officer,  
Sales & Marketing Department of  
Textile Machinery Division



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Sharing Your Life  
Muratec Customer Magazine May 2019

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# Believable? or Not?

## Testimonials from users who break new limits with MSS

The history of the MSS (Muratec Smart Support) integrated management system which connects machines, managers, and operators by IoT, began almost 50 years ago. Due to spread in advanced computerized production management, Monitron (1975), the centralized monitoring system, installed on the No. 11 Conematic automatic winders, underwent numerous developments, before incorporating numerous functions and becoming the MSS in 2011.

Since then, MSS has continuously evolved, always seeking to provide customers with more "meaning" and "ease of use", and today is used daily on 5,000 automatic winders and 1,000 VORTEX spinning machines worldwide.

For spinning companies, maintaining a high level of plant operating efficiency and quality management is a perpetual goal which is directly tied to a company's profits. Companies want to improve their plants, and continually reach newer, higher levels.

How best to manage the massive amounts of data output daily, what to input, and what actions to take?

So how can the knowhow built-up by Muratec over its long history contribute?

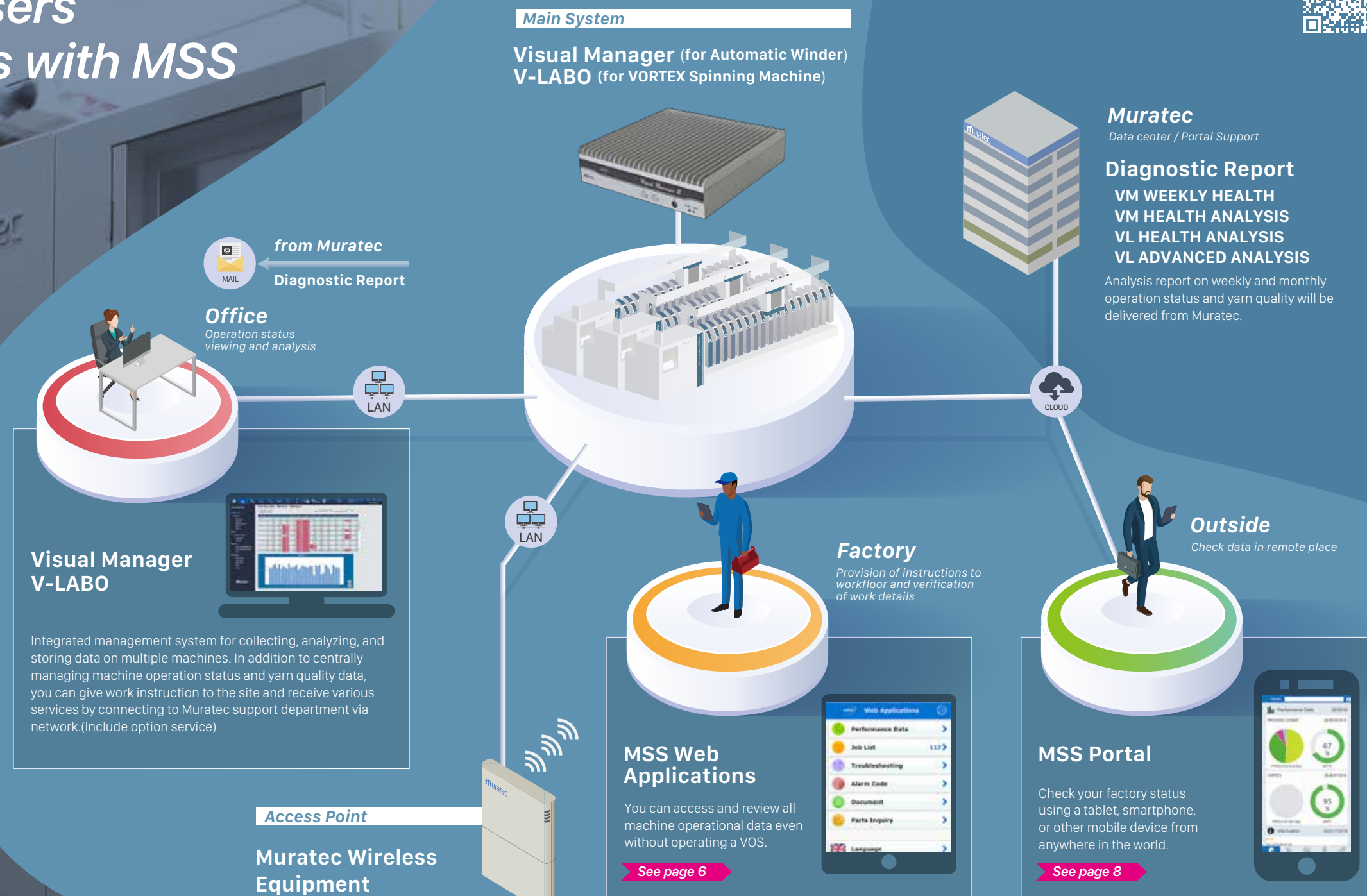
This is the real forefront for management of the data that is continually developing at spinning plants.

