



Ms. Berisha with her "new colleague"

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50% reduction of throughput time and decrease of staff deployment in the area of sample identification

Over 40 years of laboratory experience and tight timeframes outline preanalytics in the Dr. von Froreich laboratory

The Dr. von Froreich laboratory, based in Hamburg, is a member of the Sonic Healthcare Group. Approximately 400 employees, 40 of whom work in preanalytics, process around 30,000 samples a day here. Particularly important for preanalytics is the rapid acquisition of samples, including up to 70% order entry.

Sabine Michaels has been working here since 1977 and has been the group manager Preanalytics since 2012. Melanie Gräff, the technical head of the Preanalytics department, joined the company in 1999. With their long-standing experience, the two are responsible for the entire area of registration, identification, aliquoting, and distribution of incoming samples to analytics, which is largely carried out on Cobas instruments. They are also the contact persons for all departments in the company.

Diverse requirements due to shortage of skilled workers, conversion of coulor coding and variety of tube types

The decisive factor for the procurement of new sorters was the changeover to the new US color codes in the entire laboratory group. An additional challenge is the parallel use of tubes from different manufacturers, primarily Greiner and Sarstedt. "The whole topic of color cap conversion extends right through all processes in our company," emphasizes Ms. Gräff. "There, new and old must run smoothly at the same time with sample tubes of different origins."

Working smoothly and quickly under these conditions was no longer economical with the previous devices, even with high service costs for the manufacturer. Based on this experience, the calibration of the cap color detection was to be solved in-house in the future.

Relieving the burden on the required staff was also of crucial importance. "This is becoming increasingly important. In times of a shortage of skilled workers, every station we no longer have to staff manually is valuable." An expanded search spectrum is therefore just as important as improved performance:

"If we can identify sample characteristics that are important for our routine already in the sorter, which is twice as fast, that's a good way for us to counter the shortage of skilled workers"

Melanie Gräff

ASP SortPro is up to these tasks and integrates smoothly into the laboratory routine

The lab chose a ASP SortPro Tubesorter with 8 bins after a whole month of practical testing in the lab. The test was conducted in comparison to competitor's device and met the demand placed on the detection unit with its intelligent image processing and was able to demonstrate its superiority in speed and reliable operation.

Both in August and in November 2021, one of the new sorters was installed and immediately integrated into the running operation. "It all went very quickly and was no problem at all for the in-house IT with the interface description provided," Ms. Gräff is pleased with the hassle-free changeover and smooth integration directly into the LIS. The outstanding performance of the device was immediately noticeable after installation.

"The SortPro is more than twice as fast compared to the old units, we can now get the job done with two units"





Product: 2x ASP SortPro8

Key Requirements:

High processing speed to accommodate peak loads

Reliable color detection, even with transparent colors

Recognition of tube type and manufacturer

Added benefits:

Status check of the centrifugation

Teach-in of the device on your own without service technician

Search function for all processed samples

Intelligent error correction

ASP Lab Automation AG

Heinrich-Hertz-Str. 32 25336 Elmshorn Germany +49 4121 264 731 0 info@asplabauto.com www.asplabauto.com Once the samples have been recorded and assigned with the new devices, they can then be processed using pure barcode recognition, which is mastered by all devices in the laboratory. This means that the old HCTS 2000 sorters previously installed can continue to be used for further sorting.

Higher efficiency and 20% staff relief at the workplace with the new ASP SortPro Tubesorter

"The last sample delivery comes in around 4:00 p.m., and by 4:30 p.m. they should have left the preanalytical department," says the technical department manager, summarizing the daily challenge. "With the new ASP SortPro Tubesorter, we can keep to this time window".

The new sorters are exclusively responsible for sample identification. They also sort the whole blood tubes according to vacutainers and monovettes. At the same time, the centrifugation status is checked.

"The simultaneous detection of the centrifuged and non-centrifuged samples in mixed operation is really good, it really helps us. In the past, we had to record the centrifuged samples manually. That was very time-consuming and tied up additional personnel."

ASP SortPro also detects whether the requirement encoded in the barcode corresponds to the tube used. At Dr. von Froreich laboratory, the new sorters are programmed in such a way that, in case of doubt, they sort according to the tube type that has priority here in the laboratory routines. The sample is then automatically rerouted for the next laboratory run and reported to the LIS accordingly. This is noted in the sample protocol and remains traceable at all times.

A very successful implementation

The two new sorters not only handle the 30,000 samples per day with ease. At the same time, the number of staff required to collect the samples has been significantly reduced. This is an important step in countering the shortage of skilled workers in preanalytics.

"Our preanalytical department has now been able to free up time slots due to faster processing in the sorter area. The faster processing therefore also benefits other departments."

Melanie Gräff

Even if the achieved 50% reduction of the processing time in the preanalytical phase and the relief of the staff were in the focus of the requirements, many further positive effects are noticeable in the everyday life.

The mixed operation with old and new color coding runs flawlessly. The all-new ASP Sort-Pro Tubesorter recognizes all colors perfectly and assigns them to the respective color code system without errors, even with transparent caps.

Self-teaching "is not an issue, even though I haven't done it very often and sometimes still have to look at the manual," Ms. Michaels reports from her practice. " The operators get along well with the instrument. Even searching for samples through the image recognition, which was not even possible before, has become a valuable part of our work."

"The cooperation with ASP is almost family-like, very efficient and speedy, which we appreciate very much", Ms. Gräff summarizes the successful implementation and emphasizes in conclusion:

"We hardly have any sorting errors anymore and are now actually finished no later than 20 minutes after the last sample delivery"

Melanie Gräff

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