

K & S Commodity Specific Template Instructions

When attempting to attain a proper template and commodity answer within each Template, please adhere to the following instructions:

1. Identify the appropriate Criteria Template.

There should be a template for each commodity. For commodities without a criteria template reference the MISCELLANEOUS Criteria Template. Some commodities may seem to be applicable to more than one template. Therefore, please see the definitions under Level 1 to assist in determining whether the commodity is properly categorized within the given template. Any relevant information will be included in this section. Often times, a list of commodities that are included in the template will be listed along with those that are specifically excluded. With those that are excluded, direction is given as to what template is more appropriate. Once the proper template is found, the level of the template must be followed.

2. Follow the levels with the chart.

Levels are listed to break down each commodity as well as the characteristic traits of the good. The first level will actually state the commodity and any levels following will be possible features or qualities the good may possess. Along with the levels there will be definitions to explain the characteristic traits.

Follow the levels through the chart based on the proper characteristics of the commodity until an answer has been obtained. Note, there should only be one level that is appropriate for each commodity at each level (i.e. a commodity made of two materials should only fall under one material level. The definitions will state if the mixture of both materials is applicable to one level or if the material should be put in a given level based on the chief or highest content material of the good.)

If the referenced part meets all the qualities defined in level 1, proceed to level 2, then 3, etc. When the referenced part does not meet one of the definitions, go to the next row of that level in the criteria template.

For Customs definitions or certain materials, please reference the provided material definitions list, when determining material specifications.

3. Obtain a letter answer and answering the questions for the commodity. Once all levels have been determined, answer any questions that may be in the necessary part specific data column and state the commodity and answer (A, B, C, etc.) received. The end result should state the commodity name, proper letter answer, and the answer to any of the questions asked. For example, the following answers could be received from the Motors template:

Motor A, 16 W

Motor C, 13 W, no brushes

Motor I, 42 W

Materials List and Definitions

Rubber:

Rubber means the following products, whether or not vulcanized: natural rubber, cellular rubber, balata, gutta-percha, guayule, chicle and similar natural gums, synthetic rubber, factice derived from oils, and such substances reclaimed. Synthetic rubber is defined as:

1.) Unsaturated synthetic substances which can be irreversibly transformed by vulcanization with Sulphur into non-thermoplastic substances which, at a temperature between 18 °C and 29 °C, will not break on being extended to three times their original length and will return, after being extended to twice their original length, within a period of five minutes, to a length not greater than one and a half times their original length. For the purposes of this test, substances necessary for the cross-linking, such as vulcanizing activators or accelerators, may be added; the presence of substances [i.e. emulsifiers or anti-tack agents; small amounts of breakdown products of emulsifiers; very small amounts of the following: heat-sensitive agents (generally for obtaining thermosensitive rubber latexes), cationic surface-active agents (generally for obtaining electropositive rubber latexes), antioxidants, coagulants, crumbling agents, freeze-resisting agents, peptisers, preservatives, stabilizers, viscosity-control agents, or similar special-purpose additives] is also permitted. However, the presence of any substances not necessary for the cross-linking, such as extenders, plasticizers and fillers, is not permitted;

2.) Thioplasts (TM); and 3.) Natural rubber modified by grafting or mixing with plastics, depolymerized natural rubber, mixtures of unsaturated synthetic substances with saturated synthetic high polymers provided that all the above-mentioned products comply with the requirements concerning vulcanization, elongation and recovery in (a) above.

What Customs considers RUBBER (Chapter 40 in HTS):

Acrylonitrile Butadiene Rubber (NBR)	Carboxylated acrylonitrile-butadiene rubbers (XNBR)
Acrylonitrile-isoprene rubbers (NIR)	Butyl Rubber (BR)
Chlorobutadiene	Chloroprene (CR)
Ethylene Propylene-nonconjugated Diene Rubber	Isobutene-isoprene butyl rubber (IIR)
(EPDM)	
Isoprene	Natural Rubber
Neoprene	Polybutadiene
Polychloroprene	Polyisoprene
Reclaimed rubber	Styrene-butadiene (SBR)
Thioplast	Carboxylated Styrene-butadiene Rubber (XSBR)

Template Guide (spreadsheet created by BARI)

LEVEL 1: ACTUATORS

Definition of Level 1: Actuator

1. A mechanism that puts something into automatic action
2. May be activated by numerous means including motor, switch, mechanical, vacuum, valve, etc.
3. Permanent magnets are not included, see magnet template.

SEQUENCE	LEVEL 2	LEVEL 2 DEFINITION	NECESSARY PARTS SPEC DATA	ANSWER
1	Motor Actuator	Actuator that is activated by a motor	N/A	See Motors Template
	Switch Actuator	Actuator that is activated by switch	N/A	See Switches Template
	Valve Actuator	Actuator that is activated by a valve	N/A	See Valves Template
	Mechanical Actuator	Actuator that is activated by a mechanical device, it executes movement by converting one kind of motion, such as rotary, into another kind, such as linear motion.	1) Where is this part specifically used? 2) How does this part specifically operate? 3) Please provide drawing of the part	Actuator A
	Vacuum actuator	Actuator that is activated by vacuum pressure.	1) Where is this part specifically used? 2) How does this part specifically operate? 3) Please provide drawing of the part	Actuator B
	Other Actuators	Actuator that is activated by another means not listed above	1) Where is this part specifically used? 2) How does this part specifically operate? 3) Please provide drawing of the part	Actuator C

Level 1. Adhesives

Definition of Level 1: Adhesives

1. Any type of substance that is used to unite or bond

SEQUENCE	NECESSARY PARTS SPEC. DATA	ANSWER
1	1) Is the adhesive based on polymers such as (e.g.-ethylene, propylene, styrene, rubber etc.)? If yes, please state which and give chemical name. 2) If no, what is the material(s) of this part? If multiple materials, please state chief material 3) What form is it in? Liquid / tape/ film or etc. Please provide MSDS/SDS sheet	Adhesive A

Level 1: Adjuster

Definition of Level 1: Adjuster

1. The adjuster moves vertically or horizontally to reposition another part, used to regulate
2. Excludes adjusters that function similar to latch (See Latch Template for Criteria Code)

SEQUENCE	NECESSARY PARTS SPEC. DATA	ANSWER
1.	1) What is the essential function of this part? 2) Where is the part specifically located 3) Is this part made to the KNS specs? 4) Is this an essential part of the machine assembly for the machine to function? 5) Does it stay in the machine during function or gets removed prior to machine function? 6) Please advise material it is made of? 7) Please provide drawing of the part	Adjuster A

Level 1: Air Compressor

Definition of Level 1: Air Compressor

1. A machine that compresses gases

SEQUENCE	LEVEL 2	LEVEL 2 DEFINITION	NECESSARY PARTS SPEC	ANSWER
1	Turbochargers and superchargers	Turbocharger compressors are generally centrifugal compressors consisting of three essential components: compressor wheel, diffuser, and housing. With the rotational speed of the wheel, air is drawn in axially, accelerated to high velocity and then expelled in a radial direction	N/A	Air Compressors D
	Stationary	An actuator that is not capable of being moved	(1) Is the stationary air compressor reciprocating, rotary, or other? (2) What is the cubic meters per wattage?	Air Compressor A
	Portable	An actuator that is easily or conveniently transported	(1) What is the cubic meters per minute?	Air Compressor B
	Other	All other compressors that do not meet any of the above definitions	(1) What type of compressor is this e.g._ refrigerant recovery unit, centrifugal and axial, or other? (2) What is the voltage in terms of kW?	Air Compressor C

Level 1: Amplifiers

Definition of Level 1: Amplifiers

1. Electronic equipment that increases the strength of signals passing through it.

Sequence	Level 2	Level 2 Definition	Necessary parts Spec. Data	Answer
1	Audio-frequency electric amplifier	An amplifier that is used for audio frequency signals	1) What is frequency? 2) Is this an electric sound amplifier sets? 3) Is it used in repeaters in line telephony?	Amplifier A
	Other	Not meeting the definition above	1) What is the essential function of this part? 2) How does this part specifically operate? 3) Please list all components included in the assembly? 4) Is this part of the Electronic integrated circuits assy? 5) What is the individual function of this part?	Amplifier B

Level 1: Arms

Definition of Level 1: Arms

1. A slender part of a structure, machine, or an instrument projecting from a main part, axis, or fulcrum.

SEQUENCE	NECESSARY PARTS SPEC. DATA	ANSWER
1	1) With what type of machine does this arm function? 2) What is the material of this part? 3) Is this part of the KnS machine assembly? 4) Has it been manufactured to the KNS specifications or is it an off the shelf item?	ARM A

Level 1: Balls

Definitions of Level 1: Balls

1. A spherical shaped object used to reduce friction

SEQUENCE	NECESSARY PARTS SPEC. DATA	ANSWER
1	1) With what type of machine does this part function? 2) Is this part of a bearing 3) What is the diameter? 4) What is the material(s) of this part?	Ball A

Level 1: Ball Screws

Definition of Level 1: Ball Screws

1. A ball or roller screw consist of a threaded shaft and a nut with bearing balls or rollers distributed along the path between the threads on its inner surface these devices enable rotary motion to be converted into linear motion, and vice versa.
2. Please see "Screws" template for screws that are threaded throughout their length and used for fastening.

SEQUENCE	NECESSARY PARTS SPEC. DATA	ANSWER
1	1) Please verify part description 2) Where is this part specifically used? 3) Material it is made of?	Ball Screw A

Level 1: Bases

Definition of Level 1: Bases

1. Item that is the lowest supporting part of a structure.
2. Bases may perform both mounting and support functions.
3. If base is used to support an electrical apparatus or contains any electrical components, see Bezels template.

SEQUENCE	NECESSARY PARTS SPEC. DATA	ANSWER
1.	<p>1) What is the essential function of this part?</p> <p>2) Where is this part specifically located?</p> <p>3) What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type- steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic"-chemical name not necessary</p> <p>4) Is this part of the KNS machinery assembly?</p> <p>5) Does this part stay within the machine assembly during process?</p>	Base A

Level 1: Batteries

Definition of Level 1: Rechargeable Batteries

1. Stores an electrical charge and furnishes a current, by utilizing electric accumulators.
2. Accumulators consist essentially of a container holding the electrolyte in which are immersed two electrodes fitted with terminals for connection to an external circuit
3. Includes only rechargeable batteries
4. Does not include primary cells which are those that are not readily or efficiently recharged

SEQUENCE	LEVEL 2	LEVEL 2 DEFINITION	NECESSARY PARTS SPEC. DATA	ANSWER
1	Lead-Acid Batteries	A battery using lead and lead-oxide electrodes with strong acidic electrolyte	1) What is the voltage?	Battery A
	Nickel-Cadmium Batteries	A battery using Nickel and Cadmium electrodes	1) Is this battery sealed? Yes or No	Battery B
	Nickel-Iron Batteries	A battery using Nickel and Iron electrodes	1) Where are these batteries used?	Battery C
	Other Battery Types	A battery that does not fit the definitions above	1) Are these Nickel-metal hydride batteries? Y or N 2) Lithium-ion batteries? 3) Where are these batteries used?	Battery D

Level 1: Bearings

Definition of Level 1: Bearings

1. A device that enables friction to be considerably reduced.
2. May be designed to give radial support, to resist thrust, or both.
3. Normally, bearings consist of two concentric rings (races) enclosing the balls or rollers, and a cage which keeps them in place and ensures that their spacing remains constant.
4. May have rolling element(s) or may not have rolling element(s).
5. Does not include unground bearings.
6. Does not include items that are only the roller elements, e.g. balls, needles, and roller bearings.

SEQ	LEVEL2	LEVEL 2 DEF	LEVEL 3	LEVEL 3 DEF	LEVEL 4	LEV EL 4 DEF	LEVEL 5	LEV 5 DEF	NECESSARY PARTS SPEC DATA	ANSWER
1	HOUSED BEARING	Bearings that are housed within a block, frame, or other means to mount the bearing. This does not include housing that act as a bearing surface	Housed Ball/ Roller Bearing; flange, take-up, Cartridge, hanger unit type	Ball or roller bearings with housings that are flange, take-up, cartridge or hanger unit type	N/A	N/A	N/A	N/A	1) What is the type of bearing? Ball/roller bearing, flange, take-up, cartridge, or hanger unit type 2) Incorporating ball bearings? 3) Incorporating roller bearings?	Bearing A
				Other	N/A	N/A	N/A	N/A	1) Incorporating ball bearings? 2) Incorporating roller bearings?	Bearing R
			Housed Plainshaft bearing.	Housed bearings that consist of rings of antifriction material, forming a smooth bearing in which a shaft or axle turns. No rolling elements.	N/A	N/A	N/A	N/A	1) Is this rod end bearing? Yes or No 2) Ball or roller bearing type? Or Other?	Bearing B
			Other Housed Bearing	Ball or roller bearings that are not flange, take-up, cartridge or hanger unit types	N/A	N/A	N/A	N/A	1) Type of bearing? Ball /Roller Bearing, Flange, Take-up, Cartridge, or Hanger Unit type	Bearing C

SEQ	LEVEL 2	LEVEL 2 DEF	LEVEL 3	LEVEL 3 DEF	LEVEL 4	LEVEL 4 DEF	LEVEL 5	LEVEL 5 DEF	NECESSARY PART SPEC	ANSWER
	Not Housed bearings	Bearings that are not housed, but bearing only	Plain Shaft Bearing	Bearings that are consist of rings of anti-friction material, forming a smooth bearing in which a shaft or axle turns. No rolling elements	n/a	n/a	n/a	n/a	1) Is this a spherical plain shaft bearing, Yes or no?	Bearing D
			Ball bearing	Contains only balls as rolling elements	Ball bearing and shaft	Incorporates an integral shaft	n/a	n/a	1) What is the outside diameter of the bearing (in mm)? 2) Is this Unground bearings?	Bearing E
									n/a	Bearing F
					Ball Bearing without shaft	Does not Incorporate an integral shaft	Thrust bearings	Only Thrust ball bearing -resists thrust	n/a	Bearing G
							Linear Bearings	Only linear ball bearing s- straight cup, not round, balls are in a straight line	n/a	Bearing H
							Angular Contact Bearing	Only angular contact bearings	1) Is this for a wheel hub? Yes or no 2) If for wheel hub, is it flanged? Yes or now	Bearing I
							Radial Bearings	Only radial ball bearings	1) Are the bearings maximum or full capacity (ie with ball-to ball contacts)? Yes or No 2) How many rows of bearings? Single,	

									Double or other? 3) What is the outside diameter (in mm) of the bearing?	
							Other ball bearings	Ball bearing that do not meet the definitions of thrust, linear, angular contact or radial bearing	N/A	Bearing J
			Tapered Roller bearing	Contains only tapered roller elements including cone and tapered roller bearing elements	Cup and cone sets	Entered as bearing sets that include both a cup as well as cone assembly	N/A	N/A	1) What is the maximum outside diameter in mm of the cup? 2) Is this for a wheel hub? Yes/No	Bearing K
					Cone Assembly	Cone Assembly that is entered separately	N/A	N/A	1) What is the maximum outside diameter in mm of the cup	Bearing L
			Spherical Roller Bearing	Contains only Spherical Roller Elements	N/A	N/A	N/A	N/A	1) How many rows of bearing? Single, double other?	Bearing M
			Needle Roller Bearing	Contains only Needle Bearings, The cylindrical rollers of uniform diameter must not exceed 5mm, and must have a length at least 3 times the diameter	N/A	N/A	N/A	N/A	1) What is the length of the rolling elements in mm? 2) What is the diameter of rolling elements in mm?	Bearing N
			Other Cylindrical Roller Bearing	Contains only cylindrical rolling elements that do not meet	N/A	N/A	N/A	N/A		Bearing O

				the definition of roller elements defined above						
			Combination Bearings	Includes a combination of ball and roller bearings	N/A	N/A	N/A	N/A	1) What is the combination of bearing (e.g. Ball and needle, ball and spherical, needle and tapered and etc?	Bearing P
			Other Bearings	Bearings that do not meet any of the above criteria	N/A	N/A	N/A	N/A	N/A	Bearing Q

Level 1: Bearing Housing

Definition of Level 1: Bearing Housing

1. A housing used as a protector for a bearing assembly.
2. Does not include housed bearings, which are bearings housed within a block or frame, see Bearings Template.

SEQUENCE	LEVEL 2	LEVEL 2 DEFINITION	LEVEL 3	LEVEL 3 DEFINITION	NECESSARY PARTS SPEC. DATA	ANSWER
1	Bearing Housing	A protective cover or case used to house the bearing and does not include the bearings	N/A	N/A	1) What type of bearing does this part house? Ball bearing or roller bearing type? Other?	Bearing Housing A

Level 1: Belts

Definitions of Level 1: Transmission Belts

1. Transmission belts are an endless loop of flexible material between two rotating pulleys or shafts, used to transmit rotary motion.
2. Rubber or Combined with Rubber*. All non-rubber belts should be grouped into the miscellaneous file

SEQ	LEVEL 2	LEVEL 2 DEFINITION	LEVEL 3	LEVEL 3 DEF	NECESSARY PARTS SPEC DATA	ANSWER
1	V-Belt-Trapezoidal cross-section	Belts or belting of trapezoidal cross-section are those products having one or more V shapes in cross-section. The V surfaces are designed to provide good wedging action and minimum slippage along the sides of the sheave. The category includes, e.g. belts having a cross-section with: a) A single trapezoidal shape; b) Trapezoidal shapes on opposite sides; or c) Two or more trapezoidal shapes on the same side	V-Ribbed	Having ribbing in V-shape	1) What is the circumference (cm) of the belt? 2) Is this combined with textile material? Yes or No	Belt A
			Not V-Ribbed	Not having ribbing in V-shape	1) What is the circumference (cm) of the belt? 2) Is this combined with textile material? Yes or No	Belt B
	Endless Synchronous Belts(timing belts)	Synchronous belts are designed to transmit power while maintaining constant rotational relationship between sheaves. Notches, usually on the inner surface of the belt, are provided to operate smoothly with notches sheaves. Synchronous belts or belting do not have trapezoidal cross-section. Must be of an outside circumference exceeding 60 cm.	Endless Synchronous belt combined with textile	Combined with textile material	1) What is the circumference (cm) of the belt? 2) Please list textile that predominates by weight. 3) what is the width of belt (in cm)	Belt C
			Endless Synchronous Belt not combined with textile	Not combined with textile belt	1) What is the circumference (cm) of the belt?	Belt D
	Other Transmission belts	Belts of belting that do not meet the above definitions	Other transmission belts combined with textile	Combined with textile material	1) Please list textile that predominates by weight? 2) What is the width of belt in (cm)?	Belt E
			Other transmission belts no combined with textile	Not combined with textile material	N/A	Belt F

Level 1: Bezels

Definition of level 1: Bezels

1. A covering that is used to protect another item, usually an electrical apparatus from contaminants.
2. A decorative piece used for finishing purposes

SEQUENCE	LEVEL 2	LEVEL 2 DEFINITION	NECESSARY PARTS SPEC. DATA	ANSWER
1	Protector	A covering used to keep out damaging substances such as dust and liquids	1) How is this part protecting? Please be as specific as possible 2) What type of apparatus does this protect? 3) Is this part of the assembly, if so does stay within the machine during process? 4) Is this part manufactured based on KNS specs? 5) What is the material(s) of this part? If multiple materials, please state chief. 6) If plastic, is it a molded part?	Bezel A
	Finisher	A decorative piece used for ornamentation	1) What type of assembly does this finisher function with? 2) Does this finisher have depth? 3) Does the finisher extend beyond the main part for which it acts as a finisher for? 4) Is this part of the assembly, if so does stay within the machine during process? 5) Is this part manufactured based on KNS specs? 6) What is the material(s) of this part? If multiple, please state chief content? If rubber, please state type(cellular, vulcanized, etc) and give chemical name	Bezel B

Level 1: Blades (8202)

Definition of Level 1: Blades/ A flat tool with cutting edge

1. Handsaws, and metal parts thereof; blades for saws of all kinds (including slitting, slotting or toothless saw blades), and base metal parts thereof:

SEQUENCE	LEVEL 2	LEVEL 2 DEF	LEVEL 3	LEVEL 3 DEF	NECESSARY PARTS SPEC. DATA	ANSWER
1	Abrasive blade	A blade made of either base metal, metal blade carbide, cermet, precious or semiprecious stones (natural, synthetic, or reconstructed) on a support of base metal, metal carbide, or cermet or abrasive materials on a support of base metal. It can also retain its identity and function after application of the abrasive material.	Handsaws, and parts(except blades) thereof		N/A	Blade A
			Bandsaw Blades, and parts there of	A blade used with a bandsaw	1) Metal cutting? Or other	Blade B
			Circular Saw blades	A blade used with circular saw. Includes slitting or slotting saw blades	1) Is working part made of steel? 2) Other, including parts with diamond working parts? 3) Diamond sawblade cores? 4) Other?	Blade C
			Chain Saw blades		1) With cutting parts containing by weight over 0.2 percent of chromium, molybdenum, or tungsten or over 0.1 percent of vanadium? 2) Other, is it in continuous length or other?	Blade D
	OTHER SAW blades	Not meeting above definition	Straight saw blades, and parts thereof		1) Hacksaw Blades? 2) Other? Yes or No?	Blade E
			Other (including Parts	N/A	N/A	Blade F

Level 1: Bolts (7318)

Definition of level 1: Bolts

1. A bolt is an externally threaded fastener designed for insertion through the holes in assembled parts, and is intended to be tightened or released by torquing a nut.
2. Can be made of any material including steel, copper, brass, aluminum, etc.
3. This does not include threaded fasteners/articles which are not engaged by a nut (e.g., tapping screws, parts described as bolts or screws that are used with a washer but are not engaged by nut).

