# DOCUMENTATION SHEET

Steel Spring Isolator Type HDT 1



# General

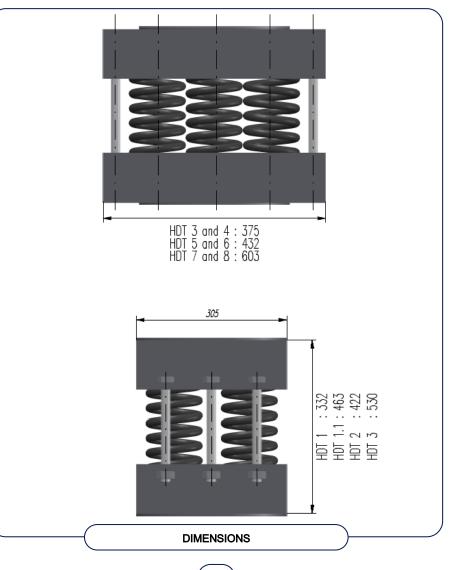
Medium and heavy duty spring isolators types MDL, HDL, HDT and HD (V) are available for a load range up to 404.5 kN and static deflections up to 76 mm. This enables the efficient support of very large machinery and/or a very high degree of isolation. The spring isolators are designed in top grade wire to low stress levels and produced by the hot deformation and annealing method. The finish is by means of protective coatings compatible with the working environment, ensuring a trouble-free service life. The housings formed by channels allow for pre-loading of the isolators up to the working load and are available in a tall (T) and low (L) version. The HD (V) isolators support an integrated damper unit for reduction of amplitudes in transient conditions. The other types of isolators can be equipped with separate viscous damper unit type DV 1, 2 and 3 to match the damping requirements. Our specialists will be happy to supply you with the selection.

### Applications

- Generator sets
- Heavy industrial machinery
- Large generator sets
- Roller mills and mixers
- Complete power plants
- Boilers

# Types

- MDL (medium-duty low)
- HDL (heavy-duty low)
- HDT (heavy-duty tall)
- HD (heavy duty)
- HDV
- Viscous damper units



1

SSM / HDT 1 / NOV 2012





# **Rubber Design** vibration and noise control

Туре	Cz [N/mm]	Cx, y [N/mm] at preferential load	Fz max [N]	Fz preferential [N]
HDT 31	2445	2677	65800	56600
HDT 41	3260	3570	87760	75475
HDT 51	4075	4462	109700	94340
HDT 61	4890	5354	131640	113200
HDT 71	5705	6247	153580	132000
HDT 81	6520	7140	175500	150950
	CHARACTERISTICS			)

### Isolator selection

This described isolator selection is based on the vertical load of the isolators, if required seismic and 6 DOF calculations can be performed by our specialists.

- 1. Determine the total weight of the machine to be isolated, including work load
- 2. Determine the position of the combined centre of gravity in horizontal and vertical planes
- 3. Decide the number of isolators and the positions where the isolators are to be placed relative to the combined centre of gravity
- 4. Calculate the load per isolator
- 5. Select with the help of the preferential load in the table the suitable type of mounting

We recommend selection of the isolators be made with the load per isolator within + or - 10% of the preferential load. The static deflection of the isolator is calculated by dividing the load per isolator by the stiffness Cz given in the table for the selected isolator.





### Rubber Design B.V.

Industrieweg 21 2995BE Heerjansdam The Netherlands Phone: +31 (0)78 677 87 78 Fax: +31 (0) 78 677 10 38 Email: info@rubberdesign.nl Web: www.rubberdesign.nl

