Scrap Specifications

THE GOOD
THE BAD
&
THE UGLY
Cascade Steel: A History of Quality

Since we began operating in 1969, a dedication to production of quality steel and the communities in which our plant is located has been the hallmark of Cascade Steel. As our mission statement declares,

“We are committed to the manufacture of quality steel products at a competitive cost. We believe in maximizing profits using the latest technology with an emphasis on safety, teamwork, and customer satisfaction, and are resolved to ensuring a rewarding workplace for all.”

In 1984, Cascade Steel was acquired by Schnitzer Steel Industries which continues a dedication to excellence through investment in technology. By combining this modernization of equipment with our skilled employees, Cascade Steel Rolling Mills remains on the forefront of quality steel production and delivery and its success continues to benefit the local communities.

As the state’s largest recycler, we value our environment.

We take scrap metal and items that would otherwise be disposed of – old car parts, metal from demolished buildings – and recycle them into reusable products. Each year we recycle more than 800,000 tons of material, demonstrating our dedication to our environment.

As one of the area’s largest employers, we contribute to a vital economy.

Cascade Steel provides the highest number of jobs in McMinnville, employing more than 500 workers. We contribute to the economy by paying our employees a family living wage and offering competitive benefits including healthcare, continuing education and retirement.

As a leader in community service, we support local efforts for social responsibility.

Through donations of time, money and product we demonstrate the value we place on the community in which we live. In recent years, we’ve contributed to a variety of community efforts including: the Yamhill County Fair Livestock Pen Project, the McMinnville High School Welding Class, the Drew Ottley Memorial Skate Park, Kids on the Block after-school program and Head Start of Yamhill County.

Our skilled employees produce quality products.

High marks in our Jacobson and Associates annual customer satisfaction report demonstrate the connection between our emphasis on finding and retaining hard working, dedicated employees and the timely delivery of quality products. Our customers are satisfied and our community benefits from our continued success.
Scrap Specifications: Why do we need them?

The Cascade Steel Scrap Acceptance Policy is based on scrap specifications. Scrap suppliers need the details of what we are looking for in our raw materials to determine if they can meet or exceed the criteria. The purpose of defining why you need scrap specifications leads to detailing the materials in the melting process. When we ask why we need certain things in steel making, we look to recycled scrap materials that meet or exceed the expectations for the characteristics of the customers steel requirements. Size, density, chemistry, cleanliness, and many more unique features, all contribute to what we need in the specification. Each materials variance in its physical and chemical form makes it unique from all other scrap types.

Shredded is not like bundles nor is it similar to machine shop turnings. They all perform differently in a melting environment and that is where the need for clear, well stated scrap specifications comes in. When we spend the time to define what is needed for the melting environment and train the supply base on these needs, we can expect materials that fit well in each of the categories. Information on the melting traits of each scrap type is also vital to our process. A source may be providing material that has great chemistry qualities – but is so light in density that we use little of it. Changing the materials physical form allows for increased sales of the material and better communication between consumer and supplier.

Radiation Statement:
Cascade Steel Rolling Mills policy is zero tolerance of radiation and radioactive materials in our scrap. Every load of scrap delivered by truck and rail is inspected for radiation. If a source is found we follow CSRM Safe Job Procedures on radiation protocol and that includes notifying the appropriate state and local radiation personnel. A yellow DOT placard is affixed to the vehicle with the approved file number and released for transport. It is the responsibility of the shipper or radiation processor to remove the DOT placard prior to release of the vehicle and dispose properly. Please see pages 9, 11 and 16 for additional radiation data.

Non-typical scrap buying:
Occasionaly scrap that does not conform to our general specifcation is offered to CSRM. Our policy is to have senior management, SSI-purchasing, melting and logistics staff review each material for chemical, physical, handling, pricing, etc. aspects of each material. A determination will then be made as to the viabaility of the scrap in the purchasing decision. Secondary "pup" coils are an example of such an scrap.
Scrap Quality Remedies:

When a scrap delivery does not meet expectations based on scrap specifications, the decision as to the disposition of this load, and potentially future loads, needs to be made. We have four steps in our process to handle a poor quality load.

1) First offense for a new shipper, if the error is not egregious and able to be handled with minimal reprocessing, a phone call and emails with pictures if necessary to show what the problem is. No monetary value adjustment - just a verbal warning.

