

Customer	Kaso Oy, PL 27, 00751 HELSINKI, FINLAND.
Order	8.12.1986/Kalevi Tirkkonen.
Commission	Submersion and magnetic shielding tests of data safe model DS-4300.
Testing team	Tor Meinander, Paavo Kauhanen, Seppo Pelkonen.
Test methods	<p>1. Submersion test</p> <p>The safe was left submerged for four hours standing on the bottom of a test pool at a water depth of 3 meters. During the test the safe was loaded with steel weights totalling 180 kg, to assure sinking. A prerecorded magnetic memory diskette was also placed in the safe. After the safe was hoisted out of the pool its interior was visually inspected for traces of water or moisture.</p> <p>2. Magnetic shielding test</p> <p>A large permanent magnet was attached to the outside of the safe at different locations. The maximum magnetic field inside the safe was then measured with a Hall probe magnetometer (Bell 640). The specifications of the permanent magnet were:</p> <ul style="list-style-type: none">- strontium ferrite material, Aimants Ugimag type- Spinalor 6H,- dimensions $150 \times 100 \times 93 \text{ mm}^3$,- total magnetic moment 404 Am^2.
Test results	<p>1. Submersion test</p> <p>After four hours of submersion no traces of water or moisture could be found inside the inner door sealing. The memory diskette was intact.</p> <p>2. Magnetic shielding test</p> <p>The maximum magnetic flux density measured inside the safe with the permanent magnet attached to the outer surface, did not exceed 0.8 mT. The safety factor as compared to</p>

3-JP-TM-emh

the IBM recommendation of 1979 (5 mT) exceeds 6. The magnetic moment of the test magnet was large enough to make it very unlikely that a stronger magnetic disturbance could be generated by accident or intentionally without heavy equipment.

Statement


The wall and door structures of the safe models DS-4200 and DS-4400 are identical to the tested safe and therefore the test results given above are obviously applicable to safes of models DS-4200 and DS-4400, too.

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