

## SA RECYCLING PURCHASE SPECIFICATIONS

**PRODUCT CLASS:** FERROUS

**GRADE:** STEEL

### **1020 Plate & Structural (P&S)**

Shall consist of new and used structural and plate steel scrap including steel plates, structural shapes, flats, I-Beams, and other shearings.

Shall be a minimum of ¼" in thickness.

Shall be a maximum of 5' X 2' X 18" with no one piece weighing more than 1000 lbs.

Must be free of all nonferrous metals and non-metallic materials including concrete, wood, or other demolition debris.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

### **1030 Mixed Rail**

Shall consist of new and used railroad track sections.

Rail track must be a minimum of 70 lbs. (70 lbs. per 3' section).

Rail track must be in straight sections with a minimum length of 5' per continuous section.

May not include manganese rail frog sections, or other railroad scrap.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1040 #1 HMS**

Shall consist of new and used wrought steel scrap  $\frac{1}{4}$ " and over in thickness.

Individual pieces not to exceed 60" X 24", or the maximum size per the specific end consumer.

Maximum weight per piece not to exceed 1000 lbs.

May not include motor blocks, appliances, cylinders, closed or sealed units, electric motors, compressors, gas tanks, mufflers, shock absorbers, chain link fence, or non-metallics.

May contain up to 20% #2 HMS (material  $\frac{1}{8}$ " to  $\frac{1}{4}$ " in thickness).

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1050 #2 HMS**

Shall consist of new and used wrought steel scrap  $\frac{1}{8}$ " and over in thickness.

Individual pieces not to exceed 60" X 24", or the maximum size per a specific end consumer.

Maximum weight per piece not to exceed 1000 lbs.

May not include appliances, cylinders, closed or sealed units, electric motors, compressors, gas tanks, mufflers, shock absorbers, chain link fence, or non-metallics.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1060 #1 Bundles**

Shall consist of new production low residual steel scrap sheet and clippings, free of coatings, and condensed into bales suitable for mill or foundry application.

Bale density must be a minimum of 75 lbs./cubic foot.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to: Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1070 #2 Bundles**

Shall consist of new and used sheet steel and light iron products, densified into bales, and suitable for shredding or for a steel mill application.

May not include tin or lead-coated (terne plate) material.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to: Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1080 Tin Cans**

Shall consist of new and post-consumer tin plate and tin can stock, tin cans, and lids.

Post-consumer tin cans should be relatively free of waste.

May be purchased loose or in baled form.

May include paper labels.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1100 Mixed Cast**

Shall consist of cast Iron from automobiles, trucks, agricultural, and machinery parts and equipment with wall thickness up to 3" maximum.

May include automobile drums, rotors, heads and blocks, manifolds, machine bases, and plow disks. May include up to 5% steel attachments per piece in the form of bolts, rods, etc.

May not include cast iron with lead or other nonferrous attachments.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**11001 Brake Drums & Rotors**

Shall consist of Cast Iron drums and rotors from automobiles and trucks only.

No other types of cast or steel are allowed in this grade.

May not include any other parts or attachments except for steel studs in rotors.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1110 Useable Steel**

May consist of new useable steel in the form of coils (master or pup), sheets, plates, bars, angles, I-beams, or other new steel stock.

Must be free of rust, corrosion or other impurities.

Light oil in the form of rust inhibitors is acceptable.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1200 P&S Unprepared**

Shall consist of new and used structural and plate steel scrap including steel plates, structural shapes, flats, I-Beams, and other shearings too large to meet size limits for category 1020.

Shall be a minimum of ¼" in thickness.

Material must be shearable by standard mechanical operations.

Must be free of all nonferrous metals and non-metallic materials including concrete, wood, or other demolition debris.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1210 #1 Auto Bundles**

Shall consist of new production auto stampings baled in a form useable by a steel mill.

Minimum density shall be 75 lbs. per cubic foot.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1220 Billets**

Semi-finished steel solids with a square or round cross section of less than 36 square inches, from steel mills or the secondary market.

Diameters, lengths, and chemistry will vary by piece or lot.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1230 Dismantled Railroad Cars**

Whole or partial railroad cars to be cut for scrap and usable components.

May include tankers, box, gondola, or other rail cars.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1240 Torch Cut**

Shall consist of any steel scrap that is too large to be cut in standard portable or stationary shredder, shear, or other mechanical means.

This material must be cut to size using torching with a variety of gas and oxygen generated flames.

May include large machinery, heavy plates and bars, and large castings.

Must be free of excessive grease and drained of all oils.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1250 #1 Unprepared**

Shall consist of new and used wrought steel scrap ¼" and over in thickness.

This material is too large to fit size limits for inventory item 1040 (#1 HMS).

May not include motor blocks, appliances, cylinders, closed or sealed units, electric motors, compressors, gas tanks, mufflers, shock absorbers, chain link fence, or non-metallics.

May contain up to 20% #2 HMS (material 1/8" to ¼" in thickness).