2) New shipper and a current shipper to CSRM. If the error has not been solved with the verbal warning then a downgrade of monetary value or grade change may be in order. A minimum of $25 per net ton is the standard but may be increased depending on the severity of the problem. The potential is for all loads after this may also be subject to pricing adjustment in addition to the $25.

3) Rejection of the load. Based on the history of the shipper and the contamination level of the load may constitute outright rejection of the load back to the shipper. Automatic rejection applies for any radioactive materials and sealed containers in a load. If a load passes top visual inspection but we find rejectionable material lower in the load, we will reject the balance of the load and pay for what has been taken out.

4) Suspension of Shipper. No future business until CSRM is satisfied issues have been resolved. May include site visits and trials of material to determine shippers ability to conform to specifications.

5) Remove shipper from SSI purchase contracts. We do this only as a last resort and in rare occasions. Continued unacceptable performance may eliminate a shipper from the CSRM purchasing process.
# Table of Contents

**Scrap Steel General Requirements** ................................................................. 7-16

**Good Scrap**

- #1 Factory Bundles .................................................................................. 18
- #2 Bundles ............................................................................................... 19
- Bonus ........................................................................................................... 20
- Bushelings ................................................................................................. 21
- Cast Iron ...................................................................................................... 22
- Hot Briquetted Iron .................................................................................. 23
- Mixed 1&2 HMS ......................................................................................... 24
- Railroad OTM ............................................................................................. 25
- Shredded ..................................................................................................... 26
- Tin Can Bales ............................................................................................. 27
- Railroad Wheels ......................................................................................... 28
- Pig Iron ........................................................................................................ 29
- Turnings ...................................................................................................... 30

**Bad Scrap**

- Cast ........................................................................................................... 34-36
- Copper ........................................................................................................ 37-39
- Dirt ............................................................................................................. 40-42
- Mixed Grades ............................................................................................. 43-45
- Non Conductor .......................................................................................... 46-47
- Oversized .................................................................................................. 48-50

**UGLY SCRAP  UGLY SCRAP UGLY SCRAP**

- Rubber, Fluff, Plastics .............................................................................. 52-54
- Sealed Containers .................................................................................... 55-56
- Oxidized ..................................................................................................... 57-58

**Area Source Rule Requirements** ............................................................... 60-70
**Raw Material Specifications**

### Steel Scrap

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: All</th>
</tr>
</thead>
</table>

**Scope:**
These general specifications apply to all grades purchased by Cascade Steel Rolling Mills Inc. for the purposes of remelting at the McMinnville, Oregon steel works.

Specific scrap types and grades are following which detail what Cascade Steel Rolling Mills Inc. will likely consume during a typical monthly buying cycle.

**Receiving Hours:**
Monday 6am - 9pm; Tuesday–Friday, 5am–9pm
Questions, call: (503) 472-4181 ext. 3650

### Special Definitions

- **“Area Source Rule”**

- **“Chlorinated Plastics”**
  Solid polymeric materials that contain chlorine in the polymer chain, such as polyvinyl chloride (PVC) and electrical wiring insulators.

- **“Downgrade”**
  When a particular load of scrap does not meet the Raw Material Specification, it may, with consent of Cascade and the shipper, be considered and accepted as a lower quality scrap grade. Financial repercussions may also be included within the downgrade action.

- **“EAF Steelmaking Facility”**
  A steel plant that produces carbon, alloy or specialty steels using an Electric Arc Furnace.

