# 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

Gearbo

### 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.

## Surface treated chocks

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.

# 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 holts

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.

Stainless steel SKF Vibracon



Surface treated SKF Vibracon low profile



Surface treated SKF Vibracon low profile and spherical washer



SKF Vibracon solution for resilient mounts



2 **5KF** 



 $Intermediate\ shaft\ bearing$ 

Skid mounted diesel engine

Main propulsion engine

Shaft bearing

SKF Vibracon low profile																	
SKF Vibracon low profile																	
Carbon Steel (-CS) Carbon Steel Surface Treated (-CSTR) Stainless Steel (-SS) K-Monel 500 (-KM)		DIN 1.1191 / 1.0570 DIN 1.1191 / 1.0570							Alloy Steel Surface Treated (-ASTR)			DIN 1.7225				In stock	
		DIN 1.4404 (AISI 316L) QQ-N-286					n stock On request										
Vibracon type	Bolt size	Tightening torque	Boltsize	Tightening torque	Machine load	Max. bolt size <sup>1)</sup> (optional)	Max. element load	Min. height	(A) Nominal height	Max. height	Min. reduced height	Max. extended height	Bolt hole	Diameter	Key holes	Pitch	Mass
_	Metric	Nm	Metric	Nm	kN	Metric	kN	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
SKF Vibracon																	
SM 12 -CS SM 16 -CS SM 20 -CS	M12 M16 M20	85 215 420	M14 M18 M22	110 270 500	8 15 25	M16 M20 M24	48 90 140	30 35 40	34 40 45	38 45 50	23 26 31	60 80 100	17 21 25	60 80 100	6 6 8	1 1,5 2	0,6 1,2 2,2
SM 24 -CS SM 30 -CS SM 36 -CS	M24 M30 M36	730 1 460 2 570	M27 M33 M39	890 1 745 3 000	35 60 90	M30 M36 M42	200 325 475	45 50 55	51 56 61	57 62 67	34 39 44	120 140 160	31 37 44	120 140 160	8 10 10	2 2 2	3,5 5,3 7,5
SM 42 -CS SM 48 -CS SM 56 -CS	M42 M48 M56	4 125 6 210 10 035	M45 M52 M60	4 995 7 175 10 360	120 160 225	M48 M56 M64	675 850 1 150	60 70 75	66 77 82	72 85 90	49 56 61	190 220 230	50 60 66	190 220 230	10 10 12	2 3 3	12,0 17,0 23,0
SM 64 -CS	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-ASTR SM 20 LP-ASTR SM 24 LP-ASTR	M20	215 420 730	M18 M22 M27	270 500 890	15 25 35	M20 M24 M30	90 140 200	20 20 20	25 25 25	30 30 30	20 20 20	80 100 120	21 25 31	80 100 120	6 6 6	1,5 2 2	0,6 0,9 1,3
SM 30 LP-ASTR SM 36 LP-ASTR SM 42 LP-ASTR	M36	1 460 2 570 4 125	M33 M39 M45	1 745 3 000 4 995	60 90 120	M36 M42 M48	325 475 675	20 30 35	25 35 40	30 40 45	20 30 35	140 160 190	37 44 50	140 160 190	6 6 6	2 2 2	1,8 3,7 6,2
Calculations are val				,		8, yield st	rength >6	530 N/n	mm², oil lu	ubricated	thread co	ourses ar	nd nut ma	ating sur	faces witl	nout slide	additives.

SKF

#### 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

The SKF BeyondZero portfolio offers products and services with enhanced environmental performance characteristics.

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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