

SEISMIC RISK EVALUATION SEISMIC MICROZONING FOR INDUSTRIAL PLANNING

Project: Definition of the earthquake effects for a new biomass plant design and construction

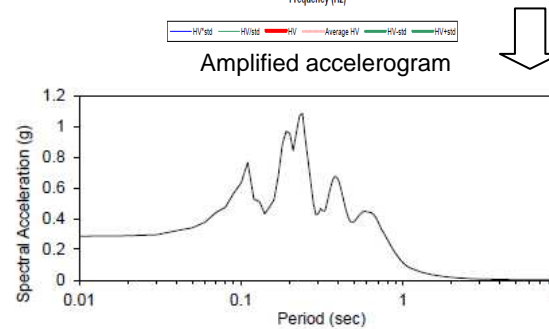
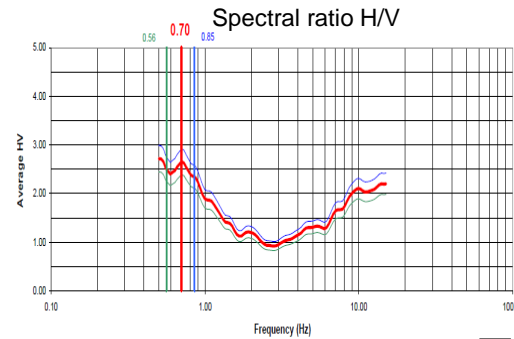
Site: Finale Emilia (MO - Italy)

The purpose of the survey:

a) seismic soil classification according to the Italian Rule (Eurocode 8); b) local site-response with the Nakamura method

Design Survey: MASW surveys and recording of natural microtremors in several points with a low-frequency geophone (long time recording)

Results: The survey has covered all the industrial, providing the following parameters: (a) seismic classification of the soils (development of shear wave velocity in the first 30 meters), (b) local-site seismic response (using the one-dimensional Linear Equivalent Method (code EERA), (c) verify the liquefaction (amplified seismic action) considering the results of Cone Penetration Test performed on a regular grid in the site



Stiffness profile - Shear waves Vs [m/s]

