

Scrap Specifications Circular 1998

Guidelines for Nonferrous Scrap: NF-98



conditions shall govern. conditions of a specific contract provide otherwise, in which case the specific contractual provisions shall govern.

ISRI Code Word	Item	ISRI Code Word	Item
Apple—Nonferrous Terms			
	a. Delivery of more or less of the specified quantity up to 3 percent is permissible.		between buyer and seller, depending on the quantities of commodities and their values.
	b. A ton shall be understood to be 2000 pounds, unless otherwise specified.		f. If it is mutually determined that goods delivered do not conform to the description specified in the contract, then the shipment is subject to rejection without refund of grade.
	c. If any portion of the goods covered by a contract are unshipped or undelivered within the time specified in a contract, then that portion is subject to cancellation by the buyer, and/or the buyer has the right to hold the seller responsible for substantiated damages.		Disposition of rejected material shall be subjected to mutual agreement between buyer and seller. Seller is responsible for freight costs.
	If, because of embargo and/or other conditions of force majeure, a delivery or shipment cannot be made by the time specified, the contract shall remain valid and shall be completed promptly upon lifting of the embargo, and/or conditions of force majeure and the terms of said contract shall not be changed.		Buyer is expected, however, to exert every effort to limit rejections only to that portion of the shipment which is unsortable and to return the rejected portion promptly upon request, if government regulations permit.
	d. If for any portion of a contract the buyer fails in a timely manner to open a Letter of Credit, and/or fails to provide proper conveyance and/or shipping instructions as specified in the contract, then that portion is subject to cancellation by the seller and/or the seller has the right to hold the buyer responsible for substantiated damages.	Barley—No. 1 COPPER WIRE	Shall consist of No. 1 bare, uncoated, unalloyed copper wire, not smaller than No. 16 B & S wire gauge. Green copper wire and hydraulically compacted material to be subject to agreement between buyer and seller.
	If, because of embargo and/or other conditions of force majeure, a delivery or shipment cannot be made by the time specified, the contract shall remain valid and shall be completed promptly upon lifting of the embargo, and/or conditions of force majeure and the terms of said contract shall not be changed.	Berry—No. 1 COPPER WIRE	Shall consist of clean, untinned, uncoated, unalloyed copper wire and cable, not smaller than No. 16 B & S wire gauge, free of burnt wire which is brittle. Hydraulically briquetted copper subject to agreement.
	e. If a significant weight or quality difference is apparent, the seller should be notified promptly and, if requested, another weight or quality determination should be taken. Seller and/or buyer should be given the opportunity to appoint an independent surveyor or a representative to verify weights and/or quality.		
	For purposes of this section, the meaning of the word "significant" shall be determined by agreement		

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Birch—No. 2 COPPER WIRE

Shall consist of miscellaneous, unalloyed copper wire having a nominal 96% copper content (minimum 94%) as determined by electrolytic assay. Should be free of the following: Excessively leaded, tinned, soldered copper wire; brass and bronze wire; excessive oil content, iron, and non-metallics; copper wire from burning, containing insulation; hair wire; burnt wire which is brittle; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement.

Canary—No. 1 HEAVY COPPER

Shall consist of clean, unalloyed, uncoated copper clippings, punchings, bus bars, commutator segments, and wire not less than 1/16 of an inch thick, free of burnt wire which is brittle; but may include clean copper tubing. Hydraulically briquetted copper subject to agreement.

Cliff—No. 2 COPPER

Shall consist of miscellaneous, unalloyed copper scrap having a nominal 96% copper content (minimum 94%) as determined by electrolytic assay. Should be free of the following: Excessively leaded, tinned, soldered copper scrap; brasses and bronzes; excessive oil content, iron and non-metallics; copper tubing with other than copper connections or with sediment; copper wire from burning, containing insulation; hair wire; burnt wire which is brittle; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement.

Clove—No. 1 COPPER WIRE NODULES

Shall consist of No. 1 bare, uncoated, unalloyed copper wire scrap nodules, chopped or shredded, free of tin, lead, zinc, aluminum, iron, other metallic impurities, insulation, and other foreign contamination. Minimum copper 99%. Gauge smaller than No. 16 B & S wire and hydraulically compacted material subject to agreement between buyer and seller.

Cobra—No. 2 COPPER WIRE NODULES

Shall consist of No. 2 unalloyed copper wire scrap nodules, chopped or shredded, minimum 97% copper. Maximum metal impurities not to exceed 0.50% aluminum and 1% each of other metals or insulation. Hydraulically compacted material subject to agreement between buyer and seller.

Cocoa—COPPER WIRE NODULES

Shall consist of unalloyed copper wire scrap nodules, chopped or shredded, minimum 99% copper. Shall be free of excessive insulation and other non-metallics. Maximum metal impurities as follows:

Aluminum	—	.05%
Tin	—	.25%
Nickel	—	.05%
Antimony	—	.01%
Iron	—	.05%

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Hydraulically compacted material subject to agreement between buyer and seller.

Dream—LIGHT COPPER

Shall consist of miscellaneous, unalloyed copper scrap having a nominal 92% copper content (minimum 88%) as determined by electrolytic assay and shall consist of sheet copper, gutters, downspouts, kettles, boilers, and similar scrap. Should be free of the following: Burnt hair wire; copper clad; plating racks; grindings; copper wire from burning, containing insulation; radiators, fire extinguishers, refrigerator units, electrotube shells, screening; excessively leaded, tinned, soldered scrap; brasses and bronzes; excessive oil, iron and non-metallics; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement. Any items excluded in this grade are also excluded in the higher grades above.