Sequence	Level 2	Level 2 def	Level 3	Level 3 Def	Necessary Parts spec Data	Answer
1	Steel Bolt	Sole material Being Steel	Track bolts	Track bolts, also called fang bolts or rail anchor bolts, are used to fix steel rails and rail chairs to rail ties, or to fasten rail joints to link rails. The track bolt is a bolt inserted through a hole in rail tie with a fanged nut that embeds into the lower surface of the tie	1) What is the diameter of shanks or threads in mm?	Bolt A
			Structural Bolt	A bolt that provides a support function in addition to a fastening	1) What is the diameter of shanks or threads in mm?	Bolt B
			Bent Bolt	U- bolt or bold ends(cylindrical rods threaded at one end)	1) What is the diameter of shanks or threads in mm? 2) Is it right-angle anchor bolts?	Bolt C
			Other bolt	Any bolt that is not structural or bent	1) What is the diameter of shanks or threads in mm? 2) What type of head (round, hex and etc) 3) Stainless steel? Y or N?	Bolt D
	OTHER MATERIAL BOLT	Sole Material being other than Steel	N/A	N/A	1) What is the diameter of thread in mm? 2) What is the material(s) of the part (aluminum, copper, brass, etc)?	Bolt E

Level 1: Brackets (8486/8302)

Definition of Level 1: Brackets

1. A bracket is used to mount or join two parts together

Sequence	Necessary Parts Spec Data	Answer
1	<ul style="list-style-type: none">1) What is the essential function of this part?2) Where is this part specifically used?3) With which type of machine is this part used?4) Is it part of the machine assembly, and must stay in the machine in order for machine to function?5) Is this part used on the interior of the machine?6) Is this made specific to KNS specs to only use in our machine?7) What is the material(s) of this part?8) Please provide drawing	Bracket A

Level 1: Brushes

Definition of Level 1: Brushes

1. Conducts current between rotating and stationary parts of a generator or motor.
2. Also functions as a tool with implemented hair or bristles firmly set into a handle.

Sequence	Level 2	Level 2 def	Level 3	Level 3 def	Necessary parts spec. data	Answer
1	Carbon	This is an article of carbon used as sliding contacts for generators, motors, and etc. They may also be wholly or partially metal-coated or be fitted with connectors (brackets, cables, terminals, springs, etc.)	N/A	N/A	1.Is this used for electrical purposes? 2.Where is this part used? 3.Is this part of the machine assembly and essential to the function of the machine 4. please provide drawing	Brush A
	Other	Not meeting the definition of above	Machine Part(e.g. for grinding, polishing or other machine-tools)	Brush constituting machinery parts	1) Where is this part specifically used? 2) What type of machine is this part used on?	Brush B
			Other	Not meeting the above definition	1.What are the bristles made of? 2. Please provide specific function of this brush and how it works?	Brush C

Level 1: Bulbs

Definition of Level 1: Bulbs

1. A glass bulb containing an electric filament/discharge that emits light when heated.

Sequenc e	Level 2	Level 2 Def	Level 3	Level 3 def	Level 4	Level 4 Def	Necessary Parts Spec. Data	Answer
	Sealed Beam Units	A Bulb with a lens, reflector and filament sealed within a gas-filled or vacuum-type lamp	N/A	N/A	N/A	N/A	1.What is the length of the largest diagonal dimensions across the faceplate in cm? 2. Please provide drawing 3. how does it function?	Bulb A
	Other Filament lamps	All filament bulbs, excluding ultraviolet or infrared, not meeting the above definition	Tungsten Filaments halogen	A bulb with fluorine, chlorine, bromine, or iodine as the chemical used to provide illumination	N/A	N/A	1) What is the wattage? 2) What is the voltage? 3. please provide drawing 4. where is this used?	Bulb B
			Filament lamp with ≤ 200 W & > 100 V	A filament lamp with a wattage that does not exceed 200 and voltage exceeding 100	150 w or less	A filament bulb with wattage that does not exceed 150 W	1) is the bulb 3-way? 2) Is it a decorative bulb? 3) What is the wattage?	Bulb C
					Other(i.e. power exceeding 150 w)	Not Meeting the above definition	N/A	Bulb D

			Other	No meeting the above definitions	100 V or less	A filament bulb with voltage that does not exceed 100 V	1) What is Voltage?	Bulb E
					More than 100 V	A filament bulb with voltage that exceeds 100 V	N/A	Bulb F
	Discharge	A bulb that is usually tubular furnished with electrodes that contains, under low pressure, either a gas which becomes luminous under the influence of an electric discharge or a substance which gives off a vapor having similar properties. Does not incorporate ultraviolet lamps.	Fluorescent/hot cathode	A lamp that has an internal wall coated with special substances which transform the ultra-violet rays into visible light thus increasing the efficiency of the lamp	N/A	N/A	1) What is the wattage? 2) Is the lamp a straight 1.2 m tube? 3) Is it single plug-in base? 4) Is it a single screw-in base?	Bulb G
			Mercury or Sodium or Metal halide	A lamp that gives off a mercury or sodium gas or a salt of halogen acid in order to luminate under the influence of an electric discharge	N/A	N/A	1) Does the lamp give off a sodium, mercury or other type of vapor? Please state which?	Bulb H
			Other	Not meeting the definition of above	N/A	N/A	N/A	Bulb I
	Ultraviolet or infrared or arc	Ultraviolet lamps usually consist of fused quartz tube containing mercury. Infrared are filament	N/A	N/A	N/A	N/A	1) Is this an arc lamp? 2) Is this an ultraviolet lamp?	Bulb J

		<p>lamps specially designed to produce infrared rays. Arc lamps have light that is emitted by an arc which is the incandescence of one or both of the electrodes between which the arc is maintained</p>						
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Level 1: Bushings

Definition of Level 1: Bushings

1. A cylindrical piece usually used to reduce friction or as a support.

Sequence	Necessary parts spec. data	Answer
1	<ol style="list-style-type: none">1. Please verify this part meets the definition of a bushing.2. What is the essential function of this part?3. If part is used to reduce friction or is a plain shaft bearing, see BEARINGS template.4. Where the part is specifically located?5. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type – steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" - chemical name not necessary.6. Can this part be used anywhere else, or specific to our machine?7. Please provide drawing	Bushing A

Level 1: Cable Glands

Definition of Level I: Cable Glands

1. The cable gland is a threaded part designed to secure a cable in place and insulate it at the point of entry.

SEQUENCE	NECESSARY PARTS SPEC. DATA	ANSWER
1	1.What is the material(s) of this part? If multiple materials, please state chief. If rubber, please state chemical name 2.What is the function? Where is it used? 3. Is it removed prior to the machine working 4. please provide drawing 5. does it include electrical connectors?	Cable Gland A

Level 1: Cables-Fiber Optic

Definition of Level 1: Fiber Optic Cables

1. A conductor for contained light signals

Seq	Level 2	Level 2 def	Level 3	Level 3 def	Necessary parts spec. data	Answer
1	Insulated Cable	Fiber optic cable, whether single strand or bundled strands, protected by a sheath	N/A	N/A	1) Is the cable combined with another major component (i.e. switch, relay, sensor, etc)? if so, please state the criteria code of this other component	Fiber Optic Cable A
		Fiber optic cable, whether single strand or bundled strands, not protected by a sheath	Optical Fibers	Single Strand of fiber optics	1) Is the cable combined with another major Fiber Optic Component (i.e. switch, relay, sensor, etc.)? If so, please state the criteria code of this other component. (2) Is this cable of the type to transmit voice, data or video communications? Yes or No (3) What is the material of this part? If multiple Materials, please state chief material. If some type of plastic, please state "plastic" - chemical name not necessary.	Fiber optic Cable B
			Optical Bundles	Bundled strands of fiber optic fibers	1) Is the cable combined with another major component (i.e. switch, relay, sensor, etc)? If so, please state the criteria code of this other component. 2) What is the material of this part? If multiple materials, please state chief material. If some type of plastic, please state "plastic" - chemical name not necessary	Fiber Optic Cable C

Level 1: Cables- Non-electrical

Definition of Level I: Cables - Non-electrical

1. Device made of multiple strands of metal alloy and used to fasten or connect two or more articles together.
2. This does not include electrical conduction cables. Please see "Wires - Criteria Template".
3. This does not include fiber optic cables. Please see "Cables - Fiber Optic - Criteria Template".

Seq	Level 2	Level 2 Def	Level 3	Level 3 Def	Level 4	Level 4 def	Level 5	Level 5 Def	Necessary parts Spec. Data	Answer
1	Steel	Essential material being steel or iron	Stainless	Essential material being stainless steel	Fittings	Fitted with connectors	N/A	N/A	1) What is the essential function of this part?	Cable A
					Without fittings	Not fitted with connectors	N/A	N/A	1) What is the diameter (in mm) of this cable? 2) What is the essential function of this part?	Cable b
			Non-Stainless	Essential material not being stainless steel	Fittings	Fitted with connectors	N/A	N/A	1) What is the essential function of this part?	Cable C
					Without fittings	Not fitted with connectors	Brass plated	Having brass plated wire	1) What is the essential function of this part?	Cable D
							Other	Not Having Brass plated wire	1) Is this part galvanized (e.g. is it covered with zinc)? 2) What is the diameter (in mm) of this cable? 3) What is the essential function of this part?	Cable E
	Copper	Essential material being copper	N/A	N/A	N/A	N/A	N/A	N/A	1) Is this cable fitted with connectors? 2) What is the essential function of this part?	Cable F
	Aluminum	Essential material being aluminum	Steel Core	Contains steel core	Fittings	Fitted with connectors	N/A	N/A	1) What is the essential function of this part?	Cable G
					Without fittings	Not fitted with connectors	N/A	N/A	1) What is the essential function of this part?	Cable H
			Non-steel core	Does not contain steel core	Fittings	Fitted with connectors	N/A	N/A	1) What is the essential function of this part?	Cable I
					Without fittings	Not fitted with connectors	N/A	N/A	1) What is the essential function of this part?	Cable J
	Other Material	Essential material being material other	N/A	N/A	N/A	N/A			1) What is the Material of this part? If multiple materials,	Cable K

		than steel, iron, aluminum , or copper							please state chief Material. If rubber, please state type (Cellular or noncellular). If metal. please state type - steel (stainless or non stainless), copper, Aluminum, etc. If some type of plastic, please state "plastic" chemical name not Necessary. (2) What is the essential function of This part?	
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Level 1: Cam

Definition of Level 1: Cam

1. A shaped rotating disc used to convert circular into linear motion

Sequence	Necessary parts spec data	Answer
1	<ol style="list-style-type: none">1) With which type of machine is this part used?2) Please provide drawing3) What is the material it is made of?4) What is its function?	Cam A

Level 1: Camera

Definition of Level I: Camera

1. Any of a wide variety of devices through which light from an object is focused onto a light-sensitive material And stored on a medium such as film, in order to record the image.
2. Does not include LCD units, optical or photographic cameras. Please see Miscellaneous group.

Seq	Level 2	Level 2 Def	Level 3	Level 3 def	Necessary parts spec. data	Answer
1	Television	A camera with the video image displayed through a television apparatus, which is an apparatus, which is an apparatus that has direct feed capability(similar to an internet camera) and doesn't use recording media such as a cassette tape or optical disc	N/A	N/A	1) What type of camera is this? 2) Does it have color? 3) Is it Gyrostabilizer television camera? 4) Studio television cameras excluding shoulder-carried and other portable cameras?	Camera A
	Still Image	A video camera capable of capturing only still images	Digital Still Image Video Camera	Digital camera utilizing electrical digits to portray a sequences of still images	N/A	Camera B
	Camcorder	A video camera that uses recording media such as a cassette tape or optical disc to store the image	N/A	N/A	1) Is it camcorder?	Camera C
	Other	Not meeting the above definitions	n/a	n/a	1) What is the essential function of this part? 2) What type of camera is this, (e.g.-digital video, photographic, etc.)? 3) How are the images stored on the camera?	Camera D

Level I: Capacitors

Definition of Level 1: Capacitors

1. Capacitors consist of two conducting surfaces separated by an insulating material (dielectric) e.g. paper, plastic, ceramic, glass.

2. Capacitors can be used to improve the power factor of AC circuits, to produce phase-shifted currents for rotating fields in induction motors, to protect electrical contacts from the effects of arcing, for storing and releasing given quantities of electricity, in oscillating circuits, in frequency filters; and for holding and storing a surge of current, generally used to absorb unwanted electrical pulses, such as voltage

3. Capacitance can be fixed, variable or adjustable (pre-set).

4. This does not cover synchronous motors used for power factor improvement which are often called synchronous capacitors.

SEQ	LEVEL 2	Level 2 def	Level 3	Level 3 def	Level 4	Level 4 def	Level 5	Level 5 def	Level 6	Level 6 def	Necessary parts spec. data	Answer
1	Fixed	Capacitor whose capacitance cannot be varied	50/60 Hz	Capacitor designed for use in 50/60 Hz circuits and having a reactive power handling capacity of not less than 0.5 k var(power capacitors .	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Capacitor A
			Other	Capacitor not designed for use in 50/60 Hz circuits, or 50/60 HZ circuit capacitor having a reactive power handling capacity of 0.5 kvar or more	Tantalum	Capacitor that contains tantalum plate	Metal	Capacitor that has a metal case	n/a	n/a	n/a	Capacitor B
							Non-metal	Capacitor with non-metal case	N/a	n/a	n/a	Capacitor C
					Aluminum electrolytic	Capacitor with electrolyte to which the current is led by means of an electrode. This produces on the aluminum or tantalum a thin layer of chemical compounds which constitutes the dielectric(insulating material)	N/a	n/a	n/a	n/a	1) What is the diameter of the capacitor in millimeters (mm)?	Capacitor D
					Ceramic	Capacitor that has a ceramic dielectric	Single layer	Capacitor that contains a single layer	n/a	n/a	1) is this part a chip? 2)If not chip, please state type	Capacitor E

						(insulating material)		dielectric (insulating material)			of leads(ie, radial or axial)	
							Multi-layer	Capacitor that contains a multi-layer dielectric (insulating material)	N/A	N/A	1) Is this part a chip? 2) if not chip, please state type of leads(i.e, radial or axial)	Capacitor F
					Paper or Plastic	Capacitor that contains a paper or plastic dielectric(insulating material)	AC	Capacitor designed for use in AC (alternating current) circuits.	N/A	N/A	1) Please state type of dielectric(insulating material); paper or plastic 2) What is the current rating of this part in volts?	Capacitor G
							Non-AC	Capacitor not designed for use in AC (Alternating current) circuits.	Leadless	Capacitor without connecting leads.	1) Please state type of dielectric (insulating material); paper or plastic 2) is this part designed for surface mounting(smd) by contract?	Capacitor H
									Leads	Capacitor with connecting leads	1) Please state type of dielectric (insulating material) paper or plastic. 2) please state type of leads: axial, radial or other	Capacitor I
					Other	Any fixed capacitor that does not fit the descriptions	n/a	n/a	n/a	n/a	1) Please state type of dielectric(insulating material: mica	Capacitor J
		Capacitor whose capacitance can be varied at will or can be adjusted with narrow limits to a precise value.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Please state type of dielectric(insulating material): mica, ceramic, glass or other	Capacitor k

Level 1: Capillaries

Definition of Level 1: Capillaries

1. A tube of small internal diameter; fine gold or aluminum wires are usually fed through these.

Seq	Level 2	Level 2 def	Level 3	Level 3 def	Necessary parts spec data	Answer
1	Refractory	A refractory capillary has special properties for strength and resistance to thermal shock. It may also have properties such as resistance to abrasion and corrosion. These articles have a pyrometric cone equivalent of at least 1500 Celsius when heated at 60 Celsius per hour. It must not only be capable of resisting high temperatures, but must be designed for high temperature work.	Graphite or other carbon	Containing by weight more than 50 percent of graphite or other carbon or of a mixture of these products	N/A	Capillary A
			Alumina	Containing by weight more than 50% of alumina (Al ₂ O ₃) or mixture or compound of alumina and silica (SiO ₂)	N/A	Capillary B
			Other	Not meeting the above definitions	1) What is the chief material of this part?	Capillary C
	Other	Not meeting the above definitions	Porcelain or China	A capillary with the chief material being porcelain or china	N/A	Capillary D
			Other	Not meeting the above definitions	1) What is the chief material of this part? 2) What is the hardness on the Mohs scale?	Capillary E

Level 1: Checking/Measuring Machines

Definition of Level I: Checking/Measuring Machines

1. Machines designed to check or measure for a given variable.
2. This does not include electron beam microscopes used for the handling and transport of semiconductor wafers or reticles. Please see MICROSCOPES.

Sequence	Level 2	Level 2 def	Necessary parts spec. data	Answer
1	Checking/measuring Machine	A single machine or combination of machines that consists of components intended to contribute together to perform a clearly defined function of checking or measuring a variable.	1) What is the essential function of this machine? 2) What is the variable being checked or measured? Please be as specific as possible? 3) What is included in the assembly? Please list all components 4) How does the machine check or measure? Be specific 5) what is the specific name for this machine? 6) Is it electrical? 7) please provide link online for this part if applicable	Machine A

Level 1: Circuit Breaker

Definition of Level 1: Circuit Breaker

1. A device that trips like a switch and opens the circuit when overloaded.
2. A switch that automatically interrupts an electric circuit under an infrequent abnormal condition

Seq	Level 2	Level 2 def	Level 3	Level 3 def	Necessary parts spec	Answer
1	Voltage exceeding 1000 V	Circuit breaker with a voltage of 1000 Volts	In Circuits	A group of electrical paths combined to form a source	1) What are the kilovolts of each circuit?	Circuit Breaker A
			Other	Not meeting the above definition	1) What is the kilovolts of each circuit?	Circuit Breaker B
	Other	Not meeting the definition of above	N/A	N/A	1) Is it in a molded case?	Circuit breaker C

Level 1: Clips & Clamps

Definition of Level I: Clips & Clamps

1. Any of various small implements used to hold loose articles together.
2. Can be made of any material including steel, plastic, etc.
3. Clamps are typically tightened with a screw.

Seq	Level 2	Level 2 def	Level 3	Level 3 Def	Necessary parts spec data	Answer
	Steel Clip or Clamp	Sole material being steel	Circlip	Clip or Clamp placed in a groove either around a shaft or inside a cylindrical bore to prevent the movement of the parts	1.What is its function? 2.Are these off the shelf items. 3. Are they essential to the function of the machine if used in the machine.	Clip&Clamp A
			Hanger	Clip or Clamp that serves as a hanger or similar support for tubes and pipes	1.Where is this part specifically used? 2. Is this essential to the machine function 3. Please provide drawing	See supports template
			Mounting	Clip or clamp that serves a mounting function	1.What is the chief material of this part? 2. Where is this part specifically used?	See brackets template

					3. Please provide drawing	
			Other	Any clip or clamp that does not meet the definition of a hanger, circlip, or mounting clip or clamp	1.What is the chief material of this part? 2. Where is this part specifically used? 3. Please provide drawing	Clip&Clamp B
	Plastic Clip or Clamp	Sole material being plastic	Other	Clip or clamp	1.what is the essential function of this part? 2. Please provide drawing	Clip&Clamp C
	Other material Clip or Clamp	Sole material being material other than listed above	n/a	n/a	1.what is the chief material of this part? 2.What is the essential function of this part? 3.Please provide drawing.	Clip&Clamp D

Level 1: Computer

Definition of Level 1: Computer

1. A digital machine, capable of (1) storing the processing program or programs and at least the data immediately necessary for execution of the program; (2) being freely programmed in accordance with the requirements of the user, (3) performing arithmetical computations specified by the user; and, (4) executing, without human intervention, a processing program which requires them to modify their execution, by logical decision during the processing run.

2. Does not include integrated circuits and micro assemblies used as CPU, memory, etc.

Seq	Level 2	Level 2 Def	Level 3	Level 3 Def	Level 4	Level 4 Def	Necessary Parts Spec Data	Answer
1	Portable	A machine which is easily or conveniently transported	n/a	n/a	n/a	n/a	What is the weight in kg?	Computer A
	Desktop	A computer designed for use on a desk or table	Entered as a system	Automatic data processing machines which comprise at least a central processing unit, one input unit (for example, a keyboard or a scanner), and one output unit (for example, a visual display unit or a printer)	Single unit	A central processing unit and an input and output unit comprised in the same housing where or not combined.	1) Does it have a cathode-ray tube? 2) If yes to 1 above, is it color?	Computer B
					Non-single unit	Digital processing units entered with the rest of a system whether or not in the same housing	1) Does it have a cathode-ray tube? 2) If yes, to 1 above, is it color?	Computer C
			Not entered as a system	Not meeting the above definition	n/a	n/a	1) Does it have a cathode-ray tube? 2) Is the cathode-ray tube have color?	Computer D

Level 1: Connector-Electrical

Definition of Level 1: Electrical Connector

1. An electrical apparatus for switching or protecting electrical circuits or for making connections to or in electrical circuits.
2. Does not include switches, fuses, relays or circuit breakers - see applicable Criteria Template.

