



## High-Frequency Induction Fusion System



Sample preparation is the main error source for XRF measurement. With high temperature, the fusion system can fuse samples into even glass slide. It can reduce the sample error arisen from mineral effect, particle effect and unevenness. Fusion system has been widely used as a necessary device for XRF sample preparation. High-frequency induction fusion system has some features, like good repeatability, high precision, short sample preparation time, low cost and so on. It has been widely used in iron & steel, metallurgical, cement, inspection, chemical and other industries.



### ***Model:***

- FFV 2D**
- FFV 2D+**
- FFV 4D**
- FFV 4D+**
- FFV 8C**

## Features:

- Quick sample preparation, 6-10 minutes for every sample preparation including cooling time.
- Moulding method to lower crucible cost.
- Manual or automatic moulding can be selected by customers.
- Automatic moulding can decrease interference.
- Shaking and pouring can let sample mix completely.
- Applying PLC controller with life more than 100000 hours.
- Touch-screen is easy for operation.
- Safe operation with exhaust system.
- Without preheating or keeping temperature.
- Real-time infrared temperature measurement.

## Indicators

| Model  | Sample No. | Moulding mode   | Dimensions (mm) | Power | Weight |
|--------|------------|---|-----------------|-------|--------|
| FFV2D  | 1          | <b>Manual-</b> moulding mode<br>Single-crucible & single-mould    | 660X700X530     | 4KW   | 40Kg   |
| FFV2D+ | 1          | <b>Automatic-</b> moulding mode<br>Single-crucible & single-mould | 660X700X530     | 4KW   | 40Kg   |
| FFV4D  | 2          | <b>Manual-</b> moulding mode<br>Double-crucible & double-mould    | 660X700X530     | 6KW   | 40Kg   |
| FFV4D+ | 4          | <b>Automatic-</b> moulding mode<br>Double-crucible & double-mould | 780X760X580     | 6KW   | 60Kg   |
| FFV8C  | 4          | <b>Automatic-</b> crucible bottom<br>moulding                     | 780X760X580     | 4KW   | 60Kg   |

## Sample treatment:

- Oxide
- Cement, carbonate, silicate, ceramics, furnace blast, glass, sand
- Geological samples
- Sulfide
- Bauxite, fluoride
- Catalyst
- Pure metal, ferroalloys and other alloys

## Model:FF V2D / FFV2D+



### FFV2D / FFV2D+ Fusion System

Sample preparation is the main error source for XRF measurement. With high temperature, the fusion system can fuse samples into even glass slide. It can reduce the sample error arisen from mineral effect, particle effect and unevenness. Fusion system has been widely used as a necessary device for XRF sample preparation. High-frequency induction fusion system has some features, like good repeatability, high precision, short sample preparation time, low cost and so on. It has been widely used in iron & steel, metallurgical, cement, inspection, chemical and other industries.

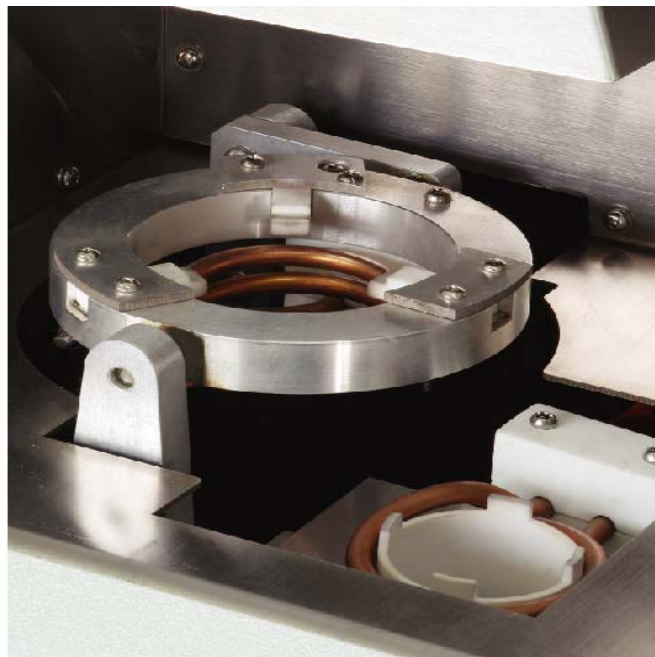
#### **Features:**

- Quick sample preparation, 6-10 minutes for every sample preparation including cooling time.
- Moulding method to lower crucible cost.
- Manual or automatic moulding can be selected by customers.
- Automatic moulding can decrease interference.
- Shaking and pouring can let sample mix completely.
- Applying PLC controller with life more than 100000 hours.
- Touch-screen is easy for operation.
- Safe operation with exhaust system.
- Without preheating or keeping temperature.
- Real-time infrared temperature measurement.