We will now introduce testimonials from users who quickly introduced and utilize MSS in India.



Muratec Smart Support

<https://www.muratec.net/tm/support/mss.html>



## Go Beyond your Limit with Muratec Smart Support!



**Believable? or Not?**  
Testimonials from users who break new limits with MSS

**PATSPIN India Limited**

**MSS has made work at the site much easier!**



Patspin uses 15 Muratec brand and 6 other company brand automatic winders at a factory under the corporate umbrella of GTN Textiles. The company was an early adopter of MSS and frequently has opinion exchanges with our company as it continually seeks to maintain optimal operation.

In daily technical meetings managers and factory leaders gather together, and hold discussions while

projecting Visual Manager performance data and spindle reports, as well as VM Weekly Health analysis reports provided by Muratec directly from a PC to a screen at the meetings. The meetings pay particular attention and focus on machines with poor efficiency and important production items with strict quality standards, and also provide appropriate instructions to worksites based on the data.

## PATSPIN India Limited

**Establishment:** 1994  
**No. of spinning spindles:** 52,000  
**No. of Muratec automatic winder in operation:**  
15 machines - No.21C Process Coner (Magazine, Link Coner),  
Process Coner II QPRO (Magazine, Link Coner)



Mr.Kanthimathinathan  
- Company President,  
Technical

Mr.P.Chandran  
- GM, Manufacturing

Mr.Shango Rapheal  
- Fitter



The Company President, and Technical, Mr. Kanthimathinathan comments: "I don't participate in daily meetings but instead delegate them to subordinates, however the weekly reports allow me to determine weekly operating conditions in detail. These reports are extremely useful for someone in my position."

In addition, fitter Mr. Shango Rapheal makes the most use of the Job List from the MSS Web Applications, which allow use of a variety of useful menus on mobile devices. He explains the benefits provided by MSS as follows: "So does the introduction of MSS increase the amount of work carried out on site? No, it actually decreases the amount of work required. The Job List tells us what

needs to be done for what spindles. Everything can be checked via portable mobile devices, so the maintenance staff are able to move around the worksite efficiently and quickly complete any handling of issues. In contrast, when a problem occurs on machines from other manufacturers which cannot use MSS, it takes significantly more time and effort to resolve. First a production shift supervisor has to find spindles with serious issues, then manually create records and submit them to maintenance staff. Then the maintenance staff have to go to the problematic spindle, investigate what the issue is, and then implement corrective actions. This is a huge difference from management using MSS."

In this way, Patspin has been able to further improve work efficiency by sharing MSS data in various scenes without paper list that were previously used.

MSS also serves a role in communication with Muratec. In the past, when a problem occurred, the problem would need to be explained to Muratec via telephone, and Muratec would then have to ask a great number of questions to develop a more detailed understanding of the issue, and then spend even more time travelling to the worksite to gather the small amount of remaining evidence to determine the cause of the issues. Now, MSS allows for sharing of operation data in realtime, which allows for quick provision of suitable advice.

"MSS making it possible to share numerical and other data and made possible for various departments to set target values and work towards self-imposed goals to aim even higher" (Mr. P. Chandran / GM, Maintenance) MSS can thus be said to be a tool for promoting awareness of goals at worksites.

