

DWPI Manual Code Revision 2019 - GMPI and EPI Codes					
New / Changed / Retired	Code	Date Range	Title	Scope Notes	Keyword/Search Terms
<b>SECTION P</b>					
Change Search Terms	P14-A99	(2015- )	Other details of animal husbandry	Includes marking of animals, devices for sorting and cleaning eggs, tools for collecting honey, bee-smokers, bee-keepers' accessories, such as veils, etc. Also includes animal transport, such as safety harnesses, car guards, animal ramps, restraints, etc.	Manure pouch, urine pouch, honey strainers, carriers, ear tag
Change Title	P81-T	(2015- )	Constructional details of optical elements, systems or apparatus	These codes are assigned with P81-A codes to indicate the novel aspects of optical elements, systems or apparatus.	
<b>SECTION Q</b>					
Change Scope Note	Q32-T01B	(2012- )	Flexible elongated elements	Includes straps and cable ties. Use of cable ties in electronic equipment wiring or in cable installations in general is covered by V04-T01A and X12-G04A2 respectively.	
Change Scope Note	Q34-M99	(2012- )	Other electrical/electronic equipment/parts	Includes packaging of electrical beauty products (electric razors, massagers, etc.), batteries, solar/photovoltaic panels/cells, lightbulbs and tubes.	
<b>SECTION S</b>					
Change Scope Note	S03-E14J	(1992- )	Plants	Includes seeds, crops.	
Change Scope Note	S03-E14N	(1992- )	Air quality	Covers air quality, e.g. in workplace, hospitals and home. See S03-D06 also for pollution monitoring. Details of gas analysis and gas sensors are also coded under S03-E14P.	Breathable, pollution, contaminant
Change Title/Scope Note/Search Terms	S03-E14P	(1997- )	Gas sensor; Gas analysis	Includes determining the components of a gas. See also S03-E02A and S03-E03 for electrical and electrochemical gas sensors, respectively. Details of air quality analysis (pollution) are coded under S03-E14N and S03-D06.	Gas detection
Change Search Terms	S03-E14P9	(1997- )	Gas sensors for other products		Livestock, poultry, SF6
Change Search Terms	S03-F20	(1980- )	Other physical or chemical properties	For sampling devices, see S03-E13 codes.	Growth measurement
Change Scope Note	S05-D01	(1980- )	Measuring and recording systems	For indicating and recording in general see also S02-K. For details of wearable computing / fitness sports training devices see also T01-M06A1D and W04-X01A1.	Electrode, data, display, monitor, physiological, process, image, probe, transducer
New	S05-M05	(2019- )	Pharmaceutical dispensing and delivery systems	Includes dispensing and delivery of medical prescriptions within hospitals and other pharmacies.	Pharmacy, Dispensary
Change Scope Note	S05-P	(1997- )	Medical simulation systems	For medical education using training and simulation aids, i.e. for training in medical procedures e.g. surgical, therapeutic, analysis, nursing etc. See W04-W07 for simulator systems, training and demonstration, and T01-J06A for data processing in medicine. See also P85-A codes, in particular P85-A01G, for non-electrical aspects.	Medical education, medical simulation, medical training
New	S05-Y07	(2019- )	Manufacture of medical equipment	Includes manufacturing of diagnostic and surgical equipment.	
<b>SECTION T</b>					
Change Scope Note/Search Terms	T01-C07C5	(1997- )	Using standard interfaces or expansion cards	See T01-C11 for PCMCIA cards per se.	PCI, PCI-X
Change Scope Note	T01-J05B4A	(1997- )	Distributed database	Includes distributed ledger systems such as Blockchain.	
