



BIRO KLASIFIKASI INDONESIA

Laporan Asesmen Persetujuan Tipe

Assessment Report for Type Approval

No. 00177-SP/C1/2021

Asesmen awal
Initial assessment

Asesmen pembaruan
Renewal assessment

1. Permohonan

Application

1.1 No. & tanggal permohonan : 10000-062 & 15 January 2021
No. & date of application

No. agenda permohonan : 00037SP21
Agenda no.

2. Data Perusahaan

Company's Data

2.1 Nama perusahaan : **Optimarin AS SANDNES, Norway**
Name of company

No persetujuan : 2141090009
Approval no.

Alamat : **Sjøvein 34, 4315 Sandnes-Norway**
Address

No. telepon : **+47-51114533**
Telephone no.

No. fax : -
Fax no.

Email : **info@optimarin.com**
dlangeland@optimarin.com

2.2 Manajer produksi : **Mr. Richard Aleksander G. Tjosvoll**
Production manager
Ms. Tonje Olafsen

Manajer mutu : **Ms. Bodil Broch-Austvoll**
Quality manager

Kepala laboratorium pengujian (jika ada) : -
Head of the testing laboratory (if any)

Supervisor las (jika ada) : -
Welding supervisor (if any)

3. Detail Lingkup Persetujuan

Details of Scope of Approval

3.1 Deskripsi produk (merek/tipe, dimensi, berat, kapasitas, batasan, dll., buatlah dalam bentuk tabel) :
Description of products (brand/type, dimension, weight, capacity, restriction, etc., show in table)

OBS BWMS Model designation : xxxx/yyyyBK3 and xxxx/yyyyFX2

Where xxxx designates the below listed UV model and yyy the below listed filter model of either the filter series manufactured by Boll & Kirch (BK3) or the filter series manufactured by Filtrex (FX2)

UV models: 167, 334, 500, 667, 834, 1000, 1167, 1334, 1500, 1667, 1834, 2000, 2167, 2334, 2500, 2667, 2834 and 3000 BK3
filter models: 72, 94, 204, 378, 518, 614, 1274, 1384, 2040 and 3100 FX2 filter models: 87, 135, 190, 255, 340, 515, 770, 1040, 1500, 2100 and 3000.

A OBS BWMS model suitable for installation in hazardous area are designated with the suffix EX (e.g. xxxx/yyyyBK3EX).

Other equipment manufactured by

The OBS BWMS applies one of the following selfcleaning screenfilters:

- 6.18.3 aquaBoll filter series with 25 µm mesh manufactured by Boll & Kirch (BK3)
- ACB filter series with 20 µm mesh manufactured by Filtrex (FX2)

Treatment Rated Capacity

- 72 – 3000 m3/h

Product description

Treatment sequence:

- Ballast water uptake: Filtration and UV treatment
- Ballast water discharge: UV treatment

System design limitations / Water quality parameters

Temperature and Salinity

Temperature and salinity of the ballast water are not a limiting condition for the ballast water treatment system.

4. Pemeriksaan Pabrik

Factory Inspection

4.1 Tanggal pemeriksaan pabrik : -

Date of factory inspection

4.2 Workshop / departemen yang dikunjungi : -

Workshops / departments visited

4.3 Semua fasilitas produksi berada dalam kondisi baik

All facilities for the manufacturing process are in good condition

1

4.4 Jika diperlukan penambahan dan/atau tindakan perbaikan dari fasilitas produksi, harap disebutkan !

If any supplements and / or corrective actions are required, please specify!

4.5 Perawatan dan pemeriksaan fasilitas produksi dilakukan secara teratur

Maintenance and inspection for manufacturing facilities is carried out regularly

1

4.6 Semua personil yang bekerja mempunyai kualifikasi yang sesuai dengan pekerjaannya

All assigned personnel have appropriate qualification for the work

1

4.7 Semua personil pada unit kerja yang dapat mempengaruhi mutu produk diberi pelatihan yang sesuai

All personnel in production units which can affect quality of the products are properly trained

1

4.8 Mesin uji dikalibrasi ulang secara periodik

The testing machines are recalibrated periodically

1

4.9 Institusi yang melaksanakan kalibrasi ulang

Institution effects the recalibration?

NA

4.10 Jika ada laboratorium luar yang digunakan untuk pengujian, harap disebutkan!

If any external laboratories commissioned with tests, please stated!

