# Sysmex Supporting Testing

**Sysmex contributes to healthy lives through its activities in the field of testing.**
**In this section, the guide and little Mamoru act walk you through the Group's activities.**


## What is a laboratory like?

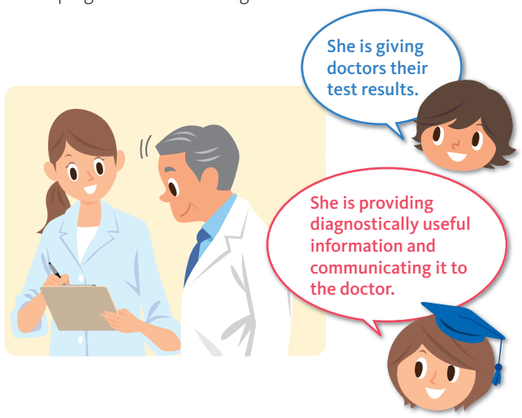
**Mamoru** What sort of room is this? There are lots of big machines and bunches of test tubes.

**Guide** This is a hospital laboratory. Laboratories are places where people study blood and urine samples to diagnose and treat diseases.

**Mamoru** Who is that person who is looking into the microscope? Is she a doctor?

**Guide** She is a clinical laboratory technologist ("lab technologist"). She is a person who performs lots of tests in a laboratory. **Lab technologists are responsible for communicating to doctors accurate test results and information that can help in making diagnoses in a timely manner. This helps doctors diagnose their patients accurately.**

**Mamoru** I see. So lab technologists' work is important for helping doctors make diagnoses.




**Guide:** A girl who knows a lot about health and healthcare
**Mamoru:** A curious elementary school pupil who is learning about Sysmex's business and testing

## What is the relationship between laboratories and Sysmex?

**Mamoru** Look, somebody came. Who is that?

**Guide** That is a salesperson from Sysmex. **Sysmex provides the instruments and reagents laboratories use for testing blood, urine and other samples. Sysmex handles everything from R&D to manufacturing, sales, and service and support.** Today, it looks like the person from Sysmex is here to suggest some laboratory upgrades.

**Mamoru** Huh? He isn't there to sell something new?

**Guide** Sysmex does more than just sell testing instruments and reagents. It also proposes testing environments that are safe and comfortable for hospitals, laboratories and patients.

**Mamoru** Like what sort of proposals?

**Guide** Well, when we go to the hospital to get tested, **if the period from the time we first go to the testing reception desk until we get testing results is short, and if the doctor can make a diagnosis quickly, that means our waiting time is shorter,** right?

**Mamoru** Now that you mention it, I remember my grandpa talking about when he went to the hospital to get some tests done. He said it was a long time before he was called to the consulting room.

**Guide** Sysmex makes lots of proposals to make testing more efficient in many ways. Of course, that starts with providing instruments and reagents that are suitable to the individual hospital. The Group also suggests putting testing results into digital reports and thinks about layouts to help lab technologists move about the laboratory more comfortably.

**Mamoru** That means that we can be comfortable when we get tested, right?

**Testing Flow**


❶ Samples are taken for hospital tests or medical checkups (blood, urine and other samples).

❷ Laboratories use instruments and reagents to perform tests.

❸ The results help decide diagnoses and treatment methods.

### Point 1 Addressing the Issues Customers Face in a Comprehensive Manner and Helping to Improve the Quality of Healthcare

Due to falling birthrates and aging populations, reducing healthcare spending is becoming an urgent issue. Against this backdrop, numerous medical institutions are facing the need to improve efficiency without lowering the quality of healthcare. In addition to providing products, Sysmex takes an integrated approach to addressing the host of problems customers face, providing new value suited to their healthcare environments. In this way, the Group helps to improve the quality and efficiency of testing and healthcare in general.

### Point 2 Creating Testing Environments That Are Safe and Comfortable for Lab Technologists and Patients

When making proposals, Sysmex takes an in-depth look at customers' testing environments so it can plan environments that enable more efficient testing. Utilizing IT to network entire laboratories helps to raise the safety of testing, such as by preventing sample mix-ups. In 1990, the company also began providing transport systems, which help to prevent infection.

# A Close-up Look at Sysmex's R&D

**The guide and little Mamoru visit Technopark, Sysmex's R&D hub.**
**They learn how the products in this lab are developed.**

## Where are products developed?

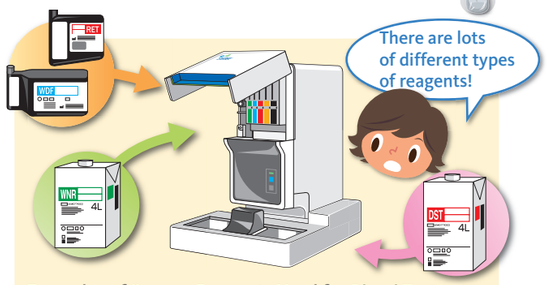
**Mamoru** So this is Technopark, the R&D hub.

