



DOCUMENTATION SHEET

Steel Spring Isolator  
Type HDL

HDL

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.

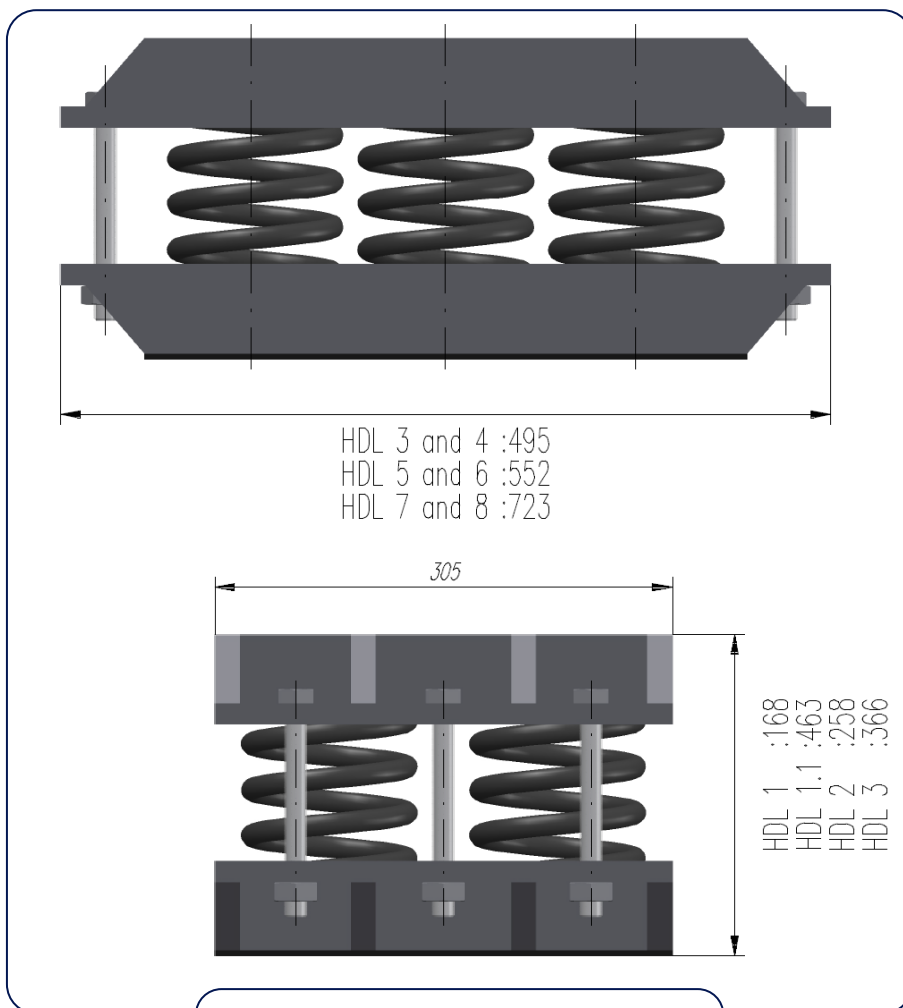
The housings formed by channels allow for pre-loading of the isolators up to the working load and are available in a tall ( T ) and low ( L ) version. The HD( V ) isolators support an integrated damper unit for reduction of amplitudes in transient conditions. The other types of isolators can be equipped 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

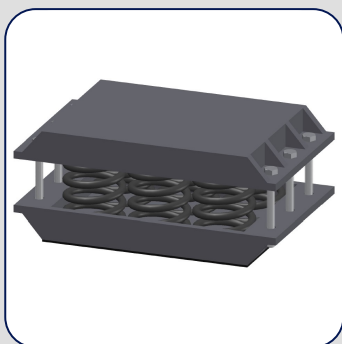
- Generator sets
- Heavy industrial machinery
- Large generator sets
- Roller mills and mixers
- Complete power plants
- Boilers

Types

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



DIMENSIONS





Type	Cz [N/mm]	Cx, y [N/mm] at preferential load	Fz max [N]	Fz preferential [N]
HDL 31.1	5430	1848	151750	130475
HDL 41.1	7240	2464	202250	174000
HDL 51.1	9050	3080	252850	217450
HDL 61.1	10860	3696	303500	260950
HDL 71.1	12670	4312	354000	304450
HDL 81.1	14480	4928	404500	348000

## 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.

HDL



**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](mailto:info@rubberdesign.nl)  
Web: [www.rubberdesign.nl](http://www.rubberdesign.nl)