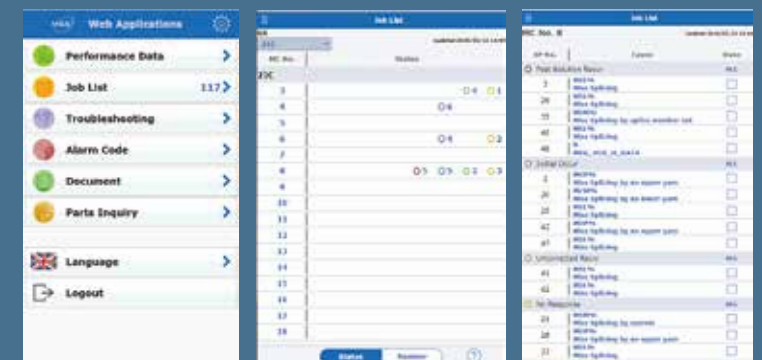


for Factory Engineer

## MSS Web Applications

SUITABLE FOR   

Applications (optional) for mobile devices which take data from the Visual Manager / V-LABO integrated management system for factory managers and summarize it in formats useful for maintenance staff. The introduction of Muratec Wireless Equipment dedicated access points installed inside factories allows for realtime communication with Visual Manager / V-LABO and utilization of work lists, troubleshooting information, and other data which supports efficient maintenance work.



**MSS** Muratec Smart Support



## Believable? or Not?

Testimonials from users who break new limits with MSS



**SUDIVA Spinners Pvt. Ltd.**



# Our plant can't operate without MSS!

SUDIVA is a leading spinning company located in the spinning industry region of Bhilwara in the state of Rajasthan. The company uses MSS as part of its top-down policy, allowing management, factory managers, and on-site maintenance staff to utilize the same data for discussions to share numerical targets. This has allowed the company to improve automatic winder efficiency by 10% over initial estimates, and achieve increased factory production.

Technical GM Mr. Akshay Jain shares the daily operation status (performance data and spindle reports) print filed by the Production Department with his subordinates, constantly checking machines which require support and providing subordinates with instructions to carry out worksite maintenance. They focus on splicing miss ratios (MIS%) and Spin Inspector (a device which reads bad ring spinning unit numbers from automatic winders) summaries in particular, in order to continually maintain the quality of the yarn packages which are their final product.

"Our plant couldn't operate without MSS. It would require 4 or 5 staff to carry out collection of data and create the analysis reports at the same level as MSS. With the current

personnel shortages, it's just not possible to secure that many qualified personnel."

Maintenance supervisor Mr. Birendra Prasad uses the mobile menu MSS Web Applications to carry out his work using the wireless LAN environment at the worksite. "If management is carried out based on numerical data, it allows for prevention of any differences in understanding or ambiguity regarding responsibilities between the production and maintenance departments. The numerical data should be regarded not as additional pressure, but as the results of one's work; if the figures are bad, one implements measures for improvement. That's what my job is."

MSS can be useful in unexpected situations. The yarn packages produced by customers undergo quality inspections by yarn buyers, but if it is explained to buyers that MSS is used to carry out detailed checks daily, and continually maintain machines in optimal condition, the frequency of these inspections can sometimes be decreased. MSS also makes it possible to present the continued daily efforts of the factory externally in an objective manner.



The promotion of MSS use in this top-down style has led to its use as a base for the communication between management and worksites that is considered the norm today. Combining this with use of MSS Portal allows for managers to communicate via phone and email while viewing the same data when on business trips outside the company. The sharing of objective data for MD, GM, and managers drives the motivation to carry out actions, allows for concrete, specific actions to be implemented, and for the results of those actions to be visualized. Chairman Mr. J. C. Laddha comments: "There is no limit for optimization of production efficiency. As such, improvements must continually be made on a daily basis, and daily data is required in order to achieve this. If there are other factories who are utilizing MSS in other efficient and effective ways, I'd like to know more about them, and learn more so that we can continually aim ever higher.

