

Water mist for travelling oven protection

International Water Mist Association

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Zurich Risk Engineering





Is it in service?

Will it work?

Is it designed right?

Travelling ovens



Property Assessment - Fire

A site based assessment considering property fire exposures and their controls

Construction	Fire divisions Building combustibility
Management programs	Hot work / contractor controls Housekeeping & smoking controls Training Maintenance practices Management programs
Fixed fire detection and protection	Fixed fire protection incl. sprinklers Fire detection
Utility and incidental hazards	Electrical systems and equipment Heating & cooling Incidental hazards
Process hazards	Control of process hazards Flammable liquids, gases and dusts
External exposures / arson	External exposures Arson Yard storage
Manual fire fighting	Fire team Fire brigade & water supply

Conducted by a Zurich risk engineer, the assessment would include discussions with site staff to understand site exposures and controls, a detailed tour of the site and closing meeting to communicate initial findings, considering:

Loss estimates

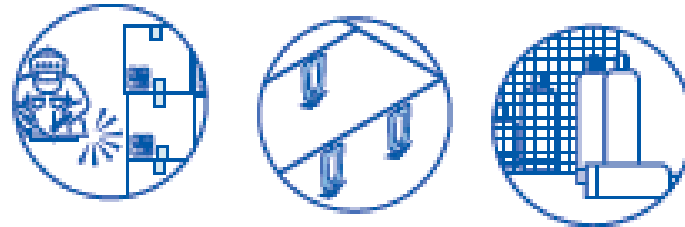
To identify the potential loss from a fire event + also Natural Hazards, Business Interruption, Machinery Breakdown.

