

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.

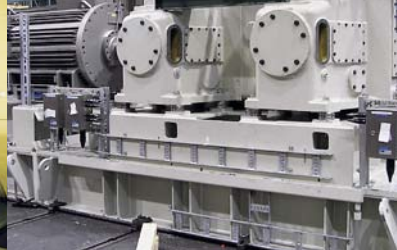




Typical SKF Vibracon application



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).

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.

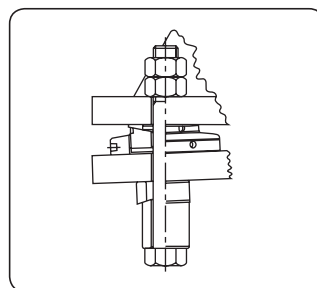
SKF Vibracon



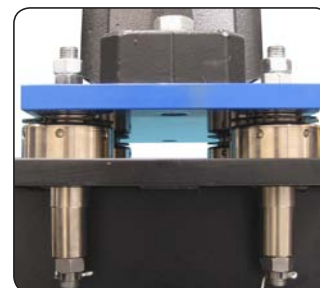
SKF Vibracon low profile



Spherical washer



Extended SKF Vibracon chock

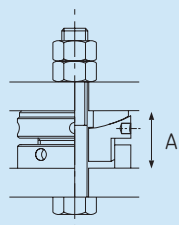




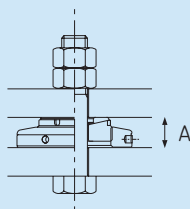
Intermediate shaft bearing Skid mounted diesel engine

Main propulsion engine

Shaft bearing



SKF Vibracon



SKF Vibracon low profile

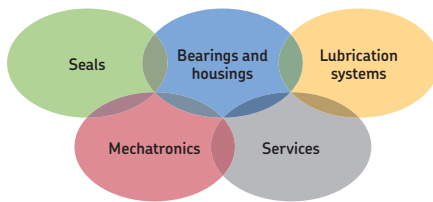
Vibracon type	Bolt size		Tightening torque		Machine load kN	Max. bolt size ¹⁾ (optional) Metric	Max. element load kN	Min. height mm	(A) Nominal height mm	Max. height mm	Min. reduced height mm	Max. extended height mm	Bolt hole mm	Diameter mm	Key holes mm	Pitch mm	Mass kg
	Metric	Nm	Metric	Nm													
SKF Vibracon																	
SM 12 -CS / -SS	M12	85	M14	110	8	M16	48	30	34	38	23	60	17	60	6	1	0,6
SM 16 -CS / -SS	M16	215	M18	270	15	M20	90	35	40	45	26	80	21	80	6	1,5	1,2
SM 20 -CS / -SS	M20	420	M22	500	25	M24	140	40	45	50	31	100	25	100	8	2	2,2
SM 24 -CS / -SS	M24	730	M27	890	35	M30	200	45	51	57	34	120	31	120	8	2	3,5
SM 30 -CS / -SS	M30	1 460	M33	1 745	60	M36	325	50	56	62	39	140	37	140	10	2	5,3
SM 36 -CS / -SS	M36	2 570	M39	3 000	90	M42	475	55	61	67	44	160	44	160	10	2	7,5
SM 42 -CS / -SS	M42	4 125	M45	4 995	120	M48	675	60	66	72	49	190	50	190	10	2	12,0
SM 48 -CS / -SS	M48	6 210	M52	7 175	160	M56	850	70	77	85	56	220	60	220	10	3	17,0
SM 56 -CS / -SS	M56	10 035	M60	10 360	225	M64	1 150	75	82	90	61	230	66	230	12	3	23,0
SM 64 -CS / -SS	M64	15 165	M68	16 320	300	M72	1 500	80	87	95	66	250	74	250	12	3	27,0
SKF Vibracon low profile																	
SM 16 LP-AS	M16	215	M18	270	15	M20	90	20	25	30	20	80	21	80	6	1,5	0,6
SM 20 LP-AS	M20	420	M22	500	25	M24	140	20	25	30	20	100	25	100	6	2	0,9
SM 24 LP-AS	M24	730	M27	890	35	M30	200	20	25	30	20	120	31	120	6	2	1,3
SM 30 LP-AS	M30	1 460	M33	1 745	60	M36	325	20	25	30	20	140	37	140	6	2	1,8
SM 36 LP-AS	M36	2 570	M39	3 000	90	M42	475	30	35	40	30	160	44	160	6	2	3,7
SM 42 LP-AS	M42	4 125	M45	4 995	120	M48	675	35	40	45	35	190	50	190	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/mm², oil lubricated thread courses and nut mating surfaces without slide additives.

¹⁾ For an engineered solution, please contact 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

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SKF Vibracon

– surface treated chocks

SKF Vibracon chocks are permanent, and re-usable machinery mounting chocks for all types of rotating or critically aligned machinery.

Many installations where the SKF Vibracon chocks are applied can be found in tough, humid and salty climates, where protection against corrosion is advised. To cater for this need, SKF has been testing different solutions resulting in the surface treated SKF Vibracon chock.

All parts are treated individually to guarantee an optimal result, consistent quality and extended corrosion protecting capabilities.

