

SECTION XVIII

OPTICAL, PHOTOGRAPHIC, CINEMATOGRAPHIC, MEASURING, CHECKING, PRECISION,  
MEDICAL OR SURGICAL INSTRUMENTS AND APPARATUS; CLOCKS AND WATCHES;  
MUSICAL INSTRUMENTS; PARTS AND ACCESSORIES THEREOF

OPTICAL, PHOTOGRAPHIC, CINEMATOGRAPHIC, MEASURING, CHECKING, PRECISION, MEDICAL  
OR SURGICAL INSTRUMENTS AND APPARATUS; PARTS AND ACCESSORIES THEREOFNotes

1. This chapter does not cover:
  - (a) Articles of a kind used in machines, appliances or for other technical uses, of vulcanized rubber other than hard rubber (heading 4016), of leather or of composition leather (heading 4204) or of textile material (heading 5911);
  - (b) Refractory goods of heading 6903; ceramic wares for laboratory, chemical or other technical uses, of heading 6909;
  - (c) Glass mirrors, not optically worked, of heading 7009, or mirrors of base metal or of precious metal, not being optical elements (heading 8306 or chapter 71);
  - (d) Goods of heading 7007, 7008, 7011, 7014, 7015 or 7017;
  - (e) Parts of general use, as defined in note 2 to section XV, of base metal (section XV) or similar goods of plastics (chapter 39);
  - (f) Pumps incorporating measuring devices, of heading 8413; weight-operated counting or checking machinery, or separately entered weights for balances (heading 8423); lifting or handling machinery (headings 8425 to 8428); paper or paperboard cutting machines of all kinds (heading 8441); fittings for adjusting work or tools on machine tools, of heading 8466, including fittings with optical devices for reading the scale (for example, "optical" dividing heads) but not those which are in themselves essentially optical instruments (for example, alignment telescopes); calculating machines (heading 8470); valves or other appliances of heading 8481;
  - (g) Searchlights or spotlights of a kind used for cycles or motor vehicles (heading 8512); portable electric lamps of heading 8513; cinematographic sound recording, reproducing or re-recording apparatus (heading 8519 or 8520); sound-heads (heading 8522); radar apparatus, radio navigational aid apparatus and radio remote control apparatus (heading 8526); sealed beam lamp units of heading 8539; optical fiber cables of heading 8544;
  - (h) Searchlights or spotlights of heading 9405;
  - (ij) Articles of chapter 95;
  - (k) Capacity measures, which are to be classified according to their constituent material; or
  - (l) Spools, reels or similar supports (which are to be classified according to their constituent material, for example, in heading 3923 or section XV).
2. Subject to note 1 above, parts and accessories for machines, apparatus, instruments or articles of this chapter are to be classified according to the following rules:
  - (a) Parts and accessories which are goods included in any of the headings of this chapter or of chapter 84, 85 or 91 (other than heading 8485, 8548 or 9033) are in all cases to be classified in their respective headings;
  - (b) Other parts and accessories, if suitable for use solely or principally with a particular kind of machine, instrument or apparatus, or with a number of machines, instruments or apparatus of the same heading (including a machine, instrument or apparatus of heading 9010, 9013 or 9031) are to be classified with the machines, instruments or apparatus of that kind;
  - (c) All other parts and accessories are to be classified in heading 9033.
3. The provisions of note 4 to section XVI apply also to this chapter.
4. Heading 9005 does not apply to telescopic sights for fitting to arms, periscopic telescopes for fitting to submarines or tanks, or to telescopes for machines, appliances, instruments or apparatus of this chapter or section XVI; such telescopic sights and telescopes are to be classified in heading 9013.
5. Measuring or checking optical instruments, appliances or machines which, but for this note, could be classified both in heading 9013 and in heading 9031 are to be classified in heading 9031.
6. Heading 9032 applies only to:
  - (a) Instruments and apparatus for automatically controlling the flow, level, pressure or other variables of liquids or gases, or for automatically controlling temperature, whether or not their operation depends on an electrical phenomenon which varies according to the factor to be automatically controlled; and
  - (b) Automatic regulators of electrical quantities, and instruments or apparatus for automatically controlling non-electrical quantities the operation of which depends on an electrical phenomenon varying according to the factor to be controlled.

Additional U.S. Notes

1. For the purposes of headings 9001 and 9002, the term "optically worked" refers to glass the surface of which has been ground or polished in order to produce the required optical properties.
2. For the purposes of this chapter, the term "electrical" when used in reference to instruments, appliances, apparatus and machines, refers to those articles the operation of which depends on an electrical phenomenon which varies according to the factor to be ascertained.
3. For the purposes of this chapter, the terms "optical appliances" and "optical instruments" refer only to those appliances and instruments which incorporate one or more optical elements, but do not include any appliances or instruments in which the incorporated optical element or elements are solely for viewing a scale or for some other subsidiary purpose.

Statistical Notes

1. For statistical reporting purposes under subheading 9001.10, the unit of quantity "fiber m", as it pertains to optical fiber bundles and cables, is determined by multiplying the number of individual fibers contained therein by the length in meters.

9001		Optical fibers and optical fiber bundles; optical fiber cables other than those of heading 8544; sheets and plates of polarizing material; lenses (including contact lenses), prisms, mirrors and other optical elements, of any material, unmounted, other than such elements of glass not optically worked:			
9001.10.00		Optical fibers, optical fiber bundles and cables.....	8.4%	Free (A,E,IL) 5.8% (CA)	65%
		Optical fibers:			
	30 2	For transmission of voice, data or video communications..... m			
		Other:			
	50 7	Plastic optical fibers..... m			
	70 3	Other..... m			
		Optical fiber bundles and cables:			
	75 8	Plastic optical fiber bundles and cables..... Fiber m			
	85 6	Other..... Fiber m			
9001.20.00	00 6	Sheets and plates of polarizing material..... kg.....	10%	Free (A,E,IL) 7% (CA)	50%
9001.30.00	00 4	Contact lenses..... Prs.....	5.6%	Free (A,E,IL) 3.9% (CA)	40%
9001.40.00	00 2	Spectacle lenses of glass..... Prs.....	5.6%	Free (A,E,IL) 3.9% (CA)	40%
9001.50.00	00 9	Spectacle lenses of other materials..... Prs.....	5.6%	Free (A,E,IL) 3.9% (CA)	40%
9001.90		Other:			
9001.90.40	00 3	Lenses..... No.....	5.6%	Free (A,C,E,IL) 3.9% (CA)	45%
9001.90.50	00 0	Prisms..... X.....	8%	Free (A,C,E,IL) 5.6% (CA)	65%
9001.90.60	00 8	Mirrors..... X.....	8%	Free (A,C,E,IL) 5.6% (CA)	45%
9001.90.80	00 4	Other:			
		Halftone screens designed for use in engraving or photographic processes..... X.....	3.1%	Free (A,E,IL) 2.1% (CA)	25%
9001.90.90	00 2	Other..... X.....	8.4%	Free (A,C,E,IL) 5.8% (CA)	85%

