Brandforsk-Swedish Fire Research Foundation

Vision: A fire safe society based on knowledge

Formed 1979: During 39 years sponsored projects for about 23 million EUR

Independent: The projects are open and the results are publicly available

Finance: SBF, the Swedish Fire Protection Association, MSB – Swedish Civil Contingencies Agency, insurance companies and many other organisations

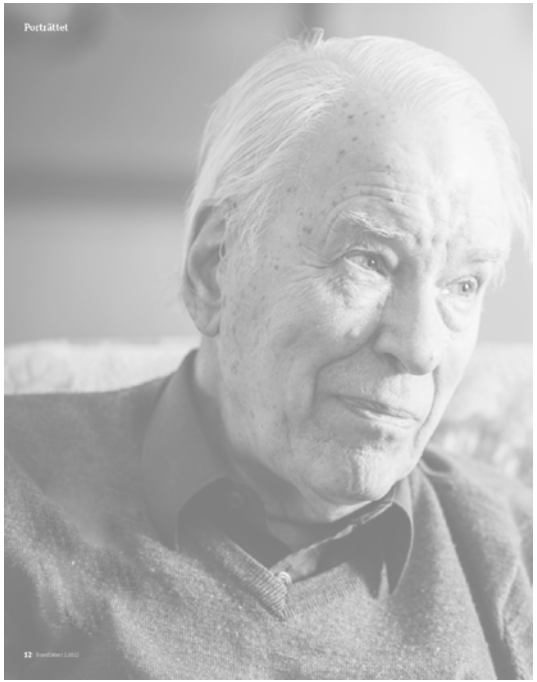
Chairman of the board: Björn Sundström

How have Brandforsk activities contributed?

At start 1979 there was hardly any Fire Research in Sweden except for a handful of researchers in Lund University doing high quality work on fire resistance. There was a limited education of fire engineers in Stockholm

Now there are two university programs for fire engineers; in Lund and Luleå. Fire research is at the order of 6-8 million EUR per year in Sweden performed at RISE and a handful of universities.

Brandforsk research funding is now a minor part of the full extent but at start Brandforsk was the spark and the major funding source for this development.

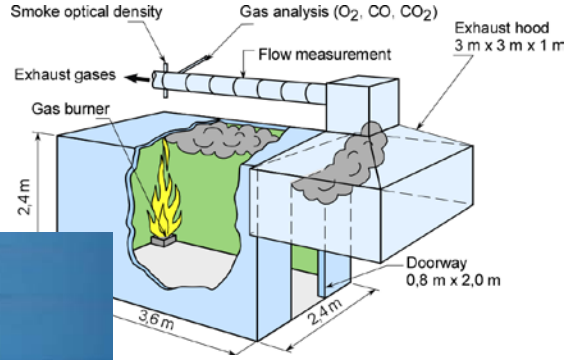


Some Brandforsk projects of importance

Study of ***preflashover fires*** during the early 80ies. Development of HRR measuring technique to a routine operation, room fire test ISO 9705 used in IMO regulations and as reference scenario for development of the Euroclasses under the CPD/CPR. Modelling using the cone calorimeter.

Sprinkler and water mist technology as basis for IMO regulations for ships

Recent work for Sweden; ***School arson fires, dwelling fires, PhD programme for fire brigades***



Why sponsor fire research?

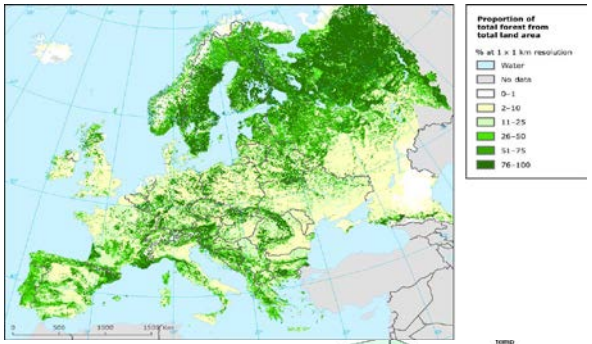
Every penny makes a difference since

Driver for new knowledge and education

Fire Research is a small discipline and not very developed

Dissemination of knowledge is scarce

Funding is small, fragmented and shows up as subtasks in projects studying other problems



Benefits

Education; fire engineers, PhD:s, fire research centres

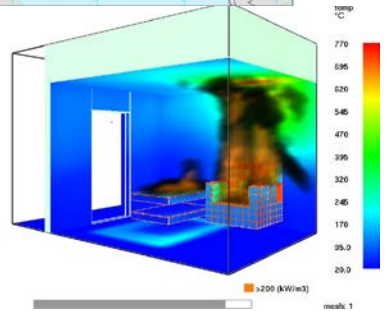
More of basic fire dynamics and fire modelling

Scientific support to regulations and test methods.

Validation of test standards and classification criteria

Proactive problem solving and innovative solutions

Increased safety, sustainability, reduced costs for fires



Examples of good use of international fire research sponsored by EU and others

A number of EU-projects have formed a basis for fire requirements in the CPR.

Projects on decision making, e.g. Casceff, Improver, during catastrophic fires useful for example in forest fires.

Prenormative research creating standards in IMO, EU for shipping, trains etc

Computational fluid dynamics, CFD modelling