Change Scope Note/Search Terms	T01-J07B	(1992- )	Computer control of manufacturing/industrial machines and Quality Control (QC)	Includes Computer-Aided Manufacture (CAM) and computerized robotics/mechatronics. See T01-J16 for Artificial Intelligence (AI), Fuzzy Logic, and Neural Network aspects. See also T06-A, T06-D and X25-A codes.	CAM, industrial robot, Industry 4.0
Change Title/Scope Note/Search Terms	T01-N01A1	(2002- )	Financial technology systems	Includes 'FinTech', cryptocurrency, electronic payment systems e.g. Near-Field Communication (NFC), Internet banking, billing, point of sale (POS) and metering (T01-J05A1 and T01-H07C5E prior to 2002). See also T05-L for POS systems in general.	FinTech, bitcoin, altcoin, Ethereum, electronic funds transfer (EFT), digital wallet
Change Title/Search Terms	T01-N01D3A	(2012- )	Cloud computing services	Includes network systems where applications are run using a virtual system from remote locations, such as Software as a Service (SaaS), Infrastructure as a Service (IaaS).	Cloud Computing, Virtualization, Virtual Desktop, Citrix (RTM)
Change Title/Scope Note/Search Terms	T01-N02B3	(2007- )	Network security, anti-malware	Anti-Virus, Anti-Spyware Software applications. Testing server security and setting updates for security programs. For security program update via network transmission see T01-N02B1E. Before 2007 see T01-J20D for Anti-Virus software applications.	Anti-Virus, Anti-Spyware, Trojan, Worm, Hacking
Change Scope Note	T03-A08A1C	(1992- )	Hard disk drive	This code is used as the default reference for a 'hard disk drive'. Card type, or similar small form factor magnetic disk drives used within equipment are covered by T03-A08A1E and external hard disk drives by T03-A08A1G (from 2012), both of which are assigned instead of T03-A08A1C. Please note that since T03 codes cover dynamic recording systems only, SSDs and similar solid-state replacements for hard disk drives are not assigned this code and are instead covered by T01-H01B3 codes.	
Change Title/Scope Note/Search Terms	T05-L01C3	(2006- )	Using mobile electronic device	Contactless payments using smartphone or other mobile device incorporating RFID/transponder technology. See also T04-K and W02 for RFID/transponders in general.	Digital wallet
Change Title/Scope Note	T05-L02	(1992- )	Electronic payments	Includes Electronic Funds Transfer (EFT) and digital wallet systems. See T01-N01A1 for Computer/Internet aspects and W01-C05B3C for telephone line data transmission aspects.	
Change Search Terms	T06-D03C	(1983- )	Fabric manufacture	See also X25-T04B codes.	Looms, knitting machines, wefting machines, warping machines, weaving, textile manufacture
New	T06-D06A	(2019- )	Riveting control	See also X25-A03R and X25-A03F for riveter control. See T06-D20 prior to 2018.	
Change Scope Note	T06-D20	(1997- )	Other applications of control systems	Includes drying (see X25-G), etc. From 2011 control of presses is transferred to T06-D05A2. From 2019 control of riveting machines is transferred to T06-D06A (see also X25-A03R).	
<b>SECTION U</b>					
Change Scope Note	U11-A15	(1992- )	Electroluminescent materials	Also includes other novel luminescent materials used in semiconductor devices, e.g. phosphors, photoluminescent and fluorescent materials. See U14-J codes for electroluminescent devices and displays (structure, circuits, manufacture).	
Change Scope Note	U11-C01A1	(1987- )	Thermal evaporation for deposition of semiconductor layer	Arc evaporation, thermal vacuum evaporation using e.g. resistive heating, or inductive (RF) heating.	
Change Scope Note	U11-C18B9	(1992- )	Complete manufacture of other devices	Includes manufacture of e.g. SAW devices (see also U14-G), field emitting structures (see also U12-B03D), superconductive devices (see also U14-F02B), photovoltaic devices (see also U12-A02).	
Change Title/Scope Note	U11-D01A8	(1987- )	Wafer level package	Includes chip packaging on wafer.	
Change Scope Note	U12-A01A1	(1992- )	Semiconductor structure of individual LED	Covers chip layer structure of LED. See U12-A01A4 for LED package structure.	
Change Scope Note	U12-A01A4A	(2005- )	Packages for white LEDs	Covers package aspects for white LEDs, including phosphors for white LEDs.	
Change Title/Scope Note	U12-A01A4B	(2006- )	Packages for coloured LEDs	Covers package aspects for red, green or blue and other non-white LEDs, including phosphors for coloured, non-white LEDs.	
Change Scope Note	U12-A02A3	(1987- )	Characterized by solar cell manufacture	Used instead of U12-A02A2 section if material manufacturing details are emphasized. (See also U11-C18B9 for photovoltaic devices manufacture).	