- **“Free of”**
  When specified to be “free of”, the grade shall not contain any amount of prohibited material greater than that which is unavoidable in the customary preparation and handling of that material (i.e. the extent practicable).
<table>
<thead>
<tr>
<th>“Free of Alloy”</th>
<th>Scrap is “free of alloy” if the residual level of each element listed contained in the scrap does not occur at levels consistent with the purposeful creation of an alloyed steel grade.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carbon (C) 0.50%</td>
</tr>
<tr>
<td></td>
<td>Chromium (Cr) 0.25%</td>
</tr>
<tr>
<td></td>
<td>Nickel (Ni) 0.25%</td>
</tr>
<tr>
<td></td>
<td>Molybdenum (Mo) 0.06%</td>
</tr>
<tr>
<td></td>
<td>Copper (Cu) 0.30%</td>
</tr>
<tr>
<td></td>
<td>Tin (Sn) 0.02%</td>
</tr>
<tr>
<td></td>
<td>Manganese (Mn) 1.65%</td>
</tr>
<tr>
<td></td>
<td>Sulfur (S) 0.05%</td>
</tr>
<tr>
<td></td>
<td>All listed elements combined shall not exceed 0.75% with the exclusion of Manganese. All other elements shall be 0.001% maximum</td>
</tr>
<tr>
<td>“Free Organic Liquids”</td>
<td>Material that fails the paint filter test by EPA Method 9095B, after accounting for water using a moisture determination test by ASTM Method D2216-05 (40 CFR § 63.14). If, after conducting the moisture determination test, any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains “free organic liquids.”</td>
</tr>
<tr>
<td>“Grade” or “Type”</td>
<td>A classification of scrap type based upon the Institute of Scrap Recycling Industries (ISRI) ferrous scrap classification, or Cascade description.</td>
</tr>
<tr>
<td>“Leaded Steel”</td>
<td>Steel that must meet a minimum specification for lead content (typically 0.25% or more) and for which lead is a necessary alloy. Scrap used for the production of leaded steel is subject to approval prior to acceptance.</td>
</tr>
<tr>
<td>“Mercury Switch”</td>
<td>Each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a vehicle.</td>
</tr>
<tr>
<td>“Motor Vehicle” or “Automobile”</td>
<td>An automotive vehicle not operated on rails and usually operated with rubber tires for use on highways.</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>&quot;Motor Vehicle Scrap&quot;</td>
<td>Vehicle or automobile bodies, including automobile body hulks that have been processed through a shredder. “Motor vehicle scrap” does not include automobile manufacturing bundles, or miscellaneous vehicle parts, such as wheels, bumpers, or other components that do not contain mercury switches.</td>
</tr>
<tr>
<td>&quot;Non-Ferrous Metals&quot;</td>
<td>Any pure metal other than iron or any metal alloy for which an element other than iron is its major constituent by percent in weight.</td>
</tr>
<tr>
<td>&quot;Off-Grade&quot;</td>
<td>A load of scrap shall be considered off grade if it fails to meet:</td>
</tr>
<tr>
<td></td>
<td>1. Applicable requirements of quality or chemistry.</td>
</tr>
<tr>
<td></td>
<td>2. Applicable requirements of material “type” or “grade”</td>
</tr>
<tr>
<td></td>
<td>3. Applicable size limitations as specified in the material’s (grade’s) Raw Material Specification.</td>
</tr>
<tr>
<td>&quot;Rejection&quot;</td>
<td>Scrap may be rejected if gross quality, chemistry, or sizing of material occurs. All costs incurred, including demurrage charges if applicable, will be charged to the shipper’s account.</td>
</tr>
<tr>
<td>&quot;Scrap Provider&quot;</td>
<td>The person (including a broker) who contracts with Schnitzer Steel Industries, Inc. to provide scrap metal to Cascade Steel.</td>
</tr>
</tbody>
</table>

**Gate Policy**

All scrap is subject to inspection prior to acceptance and is subject to classification based upon visual and/or chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and/or radiation detection. Inspection of scrap will be conducted according to the Cascade Steel Rolling Mills, Inc.'s Scrap Inspection Checklist. This checklist can be found on page 12 and all conditions and requirements outlined in this document apply.
Scrap Acceptance Guidelines

This document clarifies our policies for accepting recyclable metals. These requirements reflect our commitment to responsible environmental management. Please be aware that many of our policies are controlled by state and federal regulations which apply both to us and to our customers.

This list is not inclusive: other items not listed may be inappropriate for recycling as scrap metal. Please read this brochure carefully, and contact us if you have questions about specific items. Remember that any load may be rejected at your cost if these guidelines are not followed.

The following materials will NOT be accepted at our facility:

**Refrigerants** (including CFCs and HCFCs) in refrigerators and air conditioners. Please note that Clean Air Act regulations (§608(b)(1) and §608(c)) prohibit any release of refrigerants to the atmosphere, and require persons handling refrigerants to follow specific procedures. Our customers are REQUIRED to sign a statement certifying that all refrigerants have been properly removed (40 CFR §82).

**Asbestos or asbestos containing materials**, such as pipe insulation and surfacing material commonly found on I-beams, tanks, and other structural and demolition debris (40 CFR §61.150).