Grading

To assess risk quality

Risk improvement actions

To improve risk quality



Property Assessment (Fire) - Risk Grading

Free App – Zurich Risk Advisor



Zurich Recognised Technology

Fit for Purpose

The terms approved, certified, and listed are used interchangeably

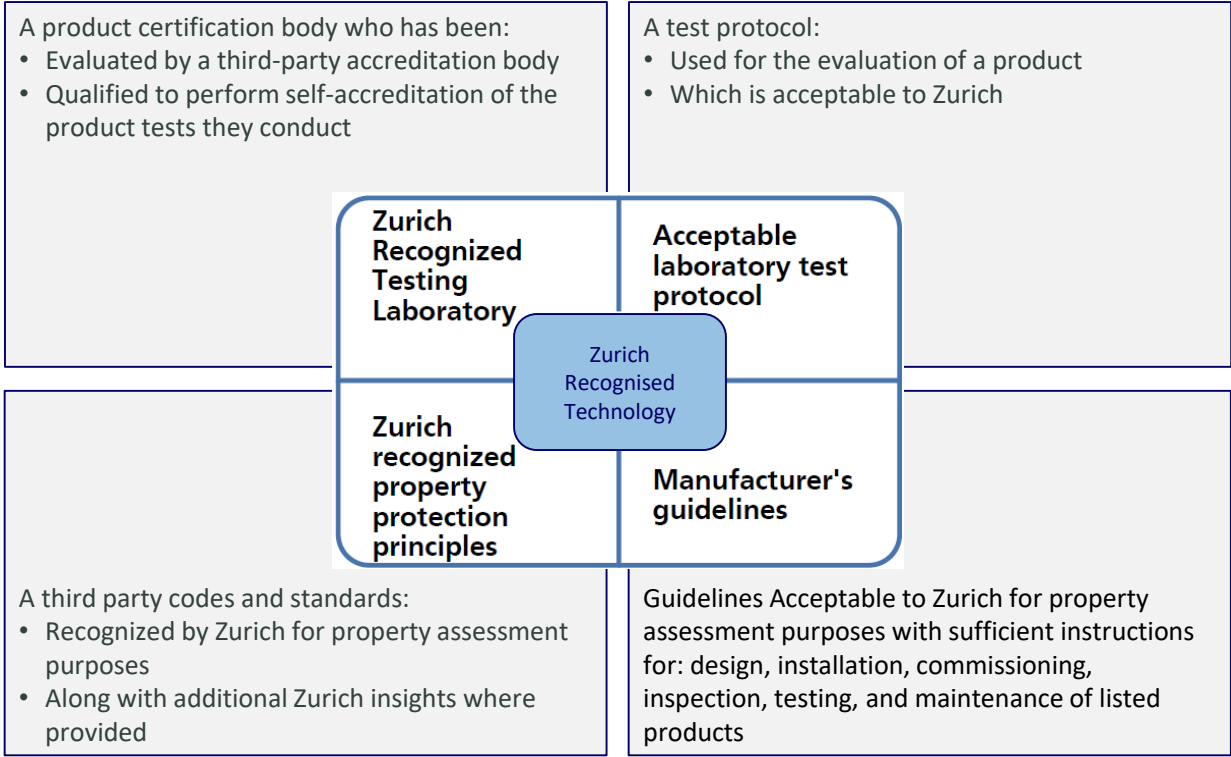


Image source: Rich Gallagher, The Zurich Services Corporation



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. 42 737 - 02 HH

TECHNICAL DATA:

Operating pressure: Rated working pressure 120 bar

Main components: High-pressure pump unit consisting of at least two pumps (each 120 l/min), jockey pump, s/s water break tank, pressure manifold and control cabinet; accumulator cylinder unit (water/nitrogen cylinders), section valves, spray heads (nozzles), s/s piping.

Spray head details: Open (deluge) type; stainless steel or brass body, with five built-in s/s micro-nozzles for ceiling mounted nozzles and with seven built-in s/s micro-nozzles for doorway nozzles.

Nozzle designation	k-factor	Spacing [m]	Nozzle location
DK5-01	0.30	4.0	Ceiling
DK7-01/04	0.52	*	Doorway manifold
DK7-05	3.09	*	Doorway manifold
DK7-01/02	0.44	*	Doorway manifold

* Number, sequence, spacing and angle of the nozzles as per FOGTEC type approval documentation

Other details of the system acc. to FOGTEC type approval documentation.

DOCUMENTS:

FOGTEC type approval documentation, reviewed with our Ref. No. 056596/02 dated 2002-07-03

SINTEF test report on fire testing, report no. NBL10 F02114 dated 2002-04-25

SINTEF test report on measurement of nozzle head k-factors, report no. NBL10 F01107 dated 2001-08-15

Component testing, report of FM, project ID. 3013735 dated 2002-03-29

Clogging tests, witnessed by GL, test report dated 2001-04-04.