9002	Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked; parts and accessories thereof:					
	Objective lenses and parts and accessories thereof:					
9002.11	For cameras, projectors or photographic enlargers or reducers:					
9002.11.40	00 8	Projection.....	No.....	7%	Free (A,CA,E,IL)	45%
9002.11.80	00 9	Other.....	X.....	6.6%	Free (A,E,IL)	45%
					4.6% (CA)	
9002.19.00	00 8	Other.....	X.....	6.6%	Free (A,E,IL)	45%
					4.6% (CA)	
9002.20	Filters and parts and accessories thereof:					
9002.20.40	00 7	Photographic.....	X.....	5.8%	Free (A,E,IL)	20%
					4% (CA)	
9002.20.80	00 8	Other.....	X.....	8.4%	Free (A,E,IL)	65%
					5.8% (CA)	
9002.90	Other:					
9002.90.20	00 6	Prisms.....	X.....	8%	Free (A,C,E,IL)	65%
					5.6% (CA)	
9002.90.40	00 2	Mirrors.....	X.....	8%	Free (A,C,E,IL)	45%
					5.6% (CA)	
9002.90.70	00 5	Other: Halftone screens designed for use in engraving or photographic processes.....	X.....	3.1%	Free (A,E,IL)	25%
					2.1% (CA)	
9002.90.90	00 1	Other.....	X.....	8.4%	Free (A,C,E,IL)	65%
					5.8% (CA)	
9003	Frames and mountings for spectacles, goggles or the like, and parts thereof:					
	Frames and mountings:					
9003.11.00	00 5	Of plastics.....	Doz.....	7.2%	Free (A,E,IL)	50%
					5% (CA)	
9003.19.00	00 7	Of other materials.....	Doz.....	7.2%	Free (A,E,IL)	50%
					5% (CA)	
9003.90.00	00 9	Parts.....	X.....	7.2%	Free (A,E,IL)	50%
					5% (CA)	
9004	Spectacles, goggles and the like, corrective, protective or other:					
9004.10.00	00 5	Sunglasses.....	Doz.....	7.2%	Free (A,E,IL)	40%
					5% (CA)	
9004.90.00	00 8	Other.....	Doz.....	7.2%	Free (A,E,IL)	40%
					5% (CA)	

9005		Binoculars, monoculars, other optical telescopes, and mountings therefor; other astronomical instruments and mountings therefor, but not including instruments for radio-astronomy; parts and accessories thereof:				
9005.10.00	20 0	Binoculars.....	No.	Free		60%
		Prism binoculars for use with infrared light.....	No.			
	40 6	Other prism binoculars.....	No.			
	80 7	Other.....	No.			
9005.80		Other instruments:				
9005.80.40		Optical telescopes.....		8%	Free (A,E,IL) 5.6% (CA)	45%
	20 7	For use with infrared light.....	No.			
	40 3	Other.....	No.			
9005.80.60	00 6	Other.....	No.....	9%	Free (A,E,IL) 6.3% (CA)	45%
9005.90.00	00 7	Parts and accessories (including mountings)...	X.....	The rate applicable	Free (A,E,IL) The rate appli-	The rate
		applicable				
		which it		to the	cable to the	to the
		is a part		article of	article of	article of
		or acces-		which it	which it is	
		sory		is a part	a part or	
				or acces-	accessory (CA)	
				sory		
9006		Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading 8539; parts and accessories thereof:				
9006.10.00	00 3	Cameras of a kind used for preparing printing plates or cylinders.....	No.....	3%	Free (A,E,IL) 2.1% (CA)	20%
9006.20.00	00 1	Cameras of a kind used for recording documents on microfilm, microfiche or other microforms..	No.....	3%	Free (A,E,IL) 2.1% (CA)	20%
9006.30.00	00 9	Cameras specially designed for underwater use, for aerial survey, or for medical or surgical examination of internal organs; comparison cameras for forensic or criminological purposes.....	No.....	3.8%	Free (A,E,IL) 2.6% (CA)	20%
9006.40		Instant print cameras:				
9006.40.40	00 9	Fixed focus.....	No.....	4%	Free (A,E,IL) 2.8% (CA)	20%
		Other than fixed focus:				
9006.40.60	00 4	Valued not over \$10 each.....	No.....	6.8%	Free (A,E,IL) 4.7% (CA)	20%
9006.40.90	00 8	Valued over \$10 each.....	No.....	3%	Free (A,E,IL) 2.1% (CA)	20%

9006 (con.)		Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading 8539; parts and accessories thereof (con.):			
		Other cameras:			
9006.51.00		With through-the-lens viewfinder (single lens reflex (SLR)), for roll film of a width not exceeding 35 mm.....	3%	Free (A,E,IL) 2.1% (CA)	20%
	40 5	For roll film of a width of 35 mm... No.			
	80 6	Other..... No.			
9006.52		Other, for roll film of a width less than 35 mm:			
		Fixed focus:			
		Hand held:			
9006.52.10		110 cameras.....	4%	Free (A,E,IL) 2.8% (CA)	20%
	20 6	With built-in electronic stroboscopic flash... No.			
	40 2	Other..... No.			
9006.52.30	00 6	Other.....	4%	Free (A,E,IL) 2.8% (CA)	20%
9006.52.50	00 1	Other.....	4%	Free (A,E,IL) 2.8% (CA)	20%
		Other than fixed focus:			
9006.52.60	00 9	Valued not over \$10 each.....	No..... 6.8%	Free (A,E,IL) 4.7% (CA)	20%
9006.52.90		Valued over \$10 each.....	3%	Free (A,E,IL) 2.1% (CA)	20%
		Hand-held type:			
		110 cameras:			
	20 9	With built-in electronic stroboscopic flash..... No.			
	40 5	Other..... No.			
	60 0	Other..... No.			
	80 6	Other..... No.			
9006.53.00		Other, for roll film of a width of 35 mm.....	3% <u>1/</u>	Free (A,E,IL) 2.1% (CA)	20%
	40 3	With built-in electronic stroboscopic flash..... No.			
	80 4	Other..... No.			
9006.59		Other:			
9006.59.40		Fixed focus.....	4%	Free (A,E,IL) 2.8% (CA)	20%
	40 9	Disc cameras..... No.			
	60 4	Other..... No.			
		Other than fixed focus:			
9006.59.60	00 2	Valued not over \$10 each.....	No..... 6.8%	Free (A,E,IL) 4.7% (CA)	20%
9006.59.90	00 6	Valued over \$10 each.....	No..... 3%	Free (A,E,IL) 2.1% (CA)	20%

1/ Duty on certain cameras temporarily suspended. See heading 9902.90.06.

9006 (con.)		Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading 8539; parts and accessories thereof (con.):				
		Photographic flashlight apparatus and flash- bulbs:				
9006.61.00		Discharge lamp ("electronic") flashlight apparatus.....	3.9%	Free (A,E,IL) 2.7% (CA)		35%
	20 7	Capable of camera mounting: Capable of automatically controlling flash duration.....	No.			
	40 3	Other.....	No.			
	60 8	Other.....	No.			
9006.62.00	00 0	Flashbulbs, flashcubes and the like.....	No..... 3.1%	Free (A,E,IL) 2.1% (CA)		35%
9006.69.00	00 3	Other.....	X..... 3.9%	Free (A,E,IL) 2.7% (CA)		35%
		Parts and accessories:				
9006.91.00	00 5	For cameras.....	X..... 5.8%	Free (A,E*,IL) 4% (CA)		20%
9006.99.00	00 7	Other.....	X..... 3.9%	Free (A,E,IL) 2.7% (CA)		35%
9007		Cinematographic cameras and projectors, whether or not incorporating sound recording or reproducing apparatus; parts and accessories thereof:				
		Cameras:				
9007.11.00		For film of less than 16 mm width or for double-8 mm film.....	4.5%	Free (A,E,IL) 2.6% (CA)		20%
	40 3	Silent.....	No.			
	80 4	Sound.....	No.			
9007.19.00		Other.....	4.5%	Free (A,E,IL) 2.6% (CA)		20%
	40 5	16 mm.....	No.			
	80 6	Other.....	No.			
		Projectors:				
9007.21		For film of less than 16 mm:				
9007.21.40	00 1	With sound recording and reproducing systems; and those capable of projecting only sound motion pictures.....	No..... 2.2%	Free (A,E,IL) 1.5% (CA)		45%
9007.21.80	00 2	Other.....	No..... 7%	Free (A,E,IL) 4.9% (CA)		45%
9007.29		Other:				
9007.29.40		With sound recording and reproducing systems; and those capable of projecting only sound motion pictures.....	2.2%	Free (A,CA,E,IL)		45%
	40 5	16 mm.....	No.			
	80 6	Other.....	No.			
9007.29.80	00 4	Other.....	No..... 7%	Free (A,CA,E,IL)		45%
		Parts and accessories:				
9007.91		For cameras:				
9007.91.40	00 6	Parts.....	X..... 4.9%	Free (A,E,IL) 3.4% (CA)		20%
9007.91.80	00 7	Other.....	X..... 5.7%	Free (A,E,IL) 3.9% (CA)		45%
9007.92.00	00 3	For projectors.....	X..... 7%	Free (A,CA,E,IL)		45%