Seq	Level 2	Level 2 def	Level 3	Level 3 Def	Necessary Parts Spec Data	Answer
1	Voltage exceeding 1000 v	A connector with voltage great than 1000 V	N/A	N/A	1) Is it a coupling, splice or terminal? If yes, please state witch. If no, please specify function and type of connector. 2) Is a wire attached? If yes, what is the voltage?	Connector A
	Voltage not exceeding 1000 V	A Connector with voltage under 1000 V	Coaxial	Coaxial connector provides a connection between two coaxial lines or between a coaxial line and equipment	1) Is a wire attached? If yes, What is the voltage?	Connector C
			Cylindrical multicontact	Multicontact connector has more than one contact and is cylindrical is shape	1) Is a wire attached? If yes, what is the voltage	Connector D
			Rack and Panel	Rack and panel connector is attached to a panel or side of equipment and when the members are brought together, the connector is engaged.	1) is a wire attached? If yes, what is the voltage	Connector E
			Printed Circuit	Printed circuit connectors has leads that are permanently soldered on a printed circuit boards	1) is a wire attached? If yes, what is the voltage?	Connector F

			Ribbon or Flat Cable	Ribbon, and flat cable connectors make a connection by wire. The flat and ribbon cable connectors are flat without height.	1) Is a wire attached? If yes, what is the voltage?	Connector G
			Other	Not meeting the above definitions	1) Is a wire attached? If yes, what is the voltage	Connector I
		Other Apparatus	Terminal, Splice, Coupling	Non-plug/socket type connectors such as terminal strips, electrical splices or electrical couplings	1) Is a wire attached? If yes, what is the voltage?	Connector H
		Connectors for optical fibers, optical fiber bundles or cables	N/A	N/A	N/A	Connector J

Level 1: Connector, Non-Electrical

Definition of Level 1: Connector, Non-Electrical

1. A non-electrical fitting designed to connect together various parts.
2. Does not include hoses, tubes, fittings and the like. See Fittings Template.

Sequence	Level 2	Level 2 def	Level 3	Level 3 def	Necessary parts spec data	Answer
1.	Rubber	A connector with the chief material being rubber	N/A	N/A	1.What type of rubber is this, i.e. - cellular, vulcanized, etc.? Please state chemical name of rubber 2.Where is it used? 3.What is its function? 4.Manufactured to the KNS specs or off the shelf item	Non-electrical connector A
	Other	Not meeting the above definition	Specific design	A connector that is unique or specific to a particular machine	1. What is the essential function of this part? 2. With what type of machine does this part function? 3. Please provide drawing	Non-electrical Connector B
			Electrical apparatus	Solely or principally working with an apparatus for protecting electrical circuits (ie, switch, fuse, plug, voltage limiters, etc.) but containing no electrical function or contacts	1. Is this part molded? 2. is it part of a switchgear, switchboard, panel board, or distribution board 3. What is the essential function of this part? 4. Please provide drawing.	Non-electrical connector C
			Other	Not meeting the above definition	N/A	Please see fittings or misc. template

Level 1: Control Modules/ Units

Definition of Level 1: Modules/Electronic Control Unit (ECU)

1. Process controller designed to electronically monitor operating conditions; automatically adjusting abnormal conditions to desired levels.
2. The control module must contain devices that sense, measure and control a variable. It must be "error-sensitive and self-corrective." That is, the module must contain a device that has the ability to receive feedback from a sensor.
(Function 1). Upon receipt of the sensor's feedback, the 3 function control module will then Compare/measure (function 2) the results against the prescribed variable and then control/adjust the preset variable.
3. Does not include programmable controllers that only implement a specific function and are not "self-corrective"
4. Does not include display modules that provide information such as time, temperature, and maintenance messages.
5. Does not include sensors that do not perform 3 functions refer to Sensors Criteria Template.

Sequence	Level 2	Level 2 definition	Necessary Parts Spec Data	Answer
1	Control Module	A condition unit that performs all three of the required functions (measure, sense, and control)	1) What is the essential function of this module? Please describe how it received input, measures and controls? 2) What is the system that it controls? 3) What is included with the module? 4) Please provide drawing	Control Unit A

Level 1: Covers

Definition of Level 1: Covers

1. A covering that serves to conceal or shelter something.
2. If cover is used with an electrical apparatus or contains any electrical components, see Bezels template.

Sequence	Necessary Parts Spec Data	Answer
1	<p>1) What is the essential function of this part?</p> <p>(2) Where is this part specifically located?</p> <p>(3) What is the material of this part? If multiple materials, Please state chief material. If rubber, please state type (cellular Or non-cellular). If metal, please state type -- steel (stainless or Non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" - chemical name not necessary.</p> <p>4)Is the part specifically manufactured to the KNS specs</p> <p>5)Is this an off the shelf item?</p> <p>6) Does this part gets removed prior to the function of the machine?</p> <p>7) Please provide drawing/image</p>	Cover A

Level 1 Crystals

Definition of Level 1: Crystals

1. A crystalline element used in various electronic devices.
2. Colorless glass made of almost pure silica.
3. Only includes piezoelectric crystals, for all others see JEWELS Criteria Template.

Sequence	Level 2	Level 2 definition	Level 3	Level 3 definition	Necessary Parts spec data	Answer
1	Piezoelectric	Piezo-electric quartz has the property, when subjected to mechanical pressure, of producing an electric charge, the strength of which varies in relation to the pressure and, conversely, of converting into mechanical pressure the differences in electric potential to which it is subjected	Mounted	Mounted crystals which are usually barium titanate(including polycrystalline polarized elements of barium titanate), lead titanate zirconate, quartz or tourmaline crystal type	1) what is the operating frequency in kHz or mHz? 2) Is it quartz? 3) Does this include other components, i.e. - is this more than just a "mounted" crystal? If yes, please list components, function and where used. 4) where is this part used? 5) What is its function?	Crystal A
			Unmounted	N/A	1)What type of crystal is this? 2)Where used? 3)What is its function?	Crystal B

Level 1: Cylinders

Definition of Level 1: Cylinders

1. A cylindrical body or space.
2. Does not include lock cylinders.

Sequence	Level 2	Level 2 Def	Level 3	Level 3 Def	Necessary Parts Spec. Data	Answer
1	Pneumatic	A cylinder that relates to or uses air or a similar gas	Engine	Linear Acting cylinder for power engines and motors	1)Is this cylinder tie-rod type? 2)Please provide drawing 3)Where is it used? 4)How does it function?	Cylinder A
			Other	Unlimited rotary acting or other	1)What is the chief material of this part? 2)Please provide drawing 3)Where used? 4)How does it function? 5)Material it is made of?	Cylinder B
	Other	Not meeting the above definition	N/A	N/A	1)With what type of machine does this part function? 2)Please provide drawing 3)Material it is made of? 4)How does it function/what is its purpose?	Cylinder C

Level 1: Dicing Wheels

Definition of Level 1: Dicing Wheels

1. Mounted blade used on a dicing saw.

Sequence	Necessary parts spec. data	Answer
1	<p>1) Please verify part description.</p> <p>2) What is the material(s) of this part -state whether base metal, metal carbide or cermet; precious or semi-precious stones (natural, synthetic or reconstructed) on a support of base metal, metal carbide or cermet; or abrasive materials on a support of base metal, provided that the articles have cutting teeth, flutes, grooves or the like of base metal, which retain their identity and function after the application of the abrasive. If none of these, please state which type of material it is made of.</p> <p>3) Where is it used? With what part?</p> <p>4) Does it stay within the machine during process</p> <p>5) Manufactured based on KNS specs, Yes or No?</p> <p>6) Please provide drawing</p>	Dicing Wheel A

Level 1: Diffuser

Definition of Level 1: Diffuser

1. A device that distributes sound waves evenly or is used to reduce noise.

Sequence	Necessary Parts Spec. Data	Answer
1	1) What is the chief material of this part? 2) What is the essential function of this part? 3) With which type of machine is this part used? 4) Manufactured based on KNS specs, Yes or No? 5) Is this part an essential part of the machine assembly and stays within the machine during process? 6) is it an Ultrasonic diffuser? 7) is it electric?	Diffuser A

Level 1: Diodes

Definition of Level 1: Diodes

1. Diodes are two-terminal devices with a P-N junction; they allow current to pass in one direction but offer a very high resistance in the other. They are used for detection, rectification, switching, etc.

Sequence	Level 2	Level 2 def	Level 3	Level 3 def	Level 4	Level 4 def	Level 5	Level 5 Def	Necessary Part Spec. data	Answer
1	Photosensitive	A component with electrical characteristics that are designed specifically to enhance the light sensitivity. Having photoconductive (change in the electrical conductivity of a substance as a result of absorbing electromagnetic radiation), photo emissive (emitting photoelectrons) or photovoltaic (producing a voltage when exposed to radiant energy) characteristics	Light-emitting	A visible light source that produces different colored light at low dc current and voltage. LED's can be switched at high speed and have working lives that are far longer than those incandescent lamps. They can also withstand high shock and vibration.	N/A	N/A	N/A	N/A	N/A	Diode A
			Other	Not meeting the definition of above	Unmounted	Not mounted on a circuit board	N/A	N/A	N/A	Diode B
					Mounted	Mounted on a circuit board	Solar Cells	Containing cells that convert solar energy into electrical energy	1) Is the diode assembled into modules or made up into panels?	Diode C
							Other	Not meeting the definition above		Diode D
	Other	Not Meeting the definitions of above	Unmounted	Not mounted on the circuit boards	N/A	N/A	N/A	N/A	N/A	Diode E
			Mounted	Mounted on a circuit board	N/A	N/A	N/A	N/A	1) What type of diode is this (Zener, microwave or other)? 2) What are the amps?	Diode F

Level 1: Disk Drives/Data Storage Units (8471)

Definition of Level I: Disk Drives/Data Storage Units

I. An electronic memory device for transcribing data onto data media in coded form and the machines which process this information.

Seq	Level 2	Level 2 Def	Level 3	Level 3 Def	Level 4	Level 4 Def	Level 5	Level 5 Def	Necessary Parts spec Data	Answer
1	Storage unit	Storage unit for an automatic data processing machine	Magnetic disk drive unit	Drive unit with a magnetic quality used for transmission purposes	Diameter exceeding 21mm	Disk of a diameter that does not exceed 21 cm	Read write unit	Without read-write unit assembled therein; read write units entered separately.	1) Is this storage unit imported with the rest of the system (computer, CPU. Etc.)? Please identify which other units are imported with this par. 2) What type of storage (i.e.-floppy disc drive, hard disc drive, etc)?	Disk Drive & Data storage unit A
							Complete Unit	Units for physical incorporation into automatic data processing machines or units thereof	1) is this storage unit imported with the rest of the system (computer, CPU, etc.)? Please identify which other units are imported with this part. 2) What type of storage (i.e. - floppy disc drive, hard disc drive, etc.)?	Disk Drive& Data storage Unit B
							Other	Not meeting the above definitions	1) Is this storage unit imported with the rest of the system (computer, Unit C CPU, etc.)? Please identify which other units are imported with this part. (2) What type of storage, (i.e. - floppy disc drive, hard disc drive, etc.)?	Disk Drive and Data Storage Unit C
					Other	Not meeting above definition	Not Assembled/no Power	Not assembled in cabinets and without attached	1) is this a flexible, hard or other disk drive unit?	Disk Drive& Data Storage unit D

								external power of supply		
							Other	Not meeting the above definition	1) is this a flexible, hard or other disk drive unit?	Disk Drive& Data Storage Unit E
			Other	Not meeting the above definitions	N/A	N/A	N/A	N/A	1) is this storage unit imported with the rest of the system(computer, CPU, etc.)? Please identify which other units are imported with this part. 2) Is this assembled in cabinets for placing on a table, desk, wall, floor, or similar place?	Disk Drive & Data Storage Unit F
	Other	Not meeting the above definition	N/A	N/A	N/A	N/A	N/A	N/A	1) Please verify part description 2) What is the essential function of of this part? 3) How does this part specifically function? 4) What type of storage medium is this?	Disk Drive& Data Storage Unit G

Level 1: Doors

Definition of level 1: Doors

1. A swinging or sliding barrier by which an entry is opened or closed

Sequence	Necessary Parts Spec. Data	Answer
1	<p>1) What is the essential function of this part?</p> <p>2) Where is this part specifically located?</p> <p>3) What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (Cellular or non-cellular). If metal, please state type - steel (stainless or non-stainless), Copper, aluminum, etc. If some type of plastic, please state "plastic"</p> <p>- Chemical name not necessary.</p> <p>4) is this part of the machine assembly and must be installed in order for machine to function?</p>	Door A

Level 1: Electromagnets (8505)

Definition of Level 1: Electromagnets

1. A temporary magnet made by coiling wire around an iron core. When current flows in the coil the iron becomes a magnet.
2. Permanent magnets and articles intended to become permanent magnets after magnetization

SEQUENCE	LEVEL 2	LEVEL 2 DEF	NECESSARY PARTS SPEC DATA	ANSWER
1	Coupling	A device connecting parts to provide an electromagnetic function	N/A	Magnet A
	Brake/Clutches	An Electro-magnetic clutch or brake	N/A	Magnet B
	Other, including parts	Electromagnetic lifting heads	N/A	Magnet C
		Work Holders and parts thereof	N/A	Magnet D
		Electromagnets of a kind used solely or principally for magnetic resonance imaging apparatus, other than apparatus of heading 9018	N/A	Magnet E
	Other	N/A	N/A	Magnet F
2.	Permanent magnets and articles intended to become permanent magnets after magnetization	Of metal	1.alnico?2. ceramic?3. sintered samarium-cobalt? 4.sintered neodymium-iron-boron? Other?	Magnet G
		Other	1.Flexible magnets?2. Composite good containing flexible magnet? Other?	Magnet H

Level I: Electrodes (8311 and 8545)

Definition of Level 1: Electrodes

1. A conductor used to make electrical contact with some non-metallic part of a circuit

SEQUENCE	LEVEL 2	LEVEL 2 DEFINITION	LEVEL 3	LEVEL 3 DEFINITION	NECESSARY PARTS SPEC DATA	ANSWER
1	Base metal or metal Carbides	Chief material being base metal or metal carbides, or coated or cored with flux material, used for soldering, brazing, welding, or deposition of metal of metal carbides	Consumable	Electrode with lifespan	1) With what type of machine does this electrode function? Is this used for electric arc-welding	Electrode A
			Other	Not meeting the above definition	1) With what type of machine does this electrode function? 2) What are the material of this part?	Electrode B
	Graphite or other carbon	Chief material being graphite or other carbon, with or without metal, used for electrical purposes	Electrodes	Of a kind used for furnaces	Graphite note exceeding 425mm in diameter	Electrode C
					Exceeding 425 mm in diameter	Electrode D
				Other	N/A	Electrode E
			Electrodes:Other	Of a kind used for electrolytic purposes	N/A	Electrode F
				Other	N/A	Electrode G

Level 1: Emblem

Definition of Level 1: Emblem

1. Thick, rigid, non-flexible (e.g. Stripes)
2. JD like shape (beveled)
3. Material being hard plastic, metal, may be rubber
4. Material should be judged from base portion of the part, do not consider material of surface treatment (such as gold-plated)
5. May be with or without adhesive backing, usually to be mounted with fasteners (bolts, nuts, clips, etc.)

SEQUENCE	LEVEL 2	LEVEL 2 DEFINITION	LEVEL 3	LEVEL 3 DEFINITION	NECESSARY PARTS SPEC. DATA	ANSWER
1	Plastic Emblem	Plastic emblem, material being judged from base portion of parts, do not consider material of surface treatment (plated)				Emblem A
	Metal Emblem	Metal Emblem, material being judged from base portion of parts, do not consider material of surface treatment (plated).	Metal Emblem with Essential information	Must have essential information on wit which is anything with letters, numbers or designs on an item.		Emblem B
			Metal Emblem without Essential Information	Item has nothing written on it; plain	1) What type of metal is this (steel, aluminum, etc.)?	Emblem C
	Rubber Emblem	Rubber Emblem, material being judged from base portion of parts, do not consider material of surface treatment (plated)			1) Please state the chemical name of the rubber.	Emblem D

Level 1: Fans

Definition of Level 1: Fans

1. An instrument for producing a current of air.

SEQUENCE	NECESSARY PARTS SPEC. DATA	ANSWER
1	<p>1) Please list all components included in the assembly.</p> <p>2) Where is this part specifically used?</p> <p>3) What type of fan is this?</p> <p>4) Is this a fan of a kind used solely or principally for cooling microprocessors, telecommunications apparatus, automatic data processing machines or units of automatic data processing machines? Or Other?</p> <p>4) Is this part of the machine assembly, if so does it have to stay within the machine during process.</p> <p>5) is this a permanent installation?</p>	FAN A

Level 1: Filters

Definition of Level 1: Filters

1. A device designed to keep foreign substances or contaminants from reaching another object.

2. Does not include air purification, dust collection or gas separation equipment, please see MISC for these items.

SEQUENCE	LEVEL 2	LEVEL 2 DEFINITION	LEVEL 3	LEVEL 3 DEFINITION	LEVEL 4	LEVEL 4 DEFINITION	NECESSARY PARTS SPEC. DATA	ANSWER
	Paper pulp	Filter block, slab, or plate with the chief material being a paper pulp.	N/A	N/A	N/A	N/A	N/A	Filter A
	Paper	Filter with chief material being paper and paperboard (e.g. circular filter papers and boards)	Paint	Specifically used for filter paints	N/A	N/A	N/A	Filter B
			Other	Not meeting the above definition	N/A	N/A	N/A	Filter C
	Textile	Filter with the chief material being a textile product.	N/A	N/A	N/A	N/A	1) What is the materials of this part? If multiple materials, please state chief	Filter D
	Fiberglass	Filter with the chief material being made from glass fibers	N/A	N/A	N/A	N/A	N/A	Filter E
	Other	Not meeting the above definitions	Air	Filtering or purifying machinery for air	N/A	N/A	1) What is the essential function of this part, i.e.- what is it filtering	Filter F
				Liquid	Filtering or purifying machinery for liquids	Water	A liquid filter specific for water	N/A
					Oil or Fuel	A liquid filter specific for either oil or fuel	N/A	Filter H
					Other	Not meeting the above definition	1) please verify part description 2) What tis the essential function of this part? 3) With which machine is this part used? 4) If pneumatic power filter, what is the kPa?	Filter I

Level 1: Fittings

Definition of Level 1: Fittings

1. Mainly used for connecting the bores of two tubes together, or for connecting a tube to some other apparatus, or for closing the tube aperture.
2. Any of various devices used to join or fit two parts together.
3. Fittings may be rigid or flexible and may be reinforced or otherwise combined with other materials.
4. Excludes clamps and other devices specially designed for assembling parts of structures.
5. Excludes bolts, nuts, screws, etc., suitable for use in the assembly of tube or pipe fittings unless combined with fitting.
6. Excludes hangers, stays, and tube plugs (if fitted with a ring, hook or the like).
7. Excludes insulated fittings for electrical purposes.
8. Excludes fittings for hoses (hoses are built up layers of materials while tubes/pipes are a single layer of material).

