The future of Sample Preparation

SPEx Sample Preparation Extractor

Affordable, rapid, reproducible and convenient

CambTEK®

The CambTEK Sample Preparation Extractor (SPEx)

Semi-automated sample preparation solution for solid dosage forms, gels and liquids.

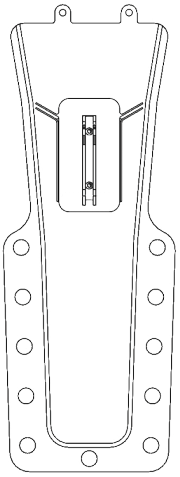
SPEx Consumables

The Extraction Pouch Proprietary Technology enables rapid extraction and dissolution with a High Frequency Pulverizing zone and a Force Jet Mixing zone.

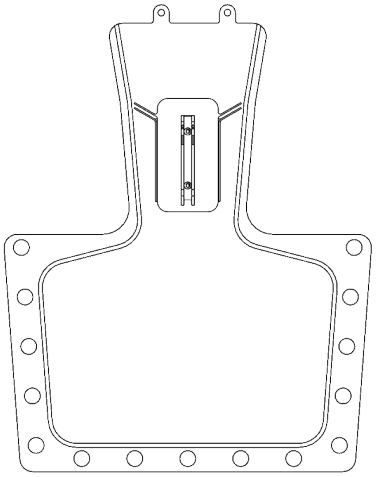
The specifically designed Extraction Pouch remove the need for glassware and are disposed after single use, are constructed of a highly durable membrane polymer and have undergone significant design and testing to provide reliable and repeatable sample preparation extractions.

The Extraction Pouch are available in two sizes 25mL–100mL and 100mL–500mL

25–100mL Extraction Pouch



100–500mL Extraction Pouch



Our Technologies

Forced Jet Mixing

Proprietary Technology
High turnover of fluid volume for rapid homogeneity and dissolution.

High Frequency Pulverizing

Proprietary Technology, focused pulverization of whole solids into powders, enhancing rapid extraction.

Extraction Pouch

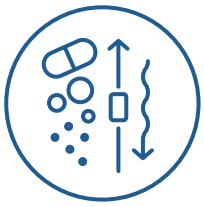
Proprietary Technology, say goodbye to glassware, cleaning and carryover. Simply dispose of the pouch after use.

Ease of use

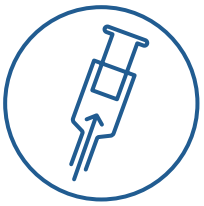
Step one:
Clip Extraction Pouch to cassette

Step two:
Add solid dosage form and solvent to Extraction Pouch

Step three:
Load cassette onto SPEx unit



Step four:
Dry High Frequency Pulverize, then Force Jet Mix or Force Jet Mix and High Frequency Pulverize simultaneous for quickly extracting a wide range of sample types