## SUDIVA Spinners Pvt. Ltd.

**Establishment:** 2007

**No. of spinning spindles:** 73,000

**No. of Muratec automatic winder in operation:** 41 machines - Process Coner II QPRO (Link Coner), FPRO (Link Coner)

Interviewee



Mr. J.C. Laddha  
- Chairman



Mr. Akshay Jain  
- Technical GM



Mr. Birendra Prasad  
- Maintenance supervisor



for Manager, Director

## MSS Portal

SUITABLE FOR



An option which allows for checking of factory operation status using tablets, smartphones, or other mobile devices even from outside of the company. Easy to read graphs allow for at-a-glance determination of production quantities, machine efficiency, and other information. Also features other useful functions such as display of parts shipping status, and production status, etc.



Muratec Smart Support





# ITMA ASIA + CITME 2018

15-19 October, 2018 Shanghai, CHINA



## Link to the Future

In the Chinese market, more and more importance continues to be placed on greater energy and labor saving on spinning factory-wide scales and higher value added products.

At the Muratec booth, we promoted our position as an innovative company who leads our industry focusing on a theme of "Link to the Future" regarding the ever evolving potential of textile machinery, and basing the booth around three exhibits consisting of the PROCESS CONER II QPRO EX / FPRO EX new automatic winder products, which provide better automation and energy saving features than ever before; VORTEX Spinning Machines, which allow for process integration; and the Muratec Smart Support (MSS) customer support integrated management system.

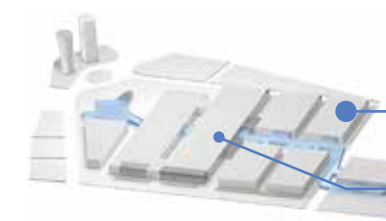
# muratec

Exhibit:  
VORTEX spinning machine- (new model)  
Automatic Winder  
-Process Coner II QPRO EX / FPRO EX  
Muratec Smart Support (MSS)



# ITMA 2019

Fira De Barcelona, Gran Via., Barcelona, SPAIN  
20 - 26 June



MURATEC BOOTH

7-Hall C202

VORTEX YARN BOOTH

3-Hall C247

## Premiere Vision Paris

Paris, FRANCE  
17-19 September

## Intertextile Shanghai

Shanghai, CHINA  
25-27 September

## KTM

Kahramanmaraş, TURKEY  
26-28 September

## TITAS

Taipei, TAIWAN  
7-9 October

## Hokuriku Yarn Fair

Fukui, JAPAN  
16-17 October

## SHANGHAITEX

Shanghai, CHINA  
25-28 November

# '20

## ITME Africa

Addis Ababa, ETHIOPIA  
14-16 February

## DTG

Dhaka, BANGLADESH  
20-23 February

## IGATEX

Karachi, PAKISTAN  
11-14 March

## Japan Yarn Fair

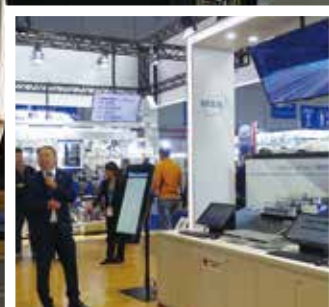
Aichi, JAPAN  
(TBD)

\*Exhibition schedule is subject to change without notice.



### FPRO EX

Exhibited package samples with winding shapes and density difficult to achieve with drums, but possible with FPRO arm traverse winders.



### MSS

We exhibited MSS PORTAL, which allows for remote monitoring of machine operation status, for the first time. We also conducted demonstration trials using attendee smartphones.



### VORTEX Collaboration

In collaboration with 32 raw material, knitting, finishing, printing, and other companies, we promoted a variety of creative materials which take advantage of the unique characteristics of VORTEX yarn.



### QPRO EX

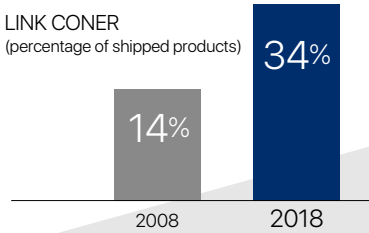
See P13 News & Topics



# Maximizing the LINK CONER productivity in QPRO EX

Labor shortages in the spinning industry have created increased demand for the LINK CONER. Muratec developed the world's first tray-to-tray system which directly links spinning machines and automatic winders and automatically transports bobbins, and has now become an industry standard.