Drink—REFINERY BRASS

Shall contain a minimum of 61.3% copper and maximum 5% iron and to consist of brass and bronze solids and turnings, and alloyed and contaminated copper scrap. Shall be free of insulated wire, grindings, electrotube shells and non-metallics. Hydraulically briquetted material subject to agreement.

Drove—COPPER-BEARING SCRAP

Shall consist of miscellaneous copper-containing skimmings, grindings, ashes, iron brass and copper, residues and slags. Free of insulated wires; copper chlorides; unprepared tangled material; large motors; pyrophoric material; asbestos brake linings; furnace bottoms; high lead materials; graphite crucibles; and noxious and explosive materials. Fine powdered material by agreement. Hydraulically briquetted material subject to agreement.

Druid—INSULATED COPPER WIRE SCRAP

Shall consist of copper wire scrap with various types of insulation. To be sold on a sample or recovery basis, subject to agreement between buyer and seller.

SETS

red clean red and yellow brass, including nickel-plated, free of gas cocks, beer can and zinc base die cast material, minimum of 35% semi-red.

SCRAP

brass castings, rolled brass, rod brass, miscellaneous yellow brasses, including plate-free of manganese-bronze, aluminum-d radiators or radiator parts, iron, and corroded materials.

CASTINGS

yellow brass castings in crucible shape, more than 12 inches over any one end free of brass forgings, silicon bronze, and manganese bronze, and not to exceed 15% nickel plated material.

TURNINGS

cuttings of new unleaded yellow brass must be clean and free from foreign substances contain more than 10% of clean brass and ¼ inch. To be free of Muntz metal and

BRASS WITHOUT PRIMERS

clean fired 70/30 brass shell cases free of other foreign material.

BRASS WITH PRIMERS

Shall have a copper content of not less than 75%, a tin content of not less than 6%, and a lead content of not less than 6%—nor more than 11%, and total impurities, exclusive of zinc, antimony, and nickel of not more than 0.75%; the antimony content not to exceed 0.50%. Shall be free of lined and unlined standard red car boxes.

Erin—MACHINERY OR HARD BRASS BORINGS

Shall have a copper content of not less than 75%, a tin content of not less than 6%, and a lead content of not less than 6%—nor more than 11%, and the total impurities, exclusive of zinc, antimony, and nickel of not more than 0.75%, the antimony content not to exceed 0.50%.

Fence—UNLINED STANDARD RED CAR BOXES (CLEAN JOURNALS)

Shall consist of standard unlined and/or sweated railroad boxes and unlined and/or sweated car journal bearings, free of yellow boxes and iron-backed boxes.

Ferry—LINED STANDARD RED CAR BOXES (LINED JOURNALS)

Shall consist of standard babbitt-lined railroad boxes and/or babbitt-lined car journal bearings, free of yellow boxes and iron-backed boxes.

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Ebony—COMPOSITION OR RED BRASS

Shall consist of red brass scrap, valves, machinery bearings and other machinery parts, including miscellaneous castings made of copper, tin, zinc, and/or lead. Should be free of semi-red brass castings (78% to 81% copper); railroad car boxes and other similar high-lead alloys; cocks and faucets; closed water meters; gates; pot pieces; ingots and burned brass; aluminum, silicon, and manganese bronzes; iron and non-metallics. No piece to measure more than 12" over any one part or weigh over 100 lbs.

Enerv—RED BRASS COMPOSITION TURNINGS

Shall consist of turnings from red brass composition material and should be sold subject to sample or analysis.

Elder—GENUINE BABBITT-LINED BRASS BUSHINGS

Shall consist of red brass bushings and bearings from automobiles and other machinery, shall contain not less than 12% high tin-base babbitt, and shall be free of iron-backed bearings.

Eland—HIGH GRADE-LOW LEAD BRONZE SOLIDS

It is recommended these materials be sold by analysis.

Elias—HIGH LEAD BRONZE SOLIDS AND BORINGS

It is recommended that these materials be sold on sample or analysis.

Engel—MACHINERY OR HARD BRASS SOLIDS

Ereby—CLEAN FIRED 70/30 BRASS SHELL CASES WITH PRIMERS

Shall consist of clean fired 70/30 brass shell cases containing the brass primers and which contain no other foreign material.

Lake—BRASS SMALL ARMS AND RIFLE SHELLS, CLEAN FIRED

Shall consist of clean fired 70/30 brass shells free of bullets, iron and any other foreign material.

Lamb—BRASS SMALL ARMS AND RIFLE SHELLS, CLEAN MUFFLED (POPPED)

Shall consist of clean muffled (popped) 70/30 brass shells free of bullets, iron and any other foreign material.

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Grape—COCKS AND FAUCETS

Shall consist of miscellaneous machinery including chrome or nickel plated faucets, and aluminum and to contain a minimum of 35% semi-red.

Honey—YELLOW BRASS SCRAP

Shall consist of brass tubing and miscellaneous yellow brass. Must be free of manganese-bronze, unsweated, and excessively dirty and

Ivory—YELLOW BRASS CASTINGS

Shall consist of yellow brass castings no piece to measure more than 12" over any one part; and shall be free of aluminum bronze and contain more than 15% nickel plated material.

