THE ECONOMICAL MACHINERY MOUNTING SOLUTION

VIBRACON® SM

The Universal Adjustable Chock

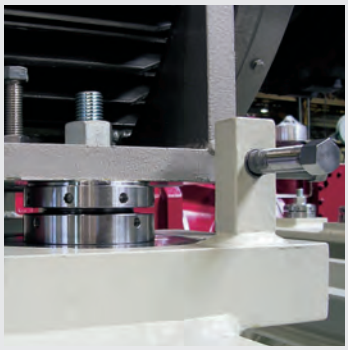
- The Vibracon® is a self leveling, height adjustable and re-usable chock
- Easy and accurate mounting of all types of rotating equipment to base frames, steel foundations or concrete
- Eliminates soft foot from the production line through the life cycle of the equipment
- Reduces the cost of equipment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

www.vibracon.com

The Vibracon® SM Advantage

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

The Vibracon® SM has many configurations and material options to satisfy technical concerns, in end user environments and production line costs. All 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 the Vibracon® easy to install.

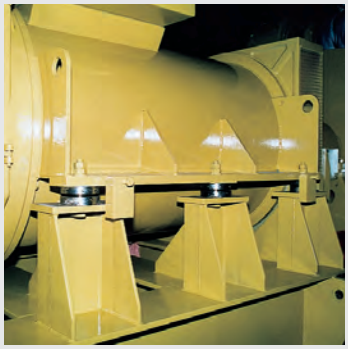


Typical application

Vibracon® SM elements are the most economical means to establish a perfect mounting plane. The Vibracon® advantage is the capability to perfectly create the mounting plane within minutes and repeatedly for Production or Service Managers and Accountants.

- **Industrial**
- **Marine**
- **Offshore**
- **Military / Navy**

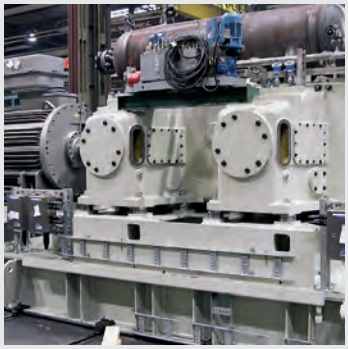
APPROVED U.S. NAVY APPROVED



Generator

Turbo generator

Gas engine on concrete

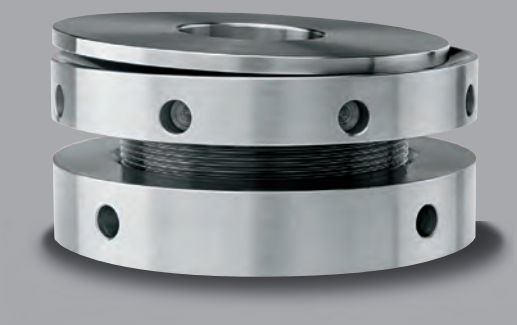


E-motor and compressor

The Original

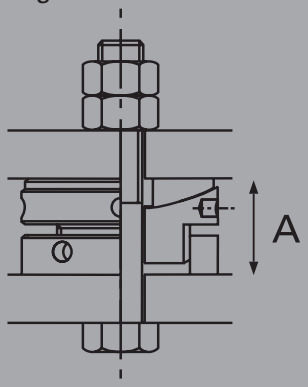
Vibracon Type	Bolt Size		Tightening Torque (metric 8.8, US-UNC grade 8)		Bolt Size		Tightening Torque (metric 8.8, US-UNC grade 8)		Machine Load	Max. Element Load	Minimum Height	Nominal Height (A)	Maximum Height	Min. Reduced Height	Max. Extended Height	Bolt Hole	Diameter	Key Holes	Pitch	Mass
	Metric	(US-UNC)	Nm	(ft.lbs)	Metric	(US-UNC)	Nm	(ft.lbs)	kN	kN	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
SM12	M12	(1/2")	85	(60)	M14	(9/16")	110	(80)	8	48	30	**34**	38	23	60	15	**60**	6	1	0,6
SM16	M16	(5/8")	215	(160)	M18		270		15	90	35	**40**	45	26	80	19	**80**	6	1,5	1,2
SM20	M20	(3/4")	420	(310)	M22	(7/8")	500	(370)	25	140	40	**45**	50	31	100	23	**100**	8	2	2,2
SM24	M24	(1")	730	(535)	M27		890		35	200	45	**51**	57	34	120	28	**120**	8	2	3,5
SM30	M30	(1-1/8")	1460	(1075)	M33	(1-1/4")	1745	(1285)	60	325	50	**56**	62	39	140	34	**140**	10	2	5,3
SM36	M36	(1-3/8")	2570	(1890)	M39	(1-1/2")	3000	(2210)	90	475	55	**61**	67	44	160	40	**160**	10	2	7,5
SM42	M42		4125		M45	(1-3/4")	4995	(3680)	120	675	60	**66**	72	49	190	46	**190**	10	2	12,0
SM48	M48		6210		M52	(2")	7175	(5290)	160	850	70	**77**	85	56	220	54	**220**	10	3	17,0
SM56	M56	(2-1/4")	10035	(7400)	M60		10360		225	1150	75	**82**	90	61	230	62	**230**	12	3	23,0
SM64	M64	(2-1/2")	15165	(11185)	M68	(2-3/4")	16320	(12035)	300	1500	80	**87**	95	66	250	70	**250**	12	3	27,0

