Appendix-1.1 Common Unit Systems

Quantity	Symbol	Metric	Engineering (English)
Mass	m	gram,gm	lbm
Length	L	centimeter,cm	ft
Time	t	second,sec	Sec
Force	F	dyne	pound, lbf
Density	ρ	gm / cu cm	lbm / cu ft
Specific Volume	V	cu cm / gm	cu ft / lbm
Absolute Viscosity	μ	gm / cm sec	lbm / ft sec
Energy	E	dyne cm (erg)	ft lbf
Power	P	erg / sec	horsepower

Appendix-1.2 Common Conversion factors

acres x 43560 = sg ft	m^3 x 61.023= cu inch	km x 328.1 = ft	lb x 453.5924 = gr
acres x 40471 sq m	ft x 30.48 = cm	km x 0.6214 = miles	psi x 0.06804 = atm
acre-ft x 43560 = cu ft	ft x 0.3048 = m	km/hr x 27.78 = cm/sec	psi x 2.307 = ft water
atm x 76 = cm of Hg	(F-32) x 0.555 = ^{O}C	km/hr x 54.68 = ft/min	psi x 2.036= inch Hg
atm x 29.92 = inch of Hg	ft/min x 0.508 = cm/sec	km/hr x 0.9113 = ft/sec	radian x 57.30 = degree
atm x 14.7 = psi	ft/min x 0.0166 = ft/sec	kw x 1.341 = hp	rad/sec x 9.549 = rpm
bbl oil x 42 = gal oil	ft/min x 0.01829 = km/hr	liter x 0.03531 = cu ft	rev. x 360 = degree
bll cem. x 376 = lb cem.	gal x 0.1337 = cu ft	liter x 0.61.02 = cu inch	cm^2 x 0.1550 = $inch^2$
bars x 14.504 = psi	gal x 231 = cu inch	liter x 0.2642 = gal	$inch^2$ x 6.452 = cm^2
^{O}C x 1.8 + 32 = F	gr x 980.7 = dtne	meter x 3.281 = ft	$inch^2$ x 6.944x10^{-3} = ft^2
cm Hg x 0.01316 = atm	hp x 33000 = ft-lb/min	meter x 29.37 = inch	ton (long) x 1016 = kg
cm^3 x 2.642 x 10^{-4} = gal	hp x 550 = ft-lb/sec	m/sec x 196.8 = ft/min	ton (long) x 1.12 = ton
in^3 x 5.78 x 10^{-4} = cu ft	inch x 2.54 = cm	m/sec x 3.281 = ft/sec	ton (short) x 907.18 = kg
m^3 x 35.31 = cu ft	kg x 980665 = dyne	m/sec x 3.6 = km/hr	yard x 91.44 = cm