

Automated Cell Processing and Staining System

This automated system processes, isolates, and stains cells. It integrates liquid handling, sample preparation, and staining into one platform, enhancing sensitivity and specificity compared to other methods.



Overview

Automated Liquid-Based Cytology Solution

The LBC-SPS4 series is a fully computer-controlled automated system that integrates liquid-based cell sampling, gradient separation, sedimentation, and drop-on dyeing into a single workflow. It utilizes advanced gradient centrifugation and natural sedimentation to remove interference from mucus and inflammatory cells, prioritizing the capture of diseased cells for higher diagnostic accuracy. This all-in-one machine is designed to improve laboratory efficiency while ensuring high-quality, clear diagnostic results for both gynecological and non-gynecological specimens.

Performance Metrics

Key Performance Metrics

24 sheets

Max Batch Capacity

55 min

Processing Time

13 mm

Cell Attachment Area

Technical Features

Processing Capabilities

- Gradient centrifugation combined with natural sedimentation
- Independent monolithic drop dyeing to prevent cross-contamination
- Automated cell washing and reagent dispensing
- Three-dimensional single-layer cell distribution
- Variable sample number settings to avoid reagent waste

Applications

Supported Specimen Types

Gynecological Samples, Pleural Effusions, Peritoneal Effusions, Sputum, Nasopharyngeal, Cerebrospinal Fluid, Puncture Fluid

Chemical & Reagent Management

Cell Preservation Functions

Cell Preservation • Mucus Dissociation • Erythrocyte Lysis • Cell Adhesion • Sterilization Inactivation

System Specifications

Hardware Components

- Robotic arm for precise manipulation
- Multiple reagent reservoirs
- Temperature-controlled incubation chamber

Control System

Fully computer-controlled with integrated protocol setup and data acquisition software

Model Series

LBC-SPS4