Valid until 2010-06-10

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Type Approval Symbol



File No. II.H.01

Hamburg, 2007-06-27

Germanischer Lloyd

Günter Hölzer

Michael Kämpi

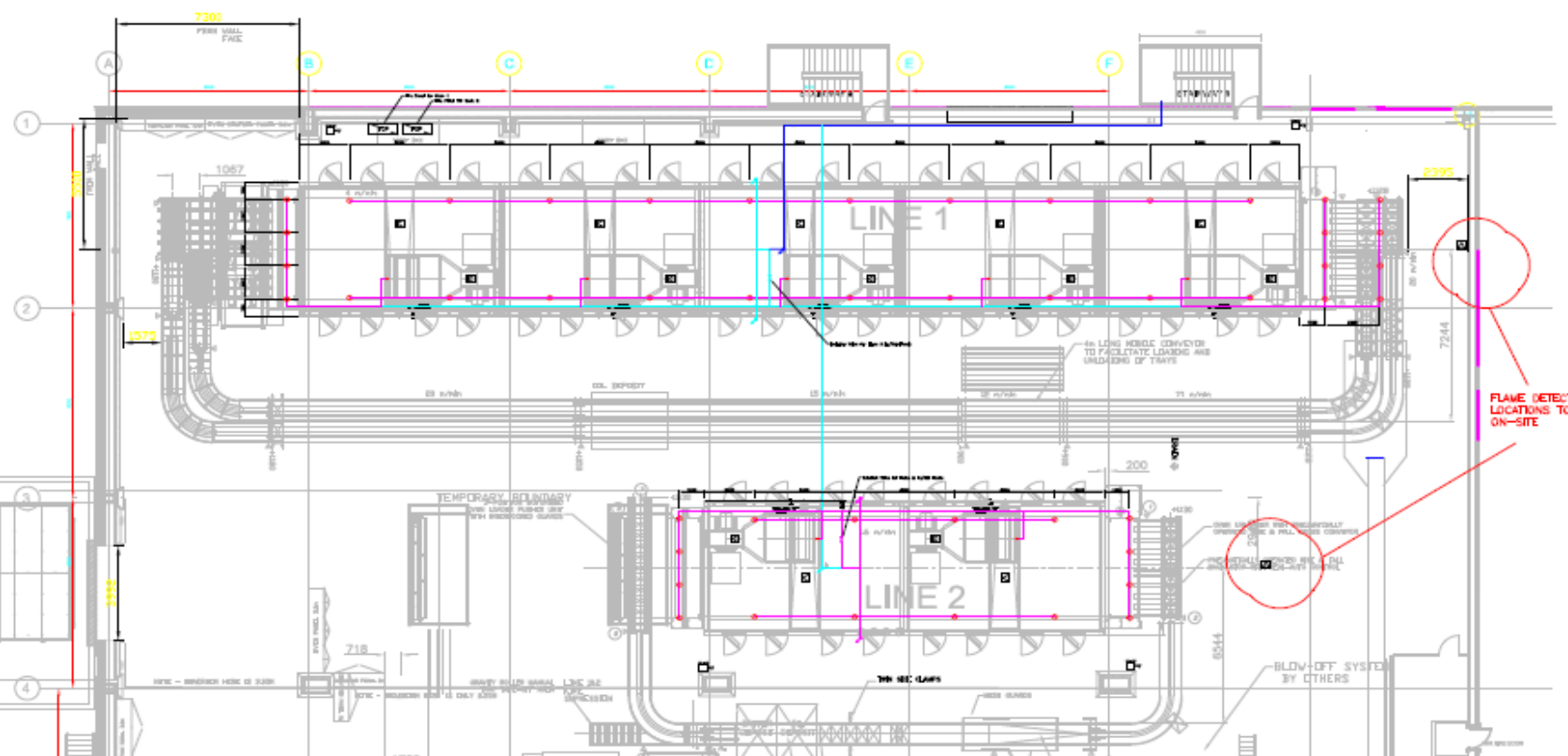
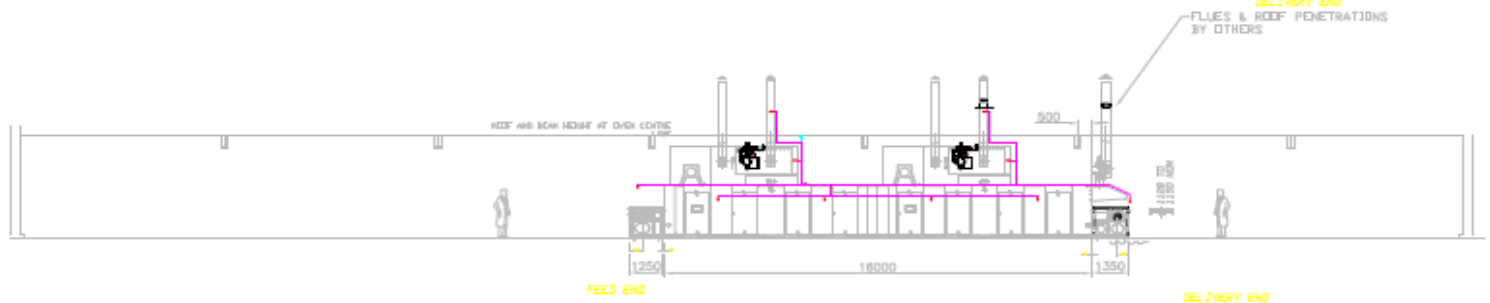
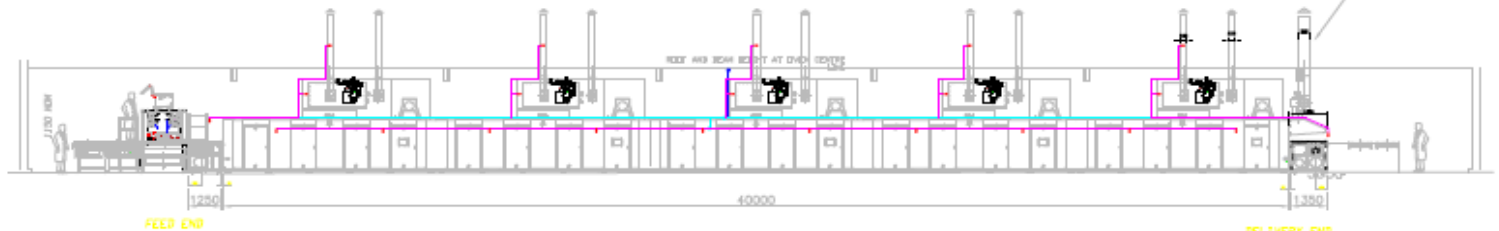
This certificate is issued on the basis of 'Guidelines' or the 'Performance of Type Approvals Part 1, Procedure'.