Label—NEW BRASS CLIPPINGS

Shall consist of the clean sheet or plate, to be free of foreign substances and not to exceed ¼ inch punchings under ½ inch naval brass.

Lace—BRASS SHELL CASES

Shall consist of clean fired 70/30 brass shell cases free of other foreign material.

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	Nomad—YELLOW BRASS TURNINGS		Lark—YELLOW BRASS PRIMER
low brass primers, burnt or excessive dirt, corrosion and any	Shall consist of yellow brass turnings, free of aluminum, manganese and composition turnings, not to contain over 3% of free iron, oil or other moisture; to be free of grind- ings and babbitts. To avoid dispute, to be sold subject to sample or analysis.		Shall consist of clean yellow brass primer, free of unburnt. Free of iron, excessive dirt, corrosion and any other foreign material.
IRON CLIPPINGS			Maize—MIXED NEW NICKEL SILVER
nickel silver alloys and the specification, free of chrome or leaded nickel silver clippings sold separately. Not to contain grindings under ¼ inch.	Ocean—MIXED UNSWEATED AUTO RADIATORS		Shall consist of one or more range of nickel content to be any other plating material. It should be packed and sold more than 10% of clean pure
IRON PIPES AND SOLIDS	Shall consist of mixed automobile radiators, to be free of aluminum radiators, and iron finned radiators. All radi- ators to be subject to deduction of actual iron. The tonnage specification should cover the gross weight of the radi- ators, unless otherwise specified.		Major—NEW NICKEL SILVER CLIPPINGS
nickel silver clippings, plate, rolled shapes, free of chrome or lead. Must be sold on nickel con- s 10%—12%—15%—18%— clippings should be packed description as to its physical char- acteristics in offering all nickel silver	Pales—ADMIRALTY BRASS CONDENSER TUBES		Shall consist of new, clean rod and forgings, and other or any other plating material tent specifications such as 20%. Leaded nickel silver and sold separately. A descrip- tion of characteristics should be made material.
LEADED NICKEL SILVER CLIPPINGS	Shall consist of clean sound Admiralty condenser tubing which may be plated or unplated, free of nickel alloy, alu- minum alloy, and corroded material.		Malar—NEW SEGREGATED NICKEL
leaded nickel silver alloy. Not to contain grindings under ¼ inch.	Pallu—ALUMINUM BRASS CONDENSER TUBES		Shall consist of one specific contain more than 10% of c
	Shall consist of clean sound condenser tubing which may be plated or unplated, free of nickel alloy and corroded material.		Malic—OLD NICKEL SILVER
	Palms—MUNTZ METAL TUBES		Shall consist of old nickel s wire, screen, soldered or trimmed seams alone and substances, iron rimmed m
silver sheet, pipe, rod, tubes, or unsoldered. Must not be it is also to be free of foreign material and other metals.	Shall consist of clean sound Muntz metal tubing which may be plated or unplated, free of nickel alloy, aluminum alloy, and corroded material.		minum bronze and silicon bron
size.	Parch—MANGANESE BRONZE SOLIDS		Racks—SCRAP LEAD—SOFT
	Shall have a copper content of not less than 55%, a lead content of not more than 10%, and shall be free of sil-		Shall consist of clean soft scrap materials such as drosses, battery p hard lead, collapsible tubes, fo zinc, iron and brass fittings, radioactive materials. Review and regulatory status pertaining prior to sale.
	Melon—BRASS PIPE		Radio—MIXED HARD/SOFT SCRAP LEAD
	Shall consist of brass pipe free of plated and soldered materials or pipes with cast brass connections. To be sound, clean pipes free of sediment and condenser tubes.		Shall consist of clean lead soli
	Naggy—NICKEL SILVER CASTINGS		
	To be packed and sold separately.		
	Niece—NICKEL SILVER TURNINGS		
	To be sold by sample or analysis.		
	Night—YELLOW BRASS ROD TURNINGS		
shall consist of clean yellow brass rod turnings, free of aluminum, manganese, composition, Tobin and Muntz metal turn- ings; not to contain over 3% free iron, oil or other mois- ture; to be free of grindings and babbitts; to contain not more than 0.30% tin and not more than 0.15% alloyed iron.			collapsible tubes, type metals, aluminum, zinc, iron and brass fittings, dirty chemical lead and radioactive materi- als. Review packaging specifications and regulatory sta- tus pertaining to shipping with buyer prior to sale.
Noble—NEW YELLOW BRASS ROD ENDS			
Shall consist of new, clean rod ends from free turning brass rods or forging rods, not to contain more than 0.30% tin and not more than 0.15% alloyed iron. To be free of Muntz metal and naval brass or any other alloys. To be in pieces not larger than 12" and free of foreign matter.			

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Rails—LEAD BATTERY PLATES

Specify whether automotive, industrial or mixed. Also whether they are groups or loose. The only other metallic that might be included could be lead connectors. To be free of non-metallics, i.e., plastic or rubber, with the exception that separators may be included. Material to be dry. May be bought on an assay basis or a flat price. Submarine plates subject to negotiation. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Rains—SCRAP DRAINED/DRY WHOLE INTACT LEAD BATTERIES

To be free of any liquid. Cases to be either plastic or rubber and be complete including caps. Non-lead (nicad, ni-fe, carbonaire, etc.) not acceptable. Industrial, steel cased, aircraft (aluminum cased) and partial, cracked or broken batteries and batteries without caps subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Rakes—BATTERY LUGS

To be free of scrap lead, wheel weights, battery plates, rubber and/or plastic case material and other foreign material. A minimum of 97% metallic content is required. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Ranks—PEWTER

Shall consist of tableware and soda-fountain boxes but should contain a minimum of 84% tin. Siphon tops to be accounted for separately. Material must be free of brass, zinc, and other foreign metals.

