

Ergun constant

Dimensionless quantity related to [fluid mechanics](#) in porous media to account for inertial (kinetic) effects at high flow velocities:

$$(1) \quad C_E = \beta \sqrt{k}$$

where k is [formation permeability](#) and β is [Forchheimer coefficient](#).

Theoretical derivation is not evident and in practise the value of [Ergun constant](#) is usually fit to the measurements.