

# SKF Vibracon

## The universal adjustable chock

### The economical machinery mounting solution

#### Why use SKF Vibracon?

- SKF Vibracon is a self leveling, height adjustable and re-usable chock
- Easy and accurate mounting of all types of rotating equipment to base frames, steel foundations or concrete
- Eliminates soft foot from the production line through the life cycle of the equipment
- Reduces the cost of equipment foundations by design for the first build or through retrofit
- SKF Vibracon has many well documented applications and references.

### SKF Vibracon advantage

SKF Vibracon elements are permanent, strong and re-usable machinery mounting chocks for all types of rotating or critically aligned machinery. SKF Vibracon mounts are mechanically stiff elements that make accurate mounting simple and quick.

SKF Vibracon advantages are the absence of curing time, as with epoxy resin chocks, it eliminates the trial and error alignment process characteristic for the “mill and shim” method and adjustability during the life cycle of the machinery.

SKF Vibracon has many configurations and material options to satisfy technical concerns, in end user environments and production line costs.

All SKF Vibracon elements include the spherical top plate and mating middle section. This self leveling configuration accommodates the angular differences that are inherent with mounting surfaces. The height adjustment feature has the



greatest range in the industry, which makes SKF Vibracon easy to install.

SKF Vibracon elements are the most economical means to establish a perfect mounting plane. SKF Vibracon advantage is the capability to perfectly create the mounting plane within minutes and repeatedly for production or service managers and accountants. SKF Vibracon can help save costs in:

- Industrial applications
- Marine applications
- Offshore applications
- Military and navy applications.

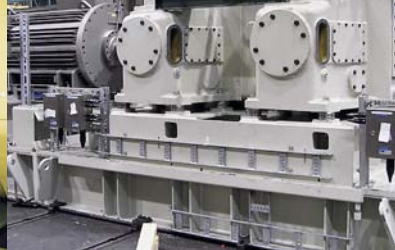




Typical SKF Vibracon application



Generator



Electrical motor and compressor



Gearbox

## SKF Vibracon

SKF Vibracon elements are machinery mounting chocks that are easily and accurately adjusted. The elements accommodate the angular difference between machine and the mounting base without expensive machining of the base or extra work of installing epoxy resin chocks. The self leveling capability combined with the height adjustment feature eliminates the possibility of a soft foot in the production line through the life cycle of the machinery.

## SKF Vibracon low profile

The low profile elements offer an economic solution for repair projects or fixed design systems where expensive milled chocks, shims or epoxy resins were applied previously. SKF Vibracon low profile configuration addresses those applications where the chock height between the foundation and component has been established by the previous design. Most of the other chocking methods are time-consuming and do not support the life cycle needs of the machine owners and installation activities on a tight schedule. A variety of adjustment tools for confined installation spaces are available.

## Other SKF Vibracon applications

The configurations and materials of SKF Vibracon mounts are not limited to the examples shown in the product tables. Many options are available and routinely deployed to solve mounting problems. Typical solutions include:

- **Concrete mounting kit.** SKF Vibracon and a sole plate are matched to suit components mounted on concrete.
- **Slotted elements.** Industrial repair applications where the anchor bolt and the machine cannot be moved. This applies typically to shore based engines and motors where the elements have to be installed as a traditional shim.
- **Shock hardened.** Elements for the Grade A Shock (MIL-S-901D) environments.
- **Additional bottom ring.** For installations with larger gaps between machine foot and foundation.
- **Spherical washer.** Compensating angular deviations between bolt and foundation. Saves costly spot facing of mating areas.
- **Stopper.** To avoid costly and time-consuming installation of fitted bolts.

Mounting instructions, references and comprehensive information is available via the SKF website ([www.skfvibracon.com](http://www.skfvibracon.com)).

SKF Vibracon mounts have been rigorously tested both in the laboratory and the field, in all types of environments and applications under the scrutiny of designers, production managers, OEM commissioning engineers, operators and owners. SKF Vibracon works technically and economically for many of the world's best. Contact SKF for application and trial examination.