SE Q	LEVEL 2	LEVEL 2 DEFINITIO N	LEVEL 3	LEVEL 3 DEFINITO N	LEVEL 4	LEVEL 4 DEFINITIO N	LEVEL 5	LEVEL 5 DEFINITIO N	NECESSARY PARTS SPEC. DATA	ANSWE R
1	Aluminu m	Chief material being aluminum	N/A	N/A	N/A	N/A	N/A	N/A	1.Please provide drawing. 2.Where is this part used? 3.Is this off the shelf item?	Fittings A
	Copper	Chief material being copper	Refined copper	Chief material being copper	N/A	N/A	N/A	N/A	1.Please provide drawing. 2.Where is this part used? 3.Is this off the shelf item?	Fitting B
			Other	A fitting that does not meet the above definition	Of copper zinc base alloys (brass)	Cooper that has been reduce to a fine, unmixed, or pure state; separated from extraneous matter and cleansed from impurities	N/A	N/A	1. Is this part threaded? 2. Is this part a nipple? 3.Please provide drawing. 4.Where is this part used? 5.Is this off the shelf item?	Fitting C
					Other	A Fitting that does not meet the above definition	N/A	N/A	1) Is this part threaded? 2) Is this part a nipple?	Fitting D
	Iron/ steel	Chief material being iron or steel	Case fitting	A fitting obtained through a casting process	Of non- malleabl e cast iron	A fitting made of cast iron not designed to be sent	Threaded pipe	A fitting designed for threaded pipe	1.Please provide drawing. 2.Where is this part used? 3.Is this off the shelf item?	Fitting F
							Other	A fitting that does not meet the above definition	1) Is this for a cast-iron soil pipe?	Fitting G

					Other	A fitting does not meet the above definition.	Ductile Fitting	A fitting capable of being bent	Is this a grooved-end fitting or grooved coupling? 2) Is this part threaded?	Fitting H
							Other	A fitting that does not meet the above definition	1) Is this union? 2) Is this grooved-end fitting or grooved coupling? 3) Is this part threaded?	Fitting I
			Other-stainless steel	A fitting that does not meet the above definition and chief material is stainless steel	Flanges	A Fitting that is used for strength or for attaching to another object	N/A	N/A	1) Is this not machined, not tooled and not otherwise processed after forging?	Fitting J
					Threaded elbows, bends and sleeves	A fitting that is of elbow, bend or sleeve type.	N/A	N/A	1) Is this a sleeve/coupling?	Fitting K
					Butt Welding fitting	A butt joint fitting that is created through welding	N/A	N/A	N/A	Fitting L
					Other	A fitting that does not meet the above definitions	N/A	N/A	1) Is this part a nipple?	Fitting M
			other	A fitting that does not meet the above definitions	Flanges	A fitting that is used for strength or for attaching to another object	Non-processed	A fitting that has not been machined, tooled or otherwise processed after forging	1) What type of material is used for this part?	Fitting N
							Other	A fitting that does not meet the above definition	1) What is the inside diameter of this part in mm? 2) Is this of iron, nonalloy steel or alloy steel?	Fitting O
					Threaded Elbows, Bends and Sleeves	A fitting that is of elbow, bend or sleeve type.	Sleeve or Coupling	An opening into which an object fits or an object that connects two objects	1) What is the inside diameter of this part in mm? Is this of iron, nonalloy steel or alloy steel?	Fitting P
							Other	A fitting that does not meet the above definition	N/A	Fitting Q
					Butt Welding Fitting	A butt joint fitting created	N/A	N/A	1) What is the inside diameter of this part in mm?	Fitting R

						through welding				
						Other				
						A fitting that does not meet the above definitions	Non-processed	A fitting that has not been machined, tooled or otherwise processed after forging	1. What type of material is used for this part? 2. Please provide drawing. 3. Where is this part used? 4. Is this off the shelf item?	Fitting S
							Other	A fitting that does not meet the above definition	1) What type of material is used for this part? 2) Is this part a nipple?	Fitting T
	Plastic	Chief material is plastic	N/A	N/A	N/A	N/A	N/A	N/A	1. Please provide drawing. 2. Where is this part used? 3. Is this off the shelf item?	Fitting U
	Other	A material other than those listed above	N/a	N/a	N/a	N/a	N/a	N/a	1. What is the chief material of this part? 2. Please provide drawing. 3. Where is this part used? 4. Is this off the shelf item?	Fitting V

Level 1: Frames

Definition of Level 1: Frames

1. A structure for supporting or containing something.

Sequence	Necessary Parts Spec Data	Answer
1	<p>1) What is the essential function of this part?</p> <p>2) Where is this part specifically located?</p> <p>3) What is the material of this part? If multiple materials, please state chief material.</p> <p>If rubber, please state type (cellular or noncellular).</p> <p>If metal, please state type -- steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>4. is this part of the machine assembly?</p> <p>5.Does this part gets removed prior to process of the machine?</p> <p>6. please provide drawing?</p>	Frame A

Level 1: Funnel

Definition of Level 1: Funnel

1. A conically shaped utensil having a wide mouth and small and narrow tube-like end. It used to channel the flow of substances into another place with a small mouth.

Sequence	Necessary Parts Spec Data	Answer
1	1. With which type of machine does this funnel function? 2. What is the material(s) of this part? 3. Is this manufactured based on KNS specs. Or is it off the shelf item. 4. Does this part gets removed prior to machine function?	Funnel A

Level 1: Fuse Box

Definition of Level 1: Fuse Box

1. A case or box used for housing and protecting fuses.

Sequence	Level 2	Level 2 Definition	Necessary Parts Spec Data	Answer
	Fuses	A box containing fuses as part of the assembly	1. What is the voltage of this part?	Fuse Box A
	Other	Not meeting the definition of above	1. What is the essential function of this part? 2. What type of machine does this part function with? 3. Please list all components included in this assembly 4. Is this part molded? 5. Is this part electrical 6. Please provide drawing?	Fuse Box B

Level 1: Fuses

Definition of Level 1: Fuses

1. A device that automatically interrupts the current when its intensity or voltage exceeds a certain limit (preventing circuit overload).
2. Fuses are a device in which a length of fuse wire is incorporated (or can be incorporated) so that, when they are inserted in the circuit, the fuse wire will melt and thus break the circuit to prevent dangerous current increases.
3. Cartridge fuses consist of a tube containing the fuse wire in contact with metal caps at the ends; other fuses consist of a base or socket (for incorporation in the line), and a connecting piece (which may be screwed into the socket or pushed in between spring contacts) on which the fuse wire is mounted.
4. This does not include constant voltage regulators or automatic voltage regulators.

Sequence	Level 2	Level 2 definition	Level 3	Level 3 Definition	Necessary Parts Spec. Data	Answer
1	Over 1000 V	Fuses with a voltage rating exceeding 1000 V	N/ A	N/A	1) What is the maximum voltage rating of the circuit that the fuse is designed for?	Fuse A
	1000 V or less	Fuses with voltage rating not exceeding 1000 V	Glass Cartridge	A cartridge fuse whose wire is encased in glass	N/A	Fuse B
			Non-Glass Cartridge	A non-Cartridge fuse, or a cartridge fuse whose wire is not encased in glass	N/A	Fuse C

Level 1: Gauge

Definition of Level 1: Gauge

I. An instrument for measuring and indicating a quantity or for testing conformity with a standard.

Sequence	Level 2	Level 2 Definition	Level 3	Level 3 definition	Necessary Parts Spec Data	Answer
1	Temperature	A gauge to measure temperature	N/A	N/A	N/A	Gauge A
	Gravity/ level	A floating gauge to measure gravity or liquid level	N/A	N/A	1) is this gauge electrical	Gauge B
	Oil/Fuel Level	A gauge to measure or check the flow or level of liquid	N/A	N/A	1) is this gauge electrical	Gauge C
	Pressure	A gauge to measure or check pressure level	N/A	N/A	1) is this gauge electrical	Gauge D
	Voltage Current Resistance Power	A gauge to measure and check the voltage, current resistance, and power	Multimeter	A gauge with more than one instrument or apparatus	1) What is this gauge measuring? 2) How does it specifically operate?	Gauge E
			Measuring voltage, current, or resistance	A single gauge to measure the voltage, current, or resistance	1) What is this gauge measuring? 2) How does it specifically operate?	Gauge F
			Other	Not meeting the above definition (e.g. gauge to measure power)	1) What is this gauge measuring? 2) How does it specifically operate?	Gauge G
	Micrometers, calipers and Gauges	Micrometers and calipers	N/A	N/A	N/A	Gauge I
		Other	Used only for set up, not part of the machine assembly	N/A	1.what material is it made of? 2. Please provide drawing?	Gauge J

Level 1: Gears

Definition of Level 1: Gears

1. Circular object upon which a series of teeth have been cut.
2. These are meshed with teeth of another gear and when one turns, it also drives the other.

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. Is this gear single or multiple?2. With which type of machine is this part used?3. Does this gear contain any other additional components? If so, please state what it is combined with.4. Please provide drawing5. What is its main function?6. Material it is made of?	Gear A

Level 1: Generators

Definition of Level 1: Generators

1. Devices that convert mechanical energy into electrical energy by electromagnetic induction.

Sequence	Level 2	Level 2 definition	Level 3	Level 3 Definition	Necessary Parts Spec Data.	Answer
1	Prime Mover (other than an electrical motor)	Generating sets which consist of a combination of an electric generator and any prime mover other than an electric motor (e.g., hydraulic turbines, steam turbines, wind engines, reciprocating steam engines, internal combustion engines). Generating sets consisting of the generator and its prime mover which are mounted (or designed to be mounted) together as one unit or on a common base that are presented together (even if packed separately).	Compression Ignition Powered	Generator powered by a compression ignition engine.	1) What is the output of this generator in kVA?	Generator A
			Spark Ignition Powered	Generator powered by spark ignition engine.	1) What is the output of this generator in kVA or watts?	Generator B
			Other Powered	Generator powered by a source other than those listed above	1) How is this generator powered? 2) What is the output of this generator of kilowatts or watts?	Generator C
	No Prime mover	Generator mounted on an electric power source or no power source at all.	DC	Direct Current generator	1) What is the output of this generator in Kilowatts or watts?	Generator D
			AC	Alternating current generator	1) What is the output of this generator in Kilowatts or watts?	Generator E

Level 1: Glass

Definition of Level 1: Glass

1. A hard, amorphous, brittle, usually transparent material which hardens from the molten state preceded by rapid cooling to prevent crystallization.

2. Worked glass is glass that has been further improved beyond the forming into shapes for ease of transport.

Working does not include coloring or other mixtures within the glass.

Sequence	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Necessary Parts Spec Data	Answer
1	Optic Element	Optical elements functioning as a lens or prism. (E.g. glass plates used in a photolithography process to transfer a reduced-sized pattern of a photomask to sensitized semiconductor wafers and materials).	N/A	N/A	1.Where is this part used? 2.What is its function? 3. Please provide drawing	GLASS A
	Quartz or Silica	Glass of fused quartz or silica	Tube or Holder	Quartz or silica reactor tube or holder designed for insertion into diffusion and oxidation furnaces for production of semiconductor wafers	1.Where is this part used? 2.What is its function? 3. Please provide drawing	Glass B
			Other	Not meeting the above definition	1.Where is this part used? 2.What is its function? 3. Please provide drawing	Glass C

Level 1: Guards (shields, protectors)

Definition of Level 1: Guards (shields, protectors)

1. This part will protect from impact or from a foreign substance by covering or encasing another object.

Sequence	Necessary Parts Spec Data	Answer
1	<p>1. What is the essential function of this part?</p> <p>2. Where is this part specifically located?</p> <p>3. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type - steel (stainless or non-stainless), copper, Aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>4. Is this part manufactured based on the Kns specs</p> <p>5. Is this part required to stay within the machine in order for it to Function</p> <p>6. Please provide drawing</p>	Guard A

Level 1: Guide

Definition of Level 1: Guide

1. Directs the path of an article; A device for steadying or directing the motion of something
2. Excludes guides that function like pulleys or tensioners. (See appropriate Template for Criteria Code).
3. Guides with ball bearings for linear motion are precluded "See Bearing template"

Sequence	Necessary Parts Spec Data	Answer
1	<ol style="list-style-type: none">1. What is the essential function of this part?2. Where is this part specifically located?3. What is the material Of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.4. Can this part be removed prior to the machine process5. Is this an off the shelf item or manufactured specifically based on KNS specs?6. Please provide drawing	Guide A

Level 1: Handles

Definition of Level 1: Handles

1. The part of an object designed to be held in order to use or move it (e.g., a knob, which is a round protuberance to be turned or moved by the hand)
2. Can be made of any material, though usually made of plastic or metal.

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. What is the material(s) of this part?2. Where is this part specifically used?3. What is the essential function of this part?4. Is this an off the shelf item or manufactured based on KNS specs?5.If part of the machine, can this be removed prior to machine process? Or is this essential to the machine being able to work?6. Please provide drawing	Handle A

Level 1: Heaters

Definition of Level 1: Heaters

1. A device that imparts heat.
2. A heater can be a bar, rod, plate, or wire, which is usually coiled, that functions to produce heat.
3. Does not include furnaces. See MISC Criteria Template.

Seq	Level 2	Level 2 definition	Level 3	Level 3 definition	Level 4	Level 4 definition	Necessary Parts Spec. Data	Answer A
1	Electric Instantaneous Storage Water, or Immersion heater	A resistor having electrical elements that instantaneously produce heat, heats water as it flows through the device, or has a reinforced protective sheath for submersion purposes	Storage water	Storage water heaters are immersion heating elements that gradually heat water insulated tanks	N/A	N/A	N/A	Heater A
			Other Water and Immersion Heater	Other water and immersion type heaters are different shapes and forms depending on their use and are generally used in tanks, vats, etc. for heating liquids, semi-fluid substances and gases	N/A	N/A	N/A	Heater B
	Electric Resistor Heater	A resistor made of a material capable of emitting heat when current is passed through it	Graphite or Carbon Type	A resistor with the chief material being graphite or carbon	N/A	N/A	N/A	Heater C
			Other	Not meeting the above definition	Specifically designed	An electrical heating resistor with more parts than a simple insulated resistor with electrical connections.	1) With what type of machine does this heater function? 2) How does this heater specifically operate?	Heater D
					Other	Not meeting the above definition	1. Where is it used? 2. How does it function	Heater E

Level 1: Heat Sinks

Definition of Level 1: Heat Sinks

1. A piece of metal specially designed to dissipate heat.
2. Heat sinks do not possess or incorporate electrical apparatus (e.g. diodes, posts, etc.) or electrical circuitry for conducting electricity.
3. Does not include heat sinks that include fans or motors, see applicable template.

Sequence	Necessary parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. With what type of apparatus does this heat sink function?2. Please list all components included in the assembly.3. Please provide drawing4. What is its function	Heat Sink A

Level 1: Hinge

Definition of Level 1: Hinge

1. A jointed device which allows a part to swing or turn on another frame.
2. Excludes hinges that are combined with bearings.

Sequence	Necessary Parts Spec Data	Answer
1	<ol style="list-style-type: none">1. With which machine is this part used?2. What is the material(s) of this part? If multiple materials, please state chief.3. What is the essential function of this part? How is it specifically used?4. Off the shelf part?5. Designed for interior and exterior doors (except garage, overhead or sliding doors)?	Hinge A

Level 1: Holder

Definition of Level 1: Holders

1. A device used for holding another object.

Sequence	Necessary Parts Spec. Data	Answer
1	<p>1. What is the essential function of this part?</p> <p>2. Where is this part specifically located?</p> <p>3. What is the material of this part? If multiple materials, please state chief material. If rubber, please State type (cellular or non-cellular). If metal, please state type - steel (stainless or non-stainless), copper, Aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>4. Is this specifically made for our machine based on KNS specs?</p> <p>5. Is this essential to the machine in order to function?</p> <p>6. Please provide drawing</p>	Holder A

Level 1: Housings

Definition of Level 1: Housings

1. A protective unit that encases or contains another article.

Sequence	Necessary Parts Spec. Data	Answer
1	<p>1. What is the essential function of this part?</p> <p>2. Where is this part specifically located?</p> <p>3. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, Please state type -- steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic"-- chemical name not necessary.</p> <p>4. Is this an off the shelf item or specifically made for our machine?</p> <p>5. Is this part removed from the machine in order to function?</p> <p>6. Please provide drawing</p>	Housing A

Level 1: Inductors

Definition of Level 1: Inductors

1. A part of an electrical apparatus that acts upon another or is itself acted upon by induction.
2. An electromotive force (EMF) is generated in a closed circuit by a change in the flow of current, causing induction.
3. Excludes inductors that function as static converters. (See Static Converter Template for Criteria Code.)

Sequence	Level 2	Level 2 definition	Necessary Parts Spec Data	Answer
1	Power supplies for automatic data processing machines (computers) or Telecommunication apparatus	Inductor used with or for power supplies for automatic data processing machines and units thereof or telecommunication apparatus.	N/A	Inductor A
	Other	Inductor not meeting the above definition	1) What is the essential function of this part? 2) If this acts as a power supply, what is the power output in Watts?	Inductor B

Level 1: Insulator/ Insulating Fittings

Definition of Level 1: Insulator

1. This part protects another part from a variety of things including excessive heat, cold and electricity.

Seq	Level 2	Level 3	Necessary Parts Spec Data	Answer
1	Electrical Insulators	Of glass	N/A	Insulator A
		Of Ceramics	1. Is it used in high-voltage, low-frequency electrical systems; commonly known as suspension, pi-type or line post insulators or Other?	Insulator B
		Other	N/A	Insulator C
	Insulating fittings for electrical machines, appliances or equipment, being fittings wholly of insulating material apart from any minor components of metal (for example, threaded sockets) incorporated during molding solely for the purposes of assembly, other than insulators mentioned above; electrical conduit tubing and joints therefor, of base metal lined with insulating material:	Insulating Fittings of ceramics	1.Are these ceramic insulators to be used in the production of spark plugs for natural gas-fueled, stationary, internal combustion engines.	Insulator D
		Other	N/A	Insulator E
		Insulating fittings of Plastics	N/A	Insulator F
		Other	Other Insulating Fittings	Insulator G
		Electrical conduit tubing and joints of base metal lined with insulating material	1.is It conduit tubing? 2. Joints? Yes or No? Threaded, yes or no?	Insulator H

Level 1: Integrated Circuits (electronic integrated circuits)

Definition of Level 1: Integrated Circuits

1. Device having a high passive and active element or component density, which are regarded as single writs.
2. This does not include circuits with only passive elements
3. Active components include Diodes, Transistors, and similar elements which can produce, rectify, modulate or amplify an electrical signal.
4. Passive components are those that are incorporated in the integrated circuit and do not produce, rectify, modulate or amplify an electrical signal, e.g. - capacitors and resistors.
5. Does not include "smart cards" with two or more electronic integrated circuits and which may or may not have a magnetic stripe.

SEQ 1	LEVEL 2	Level 3	Necessary Part Spec Data	Answer
Electron ic Integrat ed circuits	Devices having a high passive and active element or component density. However, electronic circuits containing only passive elements are excluded from this heading	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers and clock and timing circuits or other circuits	N/A	Integrat ed Circuit A
		Memories	1. Dynamic read-wire random access (DRAM)? a)not over 128 megabits? b) Over 128 megabits but not over 256 megabits? c) Over 256 megabits but not over 1 gigabit? d) over 1 gigabit? 2. Static read-write random access (SRAM) 3.Electrically erasable programmable read-only memory (EEPROM) 4.Erasable(except electrically) programmable read-only memory (EPROM) 5. Other	Integrat ed Circuit B
		Amplifiers	N/A	Integrat ed Circuit C
		Other	N/A	Integrat ed Circuit D
		Parts of Integrated circuits	N/A	Integrat ed Circuit E

Level 1: Inverters (8504)

Definition of Level 1: Inverters

1. A device for converting direct current into alternating current
2. Electrical Transformers, static converters

Sequence	Necessary Parts Spec Data	Answer
1	<ol style="list-style-type: none">1) Please verify part description2) Where is it used?3) How does it function?	Inverter A

Level 1: Jets

Definition of Level 1: Jets

1. An apparatus that disperses liquid in a steady flow or stream.
2. Does not include jets that operate like a valve, see Valves Template.

Sequence	Necessary Parts Spec. Data	Answer
1	1) With what type of machine does this jet junction? 2) How is the liquid displaced	Jet A

Level 1: Jewels

Definition of Level 1: Jewels

1. A precious or semiprecious stone.
2. Does not include synthetic or reconstructed precious or semiprecious stones.

Seq 1	Level 2	Level 2 Definition	Necessary Parts Spec Data	Answer
1	Not worked	A jewel that is simply sawn or roughly shaped	1.) What type of jewel is this? 2.) Where is this used?	Jewel A
	Worked	A jewel that is worked beyond the definition described above	1) What type of jewel is this? 2) Where is this used?	Jewel B

Level 1: Jigs

Definition of level 1: Jigs

1. A device used to maintain mechanically correct positional relation between a piece of work and the tool or between different parts of a machine that have a plunging or thrusting motion.

Seq	Level 2	Level 2 Definition	Necessary Parts Spec. Data	Answer A
1	Mounting	A jig that serves mainly to mount one thing onto another	1) What is the chief material of this part? If rubber, please state chemical name. 2) What is the essential function of this part? 3) With which type of machine is this part used? 4)Please provide drawing 5) Please confirm this part is removed from the machine before process	Jig A
	Other	Not meeting the above definition	1) What is the chief material of this part? If rubber, please state chemical name. 2) What is the essential function of this part? 3) With which type of machine is this part used? 4)Please provide drawing 5) Please confirm this part is removed from the machine before process	Jig B

Level 1: Junction Boxes

Definition of Level 1: Junction Boxes

1. Junction boxes consist of boxes fitted internally with terminals or other devices for connecting together electrical wires.
2. This excludes junction boxes not fitted with means of electrical connection, but used solely as a protective cover or to hold an insulating compound over a joint.

Sequence	Necessary Parts Spec. Data	Answer
1	N/A	Junction Box A

Level 1: Kits

Definition of Level 1: Kits

1. Articles put in a set to achieve a single, or complimenting, purpose
2. Items are intended for use together for a single purpose or activity
3. Kit components are packaged together
4. Toolkits are not provided here. Please see "Tools · Criteria Template".
5. Gasket/Seal kits are not provided for here. Please see "Seals · Criteria Template".