As a pioneer of automation and labor saving technologies, Muratec has also equipped the new model QPRO EX LINK CONER with 2 new features.



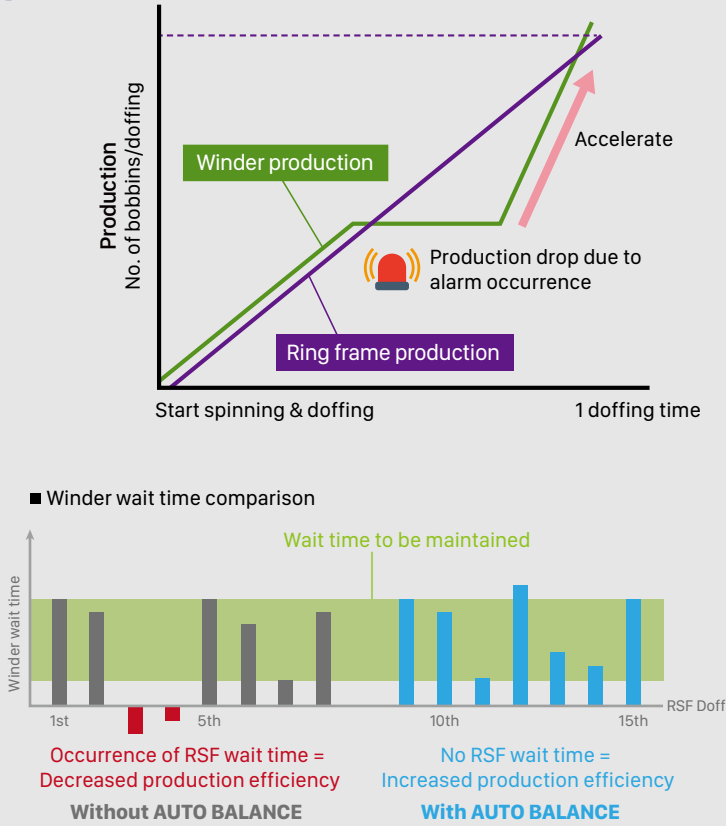
## AUTO BALANCE

The most important thing for the LINK CONER is balance of production capacity between ring spinning frame (RSF) and automatic winders.

Normally, automatic winder production capacity is set slightly higher than the RSF in order to prevent any decrease in RSF efficiency (= total factory production capacity). In other words, it is important that the automatic winder does not delay the RSF.

AUTO BALANCE function checks this production balance and continuously carries out automatic adjustment (\*) of automatic winder winding speed. This prevents any disturbance of the automatic winder and RSF production balance even if automatic winder efficiency drops as a result of textile alarm bobbins caused by raw material or RSF factors, achieving maximum production capacity for the entire factory.

(\*) Within a set value range



function:

## BOBBIN EXCHANGER

Improved accuracy of clearer has resulted in an increase in the eject of half-size bobbins due to textile alarm during current winding processes. These bobbins have a large amount of residual yarn, so they cannot be removed by bobbin stripper, and continue circulating in the machine, causing a negative impact on machine efficiency.

The BOBBIN EXCHANGER recovers and removes these textile alarm bobbins, maximizing automatic winder efficiency.

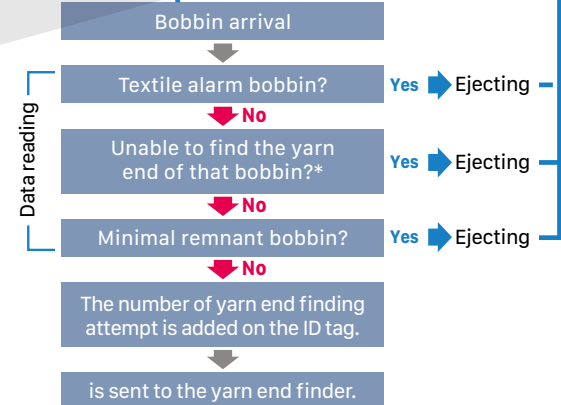
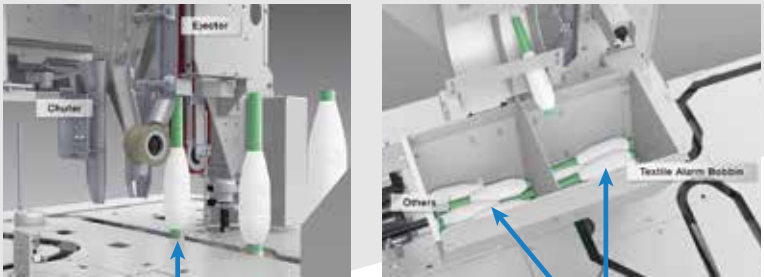


