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QUANTITIES AND UNITS OF MECHANICS

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BUREAU OF CEYLON STANDARDS

QUANTITIES AND UNITS OF MECHANICS

C. S. 84 — Part III: 1969

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**BUREAU OF CEYLON STANDARDS
53, DHARMAPALA MAWATHA
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C.S. 84 — Part III: 1969

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This Standard does not purport to include all the necessary provisions of a contract.

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FOREWORD

This Ceylon Standard, containing a table of Quantities and Units of Mechanics, is part of a series of Ceylon Standards dealing with quantities and units in various fields of science and technology. It was adopted as a Ceylon Standard by the Council of the Bureau of Ceylon Standards on 6th December 1969.

The other parts of the series are:

- C.S.84 — Part I : 1969 - Basic quantities and units of the SI and quantities and units of space and time.
- C.S.84 — Part II : 1969 - Quantities and units of periodic and related phenomena.
- C.S.84 — Part IV : 1969 - Quantities and units of heat.
- C.S.84 — Part V : 1969 - Quantities and units of electricity and magnetism.
- C.S.84 — Part VII : 1969 - Quantities and units of acoustics.
- C.S.84 — Part XI : 1971 - Mathematical signs and symbols for use in physical sciences and technology.

This Standard is based on ISO Recommendation R31 - Part III - 1960 - Quantities and Units of Mechanics.

3. Mechanics

Quantities

Item No.	Quantity	Symbol	Definition	Remarks
3-1.1	mass	m		

3. Mechanics

Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-1.a	kilogramme	kg	The kilogramme is the unit of mass defined under that name by the Conférence Générale des Poids et Mesures.		For details see C.S. 84 — Part I
3-1.b 3-1.c 3-1.d	gramme tonne metric carat	g t	1 g = 10^{-3} kg 1 t = 1000 kg 1 metric carat = 200 mg		The use of this unit is discouraged.
3-1.e	metric technical unit of mass		1 metric technical unit of mass is the mass that acquires an acceleration of 1 m/s ² under the influence of a force equal to 1 koilgramme force (See 3-8.d)	1 metric technical unit of mass = 9.806 65 kg (exactly)	
3-1.f	pound (UK) (avoirdupois) lb (UK)		1 lb (UK) is defined as 0.453 592 37kg (Weights and Measures act of UK 1963)	1 lb (UK) = 0.453 592 37kg	For details see C.S. 84: Part I

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Quantities

Item No.	Quantity	Symbol	Definition	Remarks

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Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-1.g	pound (US) (avoirdupois) lb avdp (US).	lb		1 lb avdp (US) = 0.453 592 43 kg	
3-1.h	pound (avoirdupois)			1 lb = 0.453 592 37 kg	
3-1.i	slug		1 slug is the mass that acquires an acceleration of 1 ft/s ² under the influence of a force equal to 1 pound force.	1 slug = (980.665/30.48) lb (exactly) = 32.174 0 lb = 14.593 9 kg	This is the British technical unit of mass. See 3.8.e
3-1.j	grain, gr		1 grain = (1/7000) lb	1 grain = 64.798 91 mg (exactly)	16 dram = 1 ounce 16 ounce = 1 pound (UK and US avoirdupois units)
3-1.k	ounce (avoirdupois) oz		1 oz = 437.5 grain	1 oz = 28.349 5g	

Quantities

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Item No.	Quantity	Symbol	Definition	Remarks

3. Mechanics

Units

Item No	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-1.1	hundred weight cwt.		1 cwt = 112 lb	1 cwt = 50.802 3kg	UK unit
3-1.m	ton		1 ton = 2240 lb	1 ton = 1 016.05 kg = 1.016 05 t	UK unit
3-1.n	short hundred weight, sh cwt.		1 sh cwt. = 100 lb avdp (US)	1 sh cwt. = 45.359 2 kg	US unit
3-1.o	short ton, sh tn		1 sh tn = 2000 lb avdp(US)	1 sh tn = 907.185 kg = 0.907 185 t	US unit

In the US when the word ton is used alone the reference is to the short ton of 2000 lb unless there is specific reference to the long ton or gross ton.
The ton of 2240 lb and the hundred weight of 112 lb are also used to some extent in US. They are then called "long ton" and "long hundred weight" respectively.