Sequence	Necessary Parts Spec. Data	Answer
1	(1) Please list each component of the kit. If applicable, use criteria code from the appropriate criteria template to describe each part. (2) What is the purpose of the kit (e.g. to replace pump shaft)? 3. what is the essential part of this kit and the template for the essential part? 4. Please provide drawing	Kit A

Level 1: Keyboards

Definition of Level 1: Keyboards

1. A set of keys on a typesetting machine

2. This includes unhoused keyboards consisting of only keys, printed circuit board, and connector(s)

Seq	Level 2	Level 2 Definition	Level 3	Level 3 Def	Necessary Parts Spec. Data	Answer
1	Computer Keyboard	Keyboard to be used directly with computer	System keyboard	Keyboard imported with at least one CPU, one input unit (e.g. the keyboard), and one output device (e.g. a monitor)	1) What are the other components of the system?	Keyboard A
			Individual Keyboard	Computer keyboard not meeting the above definition	1) What are the other, if any, components of the system?	Keyboard B
	Other Keyboard	Keyboard not to be used directly with computer	N/A	N/A	1) In what assembly is this part used? Please be specific (e.g. if for pump, please list pump criteria code). 2) In what type of machine is this part used (e.g. dicer, etc.)?	Keyboard C

Level 1: Labels

Definition of Level 1: Labels

1. A label is an identifying or descriptive marker

Sequence	Level 2	Level 2 definition	Level 3	Level 3 Definition	Necessary Parts Spec Data	Answer
1	Plastic Label	Essential material of item is plastic	Flat	Must be completely flat, not beveled	1) Does it come in rolls? 2) What is the width in cm? 3) Is it self-adhesive	Label A
			Not Flat	Not meeting the above definition	N/A	Label B
	Paper Label	Essential material of item is paper	Printed	Printed in whole or in part by a lithographic process	1) Is it self-adhesive?	Label C
				Other	N/A	Label G
			Not printed	Not meeting the above definition	1) Is it self-adhesive?	Label D
			Decal/ Transfers	Transfers (decalcomanias) consist of pictures, designs or lettering in single or multiple colours, lithographed or otherwise printed on absorbent, lightweight paper (or sometimes thin transparent sheeting of plastics), coated with a preparation, such as of starch and gum, to receive the imprint which is itself coated with an adhesive. When the printed paper is moistened and applied with slight pressure to a permanent surface (e.g., glass, pottery, wood, metal, stone or paper), the coating printed with the picture, etc., is transferred To the permanent surface.	1) Is it vitrifiable?	Label E
	Textile Label	Essential material of item is textile	N/A	N/A	1) Is it Woven? Knit? fiber Content?	Label F
	Metal	Material being metal; essential material of item is metal	N/A	N/A	N/A	Please see emblems template

Level 1: Lamps

Definition of Level 1: Lamps

1. An electrical source for visible illumination.

Sequence	Level 2	Level 2 Definition	Necessary Parts Spec. Data	Answer
1	Portable electrical lamps	An electrical lamp with its own source of energy such as dry batteries, storage batteries, magnetos, etc.	1.Please provide image 2.Where is this used and for what purpose? 3.	Lamp A
	Other	Not meeting the above definition	1) What type of apparatus does this light function with? 2) What type of lamp is this? 3. Please provide drawing	Lamp B

Level 1: Lasers

Definition of Level 1: Lasers

1. Light amplification by stimulated emission of radiation.
2. Device to create a coherent light beam.
3. This does not include laser diodes. Please see Diodes Criteria Template
4. A complete laser is generally composed of: 1) The lasing medium, 2) The "pumping" equipment to excite the-lasing medium, 3) The resonant optical cavity, or reflecting system, and 4) The peripheral equipment necessary to operate and enhance the laser.

Seq	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Necessary Parts Spec. Data	Answer
1	Pattern Generating Laser	Includes a laser and all equipment necessary to etch a predefined pattern onto, or out of, a substrate	N/A	N/A	N/A	Laser A
	Laser Tool	Laser to be used in a machine tool or for working materials	Laser Machine Tool	Machine tool utilizing a laser for working any material by removal of material	1) What material is this laser tool working (e.g. metal, silicon, etc.)? 2) Is this laser tool numerically controlled? 3) Is this laser to be used directly in the production of semiconductors wafers? 4) Is this a laser cutter for cutting contacting tracks in semiconductor production?	Laser B
			Other Laser Tool	Laser tool not working by the removal of material	1.What is the specific function of this tool (e.g. Brazing printed circuit boards, Soldering, Welding, etc)? 2.Please provide drawing and specification	Laser C
	Other Laser	Laser not meeting the definitions above	N/A	N/A	1.What is the specific function of this laser? 2.Please provide drawing and specification 3. Is this an optical instrument/appliance 4.Does it provide measurements?	Laser D

Level 1: Latches

Definition of Level 1: Latches

1. A fastening for a door or gate; a bar that can be lowered or slid into a groove.

Sequence	Necessary Parts Spec. Data	Answer
1	1. What is the material(s) of this part? 2. What is the essential function of this part? 3. Where is this part used? Is it essential to the function of the machine? 4. Please provide drawing	Latch A

Level 1: Light Boxes

Definition of Level 1: Light Boxes

1. An annular fiber optic lamp assembly where light is fed through a fiber optic cable.

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. Where is it used?2. Please provide drawing3. How does it function?4. What is included in the assembly?	Light Box A

Level 1: Lenses

Definition of Level 1: Lenses

1. A transparent optical device used to converge or diverge transmitted light and to form images.
2. All lenses are optically worked*. For non-optically worked "lenses", see covers.

SEQ	Level 2	Level 2 definition	Necessary Parts Spec. Data	Answer
1	Mounted Lens	Lens that includes an optical element as well as a frame or mounting	1.Where are they used? 2.Objective lenses? 3.Projection? Or other? 4. Mounted lenses suitable for use in, and entered separately from, closed-circuit television cameras, with or without attached electrical or non-electrical closed-circuit television camera connectors and with or without attached motors?	Lens A
	Unmounted Lens	Lens that includes only an optical element	1.Where are they used? 2. What is the essential function of this part?	Lens B

Optically worked is defined by Customs as, "The optical working of glass is usually performed in two stages, viz. the production of the surfaces to the shape required (i.e., with the necessary curvature, at the correct angle, etc.), and the polishing of these surfaces. This working consists of grinding the surfaces by means of abrasives, rough at first, then gradually finer, the successive operations being roughing, trueing, smoothing and polishing. Finally, in the case of lenses required to be of an exact diameter, the edges are ground; this is known as the centering and edging operation. This heading applies only to optical elements of which the whole or part of their surface has been polished in order to produce the required optical properties. It applies therefore to elements which have been ground and polished as described above, and also to elements which have been polished after molding. The heading does not apply to unpolished elements having under one merely one or more of the processes which precede polishing.

Level 1: Lock

Definition of Level 1: Lock

1. A fastener fitted to a door or drawer to keep it firmly closed.
2. Excludes parts that simply function like a latch. (See Latch Template for Criteria Code).

Sequence	Level 2	Level 2 definition	Necessary Parts Spec Data	Answer
1	Padlock	A removable lock with a shackle that can be passed through a staple or catch and then secured. Key, combination or electrically operated of base metal.	1. Is this padlock of cylinder or pin tumbler construction? 2. What is the padlock's width in terms of cm? 3. Where is this part used?	Lock A
	Other	A lock that does not meet the above definition	1.Where is this part specifically used? 2.Material it is made of?	Lock B

Level 1: Lubricants

Definition of Level 1: Lubricants

1. A substance capable of reducing friction, heat, and wear.
2. Includes oils and greases.

SE Q	LEVEL 2	LEVEL 2 DEFINITI ON	Level 3	Level 3 definition	Level 4	Level 4 definitio n	Level 5	Level 5 definition	Necessary parts Spec. Data	Answer
1	Bituminous Petroleum Based Lubricant	Petroleum Oils and oils obtained from bituminous minerals, other than crude that contain, by weight, 70% oils or of oils obtained from bituminous mineral	Oil	Any numerous combustible substances that re liquid or can be liquefied easily on warning and are soluble except in water.	Hydro- carbon	Mixtures of hydrocarbon s which contain by weight not over 50% of any single hydrocarbon compound	White mineral oil	An oil derived from minerals.	N/A	Lubricant A
							Insulating or transform er oil	Oil that is not used for their lubricating properties, but for insulating and transformer protection	1) Is this oil medicinal grade?	Lubricant B
							Other	Not meeting the above definition	N/A	Lubricant C
					Other	Not meeting the above definitions	N/A	N/A	1) is the oil for turbines, steam cylinders, a quenching or cutting oil type, or other type?	Lubricant D
			Grease	A slippery or viscous liquid or liquefiable substance not miscible with water that is used for lubricating purposes.	Non-Fatty Acid Origin	Containing less than 10% of the weight of salts of fatty acids of animal (including marine animal) or vegetable origin)	N/A	N/A	N/A	Lubricant E
					Other	Not meeting the above definition	N/A	N/A	1) What is the material(s) of this part? Please specify percentage breakdown?	Lubricant F
	Non- Bituminous Based Lubricant	Lubricating preparations (including cutting-oil preparations, bolt or nut release preparations, antitrust or anticorrosion preparations and mold release preparations, based on lubricants) and preparations of a kind used for the oil or grease treatment of textile	Bitumin ous weight of 50% to 70%	Containing 50% or more by weight of petroleum oils o of oil obtained from bituminous minerals.	N/A	N/A	N/A	N/A	N/A	Lubricant G
			Other	Not meeting above definition	N/A	N/A	N/A	N/A	N/A	Lubricant H

		materials and other materials, but excluding preparations containing, as basic constituents, 70 percent or more by weight of petroleum oils or oils obtained from bituminous minerals								
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Level 1: Magazines

Definition of Level 1: Magazines

1. Magazines hold and store an item within the manufacturing machine. They can be used to transport this item between work stations, but do not function independently and have no mechanical capability.

Sequence	Necessary Parts Spec Data	Answer
1	<ul style="list-style-type: none">1. Is this magazine specific to any one machine? If so, with which type of machine is this part used?2. What is the chief material of this part?3. What is included in the assembly4. Please provide a drawing5. Is this part essential to the machine function? Can this be removed prior to the machine function?	Magazine A

Level 1: Material Handler

Definition of Level 1: Material Handler

1. Equipment used for lifting, handling, loading, and unloading objects.

SEQUENCE	Necessary Parts Spec Data	Answer
1	<ol style="list-style-type: none">1. Please list all components included in the assembly.2. What is the essential function of this part?3. Is this handler specific to any one machine? If yes, with which type of machine is this part used?4. Please provide drawing	Material Handler A

Level 1: Microscope

Definition of Level 1: Microscope

1. An instrument consisting of a lens or combination of lenses that magnifies the image of small objects.
2. A **compound light microscope** is a **microscope** with more than one lens and its own **light** source. In this type of **microscope**, there are ocular lenses in the binocular eyepieces and objective lenses in a rotating nosepiece closer to the specimen

Sequence	Level 2	Level 2 definition	Necessary Parts Spec. Data	Answer
1.	Electron Beam	Electron beam microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or reticules	N/A	Microscope A
	Compound optical Microscopes	Microscopes including those for photomicrography, cinemicrographay or microprojection	1.Stereoscopic microscopes provided with a means for photographing the image or other? 2.Other microscopes, for photomicrography, cinemicrography or micro projection with a means for photographing the image or other?	Microscope B
	Other	Microscopes, other than optical microscopes; diffraction apparatus; parts and accessories	1) What is the essential function of this part? (2) How does this microscope specifically operate? (3) What type of microscope is this, (e.g. -- stereoscopic, compound optical, Etc.)?	Microscope C

Level 1: Misc. Parts

Definition of Level 1: Misc. parts

1. A part that does not have a Criteria Template to reference and another category not shown would be more appropriate.

Sequence	Necessary parts Spec Data	Answer
1	<p>1) Please verify part definition.</p> <p>2) What is the essential function of this part?</p> <p>3) Where is this part specifically located?</p> <p>4) What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>(5) If electrical, what is the wattage, voltage, and/or amperage?</p> <p>(6) If fastener,</p> <p>(a) What is the Diameter?</p> <p>(b) What is the Length?</p> <p>(c) Is the part torqued by its head or by nut?</p> <p>7. Please provide drawing</p>	MISC A

Level 1: Monitor

Definition of Level 1: Monitor

1. A device that receives a signal and displays it on a screen.
2. A computer monitor is an output device that displays information in pictorial form. A monitor usually comprises the visual display, circuitry, casing, and power supply.

Sequence	Level 2	Level 2 def	Level 3	Level 3 def	Level 4	Level 4 def	Level 5	Level 5 def	Necessary Parts Spec Data	Answer
1	Video	A monitor that is used for video display and not intended to be used with a computer	Color	A video monitor that displays a color picture	Complete, Non-high definition	A Color, video monitor that is fully assembled in their cabinets whether or not packaged or tested for distribution to the ultimate purchaser(s) and is not high-definition	Non-projection Type	Having a single picture tube intended for direct viewing	1) What is the video display diagonal in terms of cm? 2) Does this monitor incorporate a video recording or reproducing apparatus?	Monitor A
							Projection Type, Cathode-ray tube	Not meeting the definition above	1) Does this monitor incorporate a video recording or reproducing apparatus?	Monitor B
					Complete, High definition with a Cathode-ray tube.	A Color, video monitor that is fully assembled in their cabinets, whether or not packaged or tested for distribution to the ultimate purchaser(s) and is high-definition	Non-projection type	Having a single picture tube intended for direct viewing.	1) Does this monitor incorporate at video recording or reproducing apparatus?	Monitor C
							Projection type	Not meeting the definition above	1) Does this monitor incorporate a video recording or reproducing apparatus?	Monitor D
					Flat Panel Display	A plasma or other liquid crystal display screen that does not incorporate a cathode-ray tube.	N/A	N/A	1) What is the video display diagonal in terms of cm? 2) Does it incorporate video recording or reproducing apparatus?	Monitor E
					Other	Not meeting any of the definitions above.	N/A	N/A	1) What is the video display diagonal in terms of cm? 2) Does it incorporate video recording or reproducing apparatus? 3) What type of monitor is this?	Monitor F
			Black and white or other monochrome	A video monitor that displays a black and white picture	N/A	N/A	N/A	N/A	N/A	Monitor G
	Computer	A monitor that is intended to be used only	N/A	N/A	N/A	N/A	N/A	N/A	1) Is the monitor color? (2) Does it have a cathode-ray Tube?	Monitor H

		with the computer							(3) What is the Visual display Diagonal in cm?	
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Level 1: Electric Motors

Definition of Level 1: Electric Motors

1. Electric motors are machines for transforming electrical energy into mechanical power.
2. This includes electric motors of all types from low power motors for use in clocks and time switches up to large powerful motors for rolling mills, etc.
3. This does not include generators, primary cells, primary batteries or solar cells.

Seq	Level 2	Level 2 Def	Level 3	Level 3 Def	Level 4	Level 4 Def	Level 5	Level 5 Def	Necessary Parts Spec Data	Answer
1	37.5 W or less Motor	Motor output not exceeding 37.5 watts	Under 18.65 W	Motor output under 18.65 watts	Synchronous;\$4 usd or less motor	Synchronous motors for clock movement valued not over \$4 usd	N/A	N/A	1) What is the output in Watts?	Motor A
					Other Motor	Non-synchronous motor, or synchronous motor valued over \$4 USD	AC Motor	Electric motor that operates exclusively on AC current	1) What is the output in Watts?	Motor B
							DC Motor	Electric motor that operates exclusively on DC current	1) What is the output in Watts? 2) Does this motor contain brushes?	Motor C
							Other Motor	Electric motor that does not meet the above listed definitions	1) What is the output in Watts?	Motor D
			18.65 W plus	Motor output 18.65 watts or more	AC motor	Electric motor that operates exclusively on AC current	N/A	N/A	1) What is the output in Watts?	Motor E
					DC Motor	Electric motor that operates exclusively on DC Current	N/A	N/A	1) What is the output in Watts?	Motor F
					Other Motor	Electric motor that does not meet the above listed definitions	N/A	N/A	1) What is the output in Watts?	Motor G
	Over 37.5 W Motor	Motor output exceeding 37.5 watts	Universal AC/DC	Electric motor that operates on both AC and DC current	N/A	N/A	N/A	N/A	1) What is the Output in Watts?	Motor H
			DC	Electric motor that operates exclusively on DC current	N/A	N/A	N/A	N/A	1) What is the output in Watts?	Motor I
			AC	Electric motor that operates exclusively on AC current	N/A	N/A	N/A	N/A	1) What is the output in Watts? 2) Is this single-phase or multi-phase? 3) Is this a gear motor or non-gear motor?	Motor J

Level 1: Needles

Definition of Level 1: Needles

1. Needles are pointed implements.
2. This includes needles used to pass gasses or liquids from a pressurized source.
3. This includes needles used to move, adjust or otherwise maneuver work.

SEQUENCE	Necessary Parts Spec Data	Answer
1	<ol style="list-style-type: none">1. In what assembly is this part used? Please be specific (e.g. if for pump, please list pump criteria code).2. In what type of machine is this part used (e.g. dicer, etc.)?3. What is the material(s) of this part?4. Is this a needle for a bearing?5. Please provide drawing	Needle A

Level 1: Nozzle

Definition of Level 1: Nozzle

1. A projecting spout from which a fluid is discharged

Sequence	Necessary Parts Spec. Data	Answer
1	1. With which type of machine does this part function? 2. What is the essential function of this part? 3. What material is it made of? 4. Is this part essential to the machine. Can the machine function without the nozzle?	Nozzle A

Level 1: Nut

Definition of Level 1: Nut

1. A small square or hexagonal metal block with an internal thread to be fitted onto a blot.
2. They are usually tapped throughout but are sometimes blind.
3. Includes wheel nuts and lock nuts. Does not include spring and speed nuts.

Sequence	Level 2	Level 2 def	Level 3	Level 3 def	Level 4	Level 4 Def	Necessary Parts Spec Data	Answer
1	Steel	Essential material being steel	Lugnut	A specific nut used to tighten the bolt of a wheel	Locking	Having teeth on bottom or a special wrench attachment or key to remove/unlock	1) Is it chrome-plated?	Nut A
					Other	Not meeting the above definition	N/A	Nut B
			Other	Not meeting the above definition	N/A	N/A	1.Is it stainless steel?	Nut C
	Copper	Essential material being copper	N/A	N/A	N/A	N/A	1) What is the diameter in mm? 2) Is the nut threaded? 3.What is this nut used for?	Nut D
	Aluminum	Essential material being aluminum	N/A	N/A	N/A	N/A	1) What is the diameter in mm? 2) Is the nut threaded?	Nut E

Level 1: O-Rings

Definition of Level 1: O-Rings

1. A round seal ring placed between two parts to prevent leakage and to prevent any matter from escaping.
2. Can be made of any material including rubber, plastic, metal, paper, asbestos, cork, etc.
3. This does not include seals which prevent matter from entering; nor does it include seals and gaskets which are not 1 round rings.
4. Includes only O-Ring sets which contain O-rings of solely one type of material (e.g., only plastic O-rings).