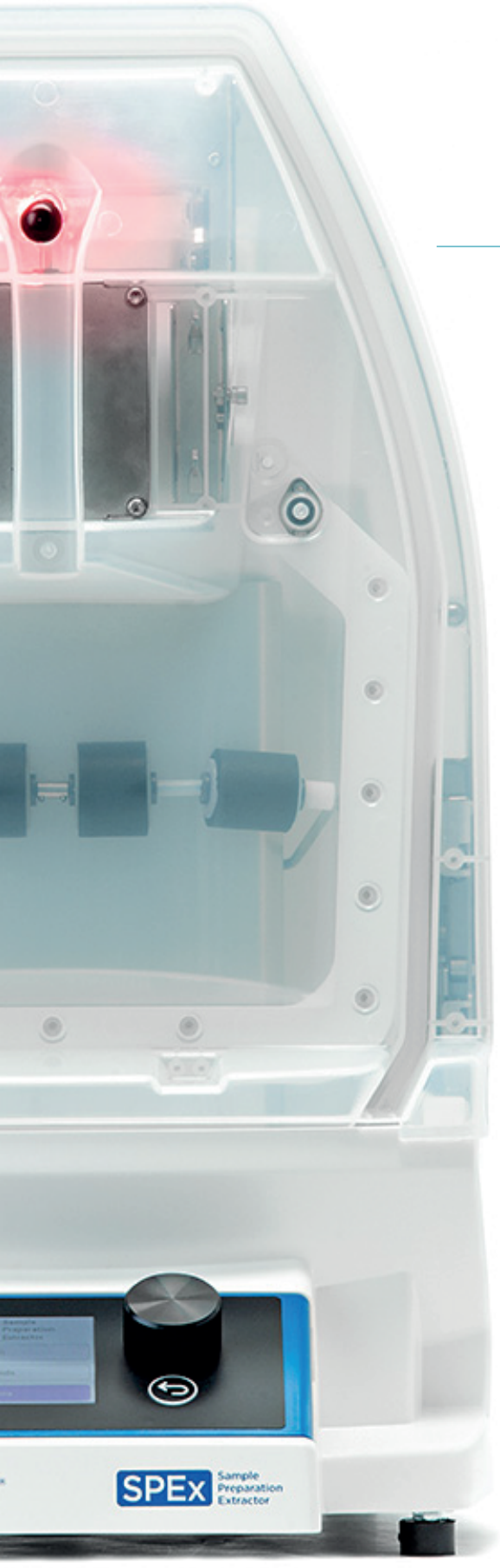


Step five:
Remove extracted sample from SPEx Extraction Pouch

Step six:
No cleaning, no cleaning validation, no carryover-simply dispose of the Extraction Pouch

Productivity	The unique SPEx technologies, Forced Jet Mixing and High Frequency Pulverizing, in conjunction with the extraction pouch, simplify and speedup laboratory productivity
Reproducible Processes	Semi automated sample preparation for improved repeatability over traditional manual techniques
Health & Safety	Semi automated sample preparation and enclosed system reduces user exposure to harmful substances
Process Standardization	Platform technology aids compliance and consistent results independent of user proficiency or laboratory location
Versatility	Processes a wide range of sample types in both single sample and bulk assay, including more challenging formulations such HPMC, PEG, PEO and laser-drilled.
Flexibility	provides sample preparation front-end to any dosage form analytical workflow
Economic	Increased productivity, no washing, no glassware, affordable technology, significantly reduce sample preparation costs
Ease of Use	Intuitive instrument and software use, and error prevention with barcoded consumables
Reliability	Robust design and high component specification delivers minimal downtime and maximum reliability.

Case Studies



Extraction of heterocyclic alkaloid

- Reduced from 4 hours to 1 minute

Extraction of water soluble vitamin from prolonged release cellulose

- Reduced from 18 hours to 3 minutes,

Extraction of heterocyclic from prolonged release matrix (PEO)

- Reduced from 16 hours to 1 minute

Extraction of NSAIDs from wax suppository

- Reduced from 12 hours to 2 minutes,
- Eliminated need for boiling solvent
- Reduced solvent consumption

Extraction of hard lozenge

- Reduced from 2 hours to 1 minute
- Eliminated loss of sample

PLUS

- Methods developed within minutes
- Eliminated carryover & cleaning
- Eliminated variability of results across single component or bulk assay

Technical Specification

Dimensions

Size (L×W×H)	302mm × 313mm × 510mm
Weight	12kg

Sample

Sample Types	Tablets (Normal and Prolonged Release, laser drilled), Lozenge, Pastilles, Beads, Capsules (hard and soft), Gels, Intermediate Granulations, Pellets, Suppositories, Powders
Extraction Pouch Volume	25mL – 100mL 100mL – 500mL

Operational Parameters

Extraction Mode	Dry High Frequency Pulverize, then Force Jet Mix or Force Jet Mix and High Frequency Pulverize simultaneous
Electrical	100-240 VAC, 50/60Hz, 250 VA

User Modes

Walk up quick run mode	No method required
Method Mode	Select existing method
Edit Mode	Create, edit, remove methods

Software

Software	SPEx Command Embedded Firmware

Environmental

Environmental	Reduced solvent for dissolution, no glassware or cleaning, quick extraction/dissolution reduced power consumption

A revolution is here

Register your interest for more information, product specification and availability at **cambtek.com**

CambTEK®

Proprietary Technology from CambTEK —
Sample Preparation Experts