

ภาคผนวก
การเปรียบเทียบหน่วย

ความยาว (Length)

1 mm	= 0.039 in
1 cm	= 10 mm
1 m	= 10 dm
1 m	= 100 cm
1 m	= 3.28 ft
1 m	= 39.37 in
1 dm	= 10 cm
1 ft	= 0.3048 m
1 ft	= 30.48 cm
1 in	= 25.4 mm
1 in	= 2.54 cm
1 km	= 1000 m
1 km	= 0.621 mile
1 mile	= 1.609 km

มวล (mass)

1 kg	= 2.205 lb
1 kg	= 9.81 N
1 kg	= 1000 g
1 lb	= 0.454 kg
1 N	= 0.2248 lb
1 N	= 0.102 kg
1 kN	= 0.1004 ton
1 ton	= 2204 lb
1 ton	= 1000 kg
1 ton	= 9.964 kN
1 carat	= 0.2 g
1 carat	= 200 mg

เวลา (Time)

1 min	= 60 s
1 hr	= 60 min
1 hr	= 3600 s

ความเร็ว (Speed)

1 in/s	= 0.083 ft/s
1 m/s	= 3.281 ft/s
1 m/s	= 60 m/min
1 ft/s	= 0.035 m/s
1 ft/s	= 12 in/s
1 ft/min	= 0.2 in/s
1 km/h	= 0.621 mph
1 kph	= 1.61 km/h

อัตราเร่ง (Acceleration)

1 ft/s ²	= 0.3048 m/s ²
1 m/s ²	= 3.2808 ft/s ²

พื้นที่ (Area)

1 mm ²	= 0.002 in ²
100 mm ²	= 1.55 in ²
1 m ²	= 100 dm ²
1 m ²	= 10000 cm ²
1 dm ²	= 100 cm ²
1 dm ²	= 10000 mm ²
1 in ²	= 645.16 mm ²
1 in ²	= 6.452 cm ²
1 ft ²	= 0.093 m ²
1 Acres	= 4046.85 m ²
1 in ²	= 6.4516 cm ²
1 in ²	= 6.4516 x 10 ⁻⁴ m ²
1 ft ²	= 929 cm ²

ปริมาตร (Volume)

1 in ³	= 16.387 cm ³
1 in ³	= 16.387 ml
1 in ³	= 16.387 cc
1 ft ³	= 1728 in ³
1 ft ³	= 7.48 Gallon
1 ft ³	= 0.0283 m ³

1 ft ³	= 28.32 Litre
1 cm ³	= 0.001 Litre
1 cm ³	= 1000 mm ³
1 cc	= 0.001 Litre
1 ml	= 0.001 Litre
1 m ³	= 1000 dm ³
1 m ³	= 35.3 ft ³
1 m ³	= 1000 Litre
1 dm ³	= 1000 cm ³
1 U.S. Gallon	= 231 in ³
1 U.S. Gallon	= 3.785 Litre
1 IMP Gallon	= 277.4 in ³
1 IMP Gallon	= 4.546 Litre
1 IMP Gallon	= 1.2 U.S. Gallon
1 Litre	= 1000 cm ³
1 Litre	= 1000 cc
1 Litre	= 0.001 m ³
1 Litre	= 0.2642 U.S. Gallon
1 Litre	= 0.22 IMP Gallon
1 ml	= 0.061 in ³
1 cm ³	= 0.061 in ³
10 ml	= 0.61024 in ³
10 cm ³	= 0.61024 in ³
1 Barrel (Oil)	= 42 Gallon
1 Barrel (Oil)	= 158.99 Litre
1 cu.ft	= 1728 cu.in

ความหนาแน่น (Density)

1 gm/cm ³	= 10 ³ kg/m ³
	= 62.43 lb/ft ³
	= 1.940 slug/ft ³

กำลัง (Power)

1 W	= 0.737 ft-lbf/s
1 W	= 1 N-m/s
1 W	= 1 J/s

1 W	= 3.412 BTU/hr
1 W	= 0.0013 hp (Britist)
1 kW	= 1.34 hp
1 kW	= 1.36 PS (SAE)
1 kW	= 1.47 PS (JIS)
1 hp	= 746 W
1 hp	= 0.7457 kW
1 hp	= 1.0139 hp (Metric)
1 hp (SAE)	= 1.014 PS (DIN)
1 hp (Metric)	= 735.499 W
1 hp (British)	= 745.699 W
1 hp (British)	= 1.01387 hp (metric)
1 hp (British)	= 2544 Btu /hr
1 hp (British)	= 0.212 ton (refrigeration)
1 hp (Boiler)	= 13.1548 hp (British)
1 hp (Boiler)	= 13.3337 hp (metric)
1 hp (DIN)	= 0.735 kW
1 hp (DIN)	= 0.735 hp (SAE)

ความดัน (Pressure)

1 atm	= 14.696 lb/in ²
1 atm	= 1.033 kg/cm ²
1 atm	= 1.013 bar
1 atm	= 101325 Pa
1 kg/cm ²	= 14.223 lb/in ²
1 kg/cm ²	= 0.981 bar
1 kg/cm ²	= 98.1 kN/m ²
1 kg/cm ²	= 98.1 kPa
1 N/m ²	= 0.000145 lbf/in ²
1 lbf/in ²	= 6.895 kN/m ²
1 lbf/in ²	= 0.068947 bar
1 lbf/in ²	= 0.070 kg/cm ²
1 lbf/in ²	= 0.068 atm
1 lbf/in ²	= 2.0416 in of Hg
1 lbf/in ²	= 27.71 in of Water
1 bar	= 0.9869 atm

1 bar	= 14.5038 lbf/in ²
1 bar	= 1.02 kg/cm ²
1 bar	= 29.527 in of Hg
1 bar	= 33.8 ft of Water
1 bar	= 42 ft of Oil
1 bar	= 10 ⁵ N/m ²
1 bar	= 10 ⁵ Pa
1 Pa	= 1 N/m ²
1 kPa	= 0.01 kgf/cm ²
1 MPa	= 10 kgf/cm ²
1 in of Hg	= 0.491 lbf/in ²
1 in of Hg	= 1.132 ft of Water
1 in of Hg	= 25.4 mm of Hg
1 ft of Water	= 0.433 lbf/in ²
1 ft of Oil	= 0.4 lbf/in ²

แรงบิด (Torque)

1 N-m	= 0.738 lbf-ft
1 N-m	= 8.8507 lbf-in
1 N-m	= 0.102 kgf-m
1 lbf-ft	= 0.1382 kgf-m
1 lbf-ft	= 1.356 N-m
1 lbf-ft	= 0.1129 N-m
1 lbf-ft	= 0.0115 kgf-m
1 kgf-m	= 86.795 lbf-in
1 kgf-m	= 7.233 lbf-ft
1 kgf-m	= 9.81 N-m

พลังงาน , งาน (Energy , Work)

1 J	= 0.738 ft-lbf
1 J	= 1 N-m
1 J	= 1 Ws
1 J	= 0.239 calorie
1 ft-lbf	= 1.3558 J
1 calorie	= 4.186 J
1 kJ	= 0.9478 Btu

1 Btu	= 1054.3 J
1 Btu	= 1.05506 kJ
1 Btu	= 252.16 calorie
1 Btu	= 0.00029 kWh
1 Btu	= 0.000392 hp-hr (British)
1 Btu	= 0.000398 hp-hr (Metric)
1 kJ	= 0.526 CHU
1 CHU	= 1.9 kJ