Challenges

Specification

- Pump N + 1
- Pump power supply
- Detection
- ITM
- Listed/certification components
- FHC
- Test data
- Cause and effect logic
- Will it work?
- Contractor competency
- Plan review - AHJ





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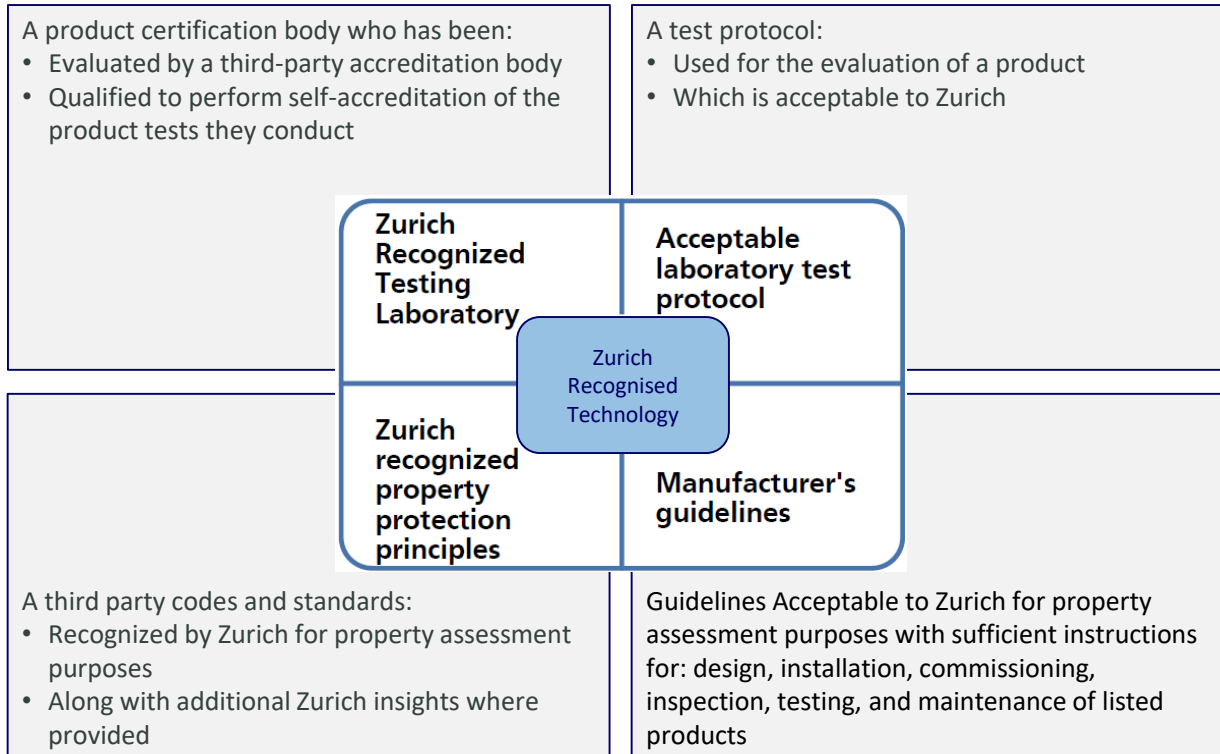


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