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



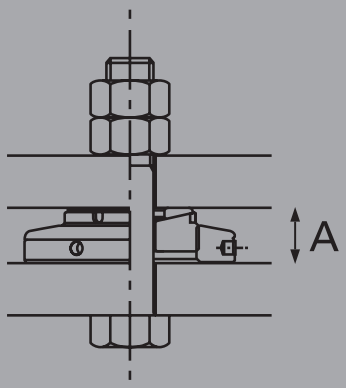
The Original

Vibracon® SM elements are machinery mounting chocks that are easily and accurately adjusted. The elements accommodate up to a 4° 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 and for the life cycle of the machinery.



The 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. The Vibracon® SM 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.



Skid mounted diesel engine

Gearbox

Main propulsion engine

Shaft bearing

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

Vibracon® SM is a patented product and registered trademark of Machine Support B.V. the Netherlands

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SM24LP	M24	(1")	730	(535)	M27		890		35	200	20	**25**	30	20	120	29	**120**	6	2	1,3
SM30LP	M30	(1-1/8")	1460	(1075)	M33	(1-1/4")	1745	(1285)	60	325	20	**25**	30	20	140	35	**140**	6	2	1,8
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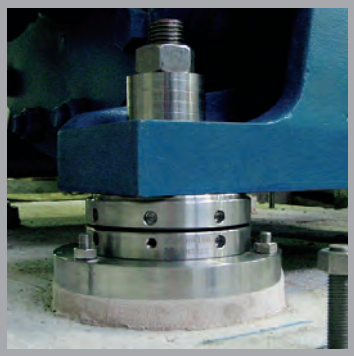
SM42LP	M42		4125		M45	(1-3/4")	4995	(3680)	120	675	35	**40**	45	35	190	46	**190**	6	2	6,2

The Low Profile

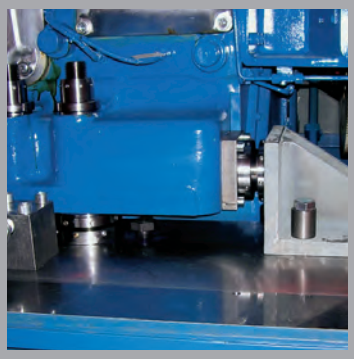
Calculations are valid for bolts with usual thread, material grade 8.8, yield strength > 630 N/mm², oil lubricated thread courses and nut mating surfaces without slide additives.

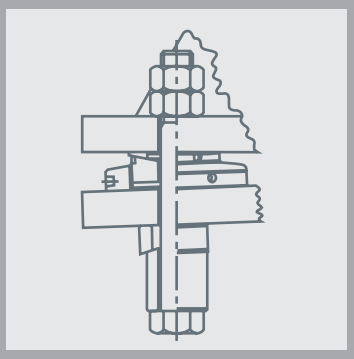
Additional Vibracon® SM Applications

The configurations and materials of the Vibracon® mounts are not limited to the tables illustrated in the previous sections. Many options are available and routinely deployed to solve mounting problems. Typical solutions include:



- **Concrete Mounting Kit** Vibracon® SM 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 for 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-STD-901) 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.





For mounting instructions, references and comprehensive information check:

www.vibracon.com

The Vibracon® mount has been rigorously tested 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. The Vibracon® works technically and economically for many of the world's best. Contact us for your application and trial examination, because; you need to save money.

MACHINE SUPPORT
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