



C3 PROZESS- UND  
ANALYSENTECHNIK GmbH

PRODUKTINFORMATION

# SPEX SamplePrep Katanax Fluxer K1 Prime<sup>®</sup>

Schmelzaufschlussgerät



**K1**  
PRIME

# FUSION WITHOUT FLAMES®



The furnace heats the sample in the crucible.

## WHY CHOOSE ELECTRIC FUSION FOR GLASS BEADS?

Founded in 2002, Katanax has established itself as the leader in electric fusion equipment. Our fluxers combine exceptional fusion accuracy with all the advantages of electric power:

- ▶ Safety
- ▶ Simplicity
- ▶ Versatility
- ▶ Easy installation
- ▶ Temperature control
- ▶ Quick maintenance

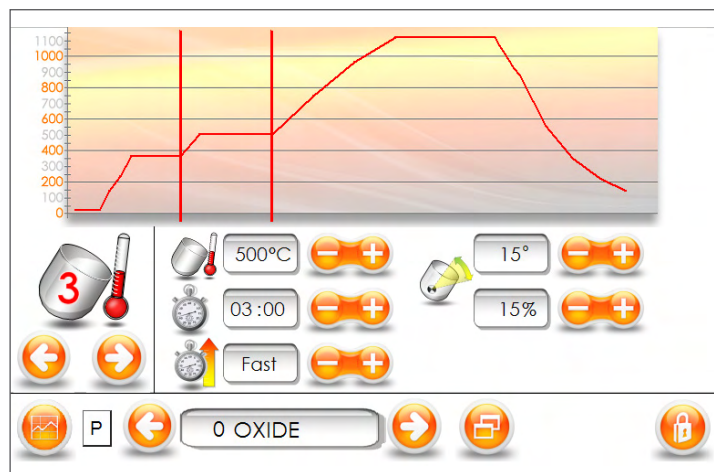
Katanax fluxers allows you to save time and money while obtaining the best possible analytical data from fused samples.

## KATANAX K1 PRIME

The K1 Prime can be used for preparing glass disks (beads) for XRF, or for preparing peroxide or pyrosulfate fusions. It is an electric fluxer that fuses samples without flames. An optional solution stirrer provides for ICP and AA solution making ability. You can also do solid oxidations with the K1 Prime. This unit allows you to achieve a throughput of up to 5-7 samples per hour.

## SAFETY

Electrical fluxers are safer than gas units. There are no pipes, no risk of gas leakage and no open flames. Plus, the K1 Prime's integrated safety shield protects the user during the fusion process.



PLC controller allows programming for all parameters.

## EASY INSTALLATION

When you install a Katanax K1 Prime in your lab you only need a 120 VAC or 220 VAC outlet. Just plug it in, choose your program and press start to fuse your sample. There is also USB connectivity for increased convenience and accessibility.

## SIMPLICITY

With minimal training, anyone can use our fluxers. The K1 Prime has a sleek, color, LCD touch-screen interface with icons and menus that makes the operation easy and efficient. It is entirely automated for the ultimate in fusion operations.

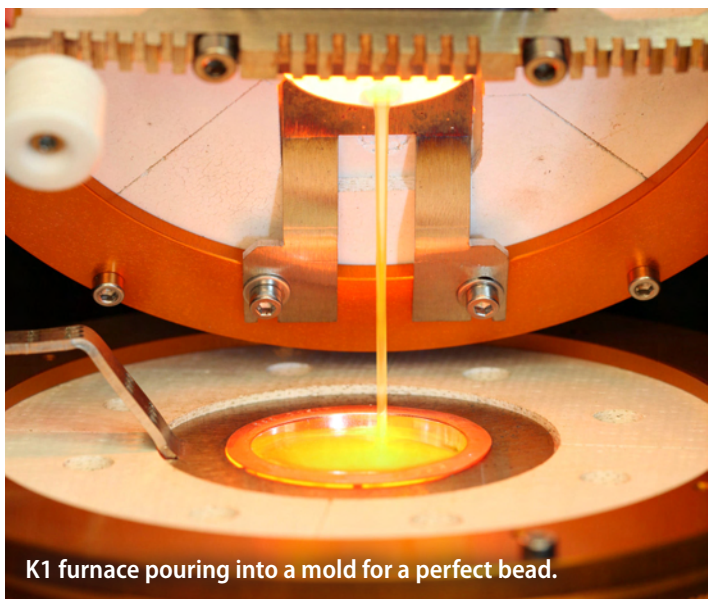


Scan the QR code to see the video or visit [www.youtube.com/sampleprep](http://www.youtube.com/sampleprep).

It comes pre-loaded with various fusion programs that can be used as is or customized for your particular protocol. Pre-loaded programs include:

- ▶ Oxide      ▶ Solution      ▶ Anneal
- ▶ Metal      ▶ Peroxide      ▶ Ramping

All programs can be saved, renamed, deleted or copied, just like computer files. Only the pre-loaded programs are protected to avoid accidental overwriting. These programs are also available in multiple languages.



