

DIN EN 14983:2024-12 (E)

Explosion prevention and protection in underground mines - Equipment and protective systems for firedamp drainage

Contents	Page
European foreword.....	4
Introduction	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	7
4 Equipment and protective systems for firedamp drainage.....	10
4.1 General.....	10
4.2 Borehole standpipes	10
4.3 Drainage pipes for seals and stoppings	13
4.4 Water separators at drainage points	13
4.5 Firedamp pipes	13
4.5.1 General requirements for firedamp pipes.....	13
4.5.2 Measuring points for measuring equipment in firedamp drainage pipes	13
4.6 Pressure vessels in firedamp drainage plant.....	14
4.7 Pressure generators.....	14
4.7.1 Requirements for pressure generators	14
4.7.2 Reserve pressure generators.....	14
4.7.3 Location of pressure generators.....	15
4.8 Venting of the drained firedamp	15
4.9 Flame arresters in pipelines	15
4.9.1 Flame arresters.....	15
4.9.2 Firedamp vent pipe outlets	16
4.9.3 Firedamp drainage pipe	17
4.9.4 Gas utilization plant.....	17
4.9.5 Reserve container and operating state	17
4.10 Requirements for the design of electrical safety devices	17
4.11 Electrostatic ignition risks.....	18
5 Instructions for installation and use.....	18
Annex A (informative) Installation and use of firedamp drainage system	19
A.1 General.....	19
A.2 Work on firedamp pipes.....	19
A.3 Measures to be taken when gas levels fall below or exceed limit values during firedamp drainage	20
A.4 Failure or shutdown of pressure generators	20
Annex B (normative) Monitoring of firedamp drainage system	21
B.1 Examination and inspection by competent persons	21
B.2 Measurement of the drained firedamp mixture and pressure.....	21
B.2.1 Measurements taken by hand	21

B.2.2	Fixed monitoring equipment.....	21
B.3	Documentation.....	22
B.4	Firedamp circuit plan.....	22
	Annex C (normative) Requirements for location of pressure generators	23
	Annex D (normative) Requirements for degassing equipment for abandoned surface openings.....	24
	Annex E (informative) Example for calculation of t_{90}-path	28
E.1	General	28
E.2	Example for calculation of t_{90}-path	28
	Annex F (informative) Significant Changes between this European Standard and EN 14983:2007	30
	Annex ZA (informative) Relationship between this European Standard and the requirements of Directive 2014/34/EU aimed to be covered.....	32
	Bibliography	35