NA

4.11 Personil yang melaksanakan pengujian memiliki kualifikasi yang disyaratkan

Persons who are carried out testing have required qualification

2

4.12 Jika ada penambahan dan/atau tindakan perbaikan dari fasilitas pengujian, harap disebutkan !

If any supplements and / or alteration of testing facilities from the last inspection, please specify!

NA

4.13 Perubahan utama yang terjadi dari sejak pemeriksaan terakhir (letak properti, struktur organisasi, jenis produk, lingkup persetujuan, pemasok bahan baku, prosedur kerja, peralatan produksi & pengujian dll.) **(Khusus diisi untuk asesmen pembaruan)** :

Principle changes since last inspection (property situation, organisation chart, product range, scope of approval, prematerial supplier, work procedures, manufacturing & testing equipments etc.)

5. Sistem Mutu

Quality System

- 5.1 Apakah ada sertifikasi sesuai dengan ISO 9000
Is a certification according to ISO 9000-series available? 1
- 5.2 Siapa yang memberikan sertifikasi : DNV-GL
Who carried out the certification
- 5.3 Audit mutu internal dilaksanakan secara berkala
The internal quality audit performed periodically 1
- 5.4 Internal audit terakhir tanggal : 10 to 15 February 2021
Date of last internal audit
- 5.5 Temuan audit internal dan tindaklanjutnya (yg terkait dgn bagian produksi dan quality assurance saja) :
Internal quality audit findings and their follow-up (related with production dept. and quality assurance dept. only)

6. Persetujuan diberikan melalui
Approval has been conducted by

- 6.1 Uji persetujuan dibawah pengawasan BKI
Approval test under the supervision by BKI 1
- 6.2 Rekaman produksi terkini
Actual manufacturing records 1
- 6.3 Hasil uji kelulusan sesuai dengan peraturan BKI
Results of acceptance tests according to BKI-rules 1
- 6.4 Pengakuan atas uji persetujuan dari kelas lain atau lembaga independen yang diakui
Acknowledgement of the approval tests of other classification societies or recognized independent body 1
- 6.5 Catatan / keterangan tambahan untuk pertanyaan no. 6.1 s/d 6.4
Supplementary notes / remarks for questions no. 6.1.1 to 6.1.4

NA

Pertanyaan no. 6.6.1 & 6.6.2 harus dijawab jika pertanyaan no. 6.1 dijawab "1"
Question No. 6.6.1 & 6.6.2 is to be completed if the box of question no. 6.1 is filled with "1"

- 6.6 Pemeriksaan sampel yang diambil dari produksi saat ini
Inspection of pieces taken from current production
- 6.6.1 Tipe dan jumlah sampel
Type and number of pieces
-
- 6.6.2 Prosedur pengujian yang diterapkan
Testing procedures applied

NA

7. Dokumentasi
Documentation

Dokumen berikut : A = terlampir H = tersedia di Kantor Pusat R = telah ditunjukkan untuk diperiksa
The following documents are attached are available at Head Office have been presented for review

- 7.1 Daftar fasilitas pembuatan A
List of the manufacturing facilities
- 7.2 Daftar fasilitas pengujian dan sertifikat kalibrasinya A
List of the testing facilities and their calibration certificate
- 7.3 Pedoman manajemen mutu A
Quality management manual
- 7.4 Bagan organisasi A
Organisation plan
- 7.5 Dokumentasi hasil uji saat ini A
Documentation of current test results
- 7.6 Laporan uji prosedur dan persetujuan -
Reports of the procedure and approval tests

NA

7.7 Dokumen lain
Other documents

1. ISO – 9001 CERTIFICATE
2. ISO – 14001 CERTIFICATE
3. THE LAST INTERNAL & EXTERNAL AUDIT REPORT
4. CERTIFICATION FROM OTHER CLASS FOR TYPE APPROVAL
5. ORGANIZATION CHART
6. COMPANY PROFILE
7. LIST OF PRODUCTION FACILITY
8. LIST OF TESTING FACILITY
9. CUSTOMER HANDLING

8. **Rekomendasi / Tindakan Perbaikan**
Recommendations / Corrective Action

- 8.1 Rekomendasi / tindakan perbaikan yang perlu dilakukan :
Recommendation / corrective action to be carried out

Surveyor

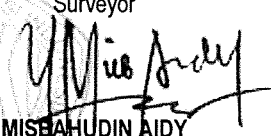
Nama & Tanda tangan
Name & Signature

SINGAPORE, 14th APRIL, 2021

Tempat / *place*

Tanggal / *date*

Surveyor



MISEAHUDIN AIDY

Nama & Tanda tangan
Name & Signature



BIRO KLASIFIKASI INDONESIA

Laporan Asesmen Persetujuan Pabrik Pembuat

Assessment Report for Approval of Manufacturers

No.laporan : 00177-SP/C1/2021

Report no.