K1 furnace pouring into a mold for a perfect bead.

### TEMPERATURE CONTROL

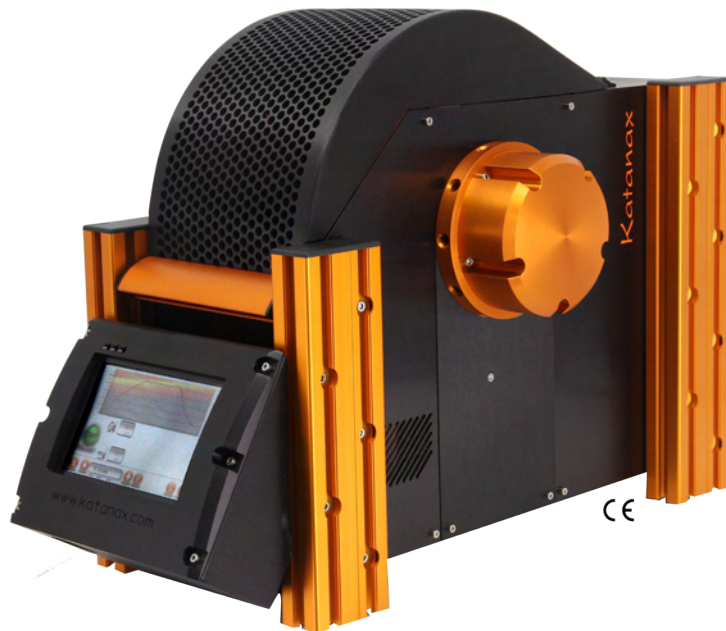
Katanax K1 Prime's electric fusion system has precise electric temperature control. This allows for better reproducibility and a more precise analysis. Analysts will benefit from optimal temperature control and homogenization in the K1 Prime. The mold and crucible have their own independent heating system to provide optimum conditions for pouring. The casing remains cool to the touch without need for a powerful vent hood.

### VERSATILITY

With our optional solutions preparation unit, you can use the K1 Prime in conjunction with your ICP and AA spectrometers in addition to your XRF. Borate and peroxide fusions, followed by acid dissolution, is the fastest way to get your refractory samples to your spectrometers.

### QUICK MAINTENANCE

Furnace heating elements are easily accessed through a removeable side panel to make replacement simple. Quick release crucible and mold holders allow for easy cleaning and part replacement.



### KEY APPLICATIONS

- ▶ Mining & geological samples
- ▶ Cement, lime & limestone
- ▶ Catalysts, glass & ceramic
- ▶ Ores & slag
- ▶ Ferroalloys & non-ferrous alloys
- ▶ Pharmaceuticals & cosmetics

### TECHNICAL SPECIFICATIONS

- VOLTAGE:** 110-127 VAC      **HEIGHT:** 39.5 cm (15.6")
- 220-240 VAC (50-60 Hz)      **WIDTH:** 27.5 cm (10.9")
- POWER:** 1300 W      **DEPTH:** 58.5 cm (23.1")
- WEIGHT:** 30 KG (66 LBS)

### COMPLETE K1 PRIME KIT

- ▶ K1 Prime fluxer unit
- ▶ Mold heating/cooling unit
- ▶ Mold holder
- ▶ Instruction manual
- ▶ Maintenance kit
- ▶ USB drive for recipe backup and updating firmware



# ANOTHER GREAT KATANAX PRODUCT!



Scan the QR code to see the video or visit [www.youtube.com/sampleprep](http://www.youtube.com/sampleprep).

## The K2 Prime is the ultimate six position fluxer

The Katanax K2 Prime fluxer is a six-position, fully automated, electric fusion machine. It has a throughput of up to 24-30 samples per hour. Ideal for preparing fused beads for XRF analysis and solutions for AA, ICP, and wet chemistry analysis. Typical samples include cement, clinker, ores, slag, refractories, ceramics, catalysts, glass, rocks, minerals, and soils.

### FEATURES INCLUDE:

- ▶ Color, LCD touch-screen interface with real-time temperature display.
- ▶ Molds and crucibles are heated in the closed electric furnace simultaneously, ensuring optimum conditions for pouring.
- ▶ Automated control of fusion parameters including heating time and temperature, mixing time and rate, cooling time for glass disks or stirring time for solutions.



**K2**  
PRIME

## PLATINUM LABWARE & FUSION FLUX



We supply platinumware and fusion flux to process your samples. Our platinum crucibles and molds are available standard or reinforced varieties. Various mold sizes are available including 30mm, 32mm, 35mm and 40mm. Our Fusion flux is superior micro-bead and pre-fused. Its available with or without integrated non-wetting agents (LiBr or LiI). Options available are pure (99.93%) or ultra pure (99.998%).

## CONTACT US

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## METHOD DEVELOPMENT PROGRAM

Our method development program allows you to send your samples to us and our application chemists will develop a fusion protocol for you. Contact your local Katanax office for more information.



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