

High impact load shock and vibration absorbing material

Hamamat HM

Colour: Black

Description

A high strength, high stiffness, shock and vibration absorbing material.

Construction

A compression moulded material made up of laminations of Nitrile (NBR IRHD 80) rubber interleaved with a high strength woven nylon fabric.

Applications

High stiffness shock and vibration absorbing material for structural support of Machine tools including: Transfer machines, Machining Centres and Lathes.

Impact shock absorption of:

Forging and forming machinery, Forging Anvil Mats, Power Presses Rolling Mills and Metal Processing Machinery, Quarrying and Mining Machinery

Also incorporated into:

Bolt isolation washers AW, AWS

Other properties

Long Term: Excellent, only slight changes over time.

Oil and Chemical Resistance

Low creep, maintains vibration damping properties over long periods

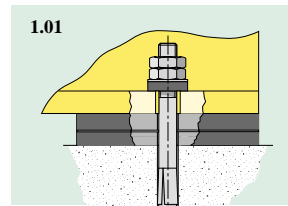
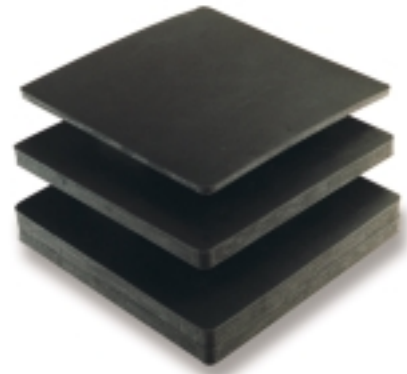
Natural Frequency Range: High

Working temperature range °C: - 30 to + 120

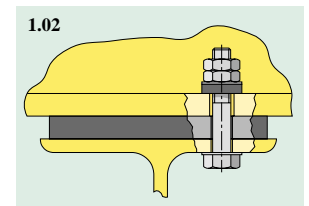
Standard Sheet Sizes

1000 x 500 mm, 500 x 500 mm plus Strips and Pads

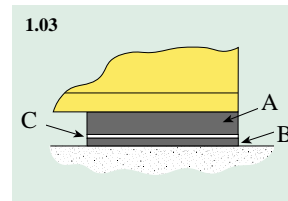
Cut with bandsaw: Drill or punch holes



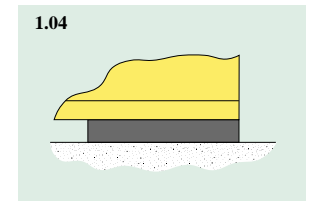
Bolt through pad installation using single, or multiple pad configuration.



Bolt through installations to steelwork



Free standing installation on multiple pads A & B with metal shim(s) C for levelling.



Free standing installation on single thickness pads.

Hamamat HM				HM 6			HM 15			HM 25		
Static Compression Modulus	Ecs	N/mm ²		84			78			78		
Specific Spring Constant	SSC	N/mm/mm ²		14.00			5.20			3.12		
Thickness	T	mm		6			15			25		
Damping	C/Cc			0.1			0.1			0.1		
Coeff. of Friction (dry)				0.8			0.8			0.8		
Hardness	Shore A	IRDH A	+/- 3	80			80			80		
Ratio Dyn to Static Modulus	D			4			4			4		
Maximum Static Press.	Msp	N/mm ²		6			6			6		
Maximum Static Press.	Msp	kg/cm ²		60			60			60		
Maximum Overload Pressure	MOP	N/mm ²										
Static Loading Pressure												
	MPa	N/mm ²	kg/cm ²	fsv	fdv	d	fsv	fdv	d	fsv	fdv	d
	0.10	0.10	1	188	376	0.01	115	229	0.02	89	178	0.03
	0.20	0.20	2	133	266	0.01	81	162	0.04	63	126	0.06
	0.30	0.30	3	109	217	0.02	66	132	0.06	51	103	0.10
	0.40	0.40	4	94	188	0.03	57	115	0.08	44	89	0.13
	0.50	0.50	5	84	168	0.04	51	103	0.10	40	79	0.16
	1.00	1.00	10	60	119	0.07	36	73	0.19	28	56	0.32
	1.50	1.50	15	49	97	0.11	30	59	0.29	23	46	0.48
	2.00	2.00	20	42	84	0.14	26	51	0.38	20	40	0.64
	3.00	3.00	30	34	69	0.21	21	42	0.58	16	32	0.96
	4.00	4.00	40	30	60	0.29	18	36	0.77	14	28	1.28
	5.00	5.00	50	27	53	0.36	16	32	0.96	13	25	1.60
	6.00	6.00	60	24	49	0.43	15	30	1.15	11	23	1.92

This information is for guidance only

Vertical		
Static Natural Frequency	Hz	fsv
Dynamic Natural Frequency	Hz	fdv
Static Deflection	mm	d