

VIBRATION CONTROL

VC2100

MATERIAL DATA SHEET

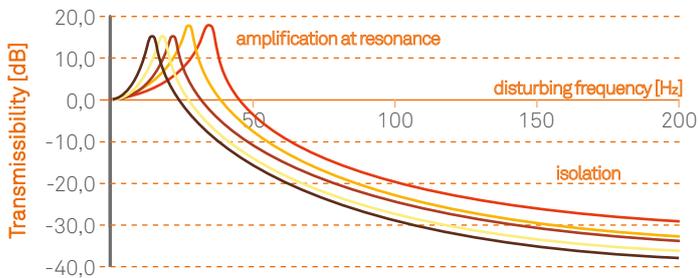
MATERIAL DESCRIPTION & PROPERTIES

VC2100 Vibration Control material is an Engineered compound with Cork and Synthetic rubber.

This product is suitable for vibration control applications in immersed in oil, such as internal vibration control pads in extreme industrial environments where the presence of oils or other chemicals are presents.

- **MAXIMUM LOAD** _____ 2.0 MPa (290psi)
- **WORK LOAD RANGE** _____ 0.5 to 1.5 MPa (72 to 217 psi)
- **TEMPERATURE RANGE** _____ -40°C to 125°C (-40°F to 257°F)

TRANSMISSIBILITY



- VC2100 10mm
- VC2100 20mm
- VC2100 30mm
- VC2100 40mm
- VC2100 50mm

Transmissibility Analysis, for a 150 x 150 pad

Read the Transmissibility by projecting a vertical line from the disturbing frequency to intercept the curve.

Specially designed to isolate the transformer core and clampings as well as walls minimizing structure borne noise:

- Oil type Transformers and Reactors
- HVAC equipment
- Industrial Machinery

DENSITY (kg/m ³) ¹	850
HARDNESS (SHORE A) ²	65
TENSILE STRENGTH (MPa) ³	2,0
CREEP RATE (%) ⁴	<2,0

- (1) ASTM D297
- (2) ASTM D2240
- (3) ASTM D412, Die C
- (4) ISO 8013

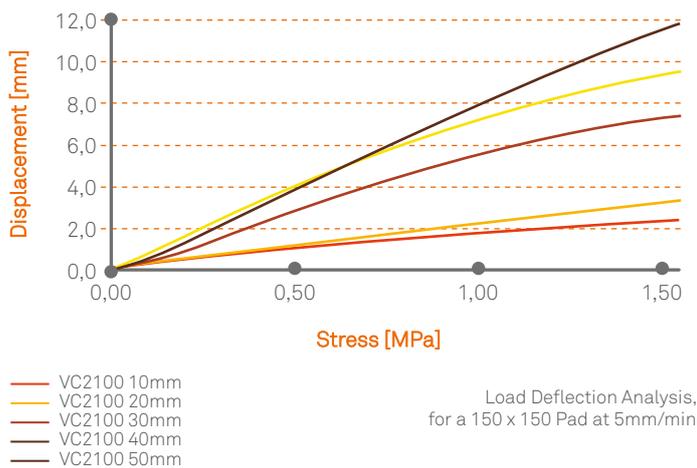
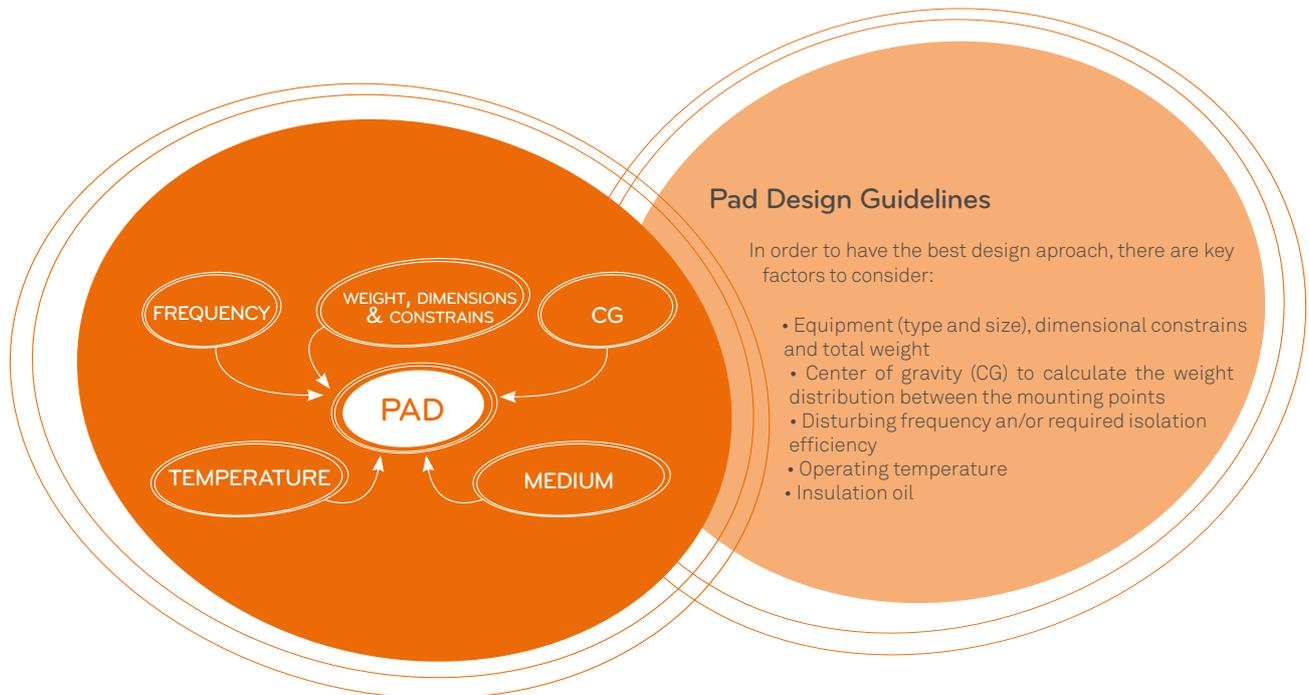
FEATURES

