

PLTW Engineering Abbreviations and Symbols

a	acceleration	in.-lb	Inch pounds
A	ampere	IU	international unit
A	area	J	joule
a.m.	ante meridiem	<i>J</i>	pinned truss joints
AC	alternating current	<i>k</i>	thermal conductivity
Btu	British thermal unit	k	Kips
Btuh	British thermal unit / hour	K	kelvin
c	calorie	kg	kilogram
C	circumference	km	kilometer
°C	degree Celsius	kph	kilometers / hour
cc	cubic centimeters	kW	kilowatt
cm	centimeter	L	length
cps	cycles / second	L	liter
Δ	change	lb	pound or pounds
δ	deformation	lbf	pound force
d	diameter	lb-ft	pound feet
d	displacement	lpm	liters / minute
D	distance	m	mass
dB	decibel	m	meter
DC	direct current	M	Moment
deg/s	degrees / second	M	truss member(s)
ε	strain or unit elongation	μ	population mean
E	effort	μm	micrometer
E	electromotive force	MA	mechanical advantage
<i>E</i>	modulus of elasticity	mA	milliamperere
F	force	mg	milligram
°F	degree Fahrenheit	min	minute
ft	feet	mL	milliliter
ft-lb	foot-pounds	mm	millimeter
g	gram	mph	miles / hour
<i>g</i>	gravity	ms	millisecond
ga	gauge	M Ω	mega ohm
<i>gal</i>	<i>gallons</i>	N	Newton
gpm	gallons / minute	n	number
GR	gear ratio	N-m	Newton-meters
H	height	ns	nanosecond
hp	horsepower	oz	ounce
hr	hour	p	pitch
Hz	hertz	p	momentum
I	current	<i>P</i>	power
I	moment of inertia	<i>p</i>	pressure
in.	inch (with a period)	p.m.	post meridiem

π	pi (3.1416)	τ	torque
psi	pounds per inches squared	τ	shear stress
Q	heat flow	T	temperature
Q	fluid flow rate	U	u-value
r	radius	v	fluid flow velocity
R	resistance	v	velocity
R	rate	V	Volt
R	reaction force	V	volume
R	R-value	w	weight
$^{\circ}$ R	degree Rankine	W	watt
rad	radian	W	work
rpm	revolutions / minute	ω	angular velocity
ρ	density	Ω	Ohm
s	second	x	horizontal displacement
s	sample standard deviation	\bar{x}	sample mean or average
σ	normal stress	y	vertical displacement
σ	population standard deviation	Z	plastic section modulus
Σ	sum		
t	thickness		
t	time		