Quantity and symbol	Formula	unit	Symbol of unit	Dimension of quantity
		Basic units		
Length l	-	metre	m	l
Mass m	-	kilogramme	kg	m
Time t	-	second	s	t
		Derived units		
Area A	$A = l^2$	square metre	m^2	l^2
Volume V	$V = l^3$	cubic metre	m^3	l^3
Frequency ν	$\nu = \frac{1}{T}$	hertz	Hz	l^{-1}
Angular velocity	$\omega = \frac{\Delta\psi}{\Delta t}$	radian per second	rad/s	l^{-1}
Angular acceleration	$\varepsilon = \frac{\Delta\omega}{\Delta t}$	radian per second per second	rad/s^2	l^{-2}
Linear velocity v	$v = \frac{\Delta l}{\Delta t}$	metre per second	m/s	lt^{-1}
Linear acceleration a	$a = \frac{\Delta v}{\Delta t}$	metre per second per second	m/s^2	lt^{-2}

Quantity and symbol	Formula	Unit	Symbol of unit	Dimension of quantity
Density ρ	$\rho = \frac{m}{V}$	kilogramme per cubic metre	kg/m^3	$l^{-3}m$
Fore F, weight G	$F = ma$	newton	N	lmt^{-2}
Specific weight γ	$\gamma = \frac{G}{V}$	newton per cubic metre	N/m^3	$l^{-2}mt^{-2}$
Pressure p	$p = \frac{F}{A}$	newton per square metre	N/m^2	$l^{-1}mt^{-2}$
Momentum $\bar{p}$	$\bar{p} = m\,v = F\Delta t$	kilogramme-metre per second	kg.m/s	lmt^{-1}
Moment of inertia I	$I = ml^2$	kilogramme-square metre	$kg.m^2$	l^2m
Work W and energy E	$W = Fl$	joule	J	l^2mt^{-2}
Power P	$P = \frac{\Delta W}{\Delta t}$	watt	W	l^2mt^{-3}
Dynamic viscosity?	$\eta = \frac{F}{A}\frac{\Delta l}{\Delta v}$	newton-secon per square metre	$N.s/m^2$	$l^{-1}mt^{-1}$
Kinematic viscosity ν	$\nu = \frac{\eta}{\rho}$	square metre per second	m^2/s	l^2t^{-1}

Quantity	Unit and its conversion factor to SI units
Length	1 centimetre (cm) = 10^{-2} m
	1 micrometre (micron); 1 micron (μ) = 10^{-6} m
	1 angstrom (A) = 10^{-10} m
Mass	1 gramme (g) = 10^{-3} kg
	1 ton(t) = 10^{3} kg
	1 centner (q) = 10^{2} kg
	1 atomic unit of mass (a.u.m.) = 1.66 x 10^{-27} kg
Plane angle	1 degree (^{o}) = $\frac{\pi}{180}$ rad
	1 minute ($'$) = $\frac{\pi}{108}$ x 10^{-3} rad
	1 revolution (rev) = 2 rad
Area	1 are (a) = 100 m^2
	1 hectare (ha) = 10^{4} m^2
Volume	1 litre (l) = 1.000028 x 10^{-3} m^3
Force	1 kilogramme-force (kgf) = 9.81 N
	1 ton-force (tonf) = 9.81 x 10^{3} N
Pressure	1 dyn/cm^2 = 0.1 N/m^2
	1 kgf/m^2 = 9.81 N/m^2
	1 millimetre of mercury column (mm Hg) = 133.0 N/m^2
	1 millimetre of water column (mm H_2O) = 9.81 N/m^2
	1 technical atmosphere (at) = 1 kgf/cm^2 = 0.981 x 10^{5} N/m^2
	1 physical atmosphere (atm) = 1.013 x 10^{5} N/m^2 (this non-system unit is not listed in GOST 7664-61)

Quantity	Unit and its conversion factor to SI units
Work, energy, amount of heat	1 erg = 10^{-7} J
	1 kgf-m = 9.81 J
	1 watt-hour (W-h) = 3.6 x 10^{3} J
	1 electron-volt (eV) = 1.6 x 10^{-19} J
	1 calorie (cal) = 4.19 J
	1 kilocalorie (1 kcal) = 4.19 x 10^{3} J
	1 physical litre-atmosphere (l.atm)=1.01 x 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 viscosity	1 poise (P) = 0.1 N.s/m^{2} = 0.1 kg/m.s
Kinematic viscosity	1 stokes (St) = 10^{-4} m^{2}/s