

Determining the heat passage through heat protection clothing exposed to fire.

A horizontally fixed specimen is panned over a gas burner flame and exposed to an impacting heat flow density of 80 kW/m². The heat that passes through the specimen is measured by a calorimeter. The time needed for a temperature rise in the calorimeter of 12° C and 24° C respectively is measured. The heat transfer index is calculated as an average value from the results of three specimen. The device consists of the burner, the cover sheet and the specimen holder with calorimeter. The device is controlled via pneumatic transmission which is controlled by a software. The software includes the calculations and evaluation of the standard. The software can also turn the propane gas supply to the burner on and off. For security purposes the burner is equipped with electronic pilot flame safety which is provided by a thermocouple. The power supply for the controller is provided by an IEC-320 AC power cordset 230 VAC (50/60 Hz).

Delivery includes

- Burner with needle valve
- Test instrument with pneumatic drives
- Sample holder and heat shield
- Temperature and humidity sensor
- USB interface with multifunction data acquisition module, 12 bit resolution
 LabVIEW ISO 9151-based software for Windows 7 / Vista / XP. PC not supplied.