Lokasi asesmen : SINGAPORE

Place of assessment

Tanggal asesmen : 14th APRIL, 2021

Date of assessment

Jenis asesmen : Asesmen awal

Kind of assessment

Asesmen pembaruan

Renewal assessment

Pemeriksaan periodik

Periodical surveillance

Asesmen khusus

Occasional assessment

Jenis persetujuan : Persetujuan proses pembuatan

Kind of approval

Persetujuan desain

Design approval

Persetujuan tipe

Type approval

Persetujuan sistem jaminan mutu

Quality assurance system approval

Persetujuan pabrik

Manufacturer approval

Nama produk : BALLAST WATER TREATMENT SYSTEM

Name of product

Tipe / model / merek / grade : Optimarin AS / UV models: 167, 334, 500, 667, 834, 1000, 1167, 1334, 1500, 1667, 1834, 2000, 2167, 2334, 2500, 2667, 2834 and 3000 BK3 filter models: 72, 94, 204, 378, 518, 614, 1274, 1384, 2040 and 3100 FX2 filter models: 87, 135, 190, 225, 340, 515, 770, 1040, 1500, 2100 and 3000.

Type / model / brand / grade

1. Data pemohon

Applicant's data

Nama perusahaan : Optimarin AS SANDNES, Norway

Name of company

Alamat : Sjøvein 34, 4315 Sandnes-Norway

Address

No. telepon : +47-51114533

Phone no.

No. telefax : -

Telefax no.

Email : info@optimarin.com & dlangeland@optimarin.com

Email

Personil penghubung : Dan Åge Langeland

Contact person

2. Kesimpulan asesmen

Assessment summary

Hasil asesmen atas sistem mutu yang diterapkan di tempat pemohon dan uji persetujuan yang telah dilakukan

Assessment results on the quality systems applied at the applicant's premises and approval tests that have been done

Temuan ketidaksesuaian : Tidak ada

Findings of non-conformity

None

Ada, lihat informasi ketidaksesuaian

Yes, see non-conformity information

Hasil uji persetujuan : memenuhi syarat

Result of approval tests

Satisfactory

Tidak memenuhi syarat

Not satisfactory

Tidak berlaku

Not applicable

SINGAPORE, 14th APRIL, 2021

Tempat / place

Tanggal / date

Surveyor


Surveyor

MISBAHUDIN AIDI

Nama & Tanda tangan
Name & Signature

Nama & Tanda tangan
Name & Signature

Lampiran form :
Attachment forms

	Informasi Ketidakesuaian <i>Non Conformity Information</i>	
No. laporan asesmen : 00177-SP/C1/2021 <i>No. of assessment report</i>	Tanggal Asesmen : 14th APRIL, 2021 <i>Date of Assessment</i>	
Nama perusahaan : Optimarin AS SANDNES, Norway <i>Name of company</i>		
No. NCR : NIL <i>NCR No.</i>		
Uraian Ketidakesuaian <i>Non Conformity Description</i> <p style="text-align: center;">NIL</p>		
Kategori temuan : <input type="checkbox"/> Ketidakesuaian <input type="checkbox"/> Observasi <i>Category of finding Non-conformity Observation</i>		
Nama Surveyor : Click here to enter text. <i>Name of Surveyor</i>	Nama Perwakilan Manajemen Mutu : Click here to enter text. <i>Name of Quality Management Representative</i>	
Tanda tangan : <i>Signature</i>	Tanda tangan : <i>Signature</i>	
Rencana Tindakan Perbaikan <i>Corrective Action Plan</i>		
Tanggal kesepakatan penyelesaian: <i>Agreed date for completion</i>	Tanda tangan Perwakilan Manajemen Mutu : <i>Signature of Quality Management Representative</i>	
Verifikasi Tindakan Perbaikan <i>Verification of Corrective Action</i>		
Tindakan perbaikan telah dilaksanakan dengan baik : <input type="checkbox"/> Ya <input type="checkbox"/> Tidak <i>Corrective action completed satisfactorily Yes No</i>		
Tanggal Verifikasi : <i>Date of Verification</i>	Tanda tangan Surveyor : <i>Surveyor's signature</i>	