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Quantities

Item No.	Quantity	Symbol	Definition ¹⁾	Remarks
3-2.1	density (mass density)	ρ, ρ	Mass divided by volume.	
3-3.1	relative density	d	Ratio of the density of a substance to the density of a reference substance under conditions that should be specified for both substances.	This quantity is dimensionless. When the reference substance is water, the name specific gravity is often used in English.
3-4.1	specific volume	v	Volume divided by mass.	
3-5.1	momentum	p	Product of mass and velocity	

¹⁾ The statements in this column are given merely for identification and they are not intended to be complete definitions.

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Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-1.p	troy ounce, oz tr in UK, oz t in US.		1 troy ounce = 480 grain	1 troy ounce = 31.1035g	The troy pound is not a legal unit in the UK, but is legalised in the US, where it is defined as equal to 5760 grain 3 scruple = 1 drachm* 3 scruple (US) = 1 dram ap (US) 8 drachm (UK) = 1 oz apoth* 8 dram ap (US) = 1 oz ap (US)
3-1.q	1 apothecaries' ounce, oz apoth. oz ap in US*		1 apothecaries' ounce = 480 grain	1 apothecaries' ounce = 31.1035 g	
3-2.a	kilogramme per cubic metre	kg/m ³			
3-2.b	tonne per cubic metre	t/m ³		1 t/m ³ = 1000 kg/m ³	- 1 t/m ³ = 1 g/cm ³
3-2.c	gramme per millilitre	g/ml		1 g/ml = 999.972 kg/m ³	
3-2.d	pound per cubic foot	lb/ft ³		1 lb/ft ³ = 16.0185 kg/m ³	
3-4.	cubic metre per kilogramme	m ³ /kg			
3-5.	kilogramme metre per second	kg m/s			

* Commonwealth

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Quantities

Item No.	Quantity	Symbol	Definition ¹⁾	Remarks
3-6.1	moment of momentum, angular momentum	b, p, p_v θ	The moment of momentum of a particle about a point is equal to the vector product of the radius vector from this point to the particle and the momentum of the particle.	
3-7.1	moment of inertia (dynamic moment of inertia)	I, J	The (dynamic) moment of inertia of a body about an axis is the sum (integral) of the products of its mass-elements and the squares of their distances from the axis.	To be distinguished from 3-16.1 and 3-16.2
3-8.1 3-8.2	force weight	F $G(P, W)$	The weight of a body is that force which, when applied to the body, would give it an acceleration equal to the local acceleration of free fall.	The quantity here defined has commonly been called the local "gravitational" force on the body. It is noteworthy that the "weight" arises not only from the resultant of the gravitational forces existing at the place where the body is, but also from the local centrifugal force. The effect of atmospheric buoyancy is excluded and consequently the weight defined is the weight in vacuo. (See also Comptes Rendus 3 ^e Conference Generale des Poids et Mesures, 1901 p. 70).

¹⁾ See footnote on page 12

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Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-6.	kilogramme metre squared per second	$\text{kg m}^2/\text{s}$			
3-7.a	kilogramme metre squared	kg m^2			
3-8.a	newton	N	1 N is that force which, when applied to a body having a mass of 1 kg, gives it an acceleration of 1 m/s^2		
3-8.b	dyne	dyn	1 dyn is that force which, when applied to a body having a mass of 1 g, gives it an acceleration of 1 cm/s^2	$1 \text{ dyn} = 10^{-5} \text{ N}$ (exactly)	
3-8.c	kilogramme force kgf		This is the force which, when applied to a body having a mass of 1 kg, gives it an acceleration of 9.806 65 m/s^2	$1 \text{ kilogramme-force} = 9.806 \text{ 65 N}$ (exactly)	This is the metric technical unit of force. The abbreviation kgf (kilogramme-force) and kp(kilopond) are both widely used. This unit must be distinguished from the (inconstant) local weight of a body having a mass of 1 kg.

