Automated Clinical Chemistry Analyzer FUJI DRI-CHEM Series

**FUJI DRI-CHEM NX500**
- Operator friendly with its touch screen keyboard
- A single specimen load analyzer that accommodates multiple tests with high throughput (128 tests/hour)
- “Real-Time and Borderless” clinical chemistry is made possible through its quick, easy operation and compactness

**FUJI DRI-CHEM 7000**
- A 5-sample loading analyzer providing a walk-away system and efficient workflow
- 190 tests/hour, offering high-throughput performance and high-speed processing
- Equipped with STAT function to accommodate emergency measurements

**FUJI DRI-CHEM 4000**
- Fully automatic analyzer for more convenient and reliable on-site performance, featuring remarkable TAT response and wider network system capability.
- For all clinical settings, ranging from small clinics to large hospitals.

Contact your local distributor for availability.

**USER’S VOICE**
Installation Reports

Medical Diagnostics
High Precision and Excellent Reagent Stability

Dr. Suri's laboratory was established in 1980 with the mission of providing quality diagnostic services to the people of Delhi. It is a stand-alone laboratory that has been on the forefront in providing world-class laboratory services by adopting the latest technologies and introducing the latest state-of-the-art fully-automated analyzers from USA, Germany, France, and Japan. They have installed FDC7000 as a routine biochemistry analyzer and FDC4000 as a backup system. Dr. Pradeep Suri, one of the head pathologists at this facility, was kind enough to share with us his thoughts on the FUJI DRI-CHEM (FDC) system.

**Incomparable convenience**

“The FDC system is very simple and easy to operate, even my basic technician can run it,” says Dr. Suri. Not only does the staff find the operation and maintenance for both FDC7000 and FDC4000 quite easy.

**High precision and stability**

According to Dr. Suri, Dr. Candido Alberto from the Hospital Geral of Luanda, a provincial hospital in Luanda, Angola, was established in 2006. This hospital was one of the first to be built under the new health policy implemented by the Angolan Government, closing the serious gap in healthcare needs in Angola as a result of the recent internal war. The hospital currently has 58 employees. This hospital has been using the FDC4000 system as their primary biochemistry analyzer for 3 years, and on an average, they perform 20 test runs using the FDC4000 system daily. Dr. Candido Alberto was kind enough to share his thoughts on the FUJI DRI-CHEM, especially the FDC4000 system:

**Emergency adaptability**

Accommodates the client's need for speedy test results

We asked Dr. Alberto why their facility needs real-time diagnostics. He replied, “Most of our patients need instant diagnosis and medication. Our facility accommodates emergency cases, as our hospital is an emergency hospital. The FDC4000 system is very easy to operate and preferable in emergency hospitals such as ours.” He added, “I would recommend this system to other hospitals, particularly to emergency hospitals seeking easy diagnostics.”

**Operator friendly**

Operator friendly and easy to maintain.

In his additional comments, Dr. Alberto stated that they have been using the FDC4000 system for 3 years and they are completely satisfied with its performance. He has not observed, so far, any discrepancies between test results and patient observation results.

**Suggestions for improving the FDC and its features**

The local distributor should improve the delivery of reagents and maintenance services, especially for hospitals that depend on the FDC for day-to-day patient diagnoses.

FUJI DRI-CHEM as One of the POCT Solutions in Italy

The origin of the hospital, “Azienda Ospedaliera S. Maria degli Angeli,” dates back to the 13th century. It served as a shelter for pilgrims travelling to Rome. At present, Azienda Ospedaliera S. Maria degli Angeli has 5 hospitals, located in Pordenone, Sacile, Tagliacozzo, Spilimbergo, and Mariano, respectively. Its main hospital is located in Pordenone, Italy. Since 1994, the main hospital and the hospital in Sacile are provincial hospitals of regional importance. These hospitals provide inpatient and outpatient diagnostic services, treatment, and rehabilitation. They accommodate over 25,000 hospitalizations and more than 2,000,000 outpatient service requests each year. The hospital’s central laboratory is located in the main hospital in Pordenone, which manages all the other sites and laboratories from this remote location.

We have visited the Department of Laboratory Medicine of the hospital in Sacile, which is headed by Dr. Renato Toson, and we were fortunate to talk to Dr. Margherita Monorardi regarding the FDC4000 system as one of their POCT (Point of Care) testing solutions.

**POCT solutions in hospitals**

Patient safety with POCT solutions

No need for sample manipulation because of the plasma filter

**Importance of POCT solutions in hospitals**

According to Dr. Morandini, POCT solutions have been implemented to obtain faster test results, which would aid in streamlining care and improving clinical outcomes. Currently, 2 of 3 hospitals in Italy do not have a laboratory. She further explained the requirements for a POCT solution: “The connectivity of different POCT devices that electronically transfer the test data to laboratory and clinical information systems and the patient’s electronic medical record is a crucial setting point. It is mandatory that the instruments are simple and easy-to-use, in particular, there must be no sample manipulation, i.e., we need direct measurements from primary tubes.”

**Patient safety by POCT solutions**

When asked about the advantages of POCT solutions over central diagnostics, she replied, “Shortened turnaround time, ease of use, absence of sample manipulation, and, most importantly, patient safety. True patient safety is attainable if all the phases are kept: the personnel are well trained, and the solutions are controlled by a central unit with constant laboratory monitoring.”

**Absence of sample manipulation**

“The most important and key feature of the FDC4000 system as a POCT solution is the possibility to use primary tubes directly without manipulation of samples. Manipulation of samples can be a source of error. With the plasma filter of the FDC, all our staff can easily operate this instrument without compromising patient safety.”

**Performance of the FDC and its compatibility with the hospital’s current workflow**

From its installation, the hospital is satisfied with FDC4000’s simplicity in operation and the system’s accuracy and precision. So far, they have not seen any discrepancies in the results. Dr. Monorardi also added that the FDC has proved to be compatible with the hospital’s current workflow.

**Suggestions for improving the FDC**

Dr. Morandini suggests the incorporation of a QC management program for the FDC. “QC has to be performed regularly and has to be monitored by a central laboratory program. It is ideal to have a QC sample registered via a barcode when used in each instrument. Currently, this is not possible in the FDC. QC information such as lot numbers needs to be typed in manually into the QC program. This again can be a possible source of error, which needs to be minimized.”

Faster Turnaround Time, Simpler, and Easier than Liquid Chemistry

India, the second most populous country in the world, has a wide network of pathological laboratories catering to different client requirements. With the country’s growing economy, it has attracted numerous foreign investors. Among them is FUJIFILM Corporation, which is located in Japan and has launched its medical systems in the Indian market. The FDC4000 system is one of the pathological chain laboratories in India. Several FDC4000 systems are working in their laboratories. Their thought on this system has been shared by Dr. Rishi Jha, Pathologist, and Director, Metropolis Healthcare Pvt. Ltd., Gurgaon, India.

**Faster turnaround time**

Operator friendly

Accurate and precise results

Liquid chemistry have previously used. As a chain laboratory, they have checked the traceability of each and every method that they have used in the FDC system and matched it with strict validation procedures.

**Maintenance benefit**

With the FDC, the amount of waste from clinical chemistry has reduced and the maintenance cost has also decreased.

**Suggestions for improving the FDC**

Mr. Jha recommends that distributors of the FDC should be available in provincial areas as well, so that the transfer of reagents to chain laboratories such as theirs is efficient.

**When asked to rate the FDC on a scale from 1 to 10 Mr. Jha gave the FDC a score of 10 and mentioned that he will definitely recommend this system to his peers.”

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