

DIN EN 1143-1:2019-07 (E)

Secure storage units - Requirements, classification and methods of test for resistance to burglary - Part 1: Safes, ATM safes, strongroom doors and strongrooms

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Classification and requirements	9
4.1	Classification	9
4.2	General requirements	9
4.2.1	Safes, strongroom doors and strongrooms	9
4.2.2	ATM safes	9
4.2.3	Boltwork cover plate	10
4.2.4	Cable hole	10
4.2.5	User instructions	10
4.3	Additional requirements for EX designation	10
4.4	Additional requirements for GAS designation	10
4.5	Additional requirements for CD designation	10
4.6	Additional requirements for T2 designation	11
5	Technical documentation	15
6	Test specimen	16
7	Tool attack test	16
7.1	Principle	16
7.2	Testing team	17
7.3	Apparatus	17
7.3.1	Attack tools	17
7.3.2	Clock	17
7.3.3	Test blocks	18
7.4	Test criteria	18
7.5	Testing programme	19
7.5.1	Free-standing safes	19
7.5.2	Built-in safes	19
7.5.3	Strongrooms	19
7.5.4	ATM safes	20
7.6	Test conditions	20
7.7	Procedure	22
7.8	Operating time measuring	23
7.9	Calculation of resistance values	24
7.10	Test record	24
8	Anchoring strength test	24
8.1	Free-standing safes	24
8.1.1	Principle	24

8.1.2	Loading equipment	25
8.1.3	Procedure	25
8.1.4	Expression of test results	25
8.1.5	Test criteria	26
8.2	ATM safes	26
8.2.1	Principle	26
8.2.2	Loading equipment	26
8.2.3	Procedure	26
8.2.4	Expression of results	28
8.2.5	Test criteria	28
9	EX explosive test	28
9.1	Principle	28
9.2	Test specimen	28
9.3	Explosives	28
9.4	Determination of active explosive charge mass	29
9.5	Conditions for explosive attack test	29
9.5.1	Safes and ATM safes	29
9.5.2	Strongroom doors and strongrooms	29
9.6	Calculation of resistance values for the post-detonation tool attack	30
9.7	Test record	30
10	GAS explosive test	30
10.1	Principle	30
10.2	Test specimen	30
10.3	Gas	31
10.4	Determination of gas charge volume	31
10.5	Test equipment for gas attack testing	32
10.6	Procedure for gas attack testing	32
10.7	Calculation of resistance values for the post-detonation tool attack	32
10.8	Test record	33
10.9	Marking	33
11	Core drilling test	33
11.1	Principle	33
11.2	Test specimen	33
11.3	Apparatus	33
11.3.1	Safes	33
11.3.2	Strongroom doors and strongrooms	34
11.4	Test method	34
11.5	Calculation of resistance value	34
11.6	Marking	34
12	Tool attack test T2	35
12.1	Principle	35
12.2	Marking	35
13	Test report	35
14	Marking	36
Annex A (normative)	Attack tools	38
Annex B (normative)	Attack tools T2	47
Annex C (informative)	Examples for ATM systems and non-ATM systems	52
Bibliography	54