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Quantities

Item No.	Quantity	Symbol	Definition	Remarks

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Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-8.d	poundal	pdl	1 pdl is that force which, when applied to a body having a mass of 1 lb, gives it an acceleration of 1 ft/s ² .	1 pdl = 0.138 255 N	
3-8.e	pound-force. lbf		1 lbf is that force which, when applied to a body having a mass of 1 lb, gives it an acceleration of 9.806 65 m/s ² .	1 lbf = 4.448 22 N = 32.174 0 pdl	This is the British technical unit of force. This unit must be distinguished from the (inconstant) local weight of a body having a mass of 1 lb. This would be called "pound-weight"

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Quantities

Item No.	Quantity	Symbol	Definition 1	Remarks
3.9.1	specific weight (weight density)	γ	Weight divided by volume.	Varies with the acceleration of free fall.
3.10.1	moment of force	M	The moment of a force about a point is equal to the vector product of the radius vector, from this point to any point on the line of action of the force and the force.	When the resultant of a system of forces is zero, this system can be replaced by a couple.
3.10.2	bending moment	M		
3.10.3	torque, moment of a couple	T		

¹⁾ See footnote on page 12

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Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-9.a	newton per cubic metre	N/m ³			
3-9.b	kilogramme-force per cubic metre, kgf/m ³			1 kilogramme-force per cubic metre = 9.806 65 N/m ³ (exactly)	See remark 3-8. c
3-9.c	pound-force per cubic foot, lbf/ft ³			1 lbf/ft ³ = 157.087 N/m ³	See remark 3-8.e
3-10.a	newton metre	N m			The symbolic abbreviation may also be written m N, but not mN.
3-10.b	kilogramme force metre, kgf m			1 kilogramme - force metre = 9.806 65 N m (exactly)	See remark 3-8.c
3-10.c	pound-force foot lbf ft.			1 lbf ft = 1.355 82 N m	See remark 3-8.e

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Quantities

Item No.	Quantity	Symbol	Definition ¹	Remarks
3-11-1	pressure	p		
3-11-2	normal stress	σ		
3-11-3	shear stress	τ		

¹) See footnote on Page 12

3. Mechanics

Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-11.a	newton per square metre	N/m ²			This unit is also called pascal
3-11.b	bar	bar	1 bar = 10 ⁵ N/m ²	1 bar = 10 ⁵ N/m ² (exactly) = 10 ⁶ dyn/cm ² (exactly)	The microbar (1 μbar = 1 dyn/cm ²) is also called barye. The millibar is widely used in meteorological barometry, and its name is then often abbreviated to mb. See remark 3-8.c
3-11.c	kilogramme-force per square metre, kgf/m ²			1 kilogramme-force per square metre = 9.806 65 N/m ² (exactly) = 98.0665 μbar(exactly)	
3-11.d	normal atmosphere	atm	1 atm = 101 325 N/m ²	1 atm = 101 325 N/m ² (exactly)	The use of this unit is discouraged
3-11.e	torr		1 torr = $\frac{1}{760}$ atm	1 torr = 133.322 N/m ² = 1333.22 bar = 0.001 315 79 atm-	
3-11.f	technical atmosphere	at	1 at = 1 kilogramme-force per square centimetre	1 at = 98 066.5 N/m ² (exactly) = 0.967 841 atm	1 at = 10 ⁴ mmH ₂ O = 10 mH ₂ O See remark 3-8.c.
3-11.g	poundal per square foot	pdl/ft ²		1 pdl/ft ² = 1.488 16 N/m ²	

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Quantities

Item No.	Quantity	Symbol	Definition ¹	Remarks

¹) See footnote on Page 12

3. Mechanics

Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-11.b	pound-force per square foot, lbf/ft ²			1 lbf/ft ² = 47.8803 N/m ²	See remark 3-8.e
3-11.i	pound-force per square inch, lbf/in ²			1 lbf/in ² = 6894.76 N/m ² = 0.070 307 0 at = 0.068 046 0 atm	See remark 3-8.e
3-11.j	ton-force per square inch, tonf/in ²		1 tonf/in ² = 2240 lbf/in ²	1 tonf/in ² = 15.443 MN/m ² = 157.488 at	The ton-force here mentioned is the force which gives a mass of 1 (long) ton an acceleration of 9.806 65 m/s ² i.e. 32.1740 ft/s ² approximately.
3-11.k	conventional millimetre of mercury, mmHg.		1 mmHg = 13.5951 mm H ₂ O	1 mmHg = 133.322 N/m ² = 1333.22 μ bar = 0.001 315 79 atm	Used in meteorological barometry. It follows from this definition that a pressure of 760 mmHg exceeds 1 atm by less than 2 x 10 ⁻⁷ atm.
3-11.l	conventional foot of water, ftH ₂ O		1 ftH ₂ O = 0.030 48 at	1 ftH ₂ O = 2989.07 N/m ²	
3-11.m	conventional inch of water, inH ₂ O		1 inH ₂ O = 0.002 54 at	1 inH ₂ O = 249.089 N/m ²	
3-11.n	conventional inch of mercury, inHg.		1 inHg = 25.4 mmHg	1 mmHg = 3386.39 N/m ²	