Ranch—BLOCK TIN

Block Tin must assay minimum of 98% tin, and to be free of liquids, solder, and brass connections, pewter, pumps, pot pieces, dirt.

Raves—HIGH TIN BASE BABBITT

Shall contain a minimum of 78% tin and be free of brassy or zincy metals.

Relay—LEAD COVERED COPPER CABLE

Free of armored covered cable, and foreign material.

Rents—LEAD DROSS

Should be clean and reasonably free of other materials such as iron, dirt, harmful chemicals or other metals. To be free of radioactive materials, aluminum and zinc. May be bought on an assay basis or as agreed to by buyer and seller. Other metals present such as antimony, tin, etc., to be accounted for as agreed between buyer and seller. Material to be readily dumped from drums. An extra charge may be assessed if material has to be mechanically removed. Review packaging specification and regulatory status pertaining to shipping with buyer prior to sale.

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Rink—SCRAP WET WHOLE INTACT LEAD BATTERIES

Consisting of SLI (starting, lighting & ignition), automotive, truck, 8-D and commercial golf cart and marine-type batteries. Cases to be either plastic or rubber and to be complete. Non-lead (i.e., ni-cad, ni-fe, carbonaire, etc.) not acceptable. Other types i.e. aircraft (aluminum) gel-cel, lawnmower, etc., and partial, cracked or broken batteries or batteries without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Rono—SCRAP INDUSTRIAL INTACT LEAD CELLS

Consisting of plates enclosed by some form of complete plastic case. Partial, cracked or broken cells, cells without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Roper—SCRAP WHOLE INTACT INDUSTRIAL LEAD BATTERIES

Consisting of bus, diesel, locomotive, telephone and/or steel cased batteries. Submarine batteries subject to negotiation. Partial, cracked, broken or batteries without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Ropes—WHEEL WEIGHTS

To consist of lead tire balances with or without iron clips. Not to include scrap lead, lugs or plates unless specifically agreed to. To be free of foreign material. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Roses—MIXED COMMON BABBITT

Shall consist of lead base bearing metal containing not less than 8% tin, free from Allens metal, ornamental, anti-monial and type metal. Must be free from all zinc and excessive copper in the alloy.

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	Saves—OLD ZINC DIE CAST SCRAP		Scroll—UNSORTED ZINC DIE CAST SCRAP
ers. Material to Other nonferrous	Shall consist of miscellaneous old zinc base die castings, with or without iron and other foreign attachments. Must be free of borings, turnings, gross pieces, bunks, friener pieces and skimmings. All unmeltables, dirt, foreign attachments, and volatile substances (such as rubber, cork, plastic, grease, etc.) are deductible. Material containing in excess of 30% iron will not constitute good delivery.		Produced from automobile fragmentizers. Must contain about 55% zinc-bearing scrap. C metals such as aluminum, stainless steel, lead metal, etc., to be about 40%. Insulated copper wire about 1%. Trash, dirt, glass, rubber, oil, iron, not to exceed 5%. Any variations to be sold by special arrangement between buyer and seller.
	Scabs—NEW ZINC DIE CAST SCRAP		Scrub—HOT DIP GALVANIZERS SLAB ZINC DROSS (Batch Process)
	Shall consist of new or unused, clean, zinc base die castings. Castings to be unplated, unpainted, and free from corrosion.		Shall consist only of galvanizers unsweated zinc dross in slab form from hot dip galvanizing (Batch Process) with a minimum zinc content of 92% and shall be free of skimmings and tramp iron. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment. Slabs shall not weigh over 100 pounds each. Heavier pieces acceptable upon mutual agreement between buyer and seller. Material from continuous galvanizing operation is not acceptable. Blocks are acceptable upon mutual agreement.
	Scope—NEW PLATED ZINC DIE CAST SCRAP		Seal—CONTINUOUS LINE GALVANIZING SLAB ZINC TOP DROSS
	Shall consist of new or unused clean, plated zinc base die castings, free from corrosion.		Shall consist of unsweated zinc dross removed from the top of a continuous line galvanizing bath, in slab form not weighing in excess of 100 pounds each, with a minimum zinc content of 90%. Heavier pieces acceptable upon mutual agreement between buyer and seller. Shall be free of skimmings. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment.
	Scoot—ZINC DIE CAST AUTOMOTIVE GRILLES		Seam—CONTINUOUS LINE GALVANIZING SLAB ZINC BOTTOM DROSS
	Shall consist of clean, old or used zinc base die cast automotive grilles, free from soldered material. All foreign attachments and extraneous materials are deductible.		Shall consist of unsweated zinc dross removed from the bottom of a continuous line galvanizing bath, in slab form not weighing in excess of 100 pounds each, with a minimum zinc content of 92%. Heavier pieces acceptable upon mutual agreement between buyer and seller. Shall be free of skimmings. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment.
	Score—OLD SCRAP ZINC		
	Shall consist of clean dry scrap zinc, such as sheets, jar lids, clean unalloyed castings and anti-corrosion plates. Borings and turnings are not acceptable. Material must not be excessively corroded or oxidized. All foreign attachments and extraneous materials are deductible.		
	Screen—NEW ZINC CLIPPINGS		
	Shall consist of any new pure zinc sheets or stampings free from corrosion. To contain no foreign material or attachments. Printers zinc, such as engravers zinc, lithograph sheets and addressograph plates subject to special arrangements. Printers zinc to be free of routings.		
	Scul—ZINC DIE CAST SLABS OR PIGS		
	Shall consist of melted zinc base die cast materials, in smooth clean solid slabs or pigs. Material to be free from drosses and to contain a minimum zinc content of 90%. To contain a maximum of 0.1% nickel and maximum of 1% lead. Blocks are acceptable upon mutual agreement.		
	Scribe—CRUSHED CLEAN SORTED FRAGMENTIZERS DIE CAST SCRAP, AS PRODUCED FROM AUTOMOBILE FRAGMENTIZERS		
	To be clean, free of dirt, oil, glass, rubber, and trash. To contain a maximum of 5% unmeltables such as free iron, copper, aluminum and other metals.		

