BS EN 858-1: 2002/A1: 2004 COMPLIANCE CERTIFICATE I-OTRO/000051-1

SUBJECT: 0715851171

SUBJECT: CERTIFICATE THE COMPLIANCE OF FACET SEPARATOR SYSTEM FOR LIGTH LIQUIDS ACCORDING TO EN 858-1

REQUESTED BY: FACET FILTRATION IBÉRICA, S.A.

TEST DATE AND PLACE: DECEMBER 07 TH ,2022

FACET FILTRATION IBÉRICA, S.A.
C/ Antonio Durán Cao, 7
15190 A Coruña (SPAIN)

STANDARDS EN 858-1: 2002/A1: 2004

EQUIPMENT TESTED (PROTOTYPE): OIL WATER SEPARATOR CLASS I

FACET MODEL MAS-13.1 - with automatic closure device

This equipment is representative of all the equipment included in the MAS serie manufactured by FACET (see attachment 2)

ANALYSIS OF SAMPLES: LABORATORY "ITSEMAP AMBIENTAL" (Madrid)

MARKING: Nameplate as per point 6.6 - EN 858-1: 2002/A1: 2004

A Coruña, December 07th, 2022

Attachments:

(1) System tested and testing apparatus

(2) Drawing of equipment including the list of separators per flow rate (NS)

Fdo. DAVID DIAZ SEOANE

Firmado digitalmente por DAVID DIAZ SEOANE
DN: cn=DAVID DIAZ SEOANE, c=ES, o=TÜV SÜD IBERIA, S.A.U. / ATISAE / 254, ou=., email=David.Diaz@tuvsud.com
Fecha: 2023.04.14 14:09:39 +02'00'

DAVID DIAZ SEOANE

Inspector

TÜV SÜD Iberia S.A.U.

Fdo.: PEDRO DOÑATE HERNANDEZ

BLM/BUM Smart Inspections

1 INITIAL DATA FOR TESTING

1.1 TEST FLUIDS

- WATER

  TEMPERATURE: 12º C

  PH: 7

  FLOW REATE: 21,6 m^3/h (NS)

  Complies with point 8.3.3.1.2 (EN 858-1: 2002/A1: 2004)

- LIGHT LIQUID: FUEL –DIESEL

  DENSITY: 0,8488 kg/l

  TEMPERATURE: 12º C

  CERTIFICATE: 99-093

  FLOW RATE: 5 ml/l

  Complies with point 8.3.3.1.2 (EN 858-1: 2002/A1: 2004)

1.2 TEST APPARATUS

As per attachment 1.

Complies with Fig 4 (EN 858-1: 2002/A1: 2004)

1.3 SAMPLING DEVICE

Complies with Fig 5 in EN 858-1: 2002/A1: 2004.

2 TEST PROCEDURE

As per point 8.3.3.1.3 (EN 858-1: 2002/A1: 2004).

Height of water level in the separator (Q_w= 0 l/s), h= 1.140mm

Volume of liquid V_k= 912 dm^3

Duration of the test:

T_E calculated = 10,13 min < 15 min

T_E of test = 15 min

T_P sampling period = 5 min.

T = duration of the test = 20 min

Height of water level at nominal flow rate = 1.310 mm

Maximum allowable flow rate is maintained, and light liquid is added at a constant flow rate of 5ml/l (tolerance +5%) for 20 min.

3 SAMPLING

As per point 8.3.3.1.3 (EN 858-1: 2002/A1: 2004).

Carried out during the last 5 minutes of the duration of the test.

At the beginning of the sampling period (T_P), and at 1 min intervals, take one sample, at least 500ml, from every outlet of the separator via the sampling pipe.

Six (6) samples are taken and treated as per annex A (EN 858-1: 2002/A1: 2004), for delivering to the laboratory.

4 RESULTS OF THE ANALYSIS

According to ITSEMAP report nº EV-99347 MOD-I-T.

SAMPLE	TIME	LAB REGISTER Nº	HYDROCARBON CONTENT mg/l
2	0 min	W99-1044	3,48
3	1 min	W99-1045	2,74
4	2 min	W99-1046	2,00
5	3 min	W99-1047	2,89
6	4 min	W99-1044	2,06
7	5 min	W99-1045	1,98

Uncertainty as per ITSEMAP PG-11 procedure.

5 TESTING OF AUTOMATIC CLOSURE DEVICE

Carried out according to point 8.3.2 (EN 858-1: 2002/A1: 2004).

Tightness test is performed using the light liquid. Light liquid is added to the tank until the device closes.

Maximum height of accumulated light liquid before the closure of the device: 190mm.

The volume of liquid flowing after closing of the automatic closure device, with a differential pressure of 0,01 bar during 15 min, is determined, being this volume 230 ml.

During the test, leaks are not detected.

Complies with requirements in points 6.5.3 and 8.3.2 (EN 858-1: 2002/A1: 2004).

6 WATERTIGHTNESS

Watertightness test of the components and complete separator system is performed.

Leaks are not detected.

Complies with requirements in point 8.2 (EN 858-1: 2002/A1: 2004).

7 EFFECTIVENESS

Meet requirements according to the following points in standard EN 858-1: 2002/A1: 2004:

- Point 4: class I separators
- Point 6.3.1: Area of the separator and sludge trap
- Point 6.3.3: Accessibility
- Point 6.3.4: Water seals
- Point 6.3.5: Pipes and pipe joints
- Point 6.3.6: Internal components
- Point 6.3.7: Sludge trap
- Point 6.3.8: Access covers
- Point 6.5: Functional requirements

8 LOAD BEARING CAPACITY

Drawings, calculations and test meet the point 6.4 (EN 858-1: 2002/A1: 2004) regarding structural stability.

9 DURABILITY

Materials meet the requirements defined in 6.2 (EN 858-1: 2002/A1: 2004).

10 ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

According to table ZA.2 in EN 858-1: 2002/A1: 2004, it applies system 4.

According to Regulation (EU) No 568/2014 which amends Annex V of Regulation (EU) No 305/2011 of the European Parliament and of the Council as regards the assessment and verification of constancy of performance of construction products, FACET carries out:

- An assessment of the performance of the separator construction on the basis of testing, calculation, tabulated values or descriptive documentation of that equipment
- Factory production control according to Annex B in EN 858-1: 2002/A1: 2004.

11 CONCLUSIONS

Hereby we certificate that the referenced equipment complies with requirements of the EN 858-1: 2002/A1: 2004 for separators of light liquids class I.

A Coruña, December 07th, 2022

TÜV SÜD Iberia S.A.U.

Fdo. DAVID DIAZ SEOANE

Fdo.: PEDRO DOÑATE HERNANDEZ

Firmado digitalmente por DAVID DIAZ SEOANE
DN: cn=DAVID DIAZ SEOANE, c=ES, o=TÜV SÜD IBERIA, S.A.U. / ATISAE / 254, ou=., email=David.Diaz@tuvsud.com
Fecha: 2023.04.14 14:09:53 +02'00'

DAVID DIAZ SEOANE

Inspector

BLM/BUM Smart Inspections