9008		Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers; parts and accessories thereof:						
9008.10.00	00 1	Slide projectors.....	No.....	7%	Free (A,E,IL) 4.9% (CA)		45%	
9008.20		Microfilm, microfiche or other microform readers, whether or not capable of producing copies:						
9008.20.40	00 1	Capable of producing copies.....	No.....	3.7%	Free (A,E,IL) 2.5% (CA)		35%	
9008.20.80	00 2	Other.....	No.....	7%	Free (A,E,IL) 4.9% (CA)		45%	
9008.30.00	00 7	Other image projectors.....	No.....	7%	Free (A,E,IL) 4.9% (CA)		45%	
9008.40.00	00 5	Photographic (other than cinematographic) enlargers and reducers.....	No.....	4.9%	Free (A,E,IL) 3.4% (CA)		20%	
9008.90		Parts and accessories:						
9008.90.40	00 6	Of image projectors, other than cinematographic.....	X.....	3.9%	Free (A,E,IL) 2.7% (CA)		35%	
9008.90.80	00 7	Other.....	X.....	5.8%	Free (A,E,IL) 4% (CA)		20%	
9009		Photocopying apparatus incorporating an optical system or of the contact type and thermocopying apparatus; parts and accessories thereof:						
9009.11.00	00 9	Electrostatic photocopying apparatus: Operating by reproducing the original image directly onto the copy (direct process).....	No.....	3.7%	Free (A,E,IL) 2.5% (CA)		35%	
9009.12.00	00 8	Operating by reproducing the original image via an intermediate onto the copy (indirect process).....	No.....	3.7%	Free (A,CA,E,IL)		35%	
9009.21.00	00 7	Other photocopying apparatus: Incorporating an optical system.....	No.....	3.7%	Free (A,E,IL) 2.5% (CA)		35%	
9009.22.00	00 6	Of the contact type.....	No.....	3.7%	Free (A,E,IL) 2.5% (CA)		35%	
9009.30.00	00 6	Thermocopying apparatus.....	No.....	3.7%	Free (A,E,IL) 2.5% (CA)		35%	
9009.90.00		Parts and accessories.....		3.9% <u>1/</u>	Free (A,CA,E,IL)		35%	
	30 7	Parts and accessories of electrostatic photocopying apparatus operating by reproducing the original image via an intermediate onto the copy (indirect process).....	X					
	60 0	Parts and accessories of other photocopying apparatus.....	X					
	90 4	Other.....	X					

1/ Duty on certain parts of electrostatic copying machines temporarily suspended. See heading 9902.90.90.

9010	Apparatus and equipment for photographic (including cinematographic) laboratories (including apparatus for the projection of circuit patterns on sensitized semiconductor materials), not specified or included elsewhere in this chapter; negatoscopes; projection screens; parts and accessories thereof:					
9010.10.00 00 7	Apparatus and equipment for automatically developing photographic (including cinematographic) film or paper in rolls or for automatically exposing developed film to rolls of photographic paper.....	X.....	3.7%	Free (A, E, IL)	35%	
				2.5% (CA)		
9010.20	Other apparatus and equipment for photographic (including cinematographic) laboratories; negatoscopes:					
9010.20.10 00 3	Contact printers.....	No.....	2.2%	Free (A, CA, E, IL)	35%	
9010.20.20 00 1	Developing tanks.....	No.....	3.8%	Free (A, E, IL)	45%	
				2.6% (CA)		
	Photographic film viewers, titlers, splicers and editors, all the foregoing and combinations thereof:					
	Articles containing an optical lens or designed to contain such a lens:					
9010.20.30 00 9	Editors and combination editor-splicers, for cinematographic film.....	X.....	7.8%	Free (A, CA, E, IL)	45%	
9010.20.40 00 7	Other.....	X.....	9%	Free (A, CA, E, IL)	45%	
9010.20.50 00 4	Other.....	X.....	4.7%	Free (A, CA, E, IL)	35%	
9010.20.60	Other.....		3.7%	Free (A, CA, E, IL)	35%	
	Apparatus for the projection of circuit patterns on sensitized semiconductor materials <u>1/</u> :					
	Direct write on wafer apparatus:					
10 0	E-beam.....	No.				
20 8	Other.....	X				
30 6	Step and repeat aligners.....	No.				
50 1	Other.....	X				
80 5	Other.....	X				
9010.30.00 00 3	Projection screens.....	No.....	4%	Free (A, CA, E, IL)	50%	
9010.90	Parts and accessories:					
9010.90.40 00 2	Of photographic film viewers, titlers, splicers, editors or any combination of the foregoing.....	X.....	6.8%	Free (A, CA, E, IL)	45%	
9010.90.80 00 3	Other.....	X.....	5.7%	Free (A, CA, E, IL)	45%	

1/ See statistical note 1 to section XVI regarding semiconductor manufacturing and testing machines and apparatus.

9011	Compound optical microscopes, including those for photomicrography, cinemicrography or microprojection; parts and accessories thereof:					
9011.10	Stereoscopic microscopes:					
9011.10.40 00 8	Provided with a means for photographing the image.....	No.....	4.9%	Free (A,E,IL)	20%	
				3.4% (CA)		
9011.10.80 00 9	Other.....	No.....	9%	Free (A,E,IL)	45%	
				6.3% (CA)		
9011.20	Other microscopes, for photomicrography, cinemicrography or microprojection:					
9011.20.40 00 6	Provided with a means for photographing the image.....	No.....	4.9%	Free (A,E,IL)	20%	
				3.4% (CA)		
9011.20.80 00 7	Other.....	No.....	9%	Free (A,E,IL)	45%	
				6.3% (CA)		
9011.80.00 00 1	Other microscopes.....	No.....	8%	Free (A,E,IL)	45%	
				5.6% (CA)		
9011.90.00 00 9	Parts and accessories.....	No.....	7.2%	Free (A,E,IL)	45%	
				5% (CA)		
9012	Microscopes other than optical microscopes; diffraction apparatus; parts and accessories thereof:					
9012.10.00 00 5	Microscopes other than optical microscopes; diffraction apparatus.....	X.....	4.4%	Free (A,E,IL)	40%	
				3% (CA)		
9012.90.00 00 8	Parts and accessories.....	X.....	6.2%	Free (A,E,IL)	40%	
				4.3% (CA)		