Tall—E.C. ALUMINUM NODULES

Shall consist of clean E.C. aluminum, chopped or shredded, free of screening, hair-wire, iron, insulation, copper and other foreign contamination. Must be free of minus 20 mesh material. Must contain 99.45% aluminum content.

Talon—NEW PURE ALUMINUM WIRE AND CABLE

Shall consist of new, clean, unalloyed aluminum wire or cable free from hair wire, wire screen, iron, insulation and any other foreign substance.

Tan—NEW MIXED ALUMINUM WIRE AND CABLE

Shall consist of new, clean, unalloyed aluminum wire or cable which may contain up to 10% 6000 series wire and cable free from hair wire, wire screen, iron, insulation and any other foreign substance.

Tape—PURE ALUMINUM WIRE AND CABLE

Shall consist of old, unalloyed aluminum wire and cable containing not over 1% free oxide or dirt and free from hair wire, wire screen, iron, insulation and any other foreign substance.

Shall consist of 24 inches x 12 to 24 inches in uniform profile with a variable length of 8 inches minimum and 48 inches maximum. Briquettes shall be bundled or stacked on skids and secured with a minimum of one vertical band per row and a minimum of one girth band per horizontal layer. Briquettes not to overhang pallet. Total package height shall be 48 inches maximum. Banding shall be at least 5/8" wide by .020" thick steel strapping or equivalent strength. The weight of any bundle shall not exceed 4000 pounds. Material must be magnetically separated and free of steel, plastic, glass, dirt and all other foreign substances. Any and all aluminum items, other than UBC are unacceptable. Any free lead is a basis for rejection. Items not covered in the specification, including moisture, and any variation in the specification are subject to special arrangement between buyer and seller.

Tale—PAINTED SIDING

Shall consist of clean, low copper aluminum siding scrap, painted one or two sides, free of iron, dirt, corrosion, fiber backing or other types of foreign contamination.

Talent—COATED SCRAP

Shall consist of awnings, venetian blinds, vinyl, plastic, etc. Shall be subject to special arrangements between buyers and sellers.

Talk—ALUMINUM COPPER RADIATORS

Shall consist of clean aluminum and copper radiators, and/or aluminum fins on copper tubing, free of brass tubing, iron and other foreign contamination.

Taldon—BALED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP

Shall have a minimum density of 14 lbs. per cubic foot, and a maximum density of 17 lbs. per cubic foot for unflattened UBC and 22 lbs. per cubic foot for flattened UBC. Size: minimum 30 cubic feet, with bale range dimensions of 24" to 40" by 30" to 52" by 40" to 84". The only acceptable tying method shall be as follows: four to six 5/8" x .020" steel bands, or six to ten #13 gauge steel wires (aluminum bands or wires are acceptable in equivalent strength and number). Use of skids and/or support sheets of any material are not acceptable. Must be magnetically separated material and free of steel, lead, bottle caps, plastic cans and other plastics, glass, wood, dirt, grease, trash and other foreign substances. Any free lead is basis for rejection. Any and all aluminum items, other than used beverage cans, are not acceptable. Items not covered in the specification are subject to special arrangement between buyer and seller.

Taldork—BRIQUETUED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP

Shall have a briquette density of 50 pounds per cubic foot minimum. Nominal briquette size shall range from 12 to 24 inches.

Shall consist of old, unalloyed aluminum wire and cable which may contain up to 10% 6000 series wire and cable with not over 1% free oxide or dirt and free from hair wire, wire screen, iron, insulation and any other foreign substance.

Tarry—ALUMINUM PISTONS

(a) Clean Aluminum Pistons

Shall consist of clean aluminum pistons to be free from struts, bushings, shafts, iron rings and any other foreign materials. Oil and grease not to exceed 2%.

(b) Aluminum Pistons with Struts

Shall consist of clean whole aluminum pistons with struts to be free from bushings, shafts, iron rings and any other foreign materials. Oil and grease not to exceed 2%.

(c) Irony Aluminum Pistons

Should be sold on recovery basis, or by special arrangements with purchaser.

