

NEONATAL

Automated Analytical Screening and Diagnostic Reagents



Astoria-Pacific[™]
INTERNATIONAL

SPOTCHECK[®] Neonatal Screening System

Let Astoria-Pacific design a screening system to fit your program's needs. From manual to full automation, we can find the level of automation that fits your budget, as well as your sample load. Highly reliable components are integrated into a design assuring maximum laboratory performance and efficiency.

The SPOTCHECK Analyzer automates newborn screening tests such as Biotinidase and GALT from the same sample simultaneously. Our diagnostic techniques allow for earlier detection and provide for same day turn around of quantitative patient results.



- ✓ PHE
- ✓ GALT
- ✓ G6PD
- ✓ T. GAL
- ✓ TYROSINE
- ✓ BIOTINIDASE

Sample Analysis by Continuous Flow

The large capacity sampler is computer controlled in an XYZ grid format to automatically introduce the extracted blood spot samples from a standard 96-well microtiter plate or test tube rack into the reagent stream. A specific Analytical Cartridge is designed to affect a reaction between sample and reagents for a specific test. As each sample passes through the cartridge, it mixes with the appropriate reagents and a fluorescent or colored product is formed. The sample continues to travel out of the cartridge and into a flow through detector cell which measures the amount of fluorescence or color produced. The results can be sent to a strip chart recorder and/or directly to a computer for data reduction.



- ✓ 17OHP
- ✓ TSH
- ✓ T4

Sample Analysis by EIA and ELISA

The SPOTCHECK immunoassays use highly specific polyclonal antibodies immobilized onto the wells of 96-well microplates. Using a single eluate, extracted samples are placed in the wells where the competition for binding sites occurs between the endogenous enzyme and the added enzyme conjugate. In the case of TSH, a second conjugated monoclonal antibody is added. The endogenous TSH then forms a bridge between the antibody bound to the wells and the enzyme conjugate that is added. After incubation, either for 4 hours or overnight, the plate is washed, and color developer is added. The degree of color change is directly or indirectly related to the amount of antigen that is bound in the well. The results are measured with a microplate absorbance reader. The incubation, transferring, washing and reading of each plate can be performed manually, or automatically.



SPOTCHECK diagnostic reagent kits are manufactured under the strictest standards specifically for the SPOTCHECK system. Convenient, color coded kits are available with a 2 year shelf life. Designed for use with proven methodologies, SPOTCHECK reagent kits provide reliable low cost testing day after day.

ASTORIA-PACIFIC

