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REPORT DATE

2004-06-01

# TEST REPORT

TITLE / TEST METHOD

Fire test of fire protected cabinets and data containers. according to NT FIRE 017

PRODUCT NAME

BS-D510, BS-D750, BS-D1200

CLIENT(S)

Booil Safes Co., Ltd # 1069-13. Ubang-Dong Kimhae-city. Kyungnam Korea

CLIENT REF.

James Lee / Booil Safes and Håkon Hattestad / SafeCo

PROJECT MANAGER (NAME, SIGN.)

Shein Lannuselt Øystein Sommerst

TEST DATE 2003-12-07 APPROVED BY (NAME, POSITION, SIGN.)

Jamehen Ulf Danielsen, Discipline Manager

TOTAL NO. OF PAGES

31

### ABSTRACT

One test was performed, with the intention of fire testing of 3 fire protected cabinets with data containers.

- Cabinet BS-D 1200 had outer dimensions of 700x635x1200mm (wxlxh), and consisted of a concrete insulated steel cabinet. Inside the cabinet two portable data containers from SafeCo were located.
- Cabinet BS-D 750 had outer dimensions of 530x515x750mm (wxlxh), and consisted of a concrete insulated steel cabinet. The cabinet was installed with an inner particleboard based data container, filling the internal space.
- Cabinet BS-D 510 had outer dimensions of 343,4x399,6x498,4mm (wxlxh) and consisted of a concrete insulated steel cabinet. The cabinet was installed with an inner particleboard based data container filling the internal space.

See constructional details in the test report for more details.

#### TEST RESULTS

Maximum temperature rise	Minutes to exceeding temperature criteria		
	30°C	50°C	150°C
BS-D 1200	7	9	>120
Small Data Container in BS-D 1200	41	54	>120
Data Container in BS-D 1200	49	66	>120
BS-D 750	25	37	107
BS-D 510	19	21	>120

The results presented in this test report may only be quoted in full.

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The test results referred to in this report relate only to the items tested.

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## INSTRUMENTATION OF THE TEST SPECIMEN:

In the bottom of the cabinets a hole of diameter 12mm was taken, for the purpose of instrumentation. The thermocouples of the 1,5mm shielded type were led through, and the hole was sealed with ceramic fibre insulation and ceramic paste. For further shielding, the cabinets were placed on top of ceramic blankets. 6 shielded thermocouples were installed in cabinet no.1 and 2 at distance of 25mm from the centre of each internal surface. Two additional thermocouples were installed inside the data container inside cabinet no. 1. Cabinet no. 2 was instrumented in the same manner as no.1, but since the container filled the entire cabinet, the 6 thermocouples were installed inside the container. Due to small size, Cabinet no. 3 was instrumented with 3 thermocouples. See Figure 1 for details, and pictures on the following pages.

TCo	Location, cabinet 1 BS-D 1200		
78	centre roof		
79	centre left side wall		
80	centre right side wall		
81	centre floor		
82	centre back wall		
83	centre door		
84	centre of lid in container		
85	centre of floor in container		
86	centre of lid in small container		
87	centre of floor in small container		
	Location, container in BS-D 750		
88	centre roof		
89	centre left side wall		
90	centre right side wall		
91	centre floor		
92	centre back wall		
93	centre door		
	Location, container in BS-I0 510		
94	centre roof		
95	centre floor		
96	centre door		

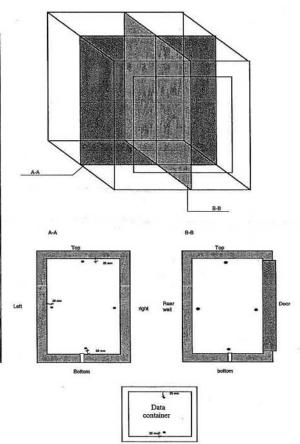


Figure 1: Location of thermocouples. Principle drawing (not in scale). See also pictures on the following pages.



# PRESENTATION OF TEST RESULTS:

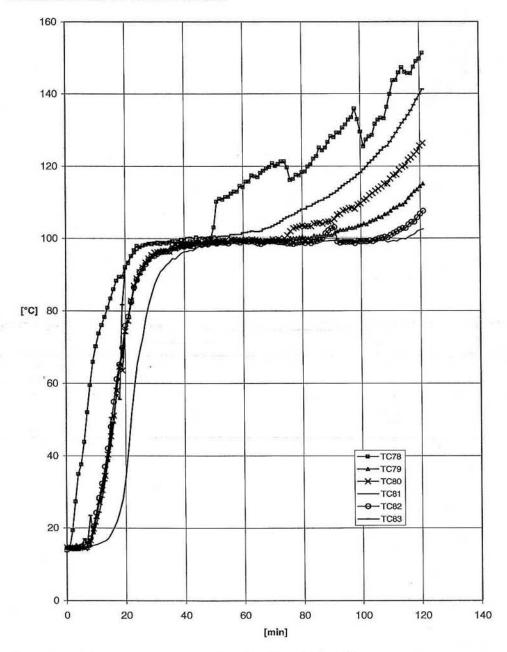


Figure 2 Temperature measurements inside cabinet BS-D 1200