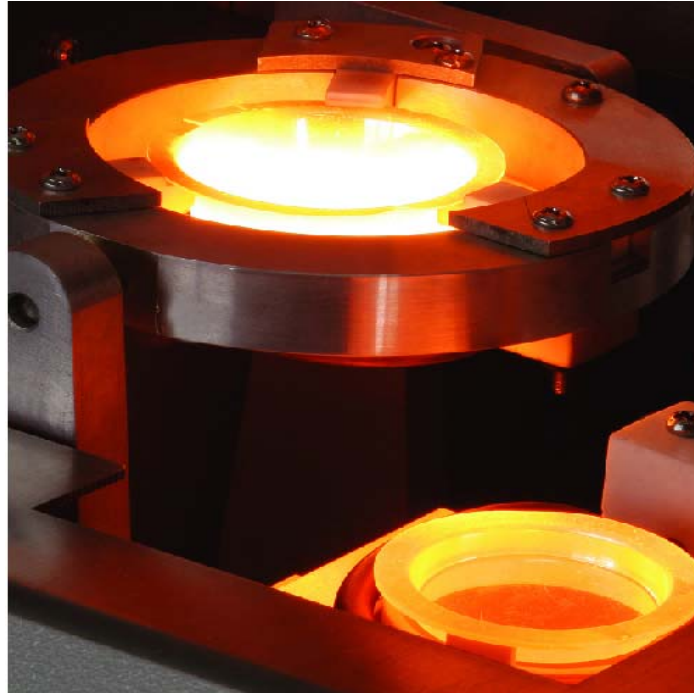
**Technical Specifications:**

| Model  | Sample No. | Moulding mode   | Dimensions    |
|--------|------------|---|---------------|
| FFV2D  | 1          | Manual moulding mode<br>Single-crucible & single-mould    | 660x700x530mm |
| FFV2D+ | 1          | Automatic moulding mode<br>Single-crucible & single-mould | 660x700x530mm |



- Sample preparation speed: 6-10 minutes for every sample, one every time, manual moulding or automatic moulding.
- Temperature raising speed: to arrive about 1000°C within 30-60 seconds.
- Temperature range: 0-1300°C (highest temperature is preset).
- Mixing method: shaking+pouring. Shaking angle is adjustable from 0 to 30°.
- Operation method: with PLC controller. Some fusion methods are preset according to customers' requirements before leaving factory. Max. 20 sample programs can be stored.
- Cooling mode: normal cooling and wind cooling.
- Safety protection: over-pressure, over-current, over-heat and lack-water alarm.
- Heating mode: high-frequency induction heating.
- Shaking frequency: 50Hz-80Hz

- Input voltage: single phase 180-245V, 50-60Hz, input current: 15A
- Dimensions: 660x700x530mm
- Gross weight: 40Kg



***Sample treatment:***

- Oxide
- Cement, carbonate, silicate, ceramics, furnace blast, glass, sand
- Geological samples
- Sulfide
- Bauxite, fluoride
- Catalyst
- Pure metal, ferroalloys and other alloys

## Model: FFV4D / FFV4D+



### FFV4D / FFV4D+ Fusion System

Sample preparation is the main error source for XRF measurement. With high temperature, the fusion system can fuse samples into even glass slide. It can reduce the sample error arisen from mineral effect, particle effect and unevenness. Fusion system has been widely used as a necessary device for XRF sample preparation. High-frequency induction fusion system has some features, like good repeatability, high precision, short sample preparation time, low cost and so on. It has been widely used in iron & steel, metallurgical, cement, inspection, chemical and other industries.