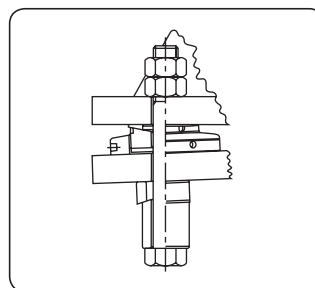
SKF Vibracon



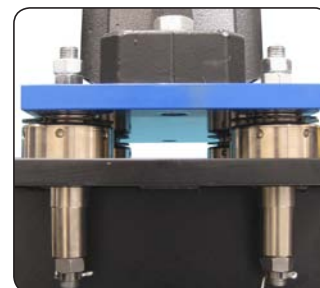
SKF Vibracon low profile



Spherical washer



Extended SKF Vibracon chock

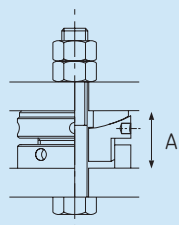




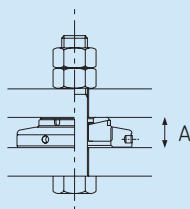
Intermediate shaft bearing Skid mounted diesel engine

Main propulsion engine

Shaft bearing



SKF Vibracon



SKF Vibracon low profile

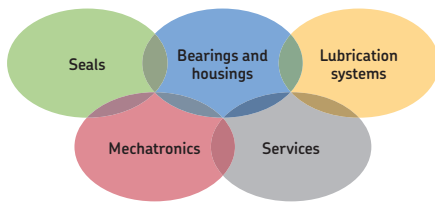
Vibracon type	Bolt size		Tightening torque		Machine load kN	Max. bolt size <sup>1)</sup> (optional) Metric	Max. element load kN	Min. height mm	(A) Nominal height mm	Max. height mm	Min. reduced height mm	Max. extended height mm	Bolt hole mm	Diameter mm	Key holes mm	Pitch mm	Mass kg
	Metric	Nm	Metric	Nm													
<b>SKF Vibracon</b>																	
SM 12 -CS / -SS	M12	85	M14	110	8	M16	48	30	<b>34</b>	38	23	60	17	<b>60</b>	6	1	0,6
SM 16 -CS / -SS	M16	215	M18	270	15	M20	90	35	<b>40</b>	45	26	80	21	<b>80</b>	6	1,5	1,2
SM 20 -CS / -SS	M20	420	M22	500	25	M24	140	40	<b>45</b>	50	31	100	25	<b>100</b>	8	2	2,2
SM 24 -CS / -SS	M24	730	M27	890	35	M30	200	45	<b>51</b>	57	34	120	31	<b>120</b>	8	2	3,5
SM 30 -CS / -SS	M30	1 460	M33	1 745	60	M36	325	50	<b>56</b>	62	39	140	37	<b>140</b>	10	2	5,3
SM 36 -CS / -SS	M36	2 570	M39	3 000	90	M42	475	55	<b>61</b>	67	44	160	44	<b>160</b>	10	2	7,5
SM 42 -CS / -SS	M42	4 125	M45	4 995	120	M48	675	60	<b>66</b>	72	49	190	50	<b>190</b>	10	2	12,0
SM 48 -CS / -SS	M48	6 210	M52	7 175	160	M56	850	70	<b>77</b>	85	56	220	60	<b>220</b>	10	3	17,0
SM 56 -CS / -SS	M56	10 035	M60	10 360	225	M64	1 150	75	<b>82</b>	90	61	230	66	<b>230</b>	12	3	23,0
SM 64 -CS / -SS	M64	15 165	M68	16 320	300	M72	1 500	80	<b>87</b>	95	66	250	74	<b>250</b>	12	3	27,0
<b>SKF Vibracon low profile</b>																	
SM 16 LP-AS	M16	215	M18	270	15	M20	90	20	<b>25</b>	30	20	80	21	<b>80</b>	6	1,5	0,6
SM 20 LP-AS	M20	420	M22	500	25	M24	140	20	<b>25</b>	30	20	100	25	<b>100</b>	6	2	0,9
SM 24 LP-AS	M24	730	M27	890	35	M30	200	20	<b>25</b>	30	20	120	31	<b>120</b>	6	2	1,3
SM 30 LP-AS	M30	1 460	M33	1 745	60	M36	325	20	<b>25</b>	30	20	140	37	<b>140</b>	6	2	1,8
SM 36 LP-AS	M36	2 570	M39	3 000	90	M42	475	30	<b>35</b>	40	30	160	44	<b>160</b>	6	2	3,7
SM 42 LP-AS	M42	4 125	M45	4 995	120	M48	675	35	<b>40</b>	45	35	190	50	<b>190</b>	6	2	6,2

