Analysis of underground structures subjected to blast loading and blast induced vibrations

The load applied due to blast on the underground structures and their dynamic behavior depends upon the surrounding geotechnical medium, i.e., soil and rock, saturated or dry. Blast response of the structures in such scenario-defined geotechnical conditions need to be analyzed with proper understanding in propagation of the shock wave through the surrounding medium and its consequences on the underground structures.

Effect of underground blast is soil ejecta

Stress wave propagation in geological mediums

Depth of burial

Material 1

Material 2

Material 3

Underground Blast

Shock wave formation

Soil Ejecta