SHREDDED SCRAP

Homogeneous iron and steel scrap originating from automobiles, unprepared #1 and #2 scrap, miscellaneous baling and sheet scrap, and white goods. Must be fragmentized, magnetically separated and have an average density of 70 lbs. per cubic foot. Shredded scrap must be free from dirt, concrete, grindings, turnings, borings, fabric, and combustible material. Loose copper and/or aluminum in any form is not acceptable.

Residuals:

Copper	-	.25% max
Chrome	-	.10% max
Nickel	-	.10% max
Tin	-	.03% max
Phos	-	.04% max
Sulphur	-	.05% max
Sil	-	.25% max
Carbon	-	.50% max

Minimum Density - 60 lbs./cu.ft.

CUT SCRAP GRADES

PLATE AND STRUCTURAL

Plate and structural steel such as I-beams, angles, H-beams, plate, crop ends, etc. sized as shown below. May contain up to 10% heavy walled pipe. Pipe in diameters 8" and over must be split. Can include clean railroad scrap. Free of rebar (any size) and attachments. May not include cast iron, machinery bases, dies, shafts, gears or other similar co-products of demolition activity.

	<u>Baldwin</u>	<u>Charlotte</u>	<u>Jackson</u>	<u>Knoxville</u>	<u>Cartersville</u>
Sizing (Max.)	4' x18" x 4"	3' x 18" x 4"	5' x 3' x 6"	3' x 18" x 3"	5' x 2' x 4"
Density (Min.)	50	55	45	55	50

RAILROAD HEAVY MELT

Cut alloy-free railroad scrap to include track, spikes, tie plates, wheels, drawbars, knuckles, etc. Car sides are specifically excluded. Wheels must be pressed or cut off axles or axles cut flush with wheels.

The following limits apply to this grade:

Springs	1% max
Wheels, drawbars, knuckles	20% max
Track, spikes, tie plates	20% max

All wood, brass, journal socks and heavy coatings (tar, oil, grease) must be removed.

Sizing (Max.)	<u>Baldwin</u>	<u>Charlotte</u>	<u>Jackson</u>	<u>Knoxville</u>	<u>Cartersville</u>
	4' x 2'	3' x 2'	5' x 3'	3' x 2'	5' x 2'

CUT SCRAP GRADES (CONTINUED)

#1 STEEL

Wrought iron and/or steel scrap sized as specified below. Minimum thickness 1/4". May include I-beams, H-beams, angles and any low carbon structurals. May include miscellaneous agricultural equipment, truck frames and heavy caterpillar equipment not to exceed 5% crawler pads. May include cut up RR car trucks, wheels, axles, rails, couplers and framework. Heavy rebar, 3/4" minimum, may be included to a maximum of 25% of load. New plate and structurals 3/16" minimum thickness may be included. Heavy torch cut pipe 8" and over must be split. Barge scrap must be single wall only, cannot be double wall. Maximum 3% cast iron.

Must be free of automotive scrap, tangled rebar, shocks, uncut hydraulic units, uncut tanks or cylinders, air compressors, starters and generators, electric motors, and batteries. Busheling, clippings, strapping and other thin gauge material will not be accepted as #1. No cast iron pipe unless phos free.

Minimum density - 55 lbs./cu. Ft.

	<u>Baldwin</u>	<u>Charlotte</u>	<u>Jackson</u>	<u>Knoxville</u>	<u>Cartersville</u>
Sizing (Max.)	4' x 18" x 4"	3' x 18" x 6"	5' x 3' x 6"	4' x 18" x 6"	5' x 2' x 6"

#2 STEEL

Wrought iron steel sized to meet 3' maximum x 18" maximum x 1/8" minimum. May include automobile scrap such as rims, frames and bumpers. May include rebar (no tangled forms) and miscellaneous machinery steel. Will accept up to 25% new light gauge sheet, shear cut and properly sized. Maximum 5% cast.

Material must be free of automobile slabs, automobile tin, appliances, and appliance slabs (even if electric motors are removed), uncut shocks, hydraulic cylinders, electric motors, starters, batteries and generators. Uncut torque converters are not acceptable. Must be free of heater baskets and motor lamination material.

Minimum density - 45 lbs./cu. ft.

CUT SCRAP GRADES (CONTINUED)

#1 & #2 MIXED STEEL

Must conform to requirements of #2 steel grade with sufficient #1 steel (minimum 40%) included to qualify for price adjustment.

Minimum Density - 50 lbs./cu.ft.

