

## ภาคผนวกที่ 2 การเปลี่ยนหน่วย

Quantity	Unit and its conversion factor to SI units
Length	1 centimetre (cm) = $10^{-2}$ m 1 micrometre (micron) ; 1 micron ( $\mu$ ) = $10^{-6}$ m 1 angstrom (A) = $10^{-10}$ m
Mass	1 gramme (g) = $10^{-3}$ kg 1 ton (t) = $10^3$ kg 1 atomic unit of mass (a.u.m.) = $1.66 \times 10^{-27}$ kg
Plane angle	1 degree ( $^{\circ}$ ) = $\frac{\pi}{180}$ rad 1 minute ( $'$ ) = $\frac{\pi}{180} \times 10^{-3}$ rad 1 revolution (rev) = 2 rad
Area	1 are (a) = $100 \text{ m}^2$ 1 hectare (ha) = $10^4 \text{ m}^2$
Volume	1 litre (l) = $1.000028 \times 10^{-3} \text{ m}^3$
Force	1 kilogramme-force (kgf) = 9.81 N 1 ton-force (tonf) = $9.81 \times 10^3$ N
Pressure	1 dyn / $\text{cm}^2$ = $0.1 \text{ N/m}^2$ 1 kgf/ $\text{m}^2$ = $9.81 \text{ N/m}^2$ 1 millimetre of mercury column (mm Hg) = $133.0 \text{ N/m}^2$ 1 millimetre of water column (mm H <sub>2</sub> O) = $9.81 \text{ N/m}^2$ 1 technical atmosphere (at) = $1 \text{ kgf/cm}^2 = 0.981 \times 10^5 \text{ N/m}^2$ 1 physical atmosphere (atm) = $1.013 \times 10^5 \text{ N/m}^2$
Work , energy,	1 erg = $10^{-7}$ J
amuont of	1 kgf-m = 9.81 J

Quantity	Unit and its conversion factor to SI units
heat	1 erg = $10^{-7}$ J 1 kgf-m = 9.81 J 1 watt-hour (W-h) = $3.6 \times 10^3$ J 1 electron-volt (eV) = $1.6 \times 10^{19}$ J 1 calorie (cal) = $4.19 \times 10^3$ J 1 kilocalorie (1 kcal) = $4.19 \times 10^3$ J 1 physical litre-atmosphere (l.atm) = $1.01 \times 10^2$ J 1 technical litre-atmosphere (l.at) = 98.1 J
Power	1 erg/s = $10^{-7}$ W 1 horsepower (hq) = 75 kgf-m/s = 736 W
Dynamic	1 poise (P) = $0.1 \text{ N.s/m}^2$ = 0.1 kg/m.s
Viscosity	
Kinematic	1 stokes (St) = $10^{-4} \text{ m}^2/\text{s}$
viscosity	