#### ***Features:***

- Quick sample preparation, 6-10 minutes for every sample preparation including cooling time.
- For larger quantities of sample preparation.
- Shaking, self-rotation and pouring can let sample mix completely.
- Moulding method to lower crucible cost.
- Manual or automatic moulding can be selected by customers.
- Automatic moulding can decrease interference.
- Applying PLC controller with life more than 100000 hours.
- Touch-screen is easy for operation. Sample preparation procedures and parameters can be set easily.
- Safe operation with exhaust system.
- Without preheating.
- Real-time infrared temperature measurement.



### ***Technical Specifications:***

| Model  | Sample No. | Moulding mode   | Dimensions    |
|--------|------------|---|---------------|
| FFV4D  | 2          | Manual moulding mode<br>Double-crucible & double-mould    | 660x700x530mm |
| FFV4D+ | 2          | Automatic moulding mode<br>Double-crucible & double-mould | 720x780x580mm |



- Sample preparation speed: 6-10 minutes for every sample, 2 samples every time, manual moulding or automatic moulding.
- Temperature raising speed: to arrive about 1000°C within 30-60 seconds.
- Temperature range: 0-1300°C (highest temperature is preset).
- Mixing method: shaking+self-rotation+pouring. Shaking angle is adjustable from 0 to 30°.
- Operation method: with PLC controller. Some fusion methods are preset according to customers' requirements before leaving factory. Max. 20 sample programs can be stored.
- Cooling mode: normal cooling and wind cooling is helpful to get good shaping.
- Safety protection: over-pressure, over-current, over-heat and lack-water alarm.

- Heating mode: high-frequency induction heating.
- Shaking frequency: 50Hz-80Hz
- Input voltage: single phase 180-245V / Three-phase 342-418V, 50-60Hz, input current: 30A/20A
- Dimensions: 660x700x530mm OR 720X780X580MM
- Gross weight: 40Kg OR 60Kg



### ***Sample treatment:***

- Oxide
- Cement, carbonate, silicate, ceramics, furnace blast, glass, sand
- Geological samples
- Sulfide
- Bauxite, fluoride
- Catalyst
- Pure metal, ferroalloys and other alloys



## Model: FFV8C



### FFV8C Fusion System

Sample preparation is the main error source for XRF measurement. With high temperature, the fusion system can fuse samples into even glass slide. It can reduce the sample error arisen from mineral effect, particle effect and unevenness. Fusion system has been widely used as a necessary device for XRF sample preparation. High-frequency induction fusion system has some features, like good repeatability, high precision, short sample preparation time, low cost and so on. It has been widely used in iron & steel, metallurgical, cement, inspection, chemical and other industries.

#### **Features:**

- Quick sample preparation, 6-10 minutes for every sample preparation including cooling time.
- For larger quantities of sample preparation. 4 samples every time.
- Can run for 24 hours without break.
- Automatic crucible bottom moulding to raise sample preparation efficiency.
- Shaking and self-rotation can let sample mix completely.
- Applying PLC controller with life more than 100000 hours.
- Touch-screen is easy for operation. Sample preparation parameters can be set or changed easily.
- Safe operation with exhaust system.
- Without preheating.
- Real-time infrared temperature measurement.



### ***Technical Specifications:***

| Model | Sample No. | Moulding mode                      | Dimensions    |
|-------|------------|------------------------------------|---------------|
| FFV8C | 4          | Automatic crucible bottom moulding | 720x780x580mm |



- Sample preparation speed: 6-10 minutes for every sample, 4 samples every time, automatic crucible bottom moulding.
- Temperature raising speed: to arrive about 1000°C within 30-60 seconds.
- Temperature range: 0-1300°C (highest temperature is preset).
- Mixing method: shaking+self-rotation. Shaking angle is adjustable from 0 to 30°.
- Operation method: with PLC controller. 7 fusion methods are preset before leaving factory.

Max. 20 sample programs can be stored.

- Cooling mode: normal cooling and wind cooling.
- Safety protection: over-pressure, over-current, over-heat and lack-water alarm.
- Heating mode: high-frequency induction heating.
- Shaking frequency: 50Hz-80Hz
- Input voltage: Three-phase 342-418V, 50-60Hz, input current: 10A
- Dimensions: 720X780X580MM
- Gross weight: 60Kg



### ***Sample treatment:***

- Oxide
- Cement, carbonate, silicate, ceramics, furnace blast, glass, sand
- Geological samples
- Sulfide
- Bauxite, fluoride
- Catalyst
- Pure metal, ferroalloys and other alloys