<b>SECTION V</b>					
Change Search Terms	V06-V01E	(2007- )	Resonators	Includes electromechanical resonators. For networks using resonators, see U25-B codes also.	Oscillators, crystal resonators, elastic wave resonators

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SECTION W					
Change Scope Note/Search Terms	W04-V07	(1992- )	Noise cancelling systems	Covers systems using a sensor such as a microphone and suitable signal processing to cancel or reduce the level of unwanted sound. This can be achieved either by means of destructive interference using antiphase sound emitted by e.g. a loudspeaker, or by electronic signal subtraction which from 2019 is covered specifically by W04-V07C1.	Active noise control, air conditioning, ANC, channel, duct, machine, vehicle
Change Scope Note	W04-V07C	(1992- )	Control system, circuitry	This code covers signal processing aspects of sound cancelling systems, normally involving a microphone to sense ambient noise sounds. It includes systems using acoustic cancellation based on antiphase sound waves emitted from a loudspeaker and systems in which electronic cancellation is performed using audio signals alone, which from 2018 are covered by W04-V07C1. See U22-G codes also, e.g. U22-G01A5 for adaptive filters, and U22-G03 codes for details of DSP in general (also assigned codes in T01-J08).	
New	W04-V07C1	(2019- )	Cancellation using electronic signal subtraction	This code covers arrangements for cancelling or reducing unwanted sounds based on electronic subtraction of corresponding unwanted signals from a wanted audio signal, rather than generation of antiphase sound waves. For application to noise-cancelling headphones search with V06-V04A4.	
Change Scope Note	W05-D	(1980- )	Transmission systems for measurement or control signals	The codes in this group relate to telemetry and telecontrol systems and specifically inventions concerned with actual measurement or control signal transmission. In 2002 the codes were revised to better distinguish between the concepts of transmission medium (represented by W05-D06 codes), application (W05-D07 codes), and function or mode (covered by W05-D08 codes). The W05-D01, W05-D03 and W05-D04 subgroups used pre-2002 are still valid for records from 1980-2001. W05-D codes are intended to be used in combination to represent particular topics. For example, a wireless sensor network can be represented by W05-D06F1 (use of wireless data networks) with W05-D08E (code indicating remote measurement). Similarly, an infrared link used in a home automation system for remote control is coded as W05-D06A3, W05-D07A and W05-D08C. Note that applications of remote control to audio/video (AV) equipment such as TV receiver remote control (W03-A02C codes), recording equipment remote control (W04-E04A), and general audio-video equipment remote control (W03-G05A codes), are not covered by W05-D codes unless of general application also. In 2018 W05-D06E1 codes were introduced to denote use of the internet as a transmission medium for IoT communication. These codes should also be considered for signal transmission aspects of Industry 4.0 systems, for which W05-D07B (for factory automation applications) is also likely to be relevant.	Remote actuation, control, remote operation, remote monitoring, process-variable transmission systems
Change Scope Note	W05-D06E1	(2018- )	Internet-based transmission for IoT communication	This code covers the use of the internet as a measurement or control signal transmission medium specifically for 'internet of things' (IoT) applications. Please note that W05-D06E1 codes are assigned for inventions where some aspect of control or measurement signal transmission is significant and not for all aspects of equipment that may be capable of operating in such a system for which codes for the equipment itself should be used. Additional W05-D06 codes are assigned for significant details such as intermediate arrangements for connecting to the internet but please note that use of wireless data networks is indicated by W05-D06E1A and use of cellular communications networks by W05-D06E1C. Search with W05-D07 codes for specific applications, e.g. with W05-D07A for home automation systems using IoT technology or with W05-D07B for use in factory automation including Industry 4.0 applications.	