Quantities

3. Mechanics

Item No.	Quantity	Symbol	Definition ¹	Remarks
3-12.1	linear strain (relative elongation)	e, ϵ	$\epsilon = \frac{\Delta l}{l_0}$ <p style="text-align: center;">to $(l_0 = \text{length in a reference state to be specified})$ $\Delta l = \text{increase in length}$)</p>	These quantities are dimensionless.
3-12.2	shear strain (shear angle)	γ	$\theta = \frac{\Delta V}{V_0}$ <p style="text-align: center;">$(V_0 = \text{volume in a reference state to be specified,}$ $\Delta V = \text{increase in volume})$</p>	
3-12.3	volume strain (bulk strain)	θ, ν		
3-13.1	Poisson's ratio, Poisson's number	$\mu, \nu,$	Lateral contraction divided by elongation.	This quantity is dimensionless. This definition applies only to small deformations of elastic bodies. The quantity defined by Poisson was the reciprocal: $m = \frac{1}{\mu}$
3-14.1	Young's modulus (modulus of elasticity)	E	$E = \sigma / \epsilon$	These definitions apply only to small deformations of elastic bodies. The strains ϵ, γ and θ in these definitions are those corresponding to the excess stresses σ, τ and the excess pressure, p .
3-14.2	shear modulus (modulus of rigidity)	G	$G = \tau / \gamma$	
3-14.3	bulk modulus (modulus of compression)	κ	$\kappa = -p / \theta$	

1) See footnote on Page 12

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Units

Item No.	Name of unit and to certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-14.	newton per square metre	N/m ²			

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Quantities

Item No.	Quantity	symbol	Definition 1)	Remarks
3-15.1	compressibility (bulk compressibility.)	α, κ	$\alpha = - \frac{1}{V} \cdot \frac{dV}{dp}$	
3-16.1	second moment of area (second axial moment of area)	I, I_a	The second axial moment of area of a plane area (section) about an axis in its plane is the sum (integral) of the products of its elements of area and the squares of their distances from the axis.	These quantities should be distinguished from 3-7.1 They have often been given the name "moment of inertia".
3-16.2	second polar moment of area	I_p, J	The second polar moment of area of a plane area (section) about a point in its plane is the sum (integral) of the products of its elements of area and the squares of their distances from the point	
3-17.1	section modulus	$Z, W, \left(\frac{I}{v}\right)$	The section modulus of a plane area (section) about an axis in its plane is the second moment of area divided by the distance from the axis to the most remote point of the area.	
3-18.1	coefficient of friction (factor of friction)	$\mu, (f)$	Ratio of frictional force to normal force, for a sliding body.	This quantity is dimensionless.

1) See footnote on Page 12

3. Mechanics

Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-15.a	square metre per newton	m^2/N			Note that the units of compressibility are the reciprocals of the units of bulk modulus.
3-16.a	metre to the fourth	m^4			
3-16.b	inch to the fourth	in^4		$1 in^4 = 41.6231 \times 10^{-8} m^4$	
3-17.a	metre cubed	m^3			
3-17.b	inch cubed	in^3		$1 in^3 = 16.3871 \times 10^{-6} m^3$	

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Quantities

Item No.	Quantity	Symbol	Definition 1	Remarks
3-19.1	viscosity (dynamic viscosity)	$\eta, (\mu)$	$\tau_{xz} = \eta \frac{dv_x}{dz}$	This definition applies to laminar flow for which v_z is zero.