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Teens—SEGREGATED ALUMINUM BORINGS AND TURNINGS

Shall consist of clean, uncorroded aluminum borings and turnings of one specified alloy only and subject to deductions for fines in excess of 3% through a 20 mesh screen and dirt, free iron, oil, moisture and all other foreign materials. Material containing iron in excess of 10% and/or free magnesium or stainless steel or containing highly flammable cutting compounds will not constitute good delivery.

Telic—MIXED ALUMINUM BORINGS AND TURNINGS

Shall consist of clean, uncorroded aluminum borings and turnings of two or more alloys and subject to deductions for fines in excess of 3% through a 20 mesh screen and dirt, free iron, oil, moisture and all other foreign materials. Material containing iron in excess of 10% and/or free magnesium or stainless steel or containing highly flammable cutting compounds will not constitute good delivery. To avoid dispute should be sold on basis of definite maximum zinc, tin and magnesium content.

Tense—MIXED ALUMINUM CASTINGS

Shall consist of all clean aluminum castings which may contain auto and airplane castings but no ingots, and to be free of iron, dirt, brass, babbitt and any other foreign materials. Oil and grease not to total more than 2%.

Tepid—WRECKED AIRPLANE SHEET ALUMINUM

Should be sold on recovery basis or by special arrangements with purchaser.

Terse—NEW ALUMINUM FOIL

Shall consist of clean, new, pure, uncoated, unalloyed aluminum foil, free from anodized foil, radar foil and chaff, paper, plastics, or any other foreign materials. Hydraulically briquetted material by arrangement only.

Testy—OLD ALUMINUM FOIL

Shall consist of clean, old, pure, uncoated, unalloyed aluminum foil, free from anodized foil, radar foil and chaff, paper, plastics, or any other foreign materials. Hydraulically briquetted material by arrangement only.

Thigh—ALUMINUM GRINDINGS

Should be sold on recovery basis or by special arrangements with purchaser.

Thirl—ALUMINUM DROSSES, SPATTERS, SPILLINGS, SKIMMINGS AND SWEEPINGS

Should be sold on recovery basis or by special arrangements with purchaser.

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Throb—SWEATED ALUMINUM

Shall consist of aluminum scrap which has been sweated or melted into a form or shape such as an ingot, pig or slab for convenience in shipping; to be free from corrosion, drosses or any foreign materials. Should be sold subject to sample or analysis.

Tooth—SEGREGATED NEW ALUMINUM ALLOY CLIPPINGS AND SOLIDS

Shall consist of new, clean, uncoated and unpainted aluminum scrap of one specified aluminum alloy only and to be free of foil, hair, wire, wire screen, dirt, and other foreign substances. Oil and grease not to total more than 1%. Also free from punchings less than 1/2" in size. New can stock subject to arrangement between buyer and seller.

Tough—MIXED NEW ALUMINUM ALLOY CLIPPINGS AND SOLIDS

Shall consist of new, clean, uncoated and unpainted aluminum scrap of two or more alloys free of 7000 series and to be free of foil, hair wire, wire screen, dirt, and other foreign substances. Oil and grease not to total more than 1%. Also free from punchings less than 1/2" in size. New can stock subject to arrangement between buyer and seller.

Tread—SEGREGATED NEW ALUMINUM CASTINGS, FORGINGS AND EXTRUSIONS

Shall consist of new, clean, uncoated aluminum castings, forgings, and extrusions of one specified alloy only and to be free from sawings, stainless steel, zinc, iron, dirt, oil, grease and other foreign substances.

Trump—ALUMINUM AUTO CASTINGS

Shall consist of all clean automobile aluminum castings of sufficient size to be readily identified and to be free from iron, dirt, brass, babbitt bushings, brass bushings, and any other foreign materials. Oil and grease not to total more than 2%.

Twang—INSULATED ALUMINUM WIRE SCRAP

Shall consist of aluminum wire scrap with various types of insulation. To be sold on a sample or recovery basis, subject to agreement between buyer and seller.

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Twist—ALUMINUM AIRPLANE CASTINGS

Shall consist of clean aluminum castings from airplanes and to be free from iron, dirt, brass, babbitt bushings, brass bushings, and any other foreign materials. Oil and grease not to total more than 2%.

**Twitch—FRAGMENTIZER ALUMINUM SCRAP
(From Automobile Shredders)**

The material, as received, must be dry and not to contain more than 3% maximum free zinc, 1% maximum free magnesium, and 1.5% maximum free iron and stainless. Not to contain more than a total 5% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material. Any variations to be sold by special arrangement between buyer and seller.

Wafer—MAGNESIUM CLIPS

Shall consist of clean magnesium clips in crucible size, free of copper, aluminum, and zinc flashings and excessive oil and grease. To be free of all foreign attachments.

Walnut—MAGNESIUM SCRAP

Shall consist of magnesium castings, magnesium engine blocks and transmission casings, bomber and car wheels, extrusions, and sheet. Material to be free from brass and copper inserts and all foreign attachments. To be free of anodes, hollow castings and explosives. Percentages of and penalties for dirt, oil, grease, and iron to be subject to agreement between buyer and seller. Excessively large pieces to be negotiated between buyer

and seller. To be clean and free of all foreign attachments. Magnesium plates shipped loose by agreement between buyer and seller.

Wood—MAGNESIUM DOCKBOARDS

Shall consist of clean magnesium dockboard cut or broken to size agreed upon by buyer and seller. To be free of all foreign attachments.

World—MAGNESIUM TURNINGS

It is recommended that these materials be sold by special arrangement between buyer and seller.

