Highly accurate blood-count data, thanks to THK technology



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Horiba develops and manufactures an extensive range of original analytical and measuring equipment for the global market, including devices that analyze automobile emissions, air and water quality, and blood components, as well as measuring devices used in semiconductor manufacturing. Our automobile-emissions testing devices hold an 80% share of the global market. Japan's Ministry of Economy, Trade and Industry included Horiba among the top 100 "global niche" firms in 2013.

Horiba's automated blood-cell counter, a medical-care device, employs a syringe unit incorporating THK products. The device measures the respective amounts of redblood cells, white-blood cells, hemoglobin, and platelets in the blood. It's a compact unit that can deliver lab results virtually anywhere, so it's widely used by doctors in private practice. Pediatric doctors have found it particularly useful, since young children are often unable to clearly describe their own symptoms. Using the blood-cell counter, by drawing a very small amount of blood a pediatrician can monitor red-blood cell and white-blood cell levels and check for the presence of CRP, a protein that appears in response to inflammation. This enables the doctor to determine whether the child is getting better or if time is still needed to effect a recovery, and makes it possible to di-

agnose the symptoms based on the data provided. The device is easy to operate, and it takes only about a minute to analyze the basic components in a blood sample (it takes about four minutes to measure CRP), so this can be done while the doctor is seeing the patient. It's an easy and convenient process that enables doctors to make a comprehensive, accurate diagnosis, and they often talk about how much they appreciate this. We hear that, at many hospitals, as soon as a new pediatrician starts practicing they order another blood-cell counter from Horiba.

Ordinarily a lot of components are needed to enable high-precision measurements. By employing a syringe unit that uses THK LM Guides, we have both reduced the number of components and attained high accuracy with a compact device, a prominent feature of our product. Fewer components means shorter, more efficient assembly procedures, and processing is so accurate that even a tiny sample will yield reliable data. We've never heard of anyone having a problem with the THK syringe unit. It's sturdy enough to be considered extremely trustworthy by people in the medical profession.

THK did not simply provide an existing product, they modified the design to meet our specifications. They demonstrated an admirable degree of flexibility in complying with our demands, and we hope to see more of this in the future. We expect to develop and produce new products for the global market, so even when we're procuring components for overseas production sites, we'll look to THK for the same kind of excellent service they've provided in the past.



Accurate data can be obtained from a very small sample.



Hematology and CRP analyzers.