

NOMENCLATURE

- A - area
- C – off bottom height
 - Sometimes concentration
- D – impeller or pipe diameter
- d or dp – particle diameter
- g – gravity acceleration
- H – liquid height
- N – impeller rotational speed
- P- power
- Q - flow
- S – density ratio
- T – tank diameter
 - Occasionally temperature
- U and V – velocity
- X – 100 times the weight ratio
- Z – distance traveled
- ρ – density
 - S – solid L - liquid
- μ - viscosity
- λ – eddy length
- σ – surface or interfacial tension
- ϵ – rate of energy dissipation per unit mass
 - Sometimes P_m
- Θ – mixing time
- Φ – volume fraction
- ν – kinematic viscosity – viscosity divide by density

DIMENSIONLESS NUMBERS

- Reynolds – NRe or Re – $\rho^* D^2 N / \mu$
- Power – Po or Npo – $P / (\rho^* N^3 D^5)$
- Fourier – Fo - $\mu^* \theta / \rho / T^2$
- Weber Nwe or We -
- Froude – Fr – $N^2 D / g$
- Flow – Nq or NQ or FI – $Q / (N^* D^3)$