1) See footnote on Page 12

3. Mechanics

Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-19.a	newton second per square metre	N s/m^2	1 N s/m^2 is the viscosity of a fluid in which the velocity under a shear stress of 1 N/m^2 has a gradient of 1 m/s per metre perpendicular to the plane of shear.		$1 \text{ N s/m}^2 = 1 \text{ kg-m}^{-1} \text{ s}^{-1}$
3-19.b	poise	P	1 P is the viscosity of a fluid in which the velocity under a shear stress of 1 dyn/cm^2 has a gradient of 1 cm/s per centimetre perpendicular to the plane of shear.	1 P = 0.1 N s/m^2 (exactly)	1 P = 1 dyn s/cm^2 = 1 $\text{g cm}^{-1} \text{ s}^{-1}$
3-19.c	kilogramme-force second per square metre, kgf s/m^2			1 kilogramme-force second per square metre = 9.806 65 N s/m^2 (exactly)	See remark 3-8.c
3-19.d	poundal second per square foot	pdl s/ft^2		1 $\text{pdl s/ft}^2 = 1.488 16 \text{ N s/m}^2$	1 $\text{pdl s/ft}^2 = 1 \text{ lb ft}^{-1} \text{ s}^{-1}$
3-19.e	pound-force second per square foot, lbf s/ft^2			1 $\text{lbf s/ft}^2 = 47.8803 \text{ N s/m}^2$	See remark 3-8. c

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Quantities

Item No.	Quantity	Symbol	Definition ¹⁾	Remarks
3-20.1	kinematic viscosity	ν	$\nu = \eta / \rho$	
3-21.1	surface tension	$\sigma, (\gamma)$	Force across a line element in a surface divided by the length of the line element.	
3-22.1	work	A, W		
3-22.2	energy	E, W		
3-22.3	potential energy	E_p, U, V, Φ		
3-22.4	kinetic energy	E_k, K, T		See also C. S. 84: Part IV

¹⁾ See footnote on page 12.

3. Mechanics

Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-20.a	square metre per second	m ² /s	1 m ² /s is the kinematic viscosity of a fluid with dynamic viscosity 1 N s/m ² and density 1 kg/m ³		
3-20.b	stokes	St	1 St is the kinematic viscosity of a fluid with dynamic viscosity 1 P and density 1 g/cm ³	1 St = 0.000 1 m ² /s	
3-20.c	square foot per second	ft ² /s		1 ft ² /s = 0.092 903 0 m ² /s	
3-21.a	newton per metre	N/m			1 N/m = 1 J/m ²
3-21.b	dyne per centimetre	dyn/cm		1 dyn/cm = 10 ⁻³ N/m	The use of cm is deprecated.
3-22.a	joule	J	1 J is the work done when the point of application of a force of 1 N is displaced through a distance of 1 m in the direction of the force.		

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Quantities

Item No.	Quantity	Symbol	Definition	Remarks

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Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-22.b 3-22.c	erg kilogramme-force metre, kgf m	erg	1 erg = 1 dyn cm	1 erg = 10 ⁻⁷ J (exactly) 1 kilogramme-force metre = 9.806 65 J (exactly)	See remark 3-8. c
3-22.d	kilowatt hour	kW h }	1 kW h is the energy delivered in 1 h by an energy source of 1 kW power.	1 kW h = 3.6×10 ⁶ J(exactly) = 3.6 MJ (exactly) = 859.845 kcal _{IT} = 3412.14 Btu	
3-22.e	electronvolt	eV	1 eV is the energy acquired by an electron by passing through a potential difference of 1 volt in vacuo.	1 eV = 1.602 × 10 ⁻¹⁹ J	
3-22.f	15°C calorie	cal ₁₅	1 cal ₁₅ is the amount of heat required to warm 1 g of airfree water from 14.5°C to 15.5°C at a constant pressure of 1 normal atmosphere.	1 cal ₁₅ = 4.1855 J	
3-22.g	I. T. calorie	cal _{IT}	1 cal _{IT} = 4.1868 J	1 cal _{IT} = 4.1868 J (exactly) 1 Mcal _{IT} = 1.163 kW h (exactly)	
3-22.h	thermochemical calorie cal (thermochem.)			1 cal (thermochem.) = 4.1840 J	