9013	Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this chapter; parts and accessories thereof:					
9013.10	Telescopic sights for fitting to arms; periscopes; telescopes designed to form parts of machines, appliances, instruments or apparatus of this chapter or section XVI:					
	Telescopic sights for rifles:					
9013.10.10	00 2	Not designed for use with infrared light.....	No.....	20%	Free (A,E,IL) 14% (CA)	45%
9013.10.30	00 8	Other.....	No.....	2.2%	Free (A,E,IL) 1.5% (CA)	35%
9013.10.40	00 6	Other.....	No.....	8%	Free (A,E,IL) 5.6% (CA)	45%
9013.20.00	00 2	Lasers, other than laser diodes.....	No.....	3.9%	Free (A,E,IL) 2.7% (CA)	35%
9013.80	Other devices, appliances and instruments:					
9013.80.20	00 5	Hand magnifiers, magnifying glasses, loupes, thread counters and similar apparatus.....	No.....	6.6%	Free (A,E,IL) 4.6% (CA)	45%
9013.80.40	00 1	Door viewers (door eyes).....	No.....	5.8%	Free (A,E,IL) 4% (CA)	60%
9013.80.60	00 6	Other.....	X.....	9%	Free (A,E,IL) 6.3% (CA)	45%
9013.90	Parts and accessories:					
9013.90.20	00 3	Of telescopic sights for rifles.....	X.....	20%	Free (A,E,IL) 14% (CA)	45%
9013.90.40	00 9	Other.....	X.....	9%	Free (A,E,IL) 6.3% (CA)	45%

9014		Direction finding compasses; other navigational instruments and appliances; parts and accessories thereof:						
9014.10		Direction finding compasses:						
9014.10.10	00 1	Optical instruments.....	No.....	7.9%	Free (A, C, E, IL)	45%	5.5% (CA)	
		Other:						
9014.10.60	00 0	Gyroscopic compasses, other than electrical.....	No.....	3.9%	Free (A, C, E, IL)	35%	2.7% (CA)	
		Other:						
9014.10.70		Electrical.....		4.9%	Free (A, C, E, IL)	40%	3.4% (CA)	
	30 2	Gyroscopic compasses.....	No.					
	60 5	Other.....	No.					
9014.10.90	00 4	Other.....	No.....	5.7%	Free (A, C, E, IL)	45%	3.9% (CA)	
9014.20		Instruments and appliances for aeronautical or space navigation (other than compasses):						
9014.20.20	00 7	Optical instruments and appliances.....	No.....	5.6%	Free (A, C, E, IL)	45%	3.9% (CA)	
		Other:						
9014.20.40	00 3	Automatic pilots.....	No.....	4.2%	Free (A, C, E, IL)	40%	2.9% (CA)	
		Other:						
9014.20.60	00 8	Electrical.....	No.....	4.9%	Free (A, C, E, IL)	40%	3.4% (CA)	
9014.20.80		Other.....		Free		30%		
	40 6	For use in civil aircraft.....	No.					
	80 7	Other.....	No.					
9014.80		Other instruments and appliances:						
9014.80.10	00 6	Optical instruments.....	No.....	5.6%	Free (A, E, IL)	45%	3.9% (CA)	
		Other:						
9014.80.20	00 4	Ships' logs and depth-sounding apparatus.....	No.....	4.8%	Free (A, E, IL)	70%	3.3% (CA)	
		Other:						
9014.80.40	00 0	Electrical.....	No.....	4.9%	Free (A, CA, E, IL)	40%		
9014.80.50	00 7	Other.....	No.....	Free		30%		
9014.90		Parts and accessories:						
9014.90.10	00 4	Of articles covered by subheading 9014.20.40.....	X.....	4.2%	Free (A, C, E, IL)	40%	2.9% (CA)	
9014.90.20		Of articles covered by subheading 9014.20.80.....		Free		30%		
	40 4	For use in civil aircraft.....	No.					
	80 5	Other.....	No.					
9014.90.40	00 8	Of articles covered by subheading 9014.80.50.....	X.....	Free		30%		
9014.90.60	00 3	Other.....	X.....	4.9%	Free (A, C, E, IL)	40%	3.4% (CA)	

9015		Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses; rangefinders; parts and accessories thereof:					
9015.10		Rangefinders:					
9015.10.40	00 4	Electrical.....	No.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%	
9015.10.80	00 5	Other.....	No.....	5.6%	Free (A,E,IL) 3.9% (CA)	45%	
9015.20		Theodolites and tachymeters:					
9015.20.40	00 2	Electrical.....	No.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%	
9015.20.80	00 3	Other.....	No.....	5.6%	Free (A,E,IL) 3.9% (CA)	45%	
9015.30		Levels:					
9015.30.40	00 0	Electrical.....	No.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%	
9015.30.80	00 1	Other.....	No.....	5.6%	Free (A,E,IL) 3.9% (CA)	45%	
9015.40		Photogrammetrical surveying instruments and appliances:					
9015.40.40	00 8	Electrical.....	X.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%	
9015.40.80	00 9	Other.....	X.....	6%	Free (A,E,IL) 4.2% (CA)	40%	
9015.80		Other instruments and appliances:					
9015.80.20	00 3	Optical instruments and appliances.....	X.....	5.6%	Free (A,E,IL) 3.9% (CA)	45%	
9015.80.60	00 4	Other:					
9015.80.80		Seismographs.....	No.....	4.9%	Free (A,CA,E,IL)	40%	
		Other.....		4.9%	Free (A,E,IL) 3.4% (CA)	40%	
	40 2	Geophysical instruments and appliances.....	X				
	80 3	Other.....	X				
9015.90.00		Parts and accessories.....			The rate ap- plicable to the article of which it is a part or accessory	Free (A,E,IL) The rate appli- cable to the article of which it is a part or accessory (CA)	The rate applicable to the article of which it is a part or acces- sory
	10 3	Of rangefinders.....	X				
	20 1	Of theodolites and tachymeters.....	X				
	30 9	Of levels.....	X				
	40 7	Of photogrammetrical surveying instruments and apparatus.....	X				
	50 4	Of seismographs.....	X				
	60 2	Of other geophysical instruments and appliances.....	X				
	90 6	Other.....	X				
9016.00		Balances of a sensitivity of a 5 cg or better, with or without weights; parts and accessories thereof:					
9016.00.20	00 9	Electrical balances and parts and accessories thereof.....	X.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%	
9016.00.40	00 5	Other: Jewelers' balances and parts and accessories thereof.....	X.....	5.7%	Free (A,E,IL) 3.9% (CA)	45%	
9016.00.60	00 0	Other.....	X.....	6.6%	Free (A,E,IL) 4.6% (CA)	40%	

9017		Drawing, marking-out or mathematical calculating instruments (for example, drafting machines, pantographs, protractors, drawing sets, slide rules, disc calculators); instruments for measuring length, for use in the hand (for example, measuring rods and tapes, micrometers, calipers), not specified or included elsewhere in this chapter; parts and accessories thereof:				
9017.10.00	00 0	Drafting tables and machines, whether or not automatic.....	X.....	4.9%	Free (A,E,IL) 3.4% (CA)	45%
9017.20		Other drawing, marking-out or mathematical calculating instruments:				
9017.20.40	00 0	Disc calculators, slide rules and other mathematical calculating instruments.....	X.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%
9017.20.80		Other.....		5.8%	Free (A,E,IL) 4% (CA)	45%
	40 3	Hand operated input devices which transmit position data to computer processors or displays (digitizers).....	No.			
	70 6	Pattern generating apparatus designed to produce masks and reticles from photoresist coated substrates (such as optical, E-beam, focused ion beam, X-ray or laser beam apparatus except those of subheading 8456.90.10) <u>1</u> /.....	No.			
	90 2	Other.....	X			
9017.30		Micrometers, calipers and gauges:				
9017.30.40	00 8	Micrometers and calipers.....	No.....	5.8%	Free (A,E,IL) 4% (CA)	45%
9017.30.80	00 9	Other.....	X.....	4.9%	Free (A,E,IL) 3.4% (CA)	45%
9017.80.00	00 5	Other instruments.....	X.....	5.3%	Free (A,E,IL) 3.7% (CA)	45%
9017.90.00		Parts and accessories.....		The rate applicable to the article of which it is a part or accessory	Free (A,E,IL) The rate applicable to the article of which it is a part or accessory (CA)	The rate applicable to the article of which it is a part or accessory
	10 1	Of articles of subheading 9017.10.....	X			
	20 9	Of articles of subheading 9017.20.40.....	X			
	30 7	Of articles of subheading 9017.20.80.....	X			
	40 5	Of articles of subheading 9017.30.40.....	X			
	50 2	Of articles of subheading 9017.30.80.....	X			
	60 0	Other.....	X			

1/ See statistical note 1 to section XVI regarding semiconductor manufacturing and testing machines and apparatus.