Sequence	Level 2	Level 2 def	Level 3	Level 3 Def	Necessary Parts Spec. Data	Answer
1	O-Ring Set	Kit that consists of sets or assortment of O-rings, dissimilar in composition, put up in pouches, envelopes or similar packing	N/A	N/A	N/A	O-RING A
	Rubber O-ring	Sole material being rubber	N/A	N/A	1) Please state chemical name of rubber	O-ring B
	Metal O-ring	Sole material is metal	Metal sheeted O-ring	O-ring composed of more than one sheet/layer of metal pressed together (Note: the metal can be of the same type)	N/A	O-ring C
				O-ring with only one layer/sheet of metal	1) Please state type of metal (steel, aluminum, etc) 2) Where is this part specifically used? 3. Is this a mechanical seal?	O-ring D
	Plastic O-ring	Sole material being plastic	N/A	N/A	1) Where is this part specifically used?	O-ring E
	Paper O-ring	Sole material being paper	N/A	N/A	1) Is the paper coated or not coated? If coated, what type of material? 2) Where is this part specifically used?	O-ring F
	Combined material O-ring	Two material snot of the same type (e.g. not two plastics, or two rubbers, rather metal and rubber, cork and rubber, etc) combined together	Combined material O-ring with metal	One of the combined materials is metal	N/A	O-Ring
			Combined material O-ring without Metal	Neither of the combined materials is metal	1) Of the materials combined, what material gives the seal its essential character? 2) Where is this part specifically used?	O-Ring H
	Other materials O-ring	Sole material being another material not listed above (e.g. cork, textile, asbestos, etc.)	N/A	N/A	1) What is the material of this seal? 2) Where is this part specifically used?	O-ring I

Level 1: Packing Materials

Definition of Level 1: Packing Materials

1. Any type of article used to protect a commodity during transportation.

SEQ	Level 2	Level 2 Def	Level 3	Level 3 Def	Level 4	Level 4 Def	Necessary Parts Spec. data	Answer
1	Paper or Paperboard	The chief material of the article being paper or paperboard	Carton Box, or case	Box, case, or crate made from corrugated paper or paperboard.	N/A	N/A	1) Is this used for sanitary food and beverage Container, Yes or No?	Packing Material A
			Folding carton, Box, or case	Folding cartons, boxes and cases, of non-corrugated paper or paperboard	N/A	N/A	1) Is this used for sanitary food and beverage Container, Yes or No?	Packing Material B
			Sack or Bag	Sack or Bag made of paper or paperboard. This includes cone shape sacks and bags	N/A	N/A	1.What is the essential function of this part? Please be as specific as possible 2.what is the width of the base in cm? 3.Are these shipping sacks and multiwall bags, other than grocers' bags	Packing material C
			Other	Not meeting the above definitions	N/A	N/A	1) What is the essential function of this part? Please be as specific as possible.	Packing material D
	Plastic	The chief material of the article being Plastic	Plate, sheet, film, foil, or strip	Plate, sheet, Film, foil, or strip forms of plastics	N/A	N/A	N/A	Packing material E
			Box, Case or Crate	Box, Case or crate made of plastic	N/A	N/A	N/A	Packing material F
			Sack or Bag	Sack or Bag made of plastic	Polymers of Ethylene	The chief material of the article being made from polymers of ethylene	1) Is this article re-closable? 2) Do any of the sides exceed 75 mm in length?	Packing material G
					Other	Not meeting the above definition	N/A	Packing material H
			Other	Not meeting the above definitions	N/A	N/A	N/A	Packing material I
	Wood	The chief material of the article being Wood	Pallet	Wood constructed to form a structural shipping base	N/A	N/A	1.what is this used for?	Packing material J
			Box, case, or crate	Box, Case or crate made of wood	N/A	N/A	1) Does it have solid sides, lid, and bottom?	Packing material K
			Other	Not meeting above definitions	N/A	N/A	1) Where is the article used in packing? (E.g. strapping tops).	Packing material L

Level 1: Pad

Definition of Level 1: Pad

1. An article used to reduce friction or shock.

Sequence	Necessary Parts Spec Data	Answer
1	<ol style="list-style-type: none">1. What is the material(s) of this part?2. Where is this part specifically used?3. What is the essential function of this part?4. Is this an off the shelf item or manufactured based on KnS specs?5. Does it get removed prior to machine working?6. Is this specific to our machine?	Pad A

Level 1: Panels

Definition of Level 1: Panels

1. A distinct (usually flat) section or component of something.

Sequence	Necessary Parts Spec Data	Answer
1	(1) What is the essential function of this part? (2)Where this part is specifically located? (3) What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (Stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" - chemical name not necessary. 3.Please provide drawing 4.Is this part essential to the machine process. 5. Does this part gets removed prior to machine function?	Panel A

Level 1: Pans

Definition of Level 1: Pans

1. Shallow container used to catch/contain other substances.

Sequence	Necessary Parts Spec Data	Answer
1.	<p>1) What is the essential function of this part?</p> <p>2) Where is this part specifically located?</p> <p>(3) What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type - steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>4. Does this part get removed from the machine prior to functioning</p>	Pan A

Level 1: Paint

Definition of Level 1: Paint

1. A liquid used to apply color or pigment to an object.

Sequence	Level 2	Level 2 def	Level 3	Level 3 def	Necessary Parts Spec Data	Answer
1	Aqueous Medium	A paint with a medium consisting of water or a mixture of water and a water-soluble solvent	Acrylic or Vinyl polymers	Paint with the synthetic polymer base of either acrylic or vinyl	N/A	Paint A
			Other	Not meeting the above definition	N/A	Paint B
	Non-Aqueous medium	A paint with a medium that is not a water based mixture and is not a water-soluble solvent	Acrylic or Vinyl polymers	Paint with the synthetic polymer base of either acrylic or vinyl	N/A	Paint C
			Polyesters	Paint with the synthetic polymer base of polyester	N/A	Paint D
			Other	Not meeting the above definitions	N/A	Paint E

Level 1: Electrical Pin

Definition of Level 1: Electrical Pin

1. A cylindrical metal object designed to fill an electrical socket.

Sequence	Necessary Parts Spec Data	Answer
1	1. Please verify part description. 2. With which type of connector is this part used with? 3. What is the essential function of this part? How does it function? 4.What material is this made of? 5.Please provide drawing	Electrical Pin A

Level 1: Pin, Non-electrical

Definition of Level 1: Pin, Non-electrical

1. A small slender piece used to support, fasten, or attach things.

2. Does not include electrical pins.

Seq	Level 2	Level 2 Def	Level 3	Level 3 Def	Level 4	Level 4 Def	Necessary Parts Spec. Data	Answer
1	Essential	A basic and fundamental part to the operation of the assembly	N/A	N/A	N/A	N/A	1) With what type of machine does this part function? 2) What is the essential function of this part? 3) What is the material(s) of this part?	Pin A
	Non-essential	Not meeting the above definition	Plastic	The sole material being plastic	N/A	N/A	N/A	Pin B
			Steel	The sole material being steel	Cotters, cotter pins, Taper pins and the like	Typically in bifurcated form. Used for fitting in or through holes in spindles, shafts, bolts, etc. To prevent objects mounted thereon from moving along them. They come in various shapes	N/A	Pin C
					Other	Not meeting the definition above	1) Is the pin threaded or non-threaded	Pin D
			Other	Not meeting the above definition	N/A	N/A	(1)what is the Materials of this part? (2) Is this part threaded? (3) What is the essential Function of this part?	Pin E

Level 1: Piston

Definition of Level 1: Piston

1. Works in conjunction with a cylinder or connecting rod to convert rotary motion into linear motion, to do various forms of work.
2. Has a plunging or thrusting motion.

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. In what assembly is this part used? Please be specific (e.g. if for pump, please list pump criteria code).2. In what type of machine is this part used (e.g. dicer, etc.)?3. Please provide drawing4. Please advise how it functions5. Is this part of the machine assembly	Piston A

Level 1: Pivots

Definition of Level 1: Pivots

1. A shaft or pin on which something turns.

Sequence	Necessary Parts spec. Data	Answer
1	<ol style="list-style-type: none">1. What is the essential function of this part?2. Where this part is specifically located?3. Is this part of the machine assembly?4. Please provide drawing	Pivot A

Level 1: Plates

Definition of Level 1: Plates

1. A sheet of metal, wood, glass, or plastic used to cover or support another article.

Sequence	Necessary Parts Spec. Data	Answer
1	(1) What is the essential function of this part? (2) Where is this part specifically located? (3) What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type – steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary. 4. Please provide drawing 5. Is this part removed prior to machine function. Can the machine function without this part?	Plate A

Level 1: Printed Circuit Boards

Definition of Level 1: Printed Circuit Boards (PCB)

1. A thin board to which electronic components are fixed by solder and connected by interconnects (printed circuits).
2. Printed circuit boards may be populated or non-populated
3. Printed circuit boards may also be layered allowing denser population
4. Active components include Integrated Circuits, Microassemblies, Diodes, Transistors, and similar elements which can produce, rectify, modulate or amplify an electrical signal.
5. Passive components are those that are printed upon the circuit board or that do not produce, rectify, modulate or amplify an electrical signal, e.g. -- capacitors and resistors.

Seq	Level 2	Level 2 definition	Level 3	Level 3 Definition	Level 4	Level 4 Definition	Necessary Parts Spec. data	Answer
1	Motherboard	Printed circuit board that contains at least 1) an operating program, 2. memory (RAM, ROM, buses or similar articles), 3. and a processing unit (i.e. CPU) This board must also be used primarily for the processing of data	N/A	N/A	N/A	N/A	1. Please list all components that are printed on this Motherboard. 2. Please list all components attached to this Motherboard. 3) Please describe the specific function of this Motherboard. 4. Which type of machines this part used? 5. Does this board contribute to function of electrical control? 6. Is the main function to control and distribute electricity 7. Does the board contain encryption features or does it contain cryptography	PCB A
	Controller Board	Board used for Electric control or the distribution of electricity; including numeric control apparatus. Must contain two or more components for this control/distribution such as switches, relays, fuses. Etc.	N/A	N/A	N/A	N/A	1) Please list all components that are printed on this PCB B 2) Please list all components attached to this PCB. 3)Please describe the machine with which this PCB is used 4) What voltage is this used with? 5) Is this a) numerical control for controlling machine tools? b) Panel for a distribution board? c) Programmable controller?	PCB B

							<p>d) Switch gear assembly and switchboard?</p> <p>e) Other? Please specify</p> <p>6. Does this board contribute to the function of electrical control</p> <p>7. Is the main function to control and distribute electricity</p> <p>8. Does the board contain encryption features or does it contain cyrprtography</p>	
	Other Printed Circuit Boards	Printed Circuit Boards that do not meet the definitions above	Populated PCB	Printed Circuit boards that are mounted with at least one active component, whether or not including passive components.	N/A	N/A	<p>1. Please list all components that are printed on this PCB.</p> <p>2. Please list all components attached to this PCB.</p> <p>3) Please describe the specific part with: which this is used (e.g. monitor, computer, etc.).</p> <p>4. Please describe the machine with which this PCB is used.</p> <p>5. Does the board contain encryption features or does it contain cyrprtography</p>	PCB C
			Non-populated PCB	Printed circuit boards that are not mounted with any active components, whether or not including passive components.	Plastic Impreg nated Inflexibl e PCB	Printed circuit boards composed of impregnate plastics, regardless of the bass material, and are resistant to flex.	<p>1) Please list all components that are printed on this PCB are printed on this PCB.</p> <p>2) Please list all components attached to this PCB.</p> <p>3) What is the material of the base (e.g. glass, paper, plastic, ceramic, etc.)?</p> <p>4) How many layers of conducting material are on this PCB?</p>	PCB D
					Flexible PCB	Printed Circuit boards that are not, or minimally resistant to flex	<p>1) Please list all Components that are printed on this PCB.</p> <p>2) Please list all components attached to this PCB.</p>	PCB E
							<p>1) Please list all components that</p>	PCB F

							<p>are printed on this PCB.</p> <p>(2) Please list all components attached to this PCB.</p> <p>(3) What is the material of the base (e.g. glass, paper, plastic, ceramic, etc.)?</p>	
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Level 1: Printed Material

Definition of Level 1: Printed Material

1. Printed material covers virtually all publications and printed reading matter, illustrated or not.
2. Consists essentially of textual matter of any kind, and printed in any language or characters, including Braille or shorthand.
3. This does not include periodicals, printed reproductions, or pictorial supplement accompanying a bound volume.
4. Dust covers, clasps, book-marks and other minor accessories supplied with the books are regarded as forming part of the book. Any of these items presented separately are excluded from this template.

Sequence	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Level 4	Level 4 Definition	Level 5	Level 5 Definition	Necessary Parts Spec Data	Answer
1	Advertising Material	Advertising Matter (including posters), year books and similar publications devoted essentially to advertising, trade catalogues of all kinds	N/A	N/A	N/A	N/A	N/A		1) Is the advertising for products of the United States or products of a foreign country? If you have mixed (if a single advertising publication has products of both US and foreign), state which makes up the bulk of the advertised products-US or foreign	Printed Material A
	Non-Advertising Material	Printed material that is of non-advertising matter	Single sheet	Printed material containing single sheet	N/A	N/A	N/A	N/A	N/A	Printed Material B
			Multiple Sheet	Printed material containing more than one sheet	Technical, Scientific or Professional material	Manuals of a technical, scientific or professional nature. Owner's manual are included here.	N/A	N/A	N/A	Printed Material C
					Other Printed material	Printed material of a non-technical, scientific or professional nature.	Other printed material	Printed material that is not a hardbound or paperbound book.	1) How many pages comes in the printed material (excluding covers)?	Printed Material D

Level 1: Probes

Definition of Level 1: Probes

1. A flexible slender instrument used for exploring, checking or testing.
2. Does not include sensors. Please see Sensors Criteria Code Template.

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. What is the material(s) of this part?2. What is the essential function of this part? How does it function?3. With which machine is this part used?4. Please provide image/drawing5. Is this removed from the machine prior to function?6. Electrically operated?	Probe A

Level 1: Pulleys

Definition of Level 1: Pulleys

1. Pulleys consist of wheels, sometimes with a grooved rim, which transmit rotary movement from one to another by means of an endless belt or rope revolving in contact between them.
2. This part includes simple pulleys, drums (wide pulleys), conical pulleys, stepped pulleys, etc.

Sequence	Necessary Parts Specific Data	Answer
1	<ol style="list-style-type: none">1. Is this pulley grooved?2. Where is this part specifically used? How does it function?3. What material is this part made of?4. Please provide drawing	Pulley A

Level 1: Pump

Definition of Level 1: Pump

1. A device that moves fluid or gas by pressure or suction.
2. This does not include pumps fitted with a measuring device or hand operated pumps.
3. This does not include pumps that project. Disperse, or spray liquids.
4. This does not include fans, blowers or compressors. (See Fans Criteria Template).

Seq	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Level 4	Level 4 Definition	Level 5	Level 5 definition	Level 6	Level 6 Definition	Parts Spec Data	Answer
1	Liquid	Used solely for pumping liquids	Reciprocating	Positive displacement pump whose linear suction or forgoing action of piston or plunger in driven within a cylinder. The inlet and outlet is regulated by valves.	Non-Hydraulic Fluid	A reciprocating positive displacement pump not used for pumping hydraulic fluid.	N/A	N/A	N/A	N/A	1. Is this a diaphragm pump? 2.Oil well and oil field pump?	Pump A
					Hydraulic Fluid	A reciprocating positive displacement pump used for pumping hydraulic fluid.	N/A	N/A	N/A	N/A	1) What type of pump is this e.g. radial piston type of other	Pump B
			Rotary	Positive displacement pump whose intake and discharge of liquid is effected by the suction and compression produced by cane (lobes) or similar devices, rotated continuously on an axis.	Hydraulic Fluid	Rotary positive displacement pump used for pumping hydraulic fluid	Vane	In the form of cylinder, rollers, or wheels revolving eccentrically with free moving projecting vanes.	N/A	N/A	N/A	Pump C
							Gear	Displaced by the teeth of specially shaped gears	N/A	N/A	N/A	Pump D
							Other	Not meeting the definitions above	N/A	N/A	N/A	Pump E
					Non-hydraulic fluid	Rotary positive displacement pump not used for pumping hydraulic fluid	Roller	Displacement of liquid by rollers	N/A	N/A	N/A	Pump F
			Other Centrifugal	Other centrifugal type pump that does not meet the above definitions	Submersible	Pump specifically designed to be submersible in liquids	N/A	N/A	N/A	N/A	N/A	Pump H
						Other	Not meeting the above definition	The liquid is directed through one staged, single suction	Close-coupled	Linked to the unit by a separate clip	1) Please state the diameter of the discharge outlet in cm.	Pump I
									Frame – mounted	Linked to the unit by mounting frame	1) Please state the diameter of the discharge outlet in cm.	Pump J

							Single Staged Double suction	The liquid is directed through one state of the impellers on the common shaft and utilizes two end of the piston for the thrust or suction.	N/A	N/A	N/A	Pump K
							Multi-staged, single or double suction	The liquid is directed through more than one stage of the impellers on the common shaft and utilizes either one or two ends of the piston for the thrust or suction.	N/A	N/A	N/A	Pump L
							Other	Any centrifugal pump not meeting the above listed definition	N/A	N/A	N/A	Pump M
			Other	Any Liquid pump not meeting the above listed definitions	N/A	N/A	N/A	N/A	N/A	N/A	1) Is this a liquid elevator? 2.Turbine pumps 3.Household water systems, self-contained , and windmill pumps, or other?	Pump N
			Parts	Of Pumps	n/a	n/a	N/A	N/A	N/A	N/A	1.Of fuel-injection pumps for compression ignition	
	Air Pump	Used solely for pumping Air	Vacuum	Designed to function by an air vacuum	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Pump O
			Hand and Foot operated	Designed to function manually by the hand or foot.	N/A	N/A	N/A	N/A	N/A	N/A	1) please state how operated: by hand or foot	Pump P

Level 1: Rails

Definition of Level 1: Rails

1. A bar extending from one post or support to another and serving as a guard or barrier.

Sequence	Necessary Parts Spec. Data	Answer
1	<p>1. What is the essential function of this part?</p> <p>2. Where is this part specifically located?</p> <p>3. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (stainless or non stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>4. Is it manufactured based on KNS specs</p> <p>5. Please provide drawing</p> <p>6. Does it get removed from the machine prior to functioning</p>	Rail A

Level 1: Relays (8536)

Definition of Level 1: Relays

1. Electrical devices whose circuit is automatically controlled by a change in the same or another circuit.
2. Relays are distinguished by the electrical means of control used: electromagnetic relays, permanent magnet relays, electro-static relays, induction relays, electro-static relays, photoelectric relays, electronic relays, etc.
3. Relays are also distinguished by how they operate: maximum current relays, maximum or minimum voltage relays, differential relays, fast acting cut-out relays, time delay relays, etc.
4. This does not include relays that also function as switches. See "Switches - Criteria Code".

SEQ	Level 2	Level 2 def	Level 3	Level 3 Def	Nec Spec Data	Answer
	For Voltage not exceeding 60V	Relay related at 60 volts or less	With contacts rated at less than 10A	Relay with contacts rated less than 10 amps	1.Electromecanical or other?	Relay A
			Other	N/A	1.Are these Contactors?	Relay B
				Other	1.Electromecanical or other?	Relay C
	Other	N/A	N/A	N/A	N/A	Relay D

Level 1: Resistors (8533)

Definition of Level 1: Resistors

1. A device that limits current flow/voltage in electronic circuits.
2. Made of many materials including carbon, silicon carbide, and metal and metal oxide film.
3. Made in the form of bars, coils, rods, and various shapes formed for individual components by a printing process.
4. Can be fitted with a number of terminals allowing the whole or part to be included in the circuit
5. Includes rheostats and potentiometers
6. Excludes heat resistors and light depressant resistors
7. Rheostats are variable resistors with a sliding contact or other means enabling the value of resistance in the [, circuit to be varied at will.
8. Potentiometers consist of a fixed resistor between two contacts and a sliding tapping which can make contact on any point of the resistor.

Seq	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Level 4	Level 4 Definition	Level 5	Level 5 definition	Necessary Parts Spec. Data	Answer
1	Fixed Carbon Resistor	Carbon resistor with a set amount of electrical resistance	Designed for surface mounting by contact	Resistor that is mounted to a circuit board	N/A	N/A	N/A	N/A	1) Number of resistor terminals (networks)?	Resistor A
			Multiple leads	Resistor that has more than 2 leads (resistor networks).	N/A	N/A	N/A	N/A	N/A	Resistor B
				Other	Not mounted and not having more than two leads	N/A	N/A	N/A	1) Carbon composition or Carbon Film?	Resistor C
	Fixed Non-carbon resistor	Non-Carbon Resistor with a set amount of electrical resistance	20W	Power handling capacity of 20 watts or less	Mounted	Resistor that is mounted to a circuit board	Multiple terminals	Having more than two terminals (resistor networks)	1) Type: Dual-in line package or other?	Resistor D
							Two terminals	Having exactly two terminals	1) Type: Flat resistor chips or cylindrical leadless resistors (including metal film, metal oxide, and thick cement film?	Resistor E
					Multiple leads	Resistor that has more than 2 leads(resistor networks)	N/A	N/A	1) Type: Single-in-line, dual-in-line, or other?	Resistor F
					Other	Not mounted and with not more than two leads.	N/A	N/A	1) Type: wire wound or Non-wire wound?	Resistor G
			Other	Power handling capacity over 20 watts	N/A	N/A	N/A	N/A	N/A	Resistor H

	Wire wound variable resistor	Wire wound resistor whose electrical resistance is adjustable. Includes rheostats and potentiometers	Dimmer	Circuit to extinguish Lighting slowly	N/A	N/A	N/A	N/A	What is the power handling capacity in Watts?	Resistor I
			Other	Non-Dimmer resistor	N/A	N/A	N/A	N/A	1) What is the power handling capacity in Watts?	Resistor J
	Other Variable Resistor	Non-wire wound resistor whose electrical resistance is adjustable. Includes rheostats and potentiometers	Metal oxide	Chief material being metal oxide	N/A	N/A	N/A	N/A	N/A	Resistor K
			Other	Chief Material Not being metal oxide	Rheostat and resistor motor starters and controllers	Sliding contacts, interchangeable no. of resistors, etc., to vary resistance	N/A	N/A	N/a	Resistor L
					Other	Not a rheostat or a resistor motor starter and controller	N/A	N/A	1) Material; cermet, metal glaze or other	Resistor M

Level 1: Rings

Definition of Level 1: Rings

1. A rigid circular band used for holding or fastening or hanging or pulling
2. Excludes O-Rings. See O-Ring Criteria Template.
3. Excludes rings that function like either a washer or a clip. See either Washers Criteria Template or Clip Criteria Template.

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. What is the material(s) of this part?2. With which type of machine does this part function?3. What is the essential function of this ring?4. Please provide drawing5. Is this an off the shelf item?	Ring A

Level 1: Rollers

Definition of Level 1: Rollers

1. A revolving cylinder over or on which something is moved; or used to press, shape, spread, or smooth something.

Sequence	Necessary Parts Spec. Data	Answer
	<p>1. What is the essential function of this part?</p> <p>2. Where is this part specifically located?</p> <p>3. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (Stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" chemical name not necessary.</p> <p>4. Is this part used for a bearing? If yes, what type of bearing is this used with?</p> <p>5. Is this part an off the shelf item</p> <p>6. Please provide drawing</p>	Roller A

Level 1: Screws

Definition of Level 1: Screws

1. A screw is an externally threaded fastener capable of being inserted into holes in assembled parts or mating with a preformed internal thread or forming its own thread, and of being tightened or released by torquing the head.
2. Can be made of any material including steel copper, brass, aluminum, etc.
3. This does not include adjuster, bleeder, hook, or ring screws.

