DIN EN 12566-6:2016-12 (E)

Small wastewater treatment systems for up to 50 PT - Part 6: Prefabricated treatment units for septic tank effluent

Contents

Page

European foreword 5

1 Scope 7

2 Normative references 7

3 Terms, definitions, symbols, units and abbreviated terms 7
3.1 Terms and definitions 7
3.2 Symbols and abbreviated terms 8

4 Products characteristics 9
4.1 Design 9
4.1.1 General 9
4.1.2 Overall dimensions 9
4.1.3 Inlets, outlets, internal pipework and connections 9
4.1.4 Access 9
4.2 Load bearing capacity 10
4.3 Secondary treatment efficiency 10
4.3.1 General 10
4.3.2 Secondary treatment efficiency ratio 10
4.3.3 Microorganism reduction 11
4.4 Watertightness 11
4.5 Power consumption 11
4.6 Durability 11
4.6.1 General 11
4.6.2 Concrete, steel, PVC-U, PE, GRP, PDCPD and flexible sheets 12
4.7 Reaction to fire 12
4.7.1 General 12
4.7.2 Units classified as Class A1 without the need for testing 12
4.7.3 Units classified according to the test results 12
4.8 Dangerous substances 13

5 Testing, assessing and sampling methods 13
5.1 Load bearing capacity 13
5.1.1 Generals 13
5.1.2 Load bearing capacity determined by calculation 13
5.1.3 Load bearing capacity determined by testing 14
5.2 Secondary treatment capacity 16
5.3 Watertightness 17

6 Assessment and verification of constancy of performance (AVCP) 17
6.1 General 17
6.2 Type testing 17
6.2.1 General 17
6.2.2 Test samples, testing and compliance criteria 18
6.2.3 Test reports 20
6.2.4 Shared other party results 20
6.2.5 Cascading determination of the product type results 21
6.3 Factory production control (FPC) 22
6.3.1 General 22
6.3.2 Requirements 22

6.3.3 Product specific requirements ... 25
6.3.4 Initial inspection of factory and of FPC ... 25
6.3.5 Continuous surveillance of FPC ... 26
6.3.6 Procedure for modifications ... 26
6.3.7 One-off products, pre-production products (e.g. prototypes) and products produced in very low quantity ... 26

7 Classification and designation (Nominal designation) ... 27

8 Marking, labelling and packaging ... 27
8.1 Marking ... 27
8.2 Technical information accompanying the unit ... 28
8.3 Installation instructions ... 29
8.4 Operation and maintenance instructions ... 29

Annex A (normative) Secondary treatment efficiency test procedure ... 31

A.1 Selection of the unit and its preliminary evaluation ... 31
A.1.1 General ... 31
A.1.2 Installation and commissioning ... 31
A.1.3 Operation and maintenance procedures during testing ... 31
A.1.4 Data to be monitored ... 31
A.2 Test procedure ... 32
A.2.1 Time for establishment ... 32
A.2.2 Influent characteristics ... 32
A.2.3 Daily flow pattern for testing ... 32
A.2.4 Test method ... 32
A.2.4.1 General ... 32
A.2.4.2 Overload ... 34
A.2.4.3 Peak flow discharge ... 34
A.2.4.4 Power breakdown/Machine breakdown ... 34
A.2.4.5 Power consumption ... 34
A.2.5 Influent and effluent sampling ... 34
A.3 Sample analysis ... 34
A.4 Test report ... 34

Annex B (normative) Presentation of the microorganisms test results ... 36

Annex C (informative) Analysis method ... 37

Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation ... 38

ZA.1 Scope and relevant characteristics ... 38

ZA.2 Procedure of attestation of conformity of prefabricated secondary treatment units ... 39

ZA.2.1 System(s) of AVCP ... 39

ZA.2.2 Declaration of performance (DoP) ... 42

ZA.2.2.1 General ... 42

ZA.2.2.2 Content ... 43

ZA.2.2.3 Example of DoP ... 44

ZA.3 CE marking and labelling ... 47

Bibliography ... 50