

# **Installation instructions**

VT44XX without movement limiters

2010-09-30 **Rev**: 1 Page 1/2

### 1. Description

The VT44 spring box, also known as an Anti Vibration Mount (AVM), status at delivery will be according to the dimensional drawing in the corresponding product data sheet.

The upper and lower mounting plates of the AVM are manufactured from mild steel painted with a red undercoat and black paint for basic corrosion resistance.

The springs are powder coated. As long as the surface is not damaged this treatment efficiently protects the spring from corrosion. The stainless steel cushions inside the isolators are made of AISI304 grade steel and the end caps of each spring are manufactured in aluminium.

If further corrosion protection is desired the isolators can be greased or treated with an anti corrosion wax OKS 2100.

#### 2. Installation of the AVM

Make sure that the foundation is levelled and that all mounting positions are in the horizontal plane. A tolerance of  $\pm 2$  mm in height difference between the mounting positions is accepted, also a declination of 1 mm per 1 m is accepted.

The foundation should be rigid. This can be considered valid when the mobility of the foundation is at least ten times higher then mobility of the AVM.

The bottom plate of the AVM can be welded or bolted to the foundation using a, for the foundation material, suitable bolt. Bolts for fastening to upper (skid) or lower (foundation) interface are not included in the scope of supply. Types of bolts and torques are not specified within this document.

Connections such as exhaust gas pipe, fuel lines, electrical cables and similar must be elastic or be fitted in a way that allows the skid to move (i.e. cable loops). The AVMs' are elastic and thus the engine will shake on start up and power down when the rotation within the engine passes the resonance frequency of the setup.

#### 3. Operating condition

When the AVM is loaded the upper plate will deflect from the load. The total deflection depends on the type of spring box and load. The typical deflection is stated in the data sheet for the specific product.

After installation a check to confirm that the deflections are equal for all AVMs' must be performed. The AVMs' built in height should be as advised in the calculations in the technical proposal. Small deviations of  $\pm 2$  mm are accepted unless otherwise stated in the documentation. After installation the built in height should be documented for future reference.



# **Installation instructions**

VT44XX without movement limiters

2010-09-30 **Rev**: 1 Page 2/2

## 4. Inspection.

Vibratec recommend that a visual inspection of all components are performed regularly. At this inspection all visible components shall be checked and also the surface protection of the steel structure.

After installation the AVMs' built in height shall be checked one week after installation. If the built in height of the AVMs' remains as when installed, the AVMs' will only need a yearly inspection as described below.

The AVMs' shall be visually inspected yearly. The installation height is to be measured and compared with the original installation height. Under normal circumstances the AVMs' height should remain unchanged. If the AVMs' tend to creep, i.e. loose built in height over time, Vibratec should be contacted.

Note! If the AVM are exposed to severe external loads, such as an earth quake, the AVM <u>must</u> be inspected for structural integrity. The AVM is not designed for seismic protection but may under certain circumstances offer some protection.

#### 5. Maintenance

Normally the AVM do not need any maintenance. If any damage of the surface treatment is noted, repair should be performed. The isolator is then to be cleaned and painted according to the relevant specification.

Sweden
Tel: +46 176 20 78 80
e-mail: info@vibratec.se

Norway
Tel: +47 33 07 07 50
e-mail: info@vibratec.no

Danmark Tel: +45 49 13 22 44 e-mail: info@vibratec.dk Estonia
Tel: +372 56 66 29 93
e-mail: info@vibratec.ee