

Underwriters Laboratories Inc.

Working For A Safer World

Application of Fire Test Data

Who



Stakeholders

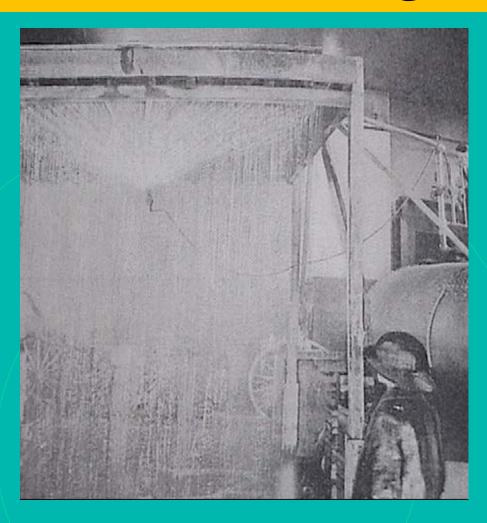
What are the Needs

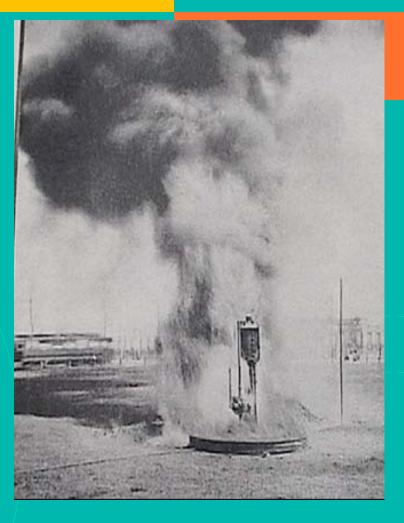


- Fire Behavior Research
- Fire Mitigation and Fire Suppression Research
- Product / Commodity Storage Research
- Product / Commodity Material Research
- Building Design Research w.r.t. Building Materials
- Building Design Research w.r.t. Suppression and Extinguishment
- Fire Loss Reproduction / Simulation / Evaluation

When was the need realized? Some time ago.....







Where





Where





HOW - Testing Methods



Used if Available.

Developed if Needed.









Types of Activities



- **Commodity**
 - Packaging
 - Storage Methods and Conditions
- Sprinkler Issues
 - Spacing, Flow, Activation
 - Combined Effects
 - L Clearance, Aisle space, Stability,

Products Collector







Large Scale





Large Scale







Application of data



- **L** Commodity
 - HRR
 - Reaction to Agent
- L Sprinklers
 - L Spacing, Flow, Activation
 - Data Analysis
 - Computer modeling

Data Analysis

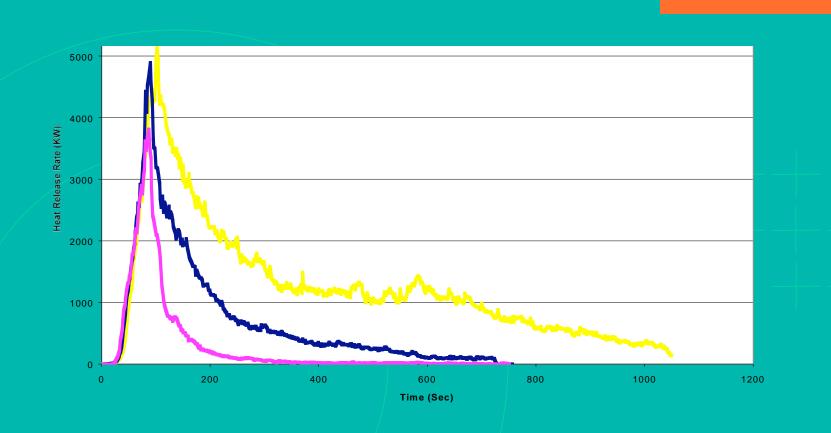


- **L** Commodity
 - HRR
 - Reaction to Agent
- Sprinklers
 - Spacing, Flow, Activation
 - Data Analysis
 - Computer modeling

Data Analysis –

Underwriters Laboratories Inc.®

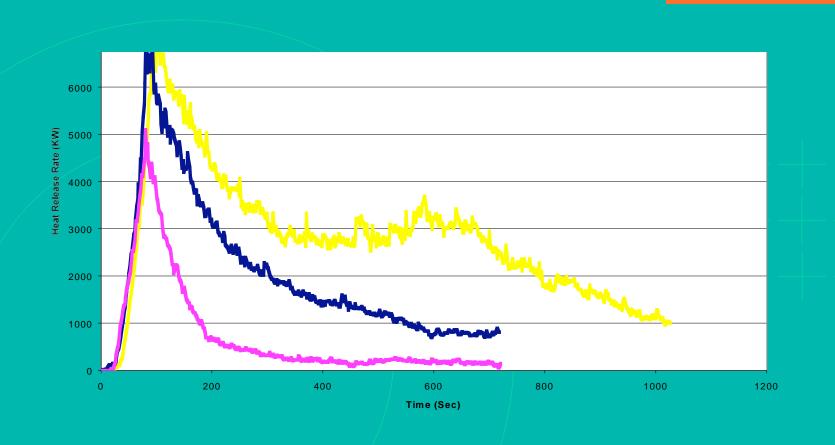
Convective HRR



Data Analysis –

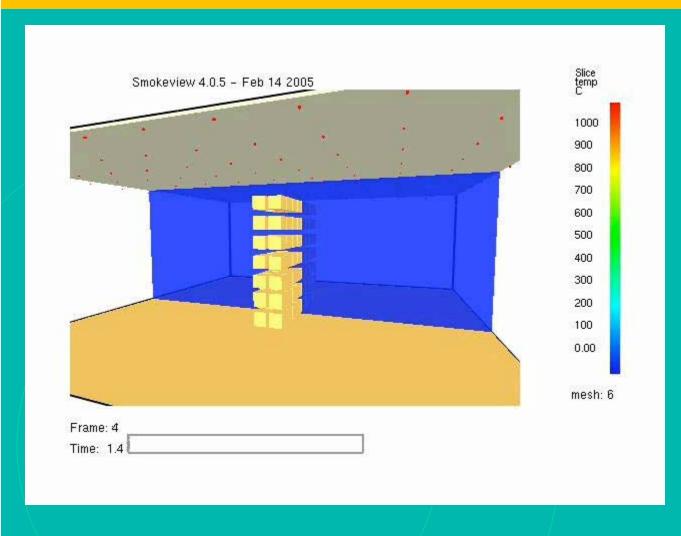
Underwriters Laboratories Inc.®

Total HRR



Computational Analysis





FDS

Data Analysis







Questions



Ignis Servus Non Dominus

Fire is the Servant Not the Master



Ok---here is one



