

**SAKURA FINETEK USA, INC. INTRODUCES TISSUE-TEK® XPRESS™***1-hour Tissue Processing: A Revolution in the Science and Business of Histology*

**S**akura Finetek USA, Inc. (Torrance, CA), a leader in the development of state-of-the-art clinical laboratory equipment, will launch their new **Tissue-Tek® Xpress™** Rapid Tissue Processor at the 2004 Clinical Lab Managers World Conference in March. This latest innovation by Sakura is destined to revolutionize pathology and healthcare itself by offering a host of benefits unmatched by current tissue processing technology. Tissue-Tek Xpress is a continuous-specimen-flow, high-throughput tissue processor, which dramatically reduces diagnosis times for same-day results. The Tissue-Tek Xpress Rapid Tissue Processor significantly transforms workflow in the lab. It enables the extraction of DNA, RNA, and proteins from the paraffin block; delivers time and cost savings; increases productivity; enhances safety; and standardizes results. The Tissue-Tek Xpress is beginning to change the field of pathology worldwide and expand the boundaries of the laboratory, improving patient care.

This breakthrough technology, the combination of a novel four-reagent system, microwave technology, and traditional vacuum infiltration techniques, is used to produce results that are equal to or better than those of conventional processing. Precisely controlled mechanical and ther-

mal actions ensure optimal, consistent tissue processing. One of the greatest benefits provided by the Tissue-Tek Xpress is its unprecedented high throughput. The Tissue-Tek Xpress Rapid Tissue Processor restructures laboratory workflow with its unique capacity for continuous loading that enables users to process an unparalleled 120 specimens in one hour. The Tissue-Tek Xpress provides the pathologist with an even distribution of cases throughout the day by enabling specimens to be embedded, sectioned, stained, and coverslipped at different times during the day, thus streamlining processes. Each basket accommodates up to forty cassettes, and can be loaded approximately every 15 or 30 minutes, for continuous throughput. Processing times for each station are preprogrammed and fixed to ensure consistent results time after time. Tissues specimens of various types, such as routine and biopsy, can be processed in the same processing run without compromising specimen integrity.



The ability of Tissue-Tek Xpress to process rapidly is based partly on its unique reagent system, using only four reagents. This unique system is a blend of very gentle reagents performing fast and efficient fixation, dehydration, clearing, and paraffin impregnation. The process is fur-

ther streamlined, as retort-cleaning cycles are eliminated so processing can continue all day, without interruption. The reagents do not contain formalin or xylene, and are specifically designed to preserve DNA, RNA, and proteins in the block for molecular biology techniques. In addition, this process represents an approximate 80% reduction in the total reagent volume needed, as compared with traditional ten-reagent processing methods, resulting in less handling and exposure and lowering operating costs. Reagents are conveniently packaged in ready-to-use, disposable one-gallon containers that histotechs can place into the instrument and subsequently dispose of without the exposure of direct contact.

Another key element the Tissue-Tek Xpress processor uses to promote rapid processing is microwave technology, which provides uniform heating of tissue for consistent results. With existing countertop microwave units, more than ten (10) times the energy required by the Tissue-Tek Xpress processor is applied in a fast, pulsing manner that can cause inconsistent heating and variable results. By comparison, the microwave technology used by the Tissue-Tek Xpress uses a low wattage (60 watts) and applies energy in a

steady, consistent manner that ensures that tissue is not overheated; therefore variability from specimen to specimen is eliminated. The Tissue-Tek Xpress also enhances processing by injecting air bubbles from the bottom of the retort. This maintains an even temperature distribution inside each retort for all specimens. Routine specimens are not under-processed and biopsy specimens are not over-processed, so specimen integrity is maintained. In addition, the Tissue-Tek Xpress processing method is compatible with special stain techniques and IHC protocols. Results with the Tissue-Tek Xpress provide excellent morphology and nuclear detail necessary for accurate examination and diagnoses.

In addition to the Tissue-Tek Xpress, new grossing tools have been designed to aid in producing uniform specimens of the same size and thickness. These unique tools consist of a grossing board with 2 adjustable wells, grossing forks, trimming knives, and scalpels. These tools ensure grossing to an exact thickness, thereby standardizing specimens for processing with the Tissue-Tek Xpress.

Sakura Finetek USA, Inc. was established in the United States in 1986. Sakura's products in-

clude brand names such as: **Tissue-Tek®**, **Cyto-Tek®**, **VIP™**, **Accu-Edge®**, **Uni-Cassette®**, **Paraform®**, and **Cryo3®** brands, which have become industry standards. These world-class product lines are augmented by a broad product portfolio that includes histology/cytology stain-ers, processors, automated coverslippers, microtomes, cryostats, and embedding centers. Sakura enjoys a strong tradition of producing quality products at a reasonable cost, and the name Sakura stands for nothing less than the best in clinical pathology. Sakura intends to revolutionize the industry once again, bringing innovative solutions to today's lab, as it is in the Sakura tradition to continually enhance and expand the boundaries of pathology. Learn more about Sakura and their world-class products at the 2004 Annual Meetings of the Clinical Laboratory Management Association and the American Society for Clinical Pathology CLMA/ASCP.



For more information concerning Tissue-Tek Xpress call Elise Green, Marketing Manager, at 1-800-725-8723; contact a Sakura Finetek representative at the CLMA/ASCP, booth #917; or visit the company Web site at [www.sakuraus.com](http://www.sakuraus.com).