

# Data Sheet

## Free Swelling Index Furnace, FSI



### INTRODUCTION

The Swelling Index Furnace, often simply called the free swelling Index (FSI) or Crucible Swelling Number (CSN), measures the swelling behaviour of materials.

Free Swelling Index is determined by comparing the size and shape of the coke button with a chart of standard profiles and scaling a value from 0 to 9 at an interval of 0.5

### STANDARD FEATURES

- | Maximum temperature: 900 °C.
- | Continuous operating temperature: Up to 850 °C.
- | Top opening furnace as per ASTM D720, BS ISO 501 & ISO 501.
- | RCD (Residual current device) is fitted to provide enhance operator safety.
- | Uses high power resistance heating element.
- | Excellent temperature stability and quick temperature ramping.
- | Energy efficient, high quality, low thermal mass insulation.
- | Temperature measurement by using with 'N' type thermocouple.
- | High end Microprocessor PID temperature controller to maintain the required temperature.
- | A set of Crucible and lid supplied as standard for swelling test as per the dimensions given in the test standard.
- | Wire Crucible holder supplied as standard.



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### STANDARD SUPPLY

- | Free Swelling Index Furnace, FSI
- | Silica Crucible – 1 No.
- | Silica Crucible lid – 1 No.
- | Crucible Holding wire, FSI – 1 No.
- | Instructions manual – 1 No.

### OPTIONAL FEATURES

- | Over Temperature controller.
- | Ceramic Cooling block for cooling crucibles.
- | Analytical Balance.

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