9018		Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments; parts and accessories thereof:			
		Electro-diagnostic apparatus (including apparatus for functional exploratory examination or for checking physiological parameters); parts and accessories thereof:			
9018.11.00		Electrocardiographs, and parts and accessories thereof.....	4.2%	Free (A,E,IL) 2.9% (CA)	35%
	40 0	Electrocardiographs.....	No.		
	80 1	Parts and accessories.....	X		
9018.19		Other:			
9018.19.40	00 2	Apparatus for functional exploratory examination, and parts and accessories thereof.....	X..... 7.9%	Free (A,E,IL) 5.5% (CA)	55%
9018.19.80		Other.....	4.2%	Free (A,E,IL) 2.9% (CA)	35%
	20 9	Complete patient monitoring systems, incorporating component modules for monitoring such functions as temperature, blood pressure and pulse.....	X		
	30 7	Basal metabolism and blood pressure apparatus.....	X		
	35 2	Electroencephalographs (EEG) and electromyographs (EMG).....	No.		
	45 0	Ultrasonic scanning apparatus..	No.		
	50 2	Other apparatus.....	X		
	60 0	Parts and accessories.....	X		
9018.20.00		Ultraviolet or infrared ray apparatus, and parts and accessories thereof.....	4.2%	Free (A,E,IL) 2.9% (CA)	35%
	40 9	Therapeutic.....	X		
	80 0	Other.....	X		



9018 (con.)		Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments; parts and accessories thereof (con.): Syringes, needles, catheters, cannulae and the like; parts and accessories thereof:			
9018.31.00		Syringes, with or without needles; parts and accessories thereof.....	8.4%	Free (A,E,IL) 5.8% (CA)	60%
		Syringes, with or without their needles:			
	40 6	Hypodermic.....	No.		
	80 7	Other.....	No.		
	90 5	Parts and accessories.....	X		
9018.32.00	00 3	Tubular metal needles and needles for sutures and parts and accessories thereof.....	X..... 6.4%	Free (A,E,IL) 4.4% (CA)	55%
9018.39.00		Other.....	4.2%	Free (A,E,IL) 2.9% (CA)	30%
		Bougies, catheters, drains and sondes, and parts and accessories thereof:			
	20 2	Rubber catheters.....	Doz.		
	40 8	Other.....	X		
	50 5	Other.....	X		
		Other instruments and appliances, used in dental sciences, and parts and accessories thereof:			
9018.41.00	00 2	Dental drill engines, whether or not combined on a single base with other dental equipment, and parts and accessories thereof.....	X..... 4.7%	Free (A,E,IL) 3.2% (CA)	35%
9018.49		Other:			
9018.49.40	00 6	Dental burs.....	Gross... 6.2%	Free (A,E,IL) 4.3% (CA)	35%
9018.49.80	40 9	Other.....	4.7%	Free (A,CA,E,IL)	35%
		Dental hand instruments and parts and accessories thereof..	X		
	80 0	Other.....	X		
9018.50.00	00 0	Other ophthalmic instruments and appliances and parts and accessories thereof.....	X..... 10%	Free (A,E,IL) 7% (CA)	60%

9018 (con.)		Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments; parts and accessories thereof (con.):				
9018.90		Other instruments and appliances and parts and accessories thereof:				
		Optical instruments and appliances and parts and accessories thereof:				
9018.90.10	00 0	Mirrors and reflectors.....	X.....	9%	Free (A,E,IL) 6.3% (CA)	45%
9018.90.20	00 8	Other.....	X.....	10%	Free (A,E,IL) 7% (CA)	60%
		Other:				
9018.90.30	00 6	Anesthetic instruments and appliances and parts and accessories thereof.....	X.....	5.7%	Free (A,E,IL) 3.9% (CA)	45%
9018.90.40	00 4	Percussion hammers, stethoscopes and parts of stethoscopes.....	X.....	5.7%	Free (A,E,IL) 3.9% (CA)	45%
9018.90.50		Sphygmomanometers, tensimeters and oscillometers; all the foregoing and parts and accessories thereof.....		3.4%	Free (A,E,IL) 2.3% (CA)	27.5%
	40 3	Sphygmomanometers and parts and accessories thereof.....	X			
	80 4	Other.....	X			
		Electro-medical instruments and appliances and parts and accessories thereof:				
9018.90.60	00 9	Electro-surgical instruments and appliances, other than extracorporeal shock wave lithotripters; all the foregoing and parts and accessories thereof.....	X.....	7.9%	Free (A,E,IL) 5.5% (CA)	55%
9018.90.70		Other.....		4.2%	Free (A,CA,E,IL)	35%
	20 3	Dialysis instruments and apparatus.....	No.			
		Other therapeutic appliances and instruments:				
	40 9	Ultrasonic.....	X			
	60 4	Other.....	X			
	70 2	Parts and accessories of dialysis instruments and apparatus.....	X			
	80 0	Other.....	X			
9018.90.80	00 5	Other.....	X.....	7.9%	Free (A,E,IL) 5.5% (CA)	55%

9019	Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus; ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus; parts and accessories thereof:				
9019.10	Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus; parts and accessories thereof:				
9019.10.20	00 4 Mechano-therapy appliances and massage apparatus; parts and accessories thereof..... X.....	4.2%	Free (A,E,IL) 2.9% (CA)	35%	
	Other:				
9019.10.40	00 0 Electrically operated apparatus and parts thereof..... X.....	4.2%	Free (A,E,IL) 2.9% (CA)	35%	
9019.10.60	00 5 Other..... X.....	7.9%	Free (A,E,IL) 5.5% (CA)	55%	
9019.20.00	00 6 Ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus; parts and accessories thereof..... X.....	3.7%	Free (A,CA,E,IL)	35%	
9020.00	Other breathing appliances and gas masks, excluding protective masks having neither mechanical parts nor replaceable filters; parts and accessories thereof:				
9020.00.40	00 9 Underwater breathing devices designed as a complete unit to be carried on the person and not requiring attendants..... X.....	Free		27.5%	
9020.00.60	00 4 Other breathing appliances and gas masks..... X.....	3.7%	Free (A,C,E,IL) 2.5% (CA)	35%	
9020.00.90	00 8 Other..... X.....	3.7%	Free (A,E,IL) 2.5% (CA)	35%	