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**Zorba—RECYCLABLE CONCENTRATES OF SHREDDED MIXED NONFERROUS SCRAP METAL IN PIECES—
DERIVED FROM FRAGMENTIZERS FOR FURTHER
SEPARATION OF CONTAINED MATERIALS**

Shall be made up of a combination of the nonferrous metals: aluminum, copper, lead, magnesium, stainless steel, nickel, tin, and zinc, in elemental or alloyed (solid) form. The percentage of each of these metals within the nonferrous concentrate shall be subject to agreement between buyer and seller, may vary from shredder to shredder and may, in some cases, be zero for a particular metal. Shall be obtained by air separation, flotation, screening, eddy current, other segregation technique(s) or a combination of the same. Shall have passed one or more magnets to reduce or eliminate free iron and/or iron attachments. Shall be free of radioactive material, dross or ash. May be screened to permit description by specific size ranges. May contain high density non-metallics such as rock, glass, rubber, plastic and wood. Items of exclusion, inclusion or limitation not set out in the above specifications, such as moisture and free iron and/or attachments or the presence or absence of other metals, are subject to agreement between buyer and seller. Material to be traded under this guideline shall be identified as ZORBA with a number to follow indicating the estimated percentage nonferrous metal content of the material (e.g. ZORBA 63 - means the material contains approximately 63% nonferrous metal content).

Aroma—NEW NICKEL SCRAP

Shall consist of clean new sheet, plate, bar, tube, and any other wrought nickel scrap solids. Material to contain a minimum of 98% nickel; Copper maximum 0.50%. This grade to be free of castings, soldered, brazed, sweated, or painted material, other metallic coating, foreign attachments, and any other contamination.

Burly—OLD NICKEL SCRAP

Shall consist of old and/or new sheet, plate, bar, tube, and any other wrought nickel scrap solids. Material to contain a minimum of 98% nickel; Copper maximum 0.50%. This grade to be free of castings, soldered, brazed, sweated, or painted material, other metallic coating, foreign attachments, and any other contamination.

Dandy—NEW CUPRO NICKEL CLIPS AND SOLIDS

Shall consist of clean, new, segregated (normally accepted analysis grades) either 70/30, 80/20, or 90/10 cupro nickel tube, pipe, sheet, plate, or other wrought solid forms. Must be free of foreign attachments or any other contamination.

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Daunt—CUPRO NICKEL SOLIDS

Shall consist of segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel tube, pipe, sheet, plate, or other wrought solid forms. Maximum 2% sediment allowable. Any other forms of cupro nickel solids such as castings, gates, risers, spills, etc., packaged separately, may or may not be included, only upon agreement between buyer and seller. Must be free of foreign attachments and all other contamination. Other particulars concerning physical description, analysis and packaging to be agreed upon between buyer and seller.

Delta—SOLDERED CUPRO NICKEL SOLIDS

Shall consist of segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel solids, soldered, brazed, or sweated, must be free of trimmed seams and edges and all other contamination.

Decoy—CURPO NICKEL SPINNINGS, TURNINGS, BORINGS

Shall consist of clean segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel spinnings, turnings, or borings. Particulars concerning physical description, analysis, packaging, to be agreed upon between buyer and seller.

Depth—MISCELLANEOUS NICKEL-COPPER AND NICKEL-COPPER IRON

Shall consist of miscellaneous scrap in which the basic elements, by weight, are nickel and copper, such as copper nickel peelings, plating racks, and hangers, and all nickel and copper in attached or combined form. In all cases, miscellaneous nickel copper scrap should be sold by description and analysis.

Hitch—NEW R-MONEL CLIPPINGS AND SOLIDS

Shall consist of clean, new, R-Monel sheet, plate, bar, rod, tube, pipe, or any other wrought scrap, free of any foreign attachments or any other contamination.

House—NEW MIXED MONEL SOLIDS AND CLIPPINGS

Shall consist of new, clean R and K-Monel solids and clippings. Free of cast material, foreign attachments and all other contamination.

Ideal—OLD MONEL SHEET AND SOLIDS

Shall consist of clean R and K-Monel solids such as sheet, plate, pipe, rods, forgings, screen and wire cloth. Must be free of soldered, brazed, welded, or sweated material, cast material, foreign attachments, and all other contamination.

Indian—K-MONEL SOLIDS

Shall consist of clean K-Monel solids.

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Junto—SOLDERED MONEL SHEET AND SOLIDS

Shall consist of soldered, brazed, welded, or sweated grades of Monel alloys in either wrought or cast form. Must be free of trimmed seams and edges, non-metallic filling, foreign attachments, and all other contamination. Particulars concerning physical description, assay, and packaging to be agreed upon between buyer and seller.

Lemon—MONEL CASTINGS

Shall consist of various types of clean Monel castings, assaying minimum 60% nickel. Must be free of foreign attachments or any other contamination.

Lemur—MONEL TURNINGS

Shall consist of mixed Monel turnings and borings containing a minimum of 60% nickel content, on a dry basis.

Pekoe—200 SERIES STAINLESS STEEL SCRAP SOLIDS

Shall consist of all types of clean AISI Series Stainless Steel Scrap Solids, which contain a maximum of .5% copper, free of foreign attachments and other contamination.

