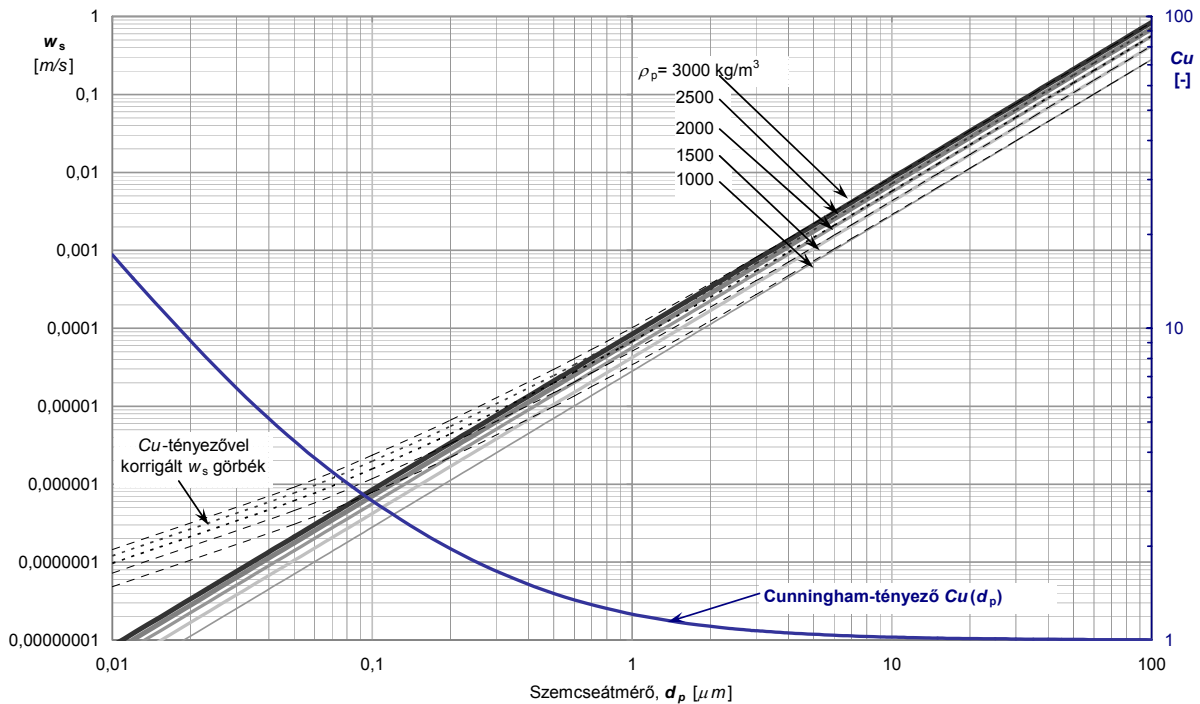


$$F_{Stokes} = 3\pi\mu d_p w, \quad Re_p = \frac{w \cdot d_p}{\nu} = \frac{w \cdot d_p \cdot \rho_g}{\mu}, \quad c_d = \frac{F_{Stokes}}{\frac{\rho_g}{2} w^2 \frac{d_p^2 \pi}{4}}, \quad c_d = \frac{24}{Re_p}$$

OSEEN
$$c_d = \frac{24}{Re_p} \cdot \left(1 + \frac{3}{16} Re_p\right) \quad Re_p < 5 \quad (1)$$

OSEEN
$$c_d = \frac{24}{Re_p} \cdot \left(1 + \frac{Re_p^{3/2}}{6}\right) \quad 3 < Re_p < 400 \quad (2)$$

MICHAELIDES
$$c_d = \frac{24}{Re_p} \cdot \left(1 + 0,15 \cdot Re_p^{0,687}\right) \quad 0,1 < Re_p < 1000 \quad (3)$$



Szemcse süllyedési (ülepedési) sebessége, ill. Cu : Cunningham-féle korrekciós tényező:

$$w_s = \frac{(\rho_p - \rho_g) d_p^2 g}{18\mu} \cong \frac{\rho_p d_p^2 g}{18\mu} \quad Cu = 1 + 1,246 \cdot \frac{2\lambda}{d_p} + 0,42 \cdot \frac{2\lambda}{d_p} \cdot e^{-0,87 \frac{2\lambda}{d_p}} \quad (Cu \cong 1 + \frac{2A\lambda}{d_p})$$