9021	Orthopedic appliances, including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect or disability; parts and accessories thereof:				
	Artificial joints and other orthopedic or fracture appliances; parts and accessories thereof:				
9021.11.00 00 3	Artificial joints and parts and accessories thereof.....	X.....	7.2%	Free (A,E,IL) 5% (CA)	55%
9021.19	Other:				
9021.19.40 00 7	Bone plates, screws and nails, and other internal fixation devices or appliances.....	X.....	7.2%	Free (A,E,IL) 5% (CA)	55%
9021.19.80 00 8	Other.....	X.....	5.8%	Free (A,E,IL) 4% (CA)	40%
9021.21	Artificial teeth and dental fittings, and parts and accessories thereof:				
	Artificial teeth and parts and accessories thereof:				
9021.21.40 00 3	Of plastics.....	X.....	5%	Free (A,E,IL) 3.5% (CA)	20%
9021.21.80 00 4	Other.....	X.....	9%	Free (A,E,IL) 6.3% (CA)	70%
9021.29	Other:				
9021.29.40 00 5	Of plastics.....	X.....	5%	Free (A,E,IL) 3.5% (CA)	20%
9021.29.80 00 6	Other.....	X.....	9%	Free (A,E,IL) 6.3% (CA)	70%
9021.30.00 00 0	Other artificial parts of the body and parts and accessories thereof.....	X.....	5.8%	Free (A,E,IL) 4% (CA)	40%
9021.40.00 00 8	Hearing aids, excluding parts and accessories thereof.....	No.....	4.2%	Free (A,E,IL) 2.9% (CA)	35%
9021.50.00 00 5	Pacemakers for stimulating heart muscles, excluding parts and accessories thereof.....	No.....	4.2%	Free (A,E,IL) 2.9% (CA)	35%
9021.90	Other:				
9021.90.40	Parts and accessories for hearing aids and for pacemakers for stimulating heart muscles.....		4.2%	Free (A,E,IL) 2.9% (CA)	35%
40 1	For hearing aids.....	X			
80 2	Other.....	X			
9021.90.80 00 0	Other.....	X.....	3.9%	Free (A,E,IL) 2.7% (CA)	35%

9022	Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like; parts and accessories thereof:					
	Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus:					
9022.11.00	00 2	For medical, surgical, dental or veterinary uses.....	X.....	2.1%	Free (A,E,IL) 1.4% (CA)	35%
9022.19.00	00 4	For other uses.....	X.....	2.1%	Free (A,E,IL) 1.4% (CA)	35%
	Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus:					
9022.21.00	00 0	For medical, surgical, dental or veterinary uses.....	X.....	4%	Free (A,CA,E,IL)	35%
9022.29		For other uses:				
9022.29.40	00 4	Smoke detectors, ionization type....	No.....	2.7%	Free (A*,B,E,IL) 1.8% (CA)	35%
9022.29.80	00 5	Other.....	X.....	4%	Free (A,CA,E,IL)	35%
9022.30.00	00 9	X-ray tubes.....	No.....	2.5%	Free (A,E,IL) 1.7% (CA)	35%
9022.90		Other, including parts and accessories:				
9022.90.20	00 2	Other apparatus.....	X.....	2.1%	Free (A,E,IL) 1.4% (CA)	35%
	Parts and accessories:					
9022.90.40	00 8	Of X-ray tubes.....	X.....	2.5%	Free (A,E,IL) 1.7% (CA)	35%
	Other:					
9022.90.60	00 3	Of apparatus based on the use of X-rays.....	X.....	2.1%	Free (A,E,IL) 1.4% (CA)	35%
9022.90.70	00 1	Of smoke detectors, ionization type.....	X.....	2.7%	Free (A,B,E,IL) 1.8% (CA)	35%
9022.90.90	00 7	Other.....	X.....	4%	Free (A,E,IL) 2.8% (CA)	35%

9023.00.00	00 4	Instruments, apparatus and models, designed for demonstrational purposes (for example, in education or exhibitions), unsuitable for other uses, and parts and accessories thereof..... X.....	Free		Free
9024		Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics), and parts and accessories thereof:			
9024.10.00	00 1	Machines and appliances for testing metals.... X.....	4.8%	Free (A, E, IL) 3.3% (CA)	40%
9024.80.00	00 6	Other machines and appliances..... X.....	4.8%	Free (A, E, IL) 3.3% (CA)	40%
9024.90.00		Parts and accessories.....	4.8%	Free (A, E, IL) 3.3% (CA)	40%
	40 6	Of machines and appliances for testing metals..... X			
	80 7	Other..... X			

9025		Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments; parts and accessories thereof:						
		Thermometers, not combined with other instruments:						
		Liquid-filled, for direct reading:						
9025.11		Clinical..... No.....				17%	Free (A*, E, IL)	85%
9025.11.20	00 5						11.9% (CA)	
9025.11.40	00 1	Other..... No.....				8.4%	Free (A, C, E, IL)	85%
9025.19.00		Other.....				5%	Free (A, B, C, E, IL)	40%
	40 3	Clinical..... No.					3.5% (CA)	<u>1/</u>
	80 4	Other..... No.						
9025.20		Barometers, not combined with other instruments:						
9025.20.40	00 0	Electrical..... No.....				4.9%	Free (A, C, E, IL)	40%
9025.20.80	00 1	Other..... No.....				2.8%	3.4% (CA)	
9025.80		Other instruments:					Free (A, C, E, IL)	40%
9025.80.10	00 3	Electrical..... No.....				4.9%	Free (A, C, E, IL)	40%
		Other:					3.4% (CA)	
9025.80.20	00 1	Hydrometers and similar floating instruments, whether or not incorporating a thermometer, non-recording..... No.....				8.4%	Free (A, C, E, IL)	85%
9025.80.30	00 9	Hygrometers, psychrometers and pyrometers, non-recording..... No.....				3.9%	5.8% (CA)	
9025.80.40	00 7	Thermographs, barographs, hygrographs and other recording instruments..... No.....				3%	Free (A, C, E, IL)	35%
9025.80.50	00 4	Other..... No.....				4.7%	2.1% (CA)	
9025.90.00	00 3	Parts and accessories..... X.....				The rate applicable to the article of which it is a part or accessory	Free (A, C, E, IL)	The rate applicable to the article of which it is a part or accessory
						3.2% (CA)	50%	
						Free (A, C, E, IL)		
						(CA) <u>1/</u>		

1/ Equipment, originating in the territory of Canada, intended for use in the repair or maintenance of certain motor vehicles subject to accelerated staged rate reductions. See heading 9905.

9026	Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meters), excluding instruments and apparatus of heading 9014, 9015, 9028 or 9032; parts and accessories thereof:				
9026.10	For measuring or checking the flow or level of liquids:				
9026.10.20	Electrical.....	No.....	4.9%	Free (A,B,C,E,IL)	40%
				1.9% (CA)	
	40 7 Flow meters.....	No.			
	80 8 Other.....	No.			
	Other:				
9026.10.40 00 1	Flow meters.....	No.....	49¢ each + 7.6%	Free (A,C,E,IL)	\$4.50 each + 65%
				19.6¢ each + 3% (CA)	
9026.10.60 00 6	Other.....	No.....	4.7%	Free (A,B,C,E,IL)	35%
				1.8% (CA)	
9026.20	For measuring or checking pressure:				
9026.20.40 00 9	Electrical.....	No.....	4.9%	Free (A,B,C,E,IL)	40%
				1.9% (CA)	
9026.20.80 00 0	Other.....	No.....	4.7%	Free (A,B,C,E,IL)	35%
				1.8% (CA)	
9026.80	Other instruments and apparatus:				
9026.80.20 00 0	Electrical.....	No.....	4.9%	Free (A,B,C,E,IL)	40%
				1.9% (CA)	
	Other:				
9026.80.40 00 6	Heat meters incorporating liquid supply meters, and anemometers.....	No.....	49¢ each + 7.6%	Free (A,C,E,IL)	\$4.50 each + 65%
				19.6¢ each + 3% (CA)	
9026.80.60 00 1	Other.....	No.....	4.7%	Free (A,B,C,E,IL)	35%
				1.8% (CA)	
9026.90	Parts and accessories:				
9026.90.20 00 8	Of electrical instruments and apparatus..	X.....	4.9%	Free (A,B,C,CA,E,IL)	40%
	Other:				
9026.90.40 00 4	Of flow meters, heat meters incorporating liquid supply meters and anemometers.....	X.....	9%	Free (A,C,E,IL)	65%
				3.6% (CA)	
9026.90.60 00 9	Other.....	X.....	4.7%	Free (A,B,C,E,IL)	35%
				1.8% (CA)	