**Guide** The lab and office areas are on the same floor to make communication easier. Dividers are made of glass, so each side can see what is happening on the other side.

**Mamoru** That person in the white clothes...why is she using liquids for tests? Don't machines do the testing?

**Guide** She is developing reagents that will be used together with instruments.

**Mamoru** What is a "reagent?"




**Examples of Sysmex Reagents Used for Blood Testing**

| | Action |
|---|---|
| Dilute<br>Dilution agents | While regaining blood cell morphology, these reagents are used to dilute samples to the optimal density for testing. |
| Dissolve<br>Hemolytic agents | These reagents are used to dissolve components of the blood that do not need to be tested, while retaining those that do. For example, when measuring white blood cells, red blood cells and platelets might be dissolved. |
| Stain<br>Staining agents | These reagents are used to stain nucleic acid constituents* inside blood cells. The information detected when a laser light is shown on the cell can be used to separate blood cells by type. |

*Nucleic acid constituents: DNA and RNA

**Guide** Reagents are chemicals used for testing blood, urine and other samples taken from the body. With blood testing, for example, reagents are reacted with blood inside the instrument. The blood is diluted, and blood cells are dissolved and stained to provide accurate measurements.

**Mamoru** So, reagents are required for testing.

## What are Sysmex's unique strengths in product development?

**Mamoru** How are reagents developed?

**Guide** Sysmex delivers products all over the world, so it develops reagents that also have stable quality in different environments.

**Mamoru** Wow...they're used all over the world.

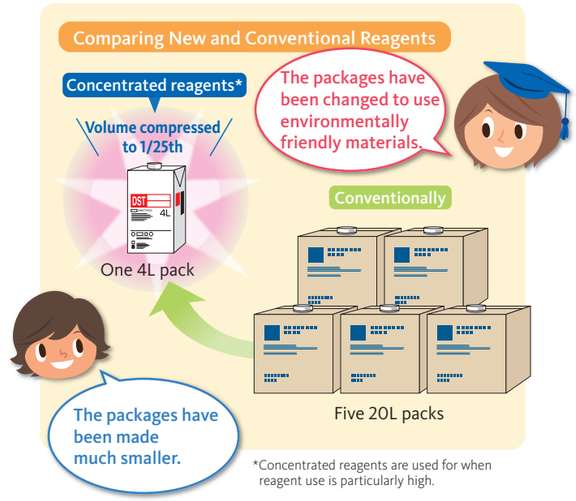
**Guide** **Reagents are made of ingredients that have to follow strict rules in different countries. After many rounds of improvements, Sysmex has developed reagents that can be produced stably in factories at 14 places around the world.** That is an important point. **Sysmex also has to think about things like making reagents that are easy to handle and are friendly to the environment.**

**Mamoru** Like how?

**Guide** Sysmex has developed concentrated reagents, which are easier to handle when changing reagents. This is a technology only Sysmex has.

**Mamoru** Wow! The package sizes are completely different! I'll bet even I could pick up that smaller one.

**Guide** The newest types of instruments use reagents that have much higher performance, so the instruments can perform at their best. **This is one of Sysmex's strengths, because it develops both instruments and reagents.**

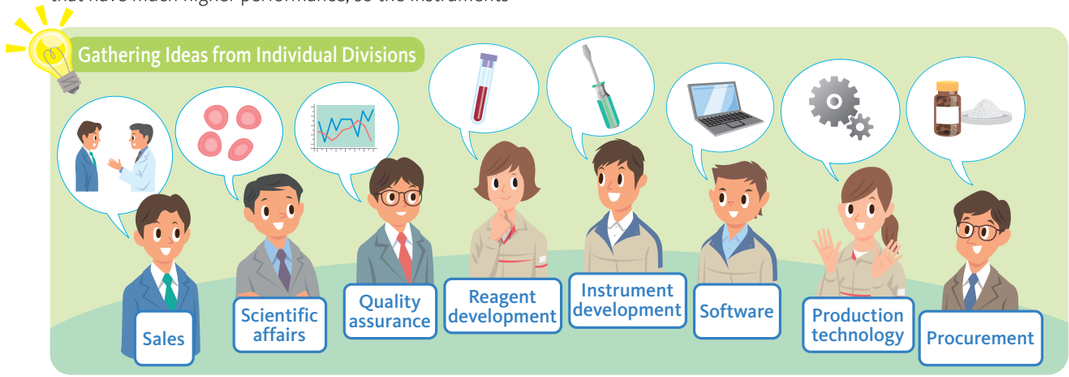



**Mamoru** Developing both is pretty impressive.

**Guide** Development requires instrument and reagent developers, of course, but many other people from different departments also get together—people from production technology and procurement, service and support, and sales divisions in Japan and overseas. These people gather to think about how to create good products and how to deliver accurate testing results to customers around the world.