- Skinny bobbin
- bobbin for which yarn end finding was not possible (continue to circulate in the CBF)

BOBBIN STRIPPER can only remove skinny bobbins, but the BOBBIN EXCHANGER can remove both bobbins for which yarn end finding failed bobbins and skinny bobbins.

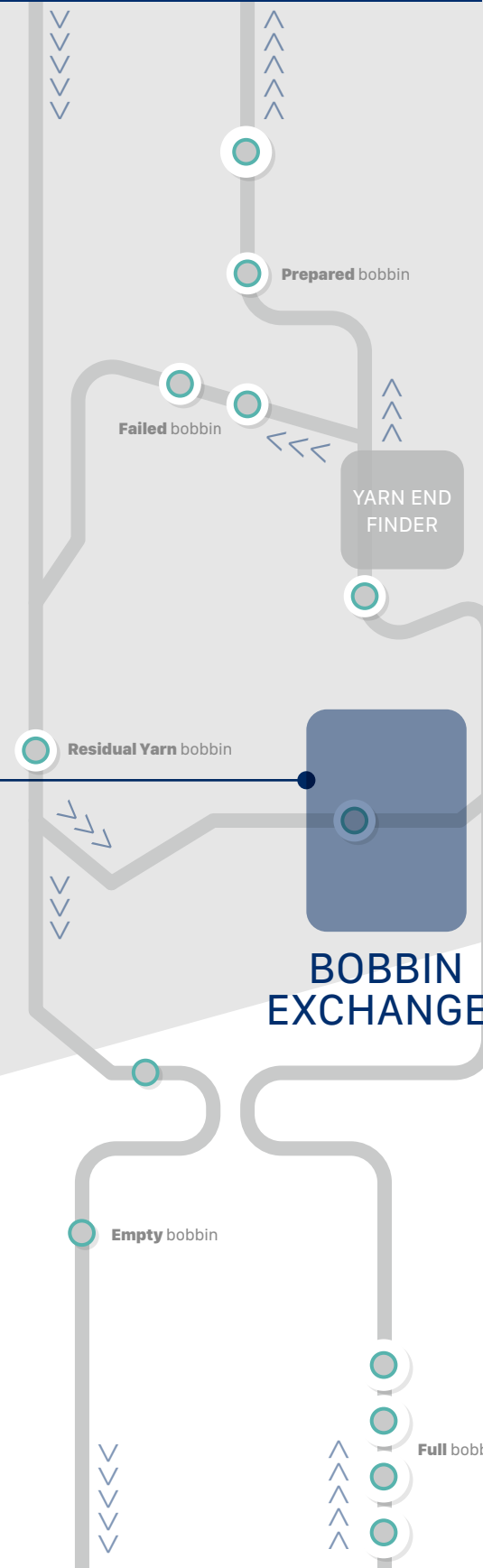
### Ejecting bad shape & textile alarm bobbins with sorting function

Can be combined with a Spin Inspector for even more intelligent detection and sorting. Allows for separate sorted collection of textilealarm bobbins and residual yarn bobbins.



\*Bobbins which exceed the set number of attempts

## QPRO EX



## PROCESS CONER II QPRO EX LINK CONER



Division: Textile Machinery

## New Automatic Winder Launched

Murata Machinery, Ltd. has developed the newest models of automatic winder, PROCESS CONER II QPRO EX and PROCESS CONER II FPRO EX, and exhibited for the first time at ITMA ASIA+CITME 2018.

The QPRO/FPRO EX continues to maintain the strengths of the current QPRO/FPRO Plus series, while providing even greater automation and energy conservation capacity, which are so vital for the spinning factories. The performance of the automatic winder that has evolved even further from QPRO/FPRO Plus can be expected.