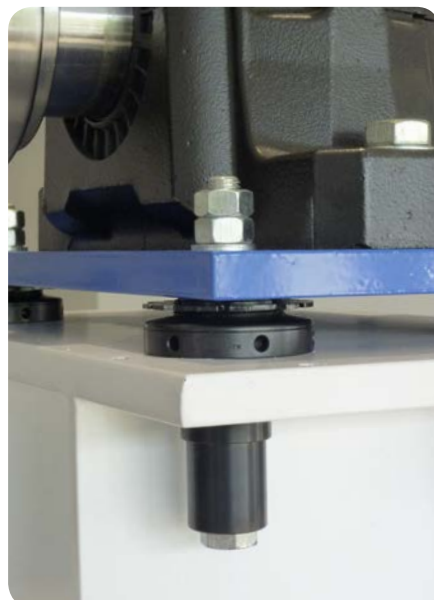
SKF Vibracon surface treated chocks are a complementary option to our wide product range.



Surface treated SKF Vibracon chock



Surface treated SKF Vibracon low profile chock



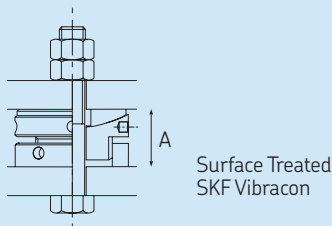
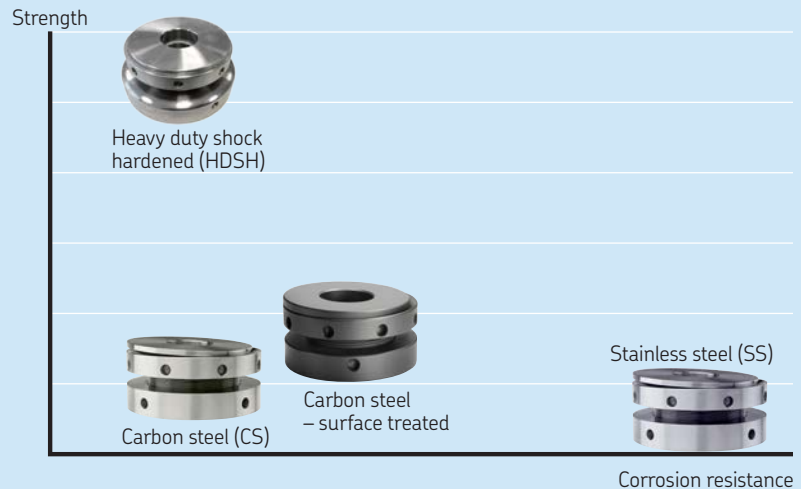
General features SKF Vibracon

- Eliminate soft foot
- Large adjustment range
- Significant self-leveling capacity
- Easy to use
- High quality installation

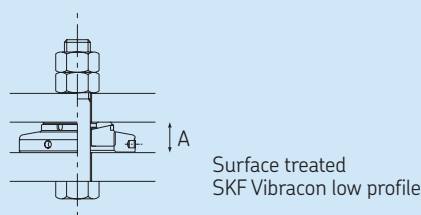
Extra features for the surface treated SKF Vibracon chock

- Improved corrosion resistance compared to carbon steel version
- Better priced than stainless steel version

Please contact vibracon@skf.com for more information.



Surface Treated
SKF Vibracon



Surface treated
SKF Vibracon low profile

Vibracon type	Bolt hole	Outer diameter	Min. height	Bolt size	Max. bolt size ¹⁾ (optional)	Max. element load ²⁾	(A) Nominal height	Max. height	Thread pitch	Mass	Proof load ³⁾
-	mm	mm	mm	Metric	Metric	kN	mm	mm	mm	kg	kN
SM 12 -CSTR	17	60	30	M12	M16	48	34	38	1	0,6	160
SM 16 -CSTR	21	80	35	M16	M20	90	40	45	1,5	1,2	175
SM 20 -CSTR	25	100	40	M20	M24	140	45	50	2	2,2	250
SM 24 -CSTR	31	120	45	M24	M30	200	51	57	2	3,5	420
SM 30 -CSTR	37	140	50	M30	M36	325	56	62	2	5,3	600
SM 36 -CSTR	44	160	55	M36	M42	475	61	67	2	7,5	775
SM 42 -CSTR	50	190	60	M42	M48	675	66	72	2	12	1275
SM 48 -CSTR	60	220	70	M48	M56	850	77	85	3	17,0	1300
SM 56 -CSTR	66	230	75	M56	M64	1 150	82	90	3	23,0	1750
SM 64 -CSTR	74	250	80	M64	M72	1 500	87	95	3	27,0	1900
SM 16 LP-ASTR	21	80	20	M16	M20	90	25	30	1,5	0,6	255
SM 20 LP-ASTR	25	100	20	M20	M24	140	25	30	2	0,9	270
SM 24 LP-ASTR	31	120	20	M24	M30	200	25	30	2	1,3	310
SM 30 LP-ASTR	37	140	20	M30	M36	325	25	30	2	1,8	475
SM 36 LP-ASTR	44	160	30	M36	M42	475	35	40	2	3,7	1000
SM 42 LP-ASTR	50	190	35	M42	M48	675	40	45	2	6,2	1625

¹⁾ For an engineered solution, please contact vibracon@skf.com

²⁾ Maximum element load is the maximum load allowed on the SKF Vibracon chock during normal operation of the equipment, including weight of the machine, operational loads and bolt force. The maximum element load includes a safety factor in order to accommodate additional forces during malfunction operation.

³⁾ Proof load is the tested load which can be applied on the SKF Vibracon chock at maximum height before plastic deformation will occur. Exceeding the proof load will permanently deform the element, rendering it no longer adjustable.

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