**Mamoru** It sounds like lots of people put their heads together to make good products.

**Guide** Sysmex's work continues, even after products are delivered to the customer. Next, let's have a look at service and support.



# Sysmex Instilling Confidence

**Following on from the comment that "Sysmex's work continues, even after products are delivered to the customer," the guide and little Mamoru visit a service and support center.**


## What are the services that support testing?

**Guide** This is a customer support center, one of Sysmex's bases for service and support. These bases respond to inquiries from hospitals, commercial labs and other customers.

**Mamoru** Lots of people are working here.

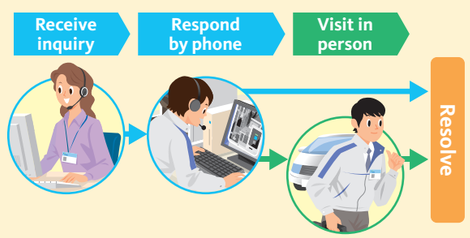
**Guide** Doctors need to receive fast and accurate testing results so they can make diagnoses smoothly. Instruments need to be maintained so they work correctly. It is also important for people to be available to respond quickly if a breakdown occurs.

**Mamoru** Over there, that man is sitting in front of an instrument and talking. It seems like he's looking at a screen.

**Guide** **The customer is using a web camera and showing him the inside of the instrument. They are using a network to look at the image together.**

**Mamoru** He can see the instrument even from far away?

■ The Flow of Service and Support




**Guide** That's right. Sometimes it's hard to explain things using just words. Sharing the screen makes it easier to understand, and this way they can solve the problem quickly.

**Mamoru** That's great! What other types of support are there?

**Guide** **The Group uses a network to keep checking customers' instruments.** This way, they can see even small changes that a customer has not yet noticed. Sysmex can tell them about the problem before a breakdown occurs (separate contract required).

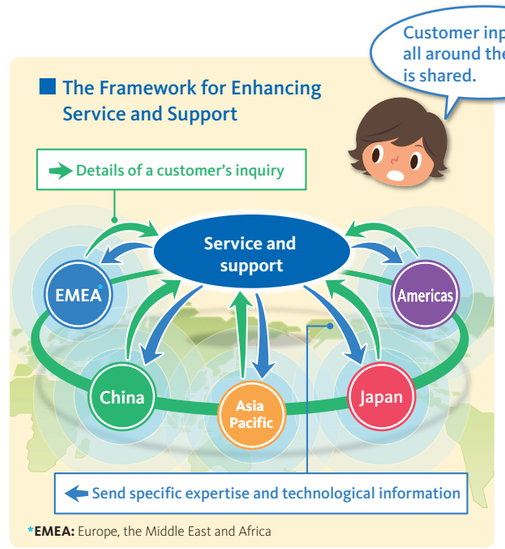
## How is service quality improved?

**Mamoru** Sysmex's products are used in lots of countries, right? Does the Group provide service overseas the way it does in Japan?

**Guide** Yes. **Sysmex conducts service and support activities at places around the world so customers can use its products with confidence.** Service and support trainers learn appropriate technologies and expertise in direct training from Japanese specialists. These trainers provide lectures to staff around the world to increase service and support quality.

**Mamoru** They're very reliable, then.

■ The Framework for Enhancing Service and Support




*EMEA: Europe, the Middle East and Africa

**Guide** **The details of customer inquiries are shared all around the world. In addition to improving service and support, this information is helpful when developing new products.**

**Mamoru** It sounds like Sysmex is strong in many areas: instruments, reagents, R&D, and service and support.

**Guide** In addition to providing customers with products, it is important to deliver accurate testing results. Sysmex continues working to provide value that exceeds customers' expectations and brings them confidence.

## An Extensive Training System to Support Customer Confidence

Providing high-quality healthcare services requires a customer understanding of our products. In addition to providing lectures covering appropriate operating methods and data analysis, Sysmex uses actual instruments in its training to increase the accuracy of testing results. The Group also provides a framework to help Sysmex employees and staff at distributors around the world gain appropriate knowledge and technologies related to service and support.

Overseas service staff member undergoing training

■ Communicating Service and Support Technologies