

Innovative sample digestion technology by Coldblock Technologies Inc.



Business Line
Scientific Instrumentation

ColdBlock™ digestion A revolutionary sample digestion technology

ColdBlock™ Technologies offers an innovative sample digestion technology, ColdBlock™ Digestion. This versatile, patented technology shortens the sample digestion process to just minutes with reliable and precise results consistently

demonstrated across multiple industries and a variety of sample types.

ColdBlock™ Digestion is the only sample digestion technology to use focused shortwave infrared radiation and a cooling

block to shorten sample preparation time, accelerate sample throughput and achieve productivity gains more safely than current methods.

Delivering a new performance standard

ColdBlock™ Digestion dissolves solid matter into solution for multi-element analysis. It is the first sample digestion technology to use focused, short-wave infrared radiation(IR) to energize sample particles.

The cooling block is essential to promote a condensation effect to minimize the escape of vapors created by this rapid heating and digestion process.

ColdBlock™ Digestion is applicable to numerous industries including:



Environmental



Pharmaceuticals



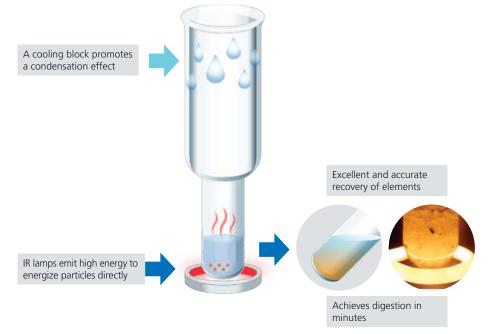
Mining



Metals and alloys



Food and agriculture



Exceptional product performance

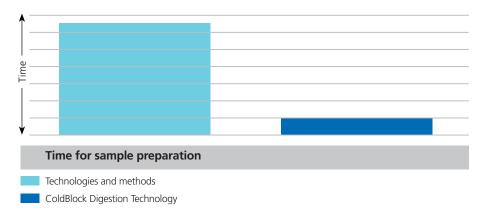
- High accuracy and reproducibility
- Very rapid sample digestion (minutes)
- Safe (no hydrofluoric and perchloric acid in the digestion process)
- Low volume reagents required
- Versatile sample size (0.2-30g)*

^{*0.2-30}grams validated. Higher and lower sample sizes are possible.

Bringing substantial benefits to multiple industries

ColdBlock™ Digestion shortens sample preparation time, accelerates sample throughput and achieves productivity gains more safely than current methods:

- Shortens sample preparation time to minutes
- Unmatched sample throughput and productivity
- Reduces environmental impact
- Higher occupational safety
- Accelerates decision-making



Products

ColdBlock Technologies offers a suite of products to suit your sample digestion needs. Built with the modern laboratory setting in mind, the modular design of the 12 and 15 channel units allow you to customize your sample digestion process depending on the required throughput.

Product features and accessories:

- Upper cooling block
- Lower heating chamber
- Anodized aluminum housing
- Electronic control box
- Test tubes and racks
- Modular design
- Small and large sample size applications
- CE and CSA Inspected

Technical requirements:

- Single phase 240V/30A/60Hz electrical supply
- Fume hood or comparable ventilation system

ColdBlock™ digestion technology product lines

Models	Capacity	Modular Expansion	Sample Size
CBL12L	12 channel system	24 channel workstation	Up to 30g
CBS15S	15 channel system	30 channel workstation	Up to 5g



CB12L

"The science behind ColdBlock allows us to prepare samples for analysis in a surprisingly short time. Digestions take less than 15 minutes and results are comparable with those from other, usually slower, digestion technologies. Coupled with the elimination of perchloric acid, and the overall reduction in the volume of acids needed, makes ColdBlock a greener and safer technology."

Dr. Ian D. Brindle Professor of Chemistry at Brock University