Seq	Level 2	Level 2 Definitions	Level 3	Level 3 Definitions	Level 4	Level 4 Definitions	Necessary Parts Spec. data	Answer
1	Steel Screw	Material being Steel	Self-tapping Screw	Self-tapping (parker) screws have a slotted head and a cutting thread and are pointed or tapered at the end. They can therefore cut their own passage into thin sheets of metal, marble, slate, plastics, etc	N/A	N/A	1) What is the diameter of thread in mm? 2) What type of steel (stainless or non-stainless)? 3) What is Tensile strength?	Screw A
			Machine Screw>9.5 mm length >3.2 mm thread diameter	A non-tapered screw, using a standard screw thread. May utilize a round, flat, oval fillister, hex, etc, head. Head may be formed to accept an Allen, Phillips, fluted, Clutch, etc, wrench or driver. The length of the screw must be 9.5 mm in length or greater and the diameter of the thread must be 3.2 mm or greater.	Hex Head	Hexagonal or hexagonal-washer type	1.) What is the length of screw in mm(9.5 mm or greater)? 2) What is the diameter of thread in mm (3.2mm or greater)? 3) Is the underside Chamfered or Not chamfered? 4) What is Tensile strength?	Screw B
					Other type of Head	Other than above	1.) What is the length of screw in mm (9.5 mm or greater)? 2) What is the diameter of thread in mm (3.2mm or greater)? 3) What is Tensile strength?	Screw C
			Other Screw	Not meeting the definitions of above	Socket Screw	A screw with a head that has a recessed opening designed for being tightened with a socket wrench.	1) What is the type of steel (stainless or non-stainless)? 2) What is the diameter of the screw in mm? 3) What is Tensile strength?	Screw D
					Hex Head Screw	A screw with a hex (6 sided) head designed for being tightened with a wrench or other tool	1) What is the type of steel (stainless or non-stainless)? 2) What is the diameter of the screw in mm? 3)	Screw E

					Other Screw	Other Screw A screw that does not meet any of the preceding definitions	1) What is the diameter of the screw in mm? 2)What is Tensile strength?	Screw F
	Other Material Screw	Material being a material other than Steel	N/A	N/A	N/A	N/A	1) What is the type of material (e.g. aluminum, copper, brass, etc.)? 2) What is the diameter of thread in mm? 3)What is Tensile strength?	Screw G

Level 1: Screen

Definition of Level 1: Screen

1. A covering that serves to conceal or shelter something.

Sequence	Necessary Parts Spec Data	Answer
1	(1) What is the essential function of this part? (2) Where is this part specifically used? (3) What is the material(s) of this part? 4) Is this part manufactured specifically based on KNS specs, can this part be removed prior to machine function or is it essential to the machine process?	Screen A

Level 1: Seals

Definition of Level 1: Seals

1. Deformable material compressed between two objects to prevent the passage of matter through an opening or joint.
2. Can be made of any material including rubber, plastic, metal, paper, asbestos, cork, etc.
3. This does not include dust boots/seals which prevent matter from entering.
4. This does not include O-rings.

Seq	Level 2	Level 2 Definition	Level 3	Level 3 definition	Level 4	Level 4 Definition	Necessary parts Spec. Data	Answer
1	Individual Seals	Single Seal or multiple seals of the same type	Rubber Seal	Material being rubber	N/A	N/A	1 What is the type of Rubber: Cellular or Non-cellular? 2) What fluid or gas (e.g. oil, argon, etc.) is being sealed by this component	Seal A
			Metal Seal	Material being metal	Metal sheeted gasket/seal	Gasket/Seal composed of more than one sheet/layer of metal pressed together(note: the metal can be of the same type)	1.What type of metal is this?	Seal B
				Not Metal sheeted Gasket/seal	Gasket/Seal with only one layer/sheet of metal	1) In what assembly is this part used?	1) In what assembly is this part used? Please be specific (e.g. if for pump, please list pump criteria code) 2) In what type of machine is this part used (e.g. dicer, etc.)?	Seal C
			Textile Seal	Material being textile	N/A	N/A	1) If covered, coated or laminated, please list. If coated please list coating or laminating material (e.g. rubber, leather, etc.). 2. what type of material is it?	Seal D
			Mineral Seals.	Material being asbestos, carbon fiber, graphite, mica,	N/A	N/A	1) In what assembly is this part used?	Seal E

				stone or similar materials			<p>Please be specific (e.g. if for pump, please list pump criteria code).</p> <p>2) In what type of machine is this part used (e.g. dicer, etc.)?</p> <p>3) what is the specific material (e.g. asbestos, Carbon fiber, Graphite, Mica, etc.)?</p> <p>4) Does the material contain magnetite, dolomite, or chromite? Yes or No</p>	
			Combined material Gasket/Seal	Two materials not of the same type (e.g. not two plastics, or two rubbers, but like metal and rubber, cork and rubber, etc.) combined	Combined material Gasket/Seal with metal	One of the combined material is metal	<p>1) In what assembly is this part used? Please be specific (e.g. if for pump, please list pump criteria code?)</p> <p>2) In what type of machine is this part used (e.g. dicer, etc.)?</p>	Seal F
					Combined Material Gasket/Seal without metal	Neither of the combined material is metal.	1) of the materials combined what material allows the seal to form	Seal G
			Other Material Seal	Sole Material being another material not listed above (e.g. cork, textile, asbestos, etc.)	N/A	N/A	<p>1) In what assembly is this part used? Please be specific (e.g. if for pump, please list pump criteria code).</p> <p>2) In what type of machine is this part used (e.g. dicer, etc.)?</p>	Seal H
	Seal sets	Multiple seals of the differing materials and/or types	N/A	N/A	N/A	N/A	1. Please list all the material that is used on these seals and the highest valued seal in the kit?	Seal I

Level 1: Sensor

Definition of Level 1: Sensor

1. Sensors detect a mechanical condition (movement or position), chemical state or temperature, and change it into an electric signal that can be used by a computer or control unit to make decisions.
2. This does not include sensors that are discreet switches, having only two possible outputs (on or off). Please see Switches – Criteria Template.
3. This does not include sensors that also incorporate a means of affecting change upon the sensed material, unless the change is only for measuring purposes. Please see Control Modules Criteria Template.
4. This does not include valves, see Valves Criteria Template.

Seq	Level 2	Level 2 Definition	Level 3	Level 3 definition	Necessary Parts Spec. Data	Answer
1	Thermometer	An instrument for measuring temperature (not a valve type)	N/A	N/A	(1) What is the sensed material? Please describe state and material (e.g. Liquid water). (2) What are the temperature ranges that are measured? (3) Does the sensor create a hardcopy of measurements? Yes or No	Sensor A
	Electrical Sensor	Instruments whose operations depends on an electrical phenomenon which varies according to the factor to be ascertained.	N/A	N/A	1) What is the sensed material? Please describe state and material (e.g. Liquid water, any solid object, etc.). 2) What factor is being ascertained (e.g. pressure, temperature, rate of flow, position, aggregate count, viscosity, etc.)? (3) Does the sensor create a hardcopy of measurements? Yes or No (4) What is the general name for this sensor (e.g. hydrometer, flow meter, Float, liquid chromatographs, no general name, etc.)?	Sensor B
	Optical sensors	Instruments incorporating one or more optical elements Note: Optical elements used only for viewing information, or other subsidiary purposes, are not optical sensors.	Optical Coupled Isolator	A small four-terminal electronic circuit instrument that includes an integral package of a light emitter, a light detector, and in some devices, as solid state electronic circuit. The emitting and detecting devices are so positioned that the majority of the emission from the emitter is optically coupled to the light-sensitive area of the detector.	N/A	Sensor E
			Other	Does not meet the definition of an optical coupled isolator	1) What is the sensed material? Please describe state and material (e.g. Liquid water, any solid object, etc.). 2) What factor is being ascertained (e.g.	Sensor C

					<p>pressure, temperature, rate of flow, position, aggregate count, viscosity, etc.)?</p> <p>3) Does the sensor create a hardcopy of measurements? Yes or No</p> <p>4) What is the general name for this sensor (e.g. hydrometer, flow meter, float, liquid chromatographs, no general name, etc.)?</p> <p>5) What optical radiations are measured (e.g. ultraviolet, visible, and infrared)?</p>	
	Other Sensors	Sensors that do not meet the above definitions	N/A	N/A	<p>1) What is the sensed material? Please describe state and material (e.g. liquid water, any solid object, etc.).</p> <p>2) What factor is being ascertained (e.g. pressure, temperature, rate of flow, position, aggregate count, viscosity, etc.)?</p> <p>3) Does the sensor create a hardcopy of measurements? Yes or No</p> <p>4) What is the general name for this sensor (e.g. hydrometer, flow meter, Float, liquid chromatographs, no general name, etc.)?</p> <p>5. Please provide link to view sensor with all its descriptive literature</p> <p>6. How does it sense the material? Be specific</p> <p>7. Please provide drawing</p>	Sensor D

Level 1: Shafts

Definition of Level 1: Shafts

1. A mechanical part used in the transmission of power.
2. This includes both internal parts of a machine (used to transmit power to the various parts of the same machine) and parts used to transmit power from an external power unit to one or more machines.

Sequence	Level 2	Level 2 Definition	Necessary Parts Spec. Data	Answer
1	Rotary Motion	Shafts designed to transmit a rotary motive power. This does not include simple axles which do not transmit power but merely support a wheel or other revolving part.	1. Where is this part specifically used? 2. With which machine does this part function? 3. Are these transmission shafts?	Shaft A
	Non-rotary motion	Shafts designed to transmit a non-rotary motive power	1. Where is this part specifically used? 2. With which machine does this part function? 3. Is this part of the machine assembly and essential to the machine function?	Shaft B

Level 1: Shock Absorbers

Definition of Level 1: Shock Absorbers

1. A mechanical damper; absorbs energy of sudden impulses.

Sequence	Necessary Parts Spec. Data	Answer
1	<p>1. What is the essential function of this part?</p> <p>2. Where is this part specifically located?</p> <p>3. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (stainless or nonstainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>4. Please provide drawing</p> <p>5. Is this part of the machine assembly and is essential to the machine function?</p>	Shock Absorber A

Level 1: Software

Definition of Level 1: Software

1. Information or programs written in digital and/or analog code, and written on a storage medium.
2. This does not include blank storage mediums.
3. Software imported with devices must have a criteria code for both the device and the software. (I.e. Software Stored on an optical disc imported with a computer).
4. This does not include instructions that store solely image.

Seq	Level 2	Level 2 Definition	Level 3	Level 3 definition	Level 4	Level 4 Definition	Necessary Parts Spec Data	Answer
1	Optically Stored Software	Information or programs stored on a medium to be read by a laser	Sound and/or Image Inclusive Optical Software	Optically stored software that includes sound or image representation	N/A	N/A	1) What is being represented by this software (e.g. instructions, data, sound, images, etc.)? 2) Is this software interactive with the user through a computer or similar machine? 3. Does the software contain encryption features? Is it designed to use cryptography or does it contain cryptography? Is this mass market encryption software and specified encryption object code that is publicly available? 3. Does the software contain encryption features? Is it designed to use cryptography or does it contain cryptography? Is this mass market encryption software and specified encryption object code that is publicly available? A common example would be open source encryption source code available for free online	Software A
			Other Optically Store software	Optically stored software that does not	N/A	N/A	1. Is this prepackaged computer software,	Software B

				include sound or image representations			of a kind sold at a retail stores 2. Does the software contain encryption features? Is it designed to use cryptography or does it contain cryptography? Is this mass market encryption software and specified encryption object code that is publicly available? A common example would be open source encryption source code available for free online	
	Magnetically Stored Software	Information or programs stored on a medium covered with a magnetic coating	Sound and/or Image Inclusive Magnetic Software	Magnetically stored software that includes sound or image representations	Magnetic Tapes	A long thin plastic strip coated with covered with a magnetic coating	1.What is the width (in mm) of this tape? 2.Does the software contain encryption features? Is it designed to use cryptography or does it contain cryptography? Is this mass market encryption software and specified encryption object code that is publicly available? 3. Does the software contain encryption features? Is it designed to use cryptography or does it contain cryptography? Is this mass market encryption software and specified encryption object code that is publicly available? A common example would be open source encryption source code available for free online	Software C
					Magnetic Discs	A disc that is covered with a magnetic coating	1.Is this prepackaged computer software, of a kind sold at retail stores? 2. Does the software contain encryption features? Is it designed to use cryptography or does it contain	Software D

							<p>cryptography? Is this mass market encryption software and specified encryption object code that is publicly available? A common example would be open source encryption source code available for free online</p>	
			Other Magnetically Stored Software	Magnetically stored software that does not include sound or image representations	N/A	N/A	<p>1.Does the software contain encryption features? Is it designed to use cryptography or does it contain cryptography? Is this mass market encryption software and specified encryption object code that is publicly available?</p> <p>2.Does the software contain encryption features? Is it designed to use cryptography or does it contain cryptography? Is this mass market encryption software and specified encryption object code that is publicly available?</p> <p>A common example would be open source encryption source code available for free online</p>	Software E
	Semiconductor Media	<p>Semiconductor memory is a digital electronic semiconductor device used for digital data storage, such as computer memory. ... This contrasts with data storage media such as hard disks and CDs which read and write data consecutively and therefore the data can only be accessed in the same sequence it was written</p>	Solid-state non-volatile storage devices	N/A	N/A	N/A	<p>1.Smart cards, Yes or no?</p> <p>2.Recorded or unrecorded?</p> <p>3.Does the software contain encryption features? Is it designed to use cryptography or does it contain cryptography? Is this mass market encryption software and specified encryption object code that is publicly available ?</p>	Software F
	Other	N/A	N/A	N/A	N/A	N/A	<p>1.Phonograph records or other?</p>	Software G

Level 1: Spacers

Definition of Level 1: Spacers

1. A spacer is an article that sits between two items to provide some degree of separation.
2. If used with fasteners, see Washers Template.

Sequence	Necessary Parts Spec. Data	
1	<ol style="list-style-type: none">1) What is the chief material of this part? If rubber, please state chemical name.2) What is the diameter of the hole in mm?3) What is the essential function of this part?4) Where is this part specifically used?5. Is this part manufactured based on KNS specs?6. Is this part essential to the function of the machine or can be removed prior to machine process?7. please provide drawing	Spacer A

Level 1: Spindles

Definition of Level 1: Spindles

1. A spindle is any of various shafts that rotate or serve as axes for larger rotating parts.

Sequence	Necessary Parts Spec. Data	Answer
1	1. With what type of machine does this part function? 2. What material is this part made of? 3. Please provide drawing? 4. Is this part motorized? Please provide specifics on how it functions?	Spindle A

Level 1: Static Converters

Definition of Level 1: Static Converters

1. Apparatus used to convert electrical energy in order to adapt it for further use. They incorporate converting elements of different types. They may also incorporate various auxiliary devices (e.g., transformers, induction coils, resistors, command regulators, etc.). Their operation is based on the principle that the converting elements act alternately as conductors and non-conductors.
2. This includes the following: Rectifiers, Inverters, Alternating current converters and cycle converters, direct current converters, semiconductor converters, gas discharge converters, converters with a mechanical converting element and electrolytic converters.

Sequence	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Necessary Parts Spec. Data	Answer
1	Speed drive controller	Variable frequency drives for controlling electricity and used to accurately power an electrical motor at variable speeds while maintaining constant torque	N/A	N/A	N/A	Static Converter A
	Power Supplies	A circuit that converts alternation line current or unregulated direct current into regulated direct current for computers	Physical Incorporation	Suitable for physical incorporation into the computer	1) What is the power output in the Watts?	Static Converter B
			Other	Not meeting the definition above	1) What is the power output in the Watts?	Static Converter C
	Telecommunication Apparatus	A static converter for system used in transmitting electronic messages	N/A	N/A	N/A	Static Converter D
	Rectifiers/ Rectifying apparatus	A static converter that transforms alternation current into direct current through rectification	Power Supplies	A circuit that converts alternating line current or unregulated direct current into regulated direct current	1) What is the power output in Watts?	Static Converter E
			Other	Not meeting the definitions above	1) What is the essential function of this part?	Static Converter F
	Inverters	A static converter that converts direct current into alternation current	N/A	N/A	N/A	Static Converter G
	Other	A static converter that does not meet any of the above definitions	N/A	N/A	1) What is the essential function of this part?	Static Converter H

Level 1: Springs

Definition of Level 1: Springs

1. Springs are made from materials with an elastic quality, in such a way that they have the property of returning to their original form after considerable displacement.
2. Can be made of any material, though usually sheet metal, wire or rod.
3. This includes individual leaves for leaf springs.
4. This does not include shock absorbers, torsion bars, spring washers or watch/clock springs.

Sequence	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Level 4	Level 4 definition	Necessary parts Spec Data	Answer
1	Steel Spring	Primary material being steel	Leaf	Spring composed of single or laminated layers of steel leaves	N/A	N/A	1) What is the thickness of the individual leaves (in mm)?	Spring A
			Helical	Spring composed of wound wire or rod of round or rectangular section, e.g., compression, tension and torsion springs	N/A	N/A	1) what is the cross-sectional dimensions of this spring (in mm)	Spring B
			Other	Non-leaf, non-helical spring composed of steel	Made of wire	Spring made of steel wire	N/A	Spring C
					Not made of wire	Spring not made of steel wire	1.What material is this made of?	Spring D
	Other Material	Primary material not being steel	N/A	N/A	N/A	N/A	1) What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular) If metal, please state type – copper, aluminum, etc. If some type of plastic, please state “plastic”- chemical name not necessary.	

Level 1: Stays

Definition of Level 1: Stays

1. An article that is used to stiffen, support, or reinforce another object.
2. This does not include stays which are pneumatic cylinders.

Sequence	Necessary Parts Spec Data	Answer
1	<p>1. What is the essential function of this part?</p> <p>2. Where is this part specifically located?</p> <p>3. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>4. Is this part manufactured based on the KNS specs?</p> <p>5. Can the machine function without this part?</p> <p>6. Please provide drawing</p>	Stay A

Level I: Stops

Definition of Level 1: Stops

1. A restraint that checks the motion of something

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. What is the essential function of this part?2. Where is this part specifically located?3. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type cellular or non-cellular). If metal, please state type -- steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.4. Is this part manufactured based on the KNs specs.5. can this part be removed prior to machine process?	Stop A

Level 1: Straps

Definition of Level 1: Straps

1. An elongated piece of material for binding things together or something in place.
2. This does not include transmission belts, used to transmit rotary motion. Please see Belts · Criteria Template1

Sequence	Necessary Parts Spec Data	Answer
1	<p>1) What is the material of this part? If multiple materials, please state chief material. If metal, please state type -steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not Necessary</p> <p>2.If material is of textile, please provide fiber content?</p> <p>3. if material is coated textile, please provide information on the coating content?</p> <p>4. how and where is this used?</p> <p>5. please provide drawing</p>	Strap A

Level 1: Substrates

Definition of Level 1: Substrates

1. Advanced industrial materials that, owing to their insulating qualities, are useful in the production of electronic components.
2. Includes only those substrates in their primary form (e.g. ingots, blocks, etc.)
3. Does not include substrates with components attached to them or printed onto them; see Integrated Circuits or Printed Circuit Boards.