SHEET SCRAP GRADES

#1 BUSHELING

Clean low-residual black and galvanized sheet sized 24" and under. May not include old sheet. Must be free of tin plate, terne, and vitreous enameled coatings. Electrical sheet over 0.5% Si is not acceptable.

BLACK SHEET CLIPS

Sheet clippings sized 4' maximum x 18" maximum, essentially free of coatings. Skeleton material cut 4' maximum x 2' maximum generally acceptable. 5% maximum galvanized.

MIXED SHEET CLIPS

Painted, galvanized, and black sheet clips sized 4' maximum x 18" maximum. Skeleton material cut 4' maximum x 2' maximum generally acceptable.

BLACK AND TIN PLATE CLIPS

Black and tin plated sheet clips sized 4' maximum x 18" maximum. Must be no more than 25% tin bearing material. If more than 25%, cars must be special noticed and price negotiated.

PROCESSED SHEET SCRAP GRADES

#1 BUNDLES

New black, painted and galvanized low-residual steel clips and wire, hydraulically pressed so as not to come apart during magnet handling. Free of tin, terne, copper, limed, vitreous enameled and similar coatings, drums, gas tanks, motor lamination steel, heater baskets or other high phosphorus or high silicon material. Maximum 20% painted and galvanized. May include mandrel wound edge trimmings or skeleton reels tightly secured so long as material is low residual steel otherwise included in this specification. May include cleaned and bundled drum material.

No grease, volatiles or environmentally restricted material will be accepted. May not include old sheet.

Maximum Size: 24" x 24" x length as shown

<u>Baldwin</u>	<u>Charlotte</u>	<u>Jackson</u>	<u>Knoxville</u>	<u>Cartersville</u>
36"	24"	36"	36"	44"

Minimum Density - 75 lbs./cu. ft.

#2 BUNDLES

New and old mixed sheet and wire hydraulically baled so as not to come apart during magnet handling. Bundles may include up to 25% appliances if electric motors and excessive copper are removed. May include tinplated clippings. May include shopping carts up to 25% of total.

Must be free of wood, non-ferrous, plastic, rags, carpet, heater baskets, motor laminations, or other high phosphorus or high silicon material. Bales must be generally free of gas tanks, used drums, and automobile mufflers.

Maximum Size: 24" x 24" x length as shown

<u>Baldwin</u>	<u>Charlotte</u>	<u>Jackson</u>	<u>Knoxville</u>	<u>Cartersville</u>
36"	24"	36"	36"	44"

Minimum Density - 65 lbs./cu. ft.

PROCESSED SHEET SCRAP GRADES (CONTINUED)

MANDREL WOUND COILS OF BANDING, WIRE OR STRAPPING

Black, galvanized or painted, banding or wire material sized as shown. May not include tinplate, terne, limed, vitreous enameled or electrical sheet containing over 0.5% Si.

<u>Must</u> be banded with a minimum of 3 steel bands suitable for magnet handling without unwinding and creating long stringers.

Sizing (Max.)	<u>Baldwin</u>	<u>Charlotte</u>	<u>Jackson</u>	<u>Knoxville</u>	<u>Cartersville</u>
	4' x 2'	3' x 2'	4' x 2'	4' x 2'	N/A

TURNINGS & BORINGS

TURNINGS

Mixed short and machine shop turnings free from lumps, tangled or matted material, iron borings, and any non-metallics. Oil content 4% maximum. Badly oxidized or wet scrap is not acceptable.

Residuals:

 Sulphur
 .15% max

 Phos
 .05% max

 Copper
 .30% max

 Nickel
 .10% max

 Chrome
 .12% max

 Carbon
 1.00% max

 Silicon
 .25%

.25% max

Minimum density - 50 lbs./cu. ft.

CAST IRON BORINGS

New clean cast iron borings and drillings containing not more than 1% oil. Free from steel turnings, chips, lumps, scale, corroded or rusty material.

MISCELLANEOUS GRADES

CAST IRON OR DROP BROKEN MACHINERY:

Clean heavy cast iron machinery scrap that has been broken under a drop. All pieces must be cupola size, not over 24 inches x 30 inches, and no piece over 150 pounds in weight. Must be free of lead.

Residuals:

P - .075% Max

S - .10% Max

MOTOR BLOCKS

Whole unstripped motor blocks with transmissions removed. Minimal quantities of diesel blocks acceptable with auto engines. Oil pans and torque converters must be punched or preferably removed. May not include counterweights, heavy cast iron or oversized cast. Sealed units or closed containers are specifically excluded.

PIT SKULLS

Maximum 3' x 2' x 6" size. No more than 10% slag. May not contain B scrap.

B SCRAP

Screenings no smaller than 1/2". No more than 20% slag.