3. Mechanics

Quantities

Item No.	Quantity	Symbol	Definition ¹	Remarks

¹) See footnote on Page 12

3. Mechanics

Units

Item No.	Name of unit and in certain cases abbreviation for this name	International Symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-22.i	foot poundal	ft pdl		1 ft pdl = 0.042 140 1 J	
3-22.j	foot pound-force, ft lbf			1 ft lbf = 1.355 82 J	See remark 3-8.e
3-22.k	British thermal unit	Btu	1 Btu/lb = 2.326 J/g	1 Btu = 1055.06 J = 778.169 ft lbf	<p>This is the only British thermal unit used in the present tables. It is exactly equal to the "International table British thermal unit" adopted by the "Fifth International Conference on Properties of Steam" (London, July 1956). Besides this, however, a number of British thermal units were formerly used. Their definitions and estimated values are given below.</p> <p>The "60 °F" British thermal unit was the heat required to warm 1 lb of water from 60°F to 61°F. 1 Btu_{60/61} = 1054.5 J</p> <p>The Mean British thermal unit was 1/180 of the heat required to warm 1 lb of liquid water from 32°F to 212°F. 1 Btu_{mean} = 1055.8 J</p>

3. Mechanics

Item No.	Quantity	Symbol	Definition ¹⁾	Remarks
3-23.1	power	P	Energy transferred in a certain time-interval, divided by the duration of that interval.	

¹⁾ See footnote on page 12.

3. Mechanics

Units

Item No.	Name of unit and in certain cases abbreviation for this name	International symbolic abbreviation for unit	Definition	Conversion factors	Remarks
					(The "Mean pound centigrade heat unit" was 1.8 Btu _{mean} , 1 C.H.U. _{mean} = 1900.4 J). The "therm" is defined as "100 000 Btu" and is therefore between 105.4 MJ and 106.0 MJ.
3-23.a	watt	W	1 W = 1 J/s		
3-23.b	erg per second	erg/s		1 erg/s = 10 ⁻⁷ W (exactly)	

Quantities**3. Mechanics**

Item No.	Quantity	Symbol	Definitional	Remarks

3. Mechanics

Item No.	Name of unit and in certain cases abbreviation for this name	international symbolic abbreviation for unit	Definition	Conversion factors	Remarks
3-23.c	kilogramme-force metre per second, kgf m/s			1 kilogramme-force metre per second := 9.806 65 W (exactly)	See remark 3-8.c.
3-23.d	metric horse power, cheval vapeur		1 metric horse-power := 75 kilogramme-force metres per second	1 metric horse power := 735.499 W	
3-23.e	I.T. kilocalorie per hour	kcal _{IT} /h		1 kcal _{IT} /h := 1.163 W (exactly)	
3-23.f	foot poundal per second	ft pdl/s		1 ft pdl/s := 0.042 140 1 W	
3-23.g	foot pound-force per second, ft lbf/s			1 ft lbf/s := 1.355 82 W	
3-23.h	horsepower (British), hp		1 hp := 550 ft lbf/s	1 hp := 745.700 W	
3-23.i	British thermal unit per hour	Btu/h		1 Btu/h := 0.293 071 W	See remark 3-22.k

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BUREAU OF CEYLON STANDARDS

The Bureau of Ceylon Standards (BCS) is the national standards organisation of Ceylon and was established by the Hon. Minister of Industries and Fisheries, as provided for by the Bureau of Ceylon Standards Act, No. 38 of 1964.

The principal objects of the Bureau as set out in the Act are to promote standards in industry and commerce, prepare national Standards Specifications and Codes of Practice and operate a Standardisation Marks Scheme and provide testing facilities, as the need arises.

The Bureau is financed by Government grants and the sale of its publications. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The detailed preparation of Standard Specifications is done by Drafting Committees composed of experts in each particular field assisted by permanent officers of the Bureau. These Committees are appointed by Divisional Committees, which are appointed by the Council. All members of the Drafting and Divisional Committees render their services in an honorary capacity. In preparing the Standard Specifications the Bureau endeavours to ensure adequate representation of all view points.

In the international field the Bureau represents Ceylon in the International Organisation for Standardisation (ISO) and will participate in such fields of Standardisation as are of special interest to Ceylon.

