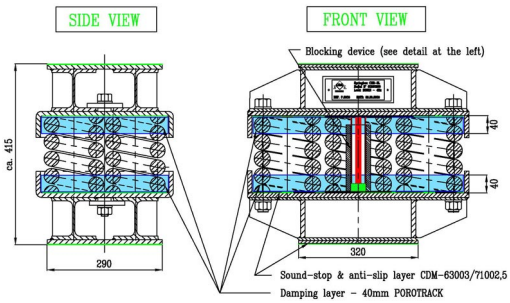
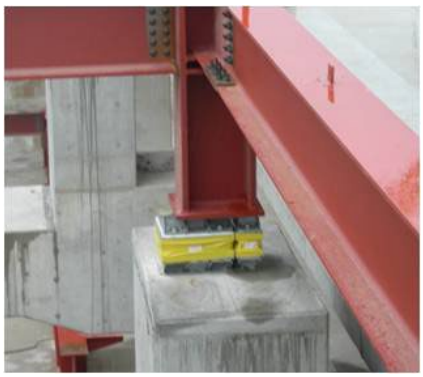
Sin Gyung Ju, KO

CDM-CHR-BOX

Job Type	Structural Isolation
Contractor	Hanjin Heavy Ind. & Con.
Acoustical Consultant	Threetech
Vibration Source	Train
Installation	2008
Load (ADL)	approx. 182000 kN
Number of springboxes	approx. 360

Already in 2004 it was decided to install the platforms for the waiting passengers on a vibration isolation system, preferably made of precompressed springs resonating around 4 Hz.
The CDM-CHR-BOX system was so installed.
Seen the high dynamics involved, a damping of 5% was requested as well. This damping was realized through the introduction in the CDM-CHR-BOX boxes of CDM-Porotrack layers at top and bottom of the springs, in combination with friction cilinders, which provide lateral blocking as well.
The supplied boxes are standard CDM-CHR-B3, B6 and B9.





In order to take up the horizontal forces (wind), about 10% of the springboxes has been fixed at the infra and superstructure by means of a bolted steel plate, ensuring that the boxes can still be removed whenever necessary.
Numerous lab tests were carried out on the springs, on the Porotrack material, and on the friction cilinders.

Building

Project Reference

CDM Reutenbeek 9-11 B - 3090 Overijse Belgium Tel: +32 2 687 79 07 Fax: +32 2 687 35 52 mailto: general@cdm.eu http://www.cdm.eu