#### Materials

Standard (CS)	DIN 1.1191 / 1.0570	In stock
Stainless Steel (SS)	DIN 1.4404 (AISI 316L)	In stock
Alloy Steel (AS)	DIN 1.7225	In stock
K-Monel 500 (KM)	QQ-N-286	On request

Calculations are valid for bolts with usual thread, material grade 8.8, yield strength >630 N/mm<sup>2</sup>, oil lubricated thread courses and nut mating surfaces without slide additives.

<sup>1)</sup> For an engineered solution, please contact [vibracon@skf.com](mailto:vibracon@skf.com)



### The Power of Knowledge Engineering

Combining products, people, and application-specific knowledge, SKF delivers innovative solutions to equipment manufacturers and production facilities in every major industry worldwide. Having expertise in multiple competence areas supports SKF Life Cycle Management, a proven approach to improving equipment reliability, optimizing operational and energy efficiency and reducing total cost of ownership.

These competence areas include bearings and units, seals, lubrication systems, mechatronics, and a wide range of services, from 3-D computer modelling to cloud-based condition monitoring and asset management services.

SKF's global footprint provides SKF customers with uniform quality standards and worldwide product availability. Our local presence provides direct access to the experience, knowledge and ingenuity of SKF people.

### Marine product portfolio

- ✓ Condition monitoring hardware and software
- ✓ Shaft alignment and vibration calculation software
- ✓ Bearings
- ✓ Slewing bearings
- ✓ Bearing housings
- ✓ Bolts
- ✓ Couplings
- ✓ Lubrication systems
- ✓ Lubricants
- ✓ Chocking solutions
- ✓ Sealing solutions
- ✓ Wear sleeves
- ✓ Propeller sleeves
- ✓ Hydraulic nuts
- ✓ Maintenance products and tools
- ✓ Power transmission products
- ✓ Electromechanical actuation systems
- ✓ Hydraulic bolt tensioners
- ✓ Steer-by-wire systems
- ✓ Sensorised bearings
- ✓ Magnetic bearings

### Marine service portfolio

- ✓ Alignment (static and dynamic)
- ✓ Shaft alignment calculations
- ✓ 3D measurement surveys
- ✓ On-site machining
- ✓ Chocking and calculations
- ✓ Mounting
- ✓ Balancing
- ✓ Engineering
- ✓ Testing and validation
- ✓ Condition-based maintenance
- ✓ Vibration analysis
- ✓ Oil analysis
- ✓ Dynamic motor analyzing
- ✓ Torsional vibration analysis
- ✓ Turbocharger monitoring
- ✓ Electric motor monitoring
- ✓ Thermographic measurement
- ✓ Remote monitoring
- ✓ Training and certification
- ✓ Asset management
- ✓ Spare part optimisation
- ✓ Logistics services
- ✓ Bearing analysis
- ✓ Remanufacturing services

© SKF and Machine Support are registered trademarks of the SKF Group.

Monel is a registered trademark of Special Metals Corporation.

© SKF Group 2013

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

PUB 43/P8 06686/3 EN · September 2013

Certain image(s) used under license from Shutterstock.com