9027		Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes; parts and accessories thereof:				
9027.10		Gas or smoke analysis apparatus:				
9027.10.20	00 4	Electrical.....	X.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%
		Other:				
9027.10.40	00 0	Optical instruments and apparatus...	X.....	10%	Free (A,E,IL) 7% (CA)	50%
9027.10.60	00 5	Other.....	X.....	6.2%	Free (A,E,IL) 4.3% (CA)	40%
9027.20		Chromatographs and electrophoresis instruments:				
9027.20.40		Electrical.....		4.9%	Free (A,E,IL) 3.4% (CA)	40%
	40 0	Electrophoresis instruments.....	No.			
	50 7	Gas chromatographs.....	No.			
	60 5	Liquid chromatographs.....	No.			
	80 1	Other.....	No.			
9027.20.80		Other.....		6.2%	Free (A,E,IL) 4.3% (CA)	40%
	30 3	Gas chromatographs.....	No.			
	60 6	Liquid chromatographs.....	No.			
	90 0	Other.....	No.			
9027.30		Spectrometers, spectrophotometers and spectrographs using optical radiations (ultraviolet, visible, infrared):				
9027.30.40		Electrical.....		4.9%	Free (A,E,IL) 3.4% (CA)	40%
	40 8	Spectrophotometers.....	No.			
	80 9	Other.....	No.			
9027.30.80		Other.....		10%	Free (A,E,IL) 7% (CA)	50%
	20 3	Spectroscopes.....	No.			
	80 0	Other.....	No.			
9027.40.00	00 2	Exposure meters.....	No.....	3.4%	Free (A,E,IL) 2.3% (CA)	27.5%
9027.50		Other instruments and apparatus using optical radiations (ultraviolet, visible, infrared):				
9027.50.40		Electrical.....		4.9%	Free (A,E,IL) 3.4% (CA)	40%
	15 4	Chemical analysis instruments and apparatus.....	No.			
	20 7	Thermal analysis instruments and apparatus.....	No.			
	50 0	Photometers.....	No.			
	60 8	Other.....	No.			
9027.50.80		Other.....		10%	Free (A,E,IL) 7% (CA)	50%
	15 5	Chemical analysis instruments and apparatus.....	No.			
	20 8	Thermal analysis instruments and apparatus.....	No.			
	60 9	Other.....	No.			

9027 (con.)		Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes; parts and accessories thereof (con.):			
9027.80		Other instruments and apparatus:			
9027.80.40		Electrical.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%
	10 3	Nuclear magnetic resonance instruments.....	No		
	20 1	Mass spectroscopes.....	No.		
		Other:			
	30 9	Chemical analysis instruments and apparatus.....	X		
	60 2	Physical analysis instruments and apparatus.....	X		
	90 6	Other.....	X		
9027.80.80		Other.....	6.2%	Free (A,E,IL) 4.3% (CA)	40%
	30 0	Chemical analysis instruments and apparatus.....	X		
	60 3	Physical analysis instruments and apparatus.....	X		
	90 7	Other.....	X		
9027.90		Microtomes; parts and accessories:			
9027.90.20	00 7	Microtomes.....	No..... 6.2%	Free (A,E,IL) 4.3% (CA)	40%
		Parts and accessories:			
9027.90.40		Of electrical instruments and apparatus.....	4.9%	Free (A,E,IL) 3.4% (CA)	40%
	10 1	Of articles of subheading 9027.10.20.....	X		
	20 9	Of articles of subheading 9027.20.40.....	X		
	30 7	Of articles of subheading 9027.30.40.....	X		
	40 5	Of articles of subheading 9027.40.....	X		
	50 2	Of articles of subheading 9027.50.40.....	X		
	60 0	Other.....	X		
		Other:			
9027.90.60	00 8	Of optical instruments and apparatus.....	X..... 10%	Free (A,E,IL) 7% (CA)	50%
9027.90.80	00 4	Other.....	X..... 6.2%	Free (A,E,IL) 4.3% (CA)	40%

9028	Gas, liquid or electricity supply or production meters, including calibrating meters thereof; parts and accessories thereof:			
9028.10.00 00 7	Gas meters.....	No.....	45¢ each + 7%	Free (A,E,IL) 31.5¢ each + 4.9% (CA) \$4.50 each + 65%
9028.20.00 00 5	Liquid meters.....	No.....	45¢ each + 7%	Free (A,E,IL) 31.5¢ each + 4.9% (CA) \$4.50 each + 65%
9028.30.00 00 3	Electricity meters.....	No.....	45¢ each + 4.4%	Free (A,E,IL) 31.5¢ each + 3% (CA) \$4.50 each + 65%
9028.90.00	Parts and accessories.....		9%	Free (A,E,IL) 6.3% (CA) 65%
40 2	Of electricity meters.....	X		
80 3	Other.....	X		
9029	Revolution counters, production counters, taximeters, odometers, pedometers and the like; speedometers and tachometers, other than those of heading 9015; stroboscopes; parts and accessories thereof:			
9029.10	Revolution counters, production counters, taximeters, odometers, pedometers and the like:			
9029.10.40 00 8	Taximeters.....	No.....	15%	Free (A,B,E,IL) 10.5% (CA) 85%
9029.10.80 00 9	Other.....	No.....	Free	35%
9029.20	Speedometers and tachometers; stroboscopes:			
9029.20.20 00 0	Bicycle speedometers.....	No.....	17%	Free (E,IL) 11.9% (CA) 110%
9029.20.40	Other speedometers and tachometers.....		Free	35%
40 8	For use in civil aircraft.....	No.		
80 9	Other.....	No.		
9029.20.60 00 1	Stroboscopes.....	No.....	45¢ each + 7%	Free (A,E,IL) 31.5¢ each + 4.9% (CA) <u>1/</u> \$4.50 each + 65%
9029.90	Parts and accessories:			
9029.90.20 00 5	Of taximeters.....	X.....	15%	Free (A,B,E,IL) 10.5% (CA) <u>1/</u> 85%
9029.90.40 00 1	Of bicycle speedometers.....	X.....	17%	Free (E,IL) 11.9% (CA) 110%
9029.90.60 00 6	Of stroboscopes.....	X.....	9%	Free (A,E,IL) 6.3% (CA) <u>1/</u> 65%
9029.90.80	Other.....		Free	35%
40 4	Of speedometers and tachometers.....	X		
80 5	Other.....	X		

1/ Equipment, originating in the territory of Canada, intended for use in the repair or maintenance of certain motor vehicles subject to accelerated staged rate reductions. See heading 9905.

