Formulas used for conversion

1. Formulas used for conversion of Stress units

   1) Pascal (Pa) to Mega Pascal (MPa)

   $MPa = Pa/(10^6)$

   2) Pascal (Pa) to Giga Pascal (GPa)

   $GPa = Pa/(10^9)$

   3) Pascal (Pa) to Terra Pascal (TPa)

   $TPa = Pa/(10^{12})$

   4) Mega Pascal (MPa) to Pascal (Pa)

   $Pa = MPa*(10^6)$

   5) Mega Pascal (MPa) to Giga Pascal (GPa)

   $GPa = MPa*(10^{-3})$

   6) Mega Pascal (MPa) to Terra Pascal (TPa)

   $TPa = MPa*(10^{-6})$

   7) Giga Pascal (GPa) to Pascal (Pa)

   $Pa = GPa*(10^9)$

   8) Giga Pascal (GPa) to Mega Pascal (MPa)

   $MPa = GPa*(10^3)$

   9) Giga Pascal (GPa) to Terra Pascal (TPa)

   $TPa = GPa*(10^{-3})$

   10) Terra Pascal (MPa) to Pascal (Pa)

   $Pa = TPa*(10^{12})$

   11) Terra Pascal (MPa) to Mega Pascal (MPa)

   $MPa = TPa*(10^6)$

12) Terra Pascal (MPa) to Giga Pascal (GPa)

$$GPa = TPa*(10^3)$$

2. Formulas used for conversion of Angular Velocity units

1) RPM to rad/s

$$rad/s = RPM*((2*3.14)/60)$$

2) RPM to rad/min

$$rad/min = RPM*(2*3.14)$$

3) RPM to rad/hr

$$rad/hr = RPM*(120*3.14)$$

4) rad/s to RPM

$$RPM = rad/s*(60/(2*3.14))$$

5) rad/s to rad/min

$$rad/min = rad/s*(60)$$

6) rad/s to rad/hr

$$rad/hr = rad/s*(3600)$$

7) rad/min to rad/s

$$rad/s = (rad/min)/60$$

8) rad/min to rad/hr

$$rad/hr = rad/min*60$$

9) rad/min to RPM

$$RPM = (rad/min)/(2*3.14)$$

10) rad/hr to RPM

$$RPM = (rad/hr)/(120*3.14)$$

11) rad/hr to rad/s

       rad/s = (rad/hr)/3600

12) rad/hr to rad/min

       rad/min = (rad/hr)/60

3. Formulas used for conversion of Viscosity units

1) kgf-sec/m^2 to Ns/m^2

       Ns/m^2 = kgf-sec/m^2*9.80665

2) kgf-sec/m^2 to Poise(dyne-sec/cm^2)

       Poise = kgf-sec/m^2*98.0665

3) Ns/m^2 to kgf-sec/m^2

       kgf-sec/m^2 =   (Ns/m^2)/9.80665

4) Ns/m^2 to Poise(dyne-sec/cm^2)

       Poise = (Ns/m^2)*10

5) Poise(dyne-sec/cm^2) to Ns/m^2

       Ns/m^2 = Poise/10

6) Poise(dyne-sec/cm^2) to kgf-sec/m^2

       kgf-sec/m^2 = Poise/98.0665

4. Formulas used for conversion of Pressure units

1) atm to bar

      bar = atm*1.01325

2) bar to atm

      atm = bar/1.01325

3) atm to Pascal (Pa)

   Pa = atm*101325

4) Pascal (Pa) to atm

   atm = Pa/101325

5) atm to Kilo Pascal (KPa)

   KPa = atm*101.325

6) Kilo Pascal (KPa) to atm

   atm = KPa/101.325

7) atm to Mega Pascal (MPa)

   MPa = atm*0.101325

8) Mega Pascal (MPa) to atm

   atm = MPa/0.101325

9) atm to Pound/sq. inch (PSI)

   PSI = atm*14.6959

10)Pound/sq. inch (PSI) to atm

   atm = PSI/14.6959

11) atm to Torr (mmHg)

   Torr = atm*760

12) Torr (mmHg) to atm

   atm = Torr/760

13) bar to Pascal (Pa)

   Pa = bar*(10^5)

14) Pascal (Pa) to bar

   bar = Pa/(10^5)

15) bar to Kilo Pascal (KPa)

   KPa = bar*(100)

16) kilo Pascal (Pa) to bar

   bar = KPa/(100)

17) bar to Mega Pascal (MPa)

   MPa = bar/10

18) Mega Pascal (Pa) to bar

   bar = MPa*10

19) bar to Pound/sq. inch (PSI)

   PSI = bar*14.5038

20) Pound/sq. inch (PSI) to bar

   bar = PSI/14.5038

21) bar to Torr (mmHg)

   Torr = bar*750.062

22) Torr (mmHg) to bar

   bar = Torr/750.062

23) Pascal (Pa) to Kilo Pascal (KPa)

   KPa = Pa/(10^3)

24) Kilo Pascal (KPa) to Pascal (Pa)

   Pa = KPa*(10^3)

25) Pascal (Pa) to Mega Pascal (MPa)

   MPa = Pa/(10^6)

26) Mega Pascal (KPa) to Pascal (Pa)

   Pa = MPa*(10^6)

27) Pascal (Pa) to Pound/sq. inch (PSI)

PSI = Pa/6894.75729

28) Pound/sq. inch (PSI) to Pascal (Pa)

Pa = PSI*6894.75729

29) Pascal (Pa) to Torr (mmHg)

Torr = Pa*133.322368

30) Torr (mmHg) to Pascal (Pa)

Pa = Torr/133.322368

31) Kilo Pascal (KPa) to Mega Pascal (MPa)

MPa = KPa/1000

32) Mega Pascal (MPa) to Kilo Pascal (KPa)

KPa = MPa*1000

33) Kilo Pascal (KPa) to Pound/sq. inch (PSI)

PSI = KPa/6.89475729

34) Pound/sq. inch (PSI) to Kilo Pascal (KPa)

KPa = PSI*6.89475729

35) Kilo Pascal (KPa) to Torr (mmHg)

Torr = KPa*7.50061683

36) Mega Pascal (MPa) to Pound/sq. inch (PSI)

PSI = MPa*145.037737797

37) Pound/sq. inch (PSI) to Mega Pascal (MPa)

MPa = PSI/145.037737797

38) Mega Pascal (MPa) to   Torr (mmHg)

Torr = MPa*7500.617

39) Torr (mmHg) to Mega Pascal (MPa)

MPa = Torr/7500.617

40) Pound/sq. inch (PSI) to Torr (mmHg)

Torr = PSI*51.7149326

41) Torr (mmHg) to Pound/sq. inch (PSI)

PSI = Torr/51.7149326 (where a = Torr & b = PSI)

5. Formula used for conversion of Izod value to charpy value

1) Izod value to Charpy value

Charpy = 2.738223*Izod

2) Charpy value to Izod value

Izod = Charpy/2.738223