

Sample Preparation

**Efficient, automatic, fast,
safe for the operators**

Grinding

Dilution

Furnace

Press

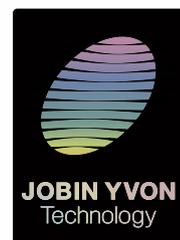
Fusion

Digestion



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Vigorous Vertical Shaker Mill Genogrinder

Grinding up to 384 samples by titer plates, or 16 samples by centrifugation. Grinding completed in 1-2 minutes with adjustable speed between 500 and 2000 strokes/min. DNA/RNA preservation during the cells' grindings, cryogenic station available as an option.

Main applications:
QuEChERS method, pesticides analysis, plant and animals tissues, bacteriology, DNA/RNA extraction...



Disc Grinder Shatterbox

Grinding of 2 g to 100 g samples down to 20 µm grains. Possibility to grind three samples simultaneously. Fast and extremely repeatable grindings.

Main applications:
Mining samples, cements, geology...

Ball Mill Mixer Mill

Grinding of 0.2 g to 20 g of sample down to nanometer size, emulsion production up to 60 ml volume and powders blending. Containers available as an option to fit specific applications. High shaking speed of 675 cycles/min.

Main applications:
Rocks, cement, ceramic, catalysts, pigments, emulsions...



Pelletizing X Press

Manual or automatic presses over 25 tons. Pellets obtained in less than two minutes. Dedicated to XRF, IR & GD analysis. Accessories and prepaid binders available.

Main applications:
Mining samples, cements, geology...

Cryogenic Grinder Freezer Mill

Grinding of 0.6 g to 200 g of sample down to 500 µm grains. Grinding temperature of -190°C (liquid nitrogen) adapted to samples difficult to be ground at ambient temperature. No cross contamination. DNA/RNA and volatile compounds preservation.

Main applications:
Soft, thermosensitive and fibrous samples, polymers, electronic compounds, DNA/RNA extraction...



Borate Fusion Single & Six Positions Electric Fluxer

Electric glass disks fluxer, No gas needed. Up to 36 samples/hour. Automatic and homogeneous preparation of glass disks for XRF and alkaline fusions for AA and ICP analysis. Extremely safe for users.

Main applications:
Cement, aluminas, limestones, ores, slags, sediments, grounds, rocks, ceramics, pigments, glasses, metals... céramiques...

Automatic Sample Dilution QPrep

Dilution up to 360 samples per cycle. Standards preparation for ICP, OES, ICP-MS, AA. Minimize pipetting errors. Improve productivity, precision and accuracy.

Main applications:
Geology, metallurgy, environment, food chemistry, cosmetic, biochemistry, biology...



Sample Digestion Vulcan

Automation of all digestion steps, from reagents' addition to dilution into samples analysis racks. Up to 144 samples per digestion cycle. Sample preparation dedicated to ICP and AA analysis.

Main applications:
Geology, metallurgy environment, food, cosmetic, biochemistry, biology...

Microwave QLabPro

For samples mineralization, extraction, evaporation or synthesis. Up to 30 samples digested per cycle. Heating capacity: 230°C.

Main applications:
Geology, metallurgy, environment, food chemistry, cosmetic, biochemistry, biology...



Tubular and Muffle Furnace

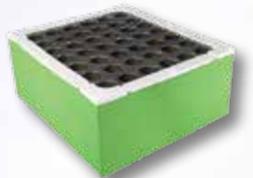
Temperature up to 1100°C with possibility of fast combustion and temperature ramps. Muffle furnace chamber capacity: 5 to 23 liters. Tubular furnace: available length: 130, 250 and 400 mm, available internal diameter: 15, 25 or 38 mm.

Main applications:
Crucible burning for C/S analysis, surface samples and/or crucible decontamination...

Nickel Capsules Press

For reproducible and easy folding of Nickel capsules.

Main applications:
Powders, ceramic, titanium... For elemental analyzer, mainly O,N,H.



Heating blocks Qblock

Heating up to 230°C. Polypropylene, glass or Teflon tubes available. Standard or customized blocks for tubes from 15 to 200 ml. Able to control the temperature on one tray only, or use ramps for difficult samples. Also can control four blocks simultaneously. Completely compatible with the digestion station VULCAN.

Main applications:
Geology, metallurgy, environment, food, cosmetic, biochemistry, biology...

Certified reference materials

Calibrate, control, validation for

ICP, AA, ICP-MS, GC, HPLC, CI, XRF, GDS, CS & ONH analyzers

- ◆ Different sources according to techniques and accreditation requirements
- ◆ Mono or multi-elements reference materials
- ◆ Custom standards
- ◆ Reference materials traceable to NIST
- ◆ Stability of solutions guaranteed for 12 or 18 months
- ◆ 10,000 standards reference: liquids, chips, powders, blocks, disks



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