Division: Machine Tools

## Acquisition of Japanese machine tools manufacturer, Horibe Machinery Co., Ltd.

Murata Machinery, Ltd. has acquired Horibe Machinery Co., Ltd. as 100% wholly owned subsidiary.

During its over 80 year history, Horibe Machinery has built a strong reputation in the industry with the company's main products, machine tools customized for automobile part manufacturing, and has a proven track record delivering products to leading automotive related companies. Together, Murata Machinery and Horibe Machinery complement each other with respective fields of specialization and expertise, allowing both companies to provide unique production systems that fulfill customer needs for greater productivity.



Division: Logistics & Automaion

## New compact AGV (Automated Guided Vehicle) developed

Murata Machinery, Ltd. has added the Premex XIO to its lineup as the company's newest AGV product. The Premex XIO features a compact body with a width of 700 mm, total length of 985 mm, and height of 350 mm, and is a compact floor type AGV which can satisfy production plant needs for loading of pallets up to maximum loads of 1 t. The compact body allows the Premex XIO to travel at its maximum travel speed of 120 m/min even in narrow spaces between and even underneath production equipment.



Interactive image transmission compatible Wireless LAN access point

## WHAT will we teach in the FUTURE classroom?



The Muratec Group also includes several unique businesses outside of the industrial machinery field. Silex Technology Inc. is one such business. Silex Technology is a research and development company which has a core collection of wireless and networking technologies for devices. The Muratec Smart Support (MSS) (see P.3) dedicated access point was also jointly developed with Silex Technology. The company was also involved in development of technologies for compression and transmission of image data from an early stage, and this has become one of the pillars of the company's business. The education market is a particular field of focus for the company. As blackboards are being replaced by large 4K monitors, and text and notebooks are being replaced by tablet PCs, Silex Technology provides proposals for installation of wireless access points and image transmission systems for the classroom, working hard to play a significant role in the transition of Japan's educational environments to ICT.

**Muratec Wireless Equipment**  
MSS dedicated access points, specialized for spinning plants by providing environment-customized features such as vibration resistance, cotton fly resistance, heat resistance, moisture resistance, and corrosion resistance.



Continually creating innovative technologies for the fulfillment of a prosperous society



**Textile Machinery**  
-Automatic Winder  
-VORTEX Spinning System



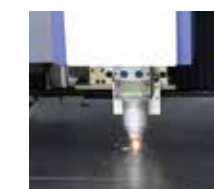
**Logistics Systems / Factory Automation Systems**  
-Automated Storage & Retrieval Systems (AS/RS)  
-Sorting System



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



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



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



**Communication Equipment**  
-MFP (Multifunctional Peripheral)  
-Facsimile



# Noren

# 暖帘



A noren is a curtain which is hung as a sunshade or blind. They are used in ordinary homes, but many noren are hung at the entranceway to shops and restaurants.

These noren are usually adorned with the store or company name, or a family crest. It plays a dual role, it is both the signboard for the establishment and also serves as a soft boundary, separating the inside and outside of the establishment. A noren also indicates the establishment is 'open for business', and if the noren has been taken down, it indicates the establishment is in the process of closing for the day.

The fabric of the noren will naturally deteriorate with time, adding to its texture and appearance. It is tangible proof that the establishment has been in operation for many years and has served many customers. Because a seasoned noren is often lovingly used for many years, the term "noren" has come to represent confidence in an establishment, as well as reputation and brand value of the establishment.

暖帘，是用来遮阳或是遮掩而挂的门帘。一般家庭也会使用布帘，但更多的是挂在商店或餐饮店的店面。

店面的暖帘上绘有店名、商号或家徽等，能起到招牌的作用，也温和地隔开店内和店外。挂着暖帘，是店家「正在营业」的标志，如果收起了暖帘，一看就知道店家已经打烊。

暖帘的布会随着岁月不断老化，越来越有手感。这也是店家接待过很多客人、长年营业的证明。从继续珍惜使用老旧暖帘这一意义衍生出来，「暖帘」一词也被用来表示店家的信誉、口碑和品牌价值。