



Marine & Offshore

Certificate number: 06593/E0 BV

File number: ACM 171/0902/001

Product code: 0020I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

SKF Maintenance Products

Nieuwegein - NETHERLANDS

for the type of product

CHOCKING DEVICES FOR MACHINERY

SKF Vibracon® SM - Readjustable Chocking Element

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate is a renewal of certificate N° 06593/D0 BV expiring on 22/04/2018

This certificate will expire on: 22 Apr 2023

For Bureau Veritas Marine & Offshore,

At BV GRONINGEN, on 09 Apr 2018,

John Mondt



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

SKF Vibracon® SM - Readjustable Chocking Elements

Dimensions	Machine load (kN)	Design load (kN)
SM 12	8	48
SM 16	15	90
SM 20	25	140
SM 24	35	200
SM 30	60	325
SM 36	90	475
SM 42	120	675
SM 48	160	850
SM 56	225	1150
SM 64	300	1500

2. DOCUMENTS AND DRAWINGS:

Reviewed drawings for each dimension (material S355J2 or C45 / 3.1.B.) :

SKF VIBRACON SMXXCS TOP PLATE	N° 1000-0XX-1-Y Rev.Z
SKF VIBRACON SMXXCS CENTER PLATE	N° 1000-0XX-2-Y Rev.Z
SKF VIBRACON SMXXCS BASE PLATE	N° 1000-0XX-3-Y Rev.Z
SKF VIBRACON SMXXCS ASSEMBLY	N° 1000-0XX-4-Y Rev.Z

Reviewed drawings for dimension from SM16 to SM64 (Material AISI 316L):

SKF VIBRACON SMXXSS TOP PLATE	N° 1100-0XX-1-Y Rev.Z
SKF VIBRACON SMXXSS CENTER PLATE	N° 1100-0XX-2-Y Rev.Z
SKF VIBRACON SMXXSS BASE PLATE	N° 1100-0XX-3-Y Rev.Z
SKF VIBRACON SMXXSS ASSEMBLY	N° 1100-0XX-4-Y Rev.Z

Nota : The whole list of reviewed drawings with the actual drawing number and revision index is filed in BV MPA system under ref PDR ACM171/0902/001.

3. TEST REPORTS:

Qualification tests of SKF Vibracon® SM - Readjustable Chocking Elements dated 10/09/1998.

4. APPLICATION / LIMITATION:

4.1 - Chocking of:

- internal combustion engine
- reduction and step up gear boxes
- gas and steam turbines
- generators
- pumps
- bearings

4.2 - The devices are to be fitted according to the supplier's instructions.

4.3 - Particulars and supporting calculations note must be submitted to the Society for each application.

4.4 - **Other materials and/or components:**

- ST52.3 or CK 35 or CK 45 steel.
- Other material on request to be submitted for each application.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The **SKF Vibracon® SM - Readjustable Chocking Elements** are to be supplied by **SKF Maintenance Products** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 - BV product certificate is required.

5.4 - For information, **SKF Maintenance Products** has declared to Bureau Veritas the following production site(s):

SKF Maintenance Products
Kelvinbaan 16
3439 MT Nieuwegein
NETHERLANDS

6. MARKING OF PRODUCT:

SKF Vibracon® SM Elements should be marked as per Manufacturer's instructions:

- Serial number
- Size
- Society's brand as relevant with COI identification number.

7. OTHERS:

7.1 - It is **SKF Maintenance Products**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 06593/D0 BV issued on 22 Apr 2013 by the Society.

*** END OF CERTIFICATE ***