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1260 #2 Unprepared**

Shall consist of new and used wrought steel scrap 1/8" and over in thickness.

This material is too large to fit size limits for inventory item 1050 (#2 HMS).

May not include appliances, cylinders, closed or sealed units, electric motors, compressors, gas tanks, mufflers, shock absorbers, chain link fence, or non-metallics.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1265 #2 Unprepared Rebar Tangles**

New or used steel rebar scrap that is bent and/or intertwined in a manner that does not allow for easy cutting or processing.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1270 Breakable Cast**

Oversize Cast Iron scrap that is too large for standard foundry applications (over 2' in length or width) and under 3" in wall thickness.

May include large castings, machine bases, and other cast parts generally over 3" in thickness.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.



**12701 Cast Unprepared Heavy**

Oversize Cast Iron scrap that is too large for standard foundry applications and processing. Material that is too large to be broken or cut to meet a standard foundry application (1100). May include large castings, machine bases, and other cast parts generally over 2' in length or width and over 3" in wall thickness.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to: Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1280 Busheling**

New production steel clippings and stampings.

May include a mix of black uncoated steel as well as steel that is galvanized, galvanealed and aluminized.

May not include tin plated, terne plated (lead coated), vitreous enameled, or electrical steels (maximum 0.5% silicon).

Maximum size allowable is 5' or size as limited by the consumer.

Must be free of paint and plastic coatings.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1290 Turnings**

Clean steel or wrought iron turnings, free of cast iron borings, nonferrous metals in a free state, scale, or excessive oil.

May not include rusted or corroded stock.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1295 Unprepared Busheling**

New production steel clippings and stampings too large to ship to a consumer without further cutting or processing.

May include a mix of black uncoated steel as well as steel that is galvanized, galvanealed and aluminized.

May not include tin plated, terne plated (lead coated), vitreous enameled, or electrical steels (maximum 0.5% silicon).

Must be free of paint and plastic coatings.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1300 Motor Blocks**

Whole or partial engine blocks from automobiles and trucks from which steel and nonferrous fittings and parts may or may not have been removed.

Must be free from drive shafts and all frame parts.

May include transmissions.

Must be drained of all fluids and relatively free of excess grease and oils.

May not include large tractor or heavy equipment motors.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

### 1310 Galvanized Sheet

Clean sheet steel and new production coated steel clippings and stampings.

May include steel that is galvanized, galvanealed and aluminized.

May not include tin plated, terne plated (lead coated), vitreous enameled, or electrical steels (maximum 0.5% silicon).

May not include nonferrous or nonmettals.

Must be free of paint and plastic coatings.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

### 1320 Manganese Steel

New and obsolete wear parts made from an alloy of steel with a high manganese (Mn) content of between 10% - 14%

May include heavy machinery parts, mining equipment parts, auto shredder wear parts such as hammers and grates, and rail frogs and switches.

This material is nonmagnetic.

May not include rubber or other nonmetallic or nonferrous parts.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1510 Shredded Ferrous**

Prepared homogenous iron and steel scrap, magnetically separated, originating from automobiles, unprepared #1 and #2 steel, miscellaneous baling and sheet scrap.

Average density of 70 pounds per cubic foot.

Must be free of Automobile Shredder residue (ASR), nonferrous, and nonmetallic materials.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1605 Complete Cars**

Whole automobile bodies complete with engines, transmissions and original components.

May or may not include tires.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

**1610 Car Bodies**

Automobile bodies that may or may not include engines, transmissions and other original components.

Must include car frame and axles.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

#### 1620 Tin

Light steel and sheet up to 1/8" in thickness suitable for shredding.

May include new or postconsumer scrap in a variety of shapes and forms.

May include a de minimus amount of nonmetallic attachments that are not hazardous including plastic, nonferrous, fabric, and other parts and pieces.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

#### 1630 Incinerator Scrap

Scrap steel magnetically or mechanically separated as part of the residue of a commercial incineration processing plant.

May include any nonhazardous steel and cast iron components and parts.

May include a de minimus coating of ash or residue from the burning process.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.

#### 1640 Other Shreddable Ferrous

May include any ferrous, nonhazardous, scrap that is suitable for and requires shredding to separate and densify the scrap into a usable melt product for a mill or foundry.

May include both nonferrous and nonmetallic parts and attachments.

**MUST BE FREE OF:** Dirt; nonmetallic parts including but not limited to wood, tar, paper, plastic, rags, garbage; and materials that do not meet the above specification.

**MAY NOT CONTAIN:** Hazardous Materials/Wastes including but not limited to:

Ammunition, explosives, oils, lead based paints, CFC's, PCB's, mercury, asbestos, batteries, fluorescent light bulbs, E-waste, and/or radioactive substances.



## SA Recycling Purchase Specifications-Ferrous

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## SA Recycling Purchase Specifications-Ferrous

Document Revision History			
Revision #	Description of Change	Date	Approved By
1.1	New	9/26/14	Margarita Rearick
1.2	Added all Ferrous Commodity Codes	12/19/14	Tom Knippel