Sabot—STAINLESS STEEL SCRAP

Shall consist of clean 18-8 type stainless steel clips and solids containing a minimum 7% nickel, 16% chrome, and have a maximum of .50% molybdenum, .50% copper, .045% phosphorous, and .03% sulfur, and otherwise free of harmful contaminants. Particulars concerning physical description, grading, additional analysis, and preparation to be agreed upon between buyer and seller.

Ultra—STAINLESS STEEL TURNINGS

Shall consist of clean 18-8 type stainless steel turnings containing a minimum 7% nickel and 16% chrome, and to be free of nonferrous metals, nonmetallics, excessive iron, oil and other contaminants. Particulars concerning physical description, assay, packaging to be agreed upon between buyer and seller.

Vaunt—EDISON BATTERIES

Nickel-iron batteries to be sold free of crates, copper terminal connectors, and excess liquid. Free of nickel cadmium batteries.

IDENTIFICATION CHECK LIST FOR PRECIOUS METALS

This Identification Check List for Precious Metals sets up a general basis for identifying types and grades of precious metals scrap by the scrap processor which will be familiar both to the precious metal

has on hand and offers a basis for the refiner to quote an estimated price for the material.

SILVER BEARING MATERIALS:

Anodes	Jewelry Sweeps
Assemblies—Electrical	Paints—Paste
Batteries	Paper—Reproduction
Silver/Copper	Plated Parts—Electrical—
Silver/Cadmium	Electronic
Silver/Zinc	Plated Serving Pieces
Silver/Magnesium	Plated Utensils
Blanking Scrap—Punchings	Plated Wire
Brazing Alloys	Powders—Granulated
Brushes—Electric Motors	Punchouts
Bullion	Relays—Electrical
Chemical Salts	Resins
Clad Bi-Metal Parts	Silver Lined Bearings—
Coin Silver	Diesel Locomotives
Contacts	and Aircraft
Dental Amalgam	Sludges—Plating and
Film	Precipitates
Industrial X-Ray	Solutions—Plating
Medical X-Ray	Sterling Silver
Lithographic	Tin Lead Alloys—
Photographic Negatives	Contaminated
Filters—Plating	Turnings
Flake—From Hypo Solution	Wave Guides
Recovery Systems	Wiping Rags
Hooks—Plating—Nodules	

GOLD BEARING MATERIALS:

Brazing Alloys	Placer Gold
Cladmetal Parts	Plated Parts—Electrical
Contacts	Plated Wire
Dental Alloys	Powders
Dental Scrap	Printed Circuit Boards
Dental Sweeps and	Printed Circuit Boards
Grindings	with Components
Diodes	Punchouts
Filled Scrap	Resins—Plating
Filters-Plating	Salts—Chemical
Flakes	Sludges—Plating
Flashings	Solutions
Foil	Sponge
Hooks—Plating—Nodules	Tin Lead Alloys—
Jewelry Scrap	Contaminated
Jewelry Sweeps and	Transistors
Grindings	Wiping Rags
Paints and Paste	Wire
Peelings	

REFINED PALLADIUM METAL—99.9 MIN. PERCENT REFINED PALLADIUM SPONGES—99.9 MIN. PERCENT

PALLADIUM BEARING MATERIALS:

Catalysts	Plated Parts
Clad Materials	Powders
Contact Points	Relays—Electrical
Dental Alloys	Salts—Chemical
Dental Scraps	Sludges
Dental Sweeps	Solutions
Jewelry Scrap (Sweeps)	Wire
Paste	

PLATINUM METAL—99.9 MIN. PERCENT
PLATINUM SPONGE—99.9 MIN.

REFINING MATERIALS:

Jewelry Sweeps
Laboratory Ware
Magneto Points
Powders and Paste

Dental Alloys
Dental Scrap
Dental Sweeps, Grindings
Jewelry Scrap

**SCRAP CONTAINING COMBINATIONS OF PRECIOUS METALS
(GOLD, SILVER, PLATINUM AND PALLADIUM) :**

Assemblies—Components
Bullion
Carbon
Catalysts
Chemicals
Chips
Drillings
Electronic Scrap
High Temperature
Resistant Alloys
Paints
Paste

II. SCRAP CATEGORIES

- A. Solution
1. Acid
2. Basic
3. Matrix if known

B. Resin

Solutions—Plating
Spark Plugs—Aircraft
Thermocouple Wire

H. Metal Scrap

I. Non Magnetic

1. Impure Gold
2. Impure Silver
3. Copper Base

C. Sludges

D. Burnable Material

1. Carbon
2. Filters
3. Film
4. Papers
5. Unprepared Sweeps
6. Others

E. Sweeps (Prepared)

F. Printed Circuit Board

1. Punch Outs
2. Non Assembled
3. Assembled
4. Other

G. Glass to metal Tubes, etc.

1. Solid Precious Metal Parts
2. Alloyed Metal Parts
3. Plated Metal Parts
4. Ceramics
5. Thick Film
6. Other....

**REFINED PLATINUM
REFINED PLATINUM
PERCENT**

PLATINUM BASE
Catalysts
Chemicals
Clad Materials
Contacts

4. Aluminum Base
5. Brass Base
6. Bronze Base
7. Molybdenum Base
8. Beryllium Base
9. Lead Base
10. Tin Base
11. Other....

II. Magnetic

1. Kovar Base
2. Stainless Steel Base
3. Iron Base
4. Nickel Base
5. Other....

I. Catalyst

1. Carbon
2. Alumina
3. Rare Earth
4. Silica
5. Other....