Change Scope Note	W05-D06E1A	(2018- )	Wireless network-based transmission for IoT communication	This code represents the use of wireless networks which form a significant part of IoT systems with the exception of cellular radio networks which are represented by W05-D06E1C. The use of wireless data networks in general for carrying remote control and measurement signals is covered by W05-D06F1.	6LoWPAN, BLE, Bluetooth®, LoRaWAN, Thread, wireless LAN, SigFox, WLAN, Z-wave, Zigbee®
Change Scope Note/Search Terms	W05-D07B	(1992- )	For factory automation	This code covers transmission of measurement and control signals for factory automation applications. When internet-of-things (IoT) aspects are significant, e.g. in connection with Industry 4.0 data communications, W05-D06E1 codes are also assigned. Control systems-related data communications arrangements in general are also assigned T06-A11. Total factory control in general is covered by T06-A04A2A when based on numerical control and for non-NC systems by T06-A04B7.	Cyber-physical systems, digital manufacturing, FA, fieldbus, IEC 61158, inventory, process control, process monitoring, production line, smart factory, total factory control
New	W06-C01S	(2019- )	Ship emergency/safety equipment	Includes all aspects of ship safety such as roll-over prevention, ballast control to improve stability etc. Navigational equipment that can prevent grounding or collision can be covered in W06-C01B1. Also see Q24-B09 for mechanical details of ship emergency/safety equipment. See W06-C10 and Q24-X01 codes instead for lifesaving in water equipment.	
Change Search Terms	W06-C07C	(2016- )	Buoys and beacons	This code covers electrical aspects of buoys and beacons irrespective of their location, i.e. open sea, harbour, inland waterway etc. (Previously buoys intended for use in a port, harbour, estuary, river or other waterway were covered by W06-C07 while those intended for use in open sea were covered by W06-C09, but now W06-C07C covers them all). Buoys in general (including those with no electrical aspects) are covered by Q24-P18. Beacon navigation systems are covered by W06-A01 codes.	Marker buoy, lighthouse, lightship, navigation marker, radio beacon
SECTION X					
Change Scope Note	X12-C01D2	(1992- )	Coils	Includes winding, insulating and connecting leads of coils for power transformers and reactors. Manufacture of insulating materials themselves when not part of the process of manufacturing windings is covered by X12-C01B codes and appropriate X12-E codes.	
Change Scope Note	X12-D03B1	(1992- )	Sheaths and armouring	Includes repair of sheaths for which the general 'cable repair' code X12-G01D is also assigned. Repair of a cable sheath in the sense of rectification during manufacture is covered by X12-D07A.	Jacket
Change Scope Note	X15-A02X	(2010- )	Other solar/photovoltaic panels/cells details	Includes mechanical details of roof structures. Mechanical details of solar/photovoltaic panels, modules or tiles are coded under X15-A02C only. Includes wiring to solar battery, details of junction boxes (also covered by V04-B09 and X12-G04B codes), and cooling arrangements, Solar module packing.	
New	X15-A15	(2019- )	Manufacture, Servicing and Maintenance (solar power)	Includes manufacture, servicing and maintenance details of solar power energy plants. This code is used in conjunction with other X15-A codes as appropriate.	
New	X15-B15	(2019- )	Manufacture, Servicing and Maintenance (wind power)	Includes manufacture, servicing and maintenance details of wind power energy plants. This code is used in conjunction with other X15-B codes as appropriate.	
New	X15-C15	(2019- )	Manufacture, Servicing and Maintenance (sea power)	Includes manufacture, servicing and maintenance details of either wave power and/or tide energy plants. This code is used in conjunction with other X15-C codes as appropriate.	
Change Title/Scope Note	X15-W	(2011- )	Constructional details, Manufacture, Servicing and Maintenance	Includes constructional, manufacturing, servicing and maintenance details for all X15 sections other than X15-A (solar power), X15-B (wind power) and X15-C (sea power). This code is used in conjunction with other X15-D to X15-X codes as appropriate.	
New	X25-A03R	(2019- )	Riveting	See also T06-D06A and X25-A03F for riveter control. See X25-X prior to 2018.	
Change Title/Scope Note	X25-A08C2	(2016- )	Fused deposition modelling / 3D printing using inkjet technology	Inkjet technology is also coded under S06-G10.	FDM (RTM), extruders, extrusion tips, fused filament fabrication, FFF
Change Search Terms	X25-B01C3C	(1992- )	Pads, seats	See X22-J02 and X22-J03 also for vehicle seat. See X27-E02 also for domestic application. See X27-A also for domestic seat application.	Mattress