9030		Oscilloscopes, spectrum analyzers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading 9028; instruments and apparatus for measuring or detecting alpha, beta, gamma, X-ray, cosmic or other ionizing radiations; parts and accessories thereof:				
9030.10.00	00 3	Instruments and apparatus for measuring or detecting ionizing radiations.....	No.....	4.7%	Free (A,C,E,IL) 40% 3.2% (CA)	
9030.20.00	00 1	Cathode-ray oscilloscopes and cathode-ray oscillographs.....	No.....	4.9%	Free (A,C,E,IL) 40% 3.4% (CA)	
		Other instruments and apparatus, for measuring or checking voltage, current, resistance or power, without a recording device:				
9030.31.00	00 8	Multimeters.....	No.....	4.9%	Free (A,B,C,CA,E,IL) 40%	
9030.39.00		Other.....		4.9%	Free (A,B,C,E,IL) 40% 1.9% (CA) <u>1/</u>	
	40 2	For measuring or checking voltage, current or resistance.....	X			
	80 3	Other.....	X			
9030.40.00	00 7	Other instruments and apparatus, specially designed for telecommunications (for example, cross-talk meters, gain measuring instruments, distortion factor meters, psophometers).....	X.....	4.9%	Free (A,B,C,E,IL) 40% 1.9% (CA)	
		Other instruments and apparatus:				
9030.81.00	00 7	With a recording device.....	X.....	4.9%	Free (A,B,C,E,IL) 40% 3.4% (CA) <u>1/</u>	
9030.89.00		Other.....		4.9%	Free (A,B,C,E,IL) 40% 3.4% (CA) <u>1/</u>	
	40 1	Instruments and apparatus designed to measure and check semiconductor wafers and devices (such as probe testers, resistivity checkers, logic analyzers, automatic integrated circuit testers) <u>2/</u> .....	No.			
	80 2	Other.....	X			
9030.90		Parts and accessories:				
9030.90.40	00 8	For articles of subheading 9030.10.....	X.....	4.7%	Free (A,C,E,IL) 40% 3.2% (CA)	
9030.90.80		Other.....		4.9%	Free (A,B,C,E,IL) 40% 3.4% (CA) <u>1/3/</u>	
	10 7	Of articles of subheading 9030.20...	X			
	20 5	Of articles of subheading 9030.31...	X			
	30 3	Of articles of subheading 9030.39...	X			
	40 1	Of articles of subheading 9030.40...	X			
	50 8	Of articles of subheading 9030.81...	X			
	60 6	Other.....	X			

1/ Equipment, originating in the territory of Canada, intended for use in the repair or maintenance of certain motor vehicles subject to accelerated staged rate reductions. See heading 9905.

2/ See statistical note 1 to section XVI regarding semiconductor manufacturing and testing machines and apparatus.

3/ Duty suspended or reduced on certain articles originating in the territory of Canada. See subheadings 9905.90.05 and 9905.90.10.

9031		Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this chapter; profile projectors; parts and accessories thereof:					
9031.10.00	00 2	Machines for balancing mechanical parts.....	X.....	4.9%	Free (A,E,IL)	40%	
					3.4% (CA)		
9031.20.00	00 0	Test benches.....	X.....	4.9%	Free (A,CA,E,IL)	45%	
9031.30.00	00 8	Profile projectors.....	X.....	7%	Free (A,E,IL)	45%	
					4.9% (CA)		
9031.40.00		Other optical instruments and appliances.....		10%	Free (A,CA,E,IL)	50%	
	20 2	For inspecting photomasks used to manufacture semiconductor devices <u>1</u> /.....	No.				
		For inspecting semiconductor wafers and devices <u>1</u> /:					
	40 8	For wafers.....	No.				
	60 3	Other.....	No.				
	80 9	Other.....	X				
9031.80.00		Other instruments, appliances and machines....		4.9%	Free (A,B,C,E,IL)	40%	
		Equipment for testing the characteristics of internal combustion engines:			3.4% (CA) <u>2</u> /		
	60 4	For testing electrical characteristics.....	X				
	70 2	Other.....	X				
	80 0	Other.....	X				
9031.90		Parts and accessories:					
9031.90.20	00 1	Of profile projectors.....	X.....	7%	Free (A,E,IL)	45%	
					4.9% (CA)		
9031.90.40	00 7	Of other optical instruments and appliances, other than test benches.....	X.....	10%	Free (A,CA,E,IL)	50%	
9031.90.60		Other.....		4.9%	Free (A,B,C,E,IL)	40%	
	30 6	Of machines for balancing mechanical parts.....	X		3.4% (CA) <u>2</u> / <u>3</u> /		
	60 9	Of test benches.....	X				
	90 3	Other.....	X				

1/ See statistical note 1 to section XVI regarding semiconductor manufacturing and testing machines and apparatus.  
2/ Equipment, originating in the territory of Canada, intended for use in the repair or maintenance of certain motor vehicles subject to accelerated staged rate reductions. See heading 9905.  
3/ Duty suspended on certain articles originating in the territory of Canada. See subheading 9905.90.15.

9032	Automatic regulating or controlling instruments and apparatus; parts and accessories thereof:				
9032.10.00	Thermostats.....	4.8%		Free (A,B,C,E,IL) 40%	
	For air conditioning, refrigeration or heating systems:			1.9% (CA)	
	30 5    Designed for wall mounting.....	No.			
	60 8    Other.....	No.			
	90 2    Other.....	No.			
9032.20.00	Manostats.....	No.....	4.8%	Free (A,B,C,E,IL) 35%	
				1.9% (CA)	
9032.81.00	Other instruments and apparatus:				
	Hydraulic and pneumatic.....		4.7%	Free (A,B,C,E,IL) 35%	
	Industrial process control instruments and apparatus:			3.2% (CA) <u>1/</u>	
	20 1    Hydraulic.....	No.			
	60 2    Pneumatic.....	No.			
	80 8    Other.....	No.			
9032.89	Other:				
	Automatic voltage and voltage-current regulators:				
9032.89.20	00 3    Designed for use in a 6, 12 or 24 V system.....	X.....	3.1%	Free (A,B,C,IL) 25%	
				2.1% (CA) <u>1/</u>	
9032.89.40	00 9    Other.....	X.....	4.9%	Free (A,C,E,IL) 35%	
				3.4% (CA) <u>1/</u>	
9032.89.60	Other.....		4.9%	Free (A,B,C,E,IL) 40%	
				3.4% (CA) <u>1/2/</u>	
	Control instruments for air conditioning, refrigeration or heating systems:				
	15 7    Complete systems.....	No.			
	25 5    Other.....	X			
	Process control instruments and apparatus:				
	30 8    Complete systems.....	No.			
	40 6    Other:				
	Temperature control instruments.....	No.			
	50 3    Pressure and draft control instruments..	No.			
	60 1    Flow and liquid level control instruments.....	No.			
	70 9    Humidity control instruments.....	No.			
	75 4    Other.....	X			
	85 2    Other.....	X			
9032.90	Parts and accessories:				
	Of automatic voltage and voltage-current regulators:				
9032.90.20	00 0    Designed for use in a 6, 12 or 24 V system.....	X.....	3.1%	Free (A,B,C,E,IL) 25%	
				2.1% (CA) <u>1/</u>	
9032.90.40	00 6    Other.....	X.....	4.9%	Free (A,C,E,IL) 35%	
				3.4% (CA) <u>1/</u>	
9032.90.60	Other.....		4.9%	Free (A,B,C,E,IL) 40%	
				3.4% (CA) <u>1/2/</u>	
	20 7    Of thermostats.....	X			
	40 3    Of manostats.....	X			
	60 8    Of instruments and apparatus of subheading 9032.81.....	X			
	80 4    Other.....	X			

1/ Equipment, originating in the territory of Canada, intended for use in the repair or maintenance of certain motor vehicles subject to accelerated staged rate reductions. See heading 9905.

2/ Duty reduced on certain articles originating in the territory of Canada. See subheadings 9905.90.20 and 9905.90.25.

9033.00.00 00 2	Parts and accessories (not specified or included elsewhere in this chapter) for machines, appliances, instruments or apparatus of chapter 90..... X.....	4.9%	Free (A,B,E,IL)	40%
			3.4% (CA) <u>1/</u>	

<sup>1/</sup> Equipment, originating in the territory of Canada, intended for use in the repair or maintenance of certain motor vehicles subject to accelerated staged rate reductions. See heading 9905.