- Reduce vibration, absorb shock and structure borne noise
- Good resistance to oils (compatible with mineral, silicone and natural ester insulation oils)
- Available in thicknesses up to 50mm
- One layer material avoiding de-lamination issues
- Easy to fabricate into pads
- Retains original length and width under compression due to cork poisson ratio

VC2100 IS FREE OF:

- Polycyclic Aromatic Hydrocarbons (PAH)
- Heavy Metals (Pb, Cd, Hg and Cr (VI))
- Asbestos

Complies with RoHS and ELV 2000/53/EC European Directives

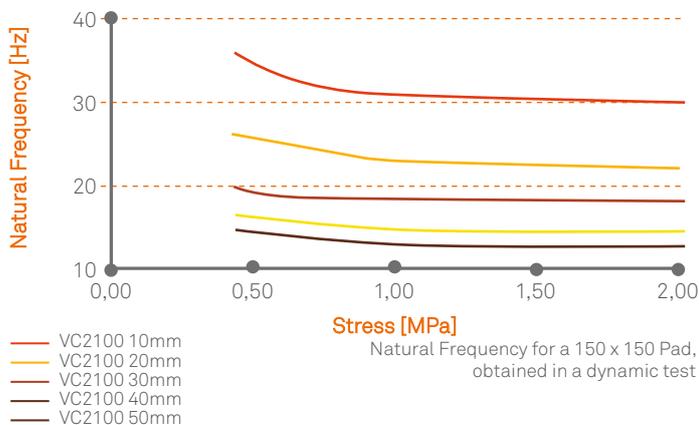


Pad Stress

Calculate Pad Stress in MPa (or N/mm²):

$$\text{Stress in MPa} = \frac{\text{Weight of machine in kg} \times 9.8}{\text{Total Pad area in mm}^2}$$

- Project vertical line from calculated stress to intercept the curve of desired thickness
- Read deflection (mm) of vertical axis of graph
- Total Pad area = number of Pads x Pad area



Pad Natural Frequency

Natural frequency of Pad:

- Calculate stress on Pad in N/mm² (see above)
- Read from horizontal axis across to desired Pad thickness
- Read natural frequency (fn) on vertical axis