Seq 1	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Level 4	Level 4 Definitions	Necessary Parts. Spec Data	Answer
1	Ceramic Substrates	Substrates made of various ceramic materials	Siliceous Ceramic Substrates	Formed ceramics made of siliceous fossil meals (e.g. kieselguhr, tripolite or diatomite) similar solaceous earths.	N/A	N/A	N/A	Substrate A
			Non-siliceous Ceramic Substrates	Formed ceramics that do not meet the above definition	N/A	N/A	1) Does this ceramic have a white body when fired? Yes or No? 2) What percentage (to the nearest tenth of a percent) of its weight will it absorb of water? 3) Is this ceramic translucent when several millimeters of thickness? Yes or No 4) How hard (in Mohs scale) is this ceramic?	Substrate B
	Other Substrates	Substrates made of materials other than the other ones defined above	N/A	N/A	N/A	N/A	1) What is the material of this part? If multiple materials, please state chief material. 1) If rubber, what is its chemical name and what type of rubber is this (e.g. cellular or non-cellular)? If I metal, please state type - steel (stainless or non-stainless , copper, aluminum, etc. If some type of plastic, please state "plastic" - chemical name Not necessary. 2) what components are Included in the assembly? (3) Does this part contain any printing?	Substrate C

Level 1: Supports

Definition of Level 1: Supports

1. Any device that is used to bear the weight of another object, or serves to stabilize, strengthen, or reinforce.

Sequence	Necessary Parts Spec Data	Answer
1	<p>1. What is the essential function of this part?</p> <p>2. Where is this part specifically located?</p> <p>3. What is the material of this part? If multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.</p> <p>4. Please provide drawing</p> <p>5. Is this essential part of the machine assembly or can this be removed prior to the machine process.</p>	Support A

Level 1: Switch

Definition of Level 1: Switch

1. A mechanical, electrical or electronic device for making, breaking or changing the connections in a circuit.
2. This does not include switches that function as sensors (See SENSORS).
3. Rocker switches are considered an "Other" type of switch.
4. A Gang switch is Single switch with multiple poles and throws

Sequence	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Necessary Parts Spec. Data	Answer
1	Single	A Single Switch	Rotary	Switch with a rotary selector	1) Rating. What are the amps of the switch?	Switch A
			Push-button	Switch with a push-button selector	1) Type: Momentary contact, Gang or other? Rating: What are the amps of the switch?	Switch B
			Snap-action, Other than limit	Switch with a snap-action selector (e.g. toggle type switches)	1) Does this part contain a wire? If yes, what type of voltage of the wire?	Switch C
			Knife	Switch with a knife selector	1) Does this part contain a wire? If yes, what is the voltage of the wire?	Switch D
			Slide	Switch with a slide selector	1) Does this part contain a wire? If yes, what is the voltage of the wire?	Switch E
			Limit	Switch operated by the motion of a machine part or presence of an object. They are used for controlling machinery as part of a control system, as a safety interlocks, or to count objects passing a point	N/A	Switch I
			Other	Switch that does not meet the above listed definition's (e.g. rocker switch)	1) Does this part contain a wire? If yes, what is the voltage of the wire?	Switch F
	Other	Electronic AC switches consisting of optically coupled input and output circuits (insulated thyristor AC switches); electronic switches, including temperature protected	N/A	N/A	N/A	Switch H

		switches, consisting of a transistor and a logic chip (chip-on-chip technology); electromechanical snap-action switches for a current not exceeding 11 amps ³				
	Switchboard	More than one switch incorporated onto a board or panel	N/A	N/A	1) Does this part contain a wire? If yes, what is the voltage of the wire?	Switch G

Level 1: Tables

Definition of Level 1: Tables

1. A piece of furniture that may or may not incorporate other articles.

Sequence	Necessary parts Spec. Data	Answer
	<ol style="list-style-type: none">1. With which type of machine does this table function?2. Does this table include electrical components?3. If containing electrical components, please state which type and how they are being used.4. What is the essential function of this part?5. What is the material(s) of this part?6. Please provide drawing7. Is this part essential to the process of the machine? Can this table be removed prior to the function of the machine?	Table A

Level 1: Tank

Definition of Level 1: Tank

1. A container for holding gases or liquids.

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. With what type of machine does this part function?2. What is the essential function of this part?3. Please provide drawing4. Is this part essential to the process of the machine? Can this table be removed prior to the function of the machine?5. What material is this part made of?	Tank A

Level 1: Tensioners

Definition of Level 1: Tensioners

1. Place stress on an object by pulling or stretching.
2. Excludes pulleys, see Pulleys Template.
3. Device that applies a force to create or maintain tension

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. What is the essential function of this part?2. With which machine is this part used?3. How does this specifically operate, (e.g. -- belt, chain, etc.)?4. What material is this made of?5. Please provide drawing?6. Is this an off the shelf item or manufactured based on KNS specs?	Tensioner A

Level 1: Terminal

Definition of Level 1: Terminal

1. A point on an electrical device (such as a battery) at which electric current enters or leaves
2. A terminal is the point at which a conductor from a component, device or network comes to an end. Terminal may also refer to an electrical connector at this endpoint, acting as the reusable interface to a conductor and creating a point where external circuits can be connected.

Sequence	Necessary Parts Spec. Data	Answer
1	1.What is the voltage? 2. Where is this used? 3.Please provide drawing?	Terminal A

Level 1: Tools

Definition of Level 1: Tools

1. Device used to facilitate manual labor powered by human effort.

Seq	Level 2	Level 2 definition	Level 3	Level 3 Definition	Level 4	Level 4 Definition	Level 5	Level 5 definition	Level 6	Level 6 definition	Necessary Parts Spec. Data	Answer
1	Hand Tools	Individual tools powered by human effort, excluding jacks	Metal Hand tools	Tools that are predominately made of base metal, metal carbide or cermet and other abrasive materials on a support of base metal, provided that the articles have cutting teeth, flutes, grooves or the like, of base metal, which retain their identity and function after the application of the abrasive.	Pliers	A gripping tool with two hinged arms and (usually) serrated jaws	Slip Joint Pliers	Pliers with joint adjustable to two positions in order to increase the opening of the jaws	N/A	N/A	N/A	Tool A
							Other Pliers	Pliers that do not meet the above definition	N/A	N/A	N/A	Tool B
					Wrench	A hand tool that is used to hold or twist a nut or bolt	Hand-operated spanner or wrench	A hand tool that is used to hold or twist a nut or bolt operated with the hand	Non-adjustable	A wrench that cannot be changed to different settings	1) What type of wrench is this (box, open, box/open combination)?	Tool C
									Adjustable	A wrench that can be changed to different settings	N/A	Tool D
							Socket wrench	A wrench with or without, a handle onto which sockets of different	N/A	N/A	N/A	Tool E

								sizes can be fitted				
					Hammer	A hand tool with a heavy rigid head and a handle; used to deliver an impulsive force by striking	Head not over 1.5 kg	A hammer with a head weighting less than 1.5 kg	N/A	N/A	N/A	Tool F
							Head over 1.5 kg	A hammer with a head weighting over 1.5kg	N/A	N/A	N/A	Tool G
						Screwdriver	A hand tool for driving screws; has a tip that fits into the head of screw	N/A	N/A	N/A	N/A	Tool H
						Other metal hand tools	Tools that do not meet the above definitions	Other	Hand tools that do not meet the above definitions	N/A	1) What is the material of this part? If multiple material, please state chief material. If some type of plastic, please state "plastic" chemical name not necessary. 2) What is the essential function of this part?	Tool I
				Other Hand Tools	Hand tools predominately made from non-metal materials	N/A	N/A	N/A	N/A	N/A	1) What is the materials used of this part? If multiple please specify chief material. If some type of plastic, please state "plastic" chemical name not necessary. 2) What is the essential function of this part?	Tool K

	Tool Sets	Sets of dissimilar tools combined for a common purpose, e.g. for the maintenance of a particular machine.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1) Please list all of the component of this set, including storage containers and their respective materials 2) What is the materials of the containers? 3.Which tool is the essential part of the set, please provide template for the essential tool of the set.	Tool N
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Level 1: Torque driver

Definition of Level 1: Torque driver

1. An instrument designed to act as a holder for both the bits and sockets.

Sequence	Necessary Parts. Spec. Data	Answer
1	1. With which type of machine does this part function? 2. Please provide drawing 3. Is this electrical? 4. Is this operated by hand? 5. Is this adjustable? 6. What is the specific name for this part?	Torque Driver A

Level 1: Transducers

Definition of Level 1: Transducers

1. Device that converts one form of energy into another.
2. Usually a transducer converts a signal in one form of energy to a signal in another
3. Does not include transducers that act as sensors or control units, see appropriate template.

SEQUENCE	NECESSARY PARTS SPECIFIC DATA	ANSWER
1	<ol style="list-style-type: none">1. What is the essential function of this part? Does this operate as a piezoelectric crystal?2. Is this part used to check or measure a variable?3. If yes to 2, what variable is this checking?4. How does this part specifically function?5. With which machine is this part used?6. Please provide drawing	Transducer A

Level 1: Transformers

Definition of Level 1: Transformers

1. A device employing the principle of mutual induction to convert variations of current in a primary circuit into variations of voltage and current in a secondary circuit.
2. Transfers electrical energy from one or more primary circuits to one or more secondary circuits by means of electromagnetic induction.
3. It consists of at least one primary winding and one secondary winding of insulated wire on a common core.
4. Excludes static converters, inverters, and inductors. (See appropriate Template for Criteria Code).

Sequence	Level 2	Level 2 definition	Necessary parts Spec. Data	Answer
1	Liquid Dielectric	A transformer that has a material such as glass or porcelain with negligible electrical or thermal conductivity	1) What is the power handling capacity in terms of kVa?	Transformer A
	Other	A transformer that does not meet the above definitions.	1) What is the power handling capacity in terms of kVa? 2) Is it rated?	Transformer B

Level 1: Transistors

Definition of Level 1: Transistors

1. A semi-conductor device capable of amplification oscillation frequency conversion or switching of electrical currents.
2. Transistors include both bipolar and metal oxide semi-conductors.
3. Can be composed of ores, chemical elements or combinations of chemical elements.
4. This does not include devices whose operation depends primarily on temperature or pressure.
5. This does not include diodes

Sequence	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Necessary Parts Spec. Data	Answer
1	Non-Photosensitive	Active semi-conductor capable of amplification, oscillation, and switching	Mounted	Mounted on a circuit board	1) What is the operating frequency in MHz? 2) What is the dissipation rate in Watts?	Transistor A
			Unmounted	Not mounted on a circuit board	1) What is the operating frequency in MHz? 2) What is the dissipation rate in Watts?	Transistor B
	Photosensitive	Transistor in which current is gained and amplified by illumination	N/A	N/A	1) Is this part mounted or unmounted	Transistor C

Level 1: Trays

Definition of Level 1: Trays

1. An open receptacle with a flat bottom and a low rim for holding, carrying, or exhibiting articles.

Sequence	Necessary Parts Spec. Data	Answer
1	<ol style="list-style-type: none">1. What is the essential function of this part?2. Where is this part specifically located?3. What is the material of this part? If Multiple materials, please state chief material. If rubber, please state type (cellular or non-cellular). If metal, please state type -- steel (Stainless or non-stainless), copper, aluminum, etc. If some type of plastic, please state "plastic" -- chemical name not necessary.4. Is this part essential to the machine assembly? Can this part be removed prior to machine function?5. Please provide drawing	Tray A

Level 1: Tubes & Pipes

Definition of Level 1: Tubes & Pipes

1. A long hollow tube (usually cylindrical) used to hold and conduct liquids or gases.
2. Can be made of any material including, but not limited to, rubber, metal and plastic.

Seq	Level 2	Level 2 definition	Level 3	Level 3 Definition	Level 4	Level 4 Definition	Level 5	Level 5 Definition	Level 6	Level 6 Definition	Necessary parts Spec. Data	Answer
1	Cut-to-fit Tubes	Tubes that are "out-to-fit", i.e. ready to be used directly in a machine	Vulcanized Rubber tube	Essential Material being Vulcanized Rubber	Reinforced	Vulcanized rubber tube that is not combined with or reinforced with other materials.	Tube without fittings	Tube without any type of connection fittings attached	N/A	N/A	1) What type of reinforcement material (e.g. metal, textile, or other does this tube have?	Tube A
							Tube with fittings	Tube with connection fittings attached	N/A	N/A	1) What type of reinforcement material (e.g. metal, textile, or other does this tube have	Tube B
					Not Reinforced	Vulcanized rubber Tube that is combined with or reinforced with other material	Tube Without fittings	Tube without any type of connection fittings attached	N/A	N/A	N/A	Tube C
							Tube with fittings	Tube without any type of connection fittings attached	N/A	N/A	N/A	Tube D
			Other Material tube	Essential material being a material other than vulcanized rubber	N/A	N/A	N/A	N/A	N/A	N/A	1) In what type of machine is this part used (e.g. wire bonder, dicing machine, etc)? 2) What is the material of this part? If multiple materials, please state chief material. If metal, please state type- steel (stainless or non-stainless) copper, aluminum, etc. If some type of plastic, please state "plastic"	Tube E

											chemical name not necessary. 3) In what assembly is this part used? Please be specific (e.g. for pressurized water to be carried from pump to nozzle) 4. For metal what is the wall thickness and outside diameter of the tube? 5. For copper: of refined copper; or a copper of base alloy, seamless or other? 6. For nickel, is it alloyed or not alloyed. 7. Aluminium alloyed or not? Seamless or other?	
	Bulk tubes	Tubes that are not "out to-fit", i.e., are not ready to be used directly in a machine	Plastic tube	Essential material being Plastic	Rigid Plastic tube	Plastic tube that is incapable of, or highly resistant to, bending.	N/A	N/A	N/A	N/A	1) What type of polymer (Ethylene, propylene, Vinyl, chloride or other) is this? 2) What is the length (in mm) of this bulk tubing?	Tube F
					Flexible Plastic Tube	Plastic Tube that is capable of, or not highly resistant to, bending	27.6 Mpa	Tube having a minimum burst pressure of 27.6 mega pascals	N/A	N/A	N/A	Tube G
							Reinforced	Plastic tube that is reinforced with or otherwise combined with other materials	N/A	N/A	1) What type of reinforcement material (e.g. metal, textile, or other) does this tube have? 2) What type of polymer (e.g. polyvinyl chloride, etc.) is this?	Tube H
							Not reinforced	Flexible plastic tube that is not reinforced with or otherwise combined	With fittings	Plastic tube with connection fittings attached	N/A	Tube I

								with other materials				
									Without fittings	Plastic tube with no connection fittings attached.	1) What is the type of polymer: Polyvinyl chloride, polyethylene or other	Tube J
			Other Tube	Essential Material being not material listed above	N/A	N/A	N/A	N/A	N/A	N/A	1) What is the material of this part? If multiple materials, please state chief material. If metal, please state type-steel (stainless or non-stainless) copper, aluminum, etc.	Tube K

Level 1: Valve

Definition of Level 1: Valve

- Any mechanical device used to regulate (e.g., start, stop, or direct) the flow of fluids (liquid, viscous or gaseous) or of solids (e.g., sand).
- Valves include such devices designed to regulate the pressure or the flow velocity of a liquid or a gas.
- Valves regulate the flow by opening or closing an aperture (e.g., gate, disc, ball, plug, needle or diaphragm). They may be operated by hand (by means of a key, wheel, press button, etc.), or by a motor, solenoid, clock movement, etc., or by an automatic device such as a spring, counterweight, float lever, thermostatic element or pressure capsule.
- This does not include rubber valves.

5. kPa-Kilopascal

Seq	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Level 4	Level 4 Definition	Level 5	Level 5 Definition	Necessary parts Spec. Data	Answer
1	Pressure Reducing	Valve used to reduce pressure and maintain that reduced pressure at a fairly constant level by means of a plug or stopper which is generally controlled by a pressure device (diaphragm, bellows, capsule, etc.) damped by an adjustable tension spring	Hydraulic	A valve that is operated by hydraulic fluid	N/A	N/A	N/A	N/A	N/A	Valve A
			Pneumatic	A valve is operated by pneumatic pressure	N/A	N/A	N/A	N/A	1) Type (e.g. filter regulator, filter regulator lubricator or other).	Valve B
			Other	A valve that does not meet the above listed definitions	N/A	N/A	N/A	N/A	N/A	Valve C
	Transmission Valves	Valves used in oleo hydraulic or pneumatic transmissions	Hydraulic	A valve that is operated by hydraulic fluid	N/A	N/A	N/A	N/A	1) Is this a directional control type valve? 2) How is it controlled, i.e.-manual, solenoid, other, etc.	Valve D
			Other	A valve that does not meet the above definition	N/A	N/A	N/A	N/A	1) Is this a directional control type valve? 2) How is it controlled, i.e.-manual, solenoid, other, etc)	Valve E
	Check	Valve designated to block the flow of fluid	Copper	Essential material being copper	N/A	N/A	N/A	N/A	1) What is the pressure rating in kPa?	Valve F

			Other	Essential material being a material other than copper	N/A	N/A	N/A	N/A	1) What is the material of this part; iron, steel or other?	Valve G
	Safety relief	Valve used to reduce pressure for safety purposes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Valve H
	Other Appliances	Valve that does not meet the above listed definitions	Hand operated	Valve that is hand-operated, which included valves operated by a key, wheel, press button, know, etc.	Copper	Essential material being copper	N/A	N/A	1) What is the pressure rating in kPa? 2) What is the type of closing aperture in the valve: Gate, Globe, Plug, Ball, Butterfly, or other?	Valve I
					Iron or steel	Essential material being iron or steel	N/A	N/A	1) What is the material of this part; iron or steel? 2) What is the type of closing aperture in the valve Gate, Globe, Plug, Ball, Butterfly, or other?	Valve J
					Other	Essential material being a material other than copper, iron, or steel	N/A	N/A	1) What is the material of this part?	Valve K
			Non-hand operated		Solenoid	Valve operated by a solenoid, i.e., electromagnet device with movable cores used to change electrical current flow into mechanical movement.	N/A	N/A	N/A	Valve L
					Ballcock	Valve that controls flow by means of a floating ball	N/A	N/A	N/A	Valve M
					Regulator	Self-operating valve for controlling variables such as temperature, pressure, flow or level	N/A	N/A	N/A	Valve N
					Other	Valve that does not meet the	Electrical or Electro-hydraulic	Valve operated by an electrical	1) Type (e.g. is it a control valve designed for	Valve O

						above listed definitions		or electro-hydraulic actuator. Actuator must be included with valve	proportional operation by a signal from a control device? Y or N	
							Hydraulic	Valve operated by a hydraulic actuator. Actuator must be included with valve.	N/A	Valve P
							Pneumatic	Valve operated by a pneumatic actuator. Actuator must be included with valve	1) Type (e.g. is it control valve designed for proportional operation by a signal from a control device? Y or N.	Valve Q
							Thermostatic	Valve operated by a thermostatic actuator. Actuator must be included with valve.	N/A	Valve R
							Other	Valve not meeting the above listed definitions	N/A	Valve S

Level 1: Washers

Definition of Level 1: Washers.

1. Washers are usually small, thin discs with a hole in the center. They are placed between the nut and one of the parts to protect the part. They may be plain, cut, split, curved, cone shaped, etc.
2. Can be made of any material including steel, aluminum, plastic, etc.
3. This does not include bearing (thrust) washers.
4. This does not include any washer that acts like a spacer. The washer must be used in a fastening function (between nut and screw/bolt).
5. This does not include any washer that performs a sealing function.

Seq	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Necessary Parts Spec. Data	Answer
1	Steel Washer	Essential material being steel (can be surface coated with other materials)	Spring/Lock washer	Spring or lock washers	1) Is this a helical spring lock washer?	Washer A
			Other Steel Washer	Any Steel Washer that is not a spring or lock washer	N/A	Washer B
	Aluminum Washer	Essential material being aluminum (can be surface coated with other Materials)	N/A	N/A	1) What is the hole diameter in mm?	Washer C
	Plastic Washer	Essential material being Plastic (can be surface coated with other materials).	N/A	N/A	1.Please provide drawing; 2.What is its function? 3. Where is it used?	Washer D
	Other material Washer	Essential Material being material other than above (can be surface coated with other materials	N/A	N/A	What is the Material(s) of this part (e.g. copper, brass, etc.)?	Washer E

Level 1: Wedge/tab

Definition of Level 1: Wedge/tab

1. An instrument designed for pressing and/or stamping an indentation to allow for wire bonding.
2. These are consumables.

Sequence	Necessary Parts Spec. Data	Answer
1	1. What is the material of this part? If cermet, is it sintered metal Carbides 2. Please provide drawing 3. What is its function?	Wedge/Tab A

Level 1: Wires

Definition of Level 1: Wires

1. An insulated conductor for electrical use.
2. If wires combined with switches, lights and sockets, please list information per criteria template for the article that it is attached to.
3. This does not include wire for non-electrical use. See CABLES - NON-ELECTRICAL template.
4. This includes other articles that are combined with and include external wires.

Seq	Level 2	Level 2 Definition	Level 3	Level 3 Definition	Necessary Parts Spec. Data	Answer
1	Winding Wire	Insulated winding wire	Copper wire	Winding wire of only copper conductors	1) Is wire combined with another major component (i.e. switch, relay sensor, etc.)? If so, please state the criteria code of this other component. 2) What is the diameter (in mm) of this wire? 3) What is the gauge (in AWG) of this wire?	Wire A
			Other Wire	Winding Wire of other conduction materials	1) Is wire combined with another major component (i.e. switch, relay, sensor, etc.)? If so, please state the criteria code of this other component. 2) What is the material of this wire?	Wire B
	Coaxial cable	An insulated wire consisting of a conduction outer metal tube enclosing and insulated from a central conducting core	N/A	N/A	1) Is Wire combined with another major component (i.e. switch, relay, sensor, etc.)? If so, please state the criteria code of this other component	Wire C

	Other Wires	Other insulated conductors	Connector	Wire fitted with connectors	<p>1) Is Wire is combined with another major component (i.e. switch, relay, sensor, etc.)? If so, please state the criteria code of this other component.</p> <p>2) What is the maximum voltage rating of this part?</p>	Wire D
					<p>1) Is wire is combined with another major component (i.e. switch, relay, sensor, etc.)? If so, please state the criteria code of this other component.</p> <p>2) What is the maximum voltage rating of this part?</p> <p>3) What is the material(s) of conductor (e.g. copper)? If multiple, please state which predominates by weight.</p>	Wire E

Level 1: Work Holder

Definition of Level 1: Work Holder

1. Work holders are used to hold a part in place while it is being worked on.

Sequence	Necessary parts Specific Data	Customs Description
1	<ul style="list-style-type: none">1. Is this work holder specific to any machine?2. With which type of machine is this part used?3. What is included in the assembly?4. Is this an electromagnet or permanent magnet chuck?5. Does it stay within the machine during process?6. Please provide drawing?7. How does it function?8. Material it is made of?	Work Holder A