**Oils, gasoline, other petroleum products and antifreeze**. This includes hydraulic fluids, gear oils and grease. Hydraulic equipment must have hydraulic hoses removed and cylinders cut open and drained.

**Lead-acid batteries or battery parts**, including automobile batteries (40 CFR §273).

**Items that contain or have contained PCBs**, including small capacitors, flourescent light ballasts and electrical transformers or transformer components (TSCA and 40 CFR §258 and §261).

**Automobile airbags**, which contain sodium azide (40 CFR §261).

**Paint cans or other paint containers**.
Acetylene bottles and other sealed containers. Sealed containers are described as air or water tight containers without visible openings.

Flourescent lights, neon, high intensity or mercury vapor lights.

Any material containing hazardous or toxic substances.

Military scrap of any kind, unless approved in advance.

Explosives, fracturing guns and tubes, or any explosive residues.

Radioactive materials of any kind.

Tires, wood, dirt, yard debris, concrete, asphalt, glass, excessive fluff, rubber, or other non-metallic materials.

Scrap Inspection Checklist:
The next page illustrates the Scrap Inspection Checklist form we use on all inbound scrap loads. The Restricted Scrap will tend to have more contamination potential, derived by the Area Source Rule, namely the element mercury. However, other contaminants are also found such as dirt and liquids that must be inspected for and dealt with. We will place more effort to these scrap types than the Unrestricted which will not normally have any Area Source Rule infractions.

It is the intent of the process that when a problem exists, the weigh scale personnel have the authority to hold for inspection any load not conforming to the Scrap Specifications. A supervisor or person knowledgable in scrap may elect to perform a follow up inspection. Photographs are usually taken to verify the problem and these can be attached as supporting documents to the inspection report. Loads which do not conform will be flagged and email notices sent to those in CSRM management and SSI purchasing.
<table>
<thead>
<tr>
<th>Restricted Scrap Identification</th>
<th>Unrestricted Scrap Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ #2 Bundles</td>
<td>□ Low Residual</td>
</tr>
<tr>
<td>□ Tin Can Bales</td>
<td>□ #1 Factory Bundles</td>
</tr>
<tr>
<td>□ Cast Iron</td>
<td>□ Pig Iron</td>
</tr>
<tr>
<td>□ Turnings</td>
<td>□ Bushelings</td>
</tr>
<tr>
<td>□ Shredded</td>
<td>□ Tire Wire</td>
</tr>
<tr>
<td>□ Mixed 1 &amp; 2 HMS</td>
<td>□ Railroad Wheels</td>
</tr>
<tr>
<td>□ Bonus</td>
<td>□ RR Rail</td>
</tr>
<tr>
<td>□ Other: _____________________</td>
<td>□ RR OTM</td>
</tr>
<tr>
<td>□ Other: _____________________</td>
<td>□ HBI</td>
</tr>
</tbody>
</table>

**Inspection Guidelines**

This scrap, to the extent practical, does not contain any of the following items:

**Pass**  **Fail**

- □ □ free organic liquids (oils, antifreeze, fuels, lubricants, hydraulic fluids, grease, etc.), including un-drained oil filters.
- □ □ chlorinated plastics (PVC, electrical insulators, etc.).
- □ □ lead and lead containing components of scrap (batteries, battery cables, wheel weights, etc.).
- □ □ sealed containers (barrels, gas cylinders, propane bottles, paint cans, aerosol cans, etc.).
- □ □ non-metallic debris (wood, dirt, yard debris, concrete, asphalt, glass, rubber, etc.).
- □ □ Mercury switches, fluorescent, neon, HID, mercury vapor lights, hazardous or toxic substances, all refrigerants and air conditioners, asbestos or asbestos containing materials, any items that contain or did contain PCBs, explosives or military scrap, and all non-ferrous metals (brass, copper, bronze, aluminum, tin).

**Pass**  **Fail**

- □ □ This scrap load has failed visual inspection due to reasons other than those identified above. Explanation:

---

This load has been found to be (unacceptable) (acceptable) according to Cascade Steel Rolling Mills, Inc.’s scrap acceptance guidelines and scrap specifications. If this load has been found to be unacceptable, describe the course of action required.

- □ Downgrade  □ Reject
CASCADE STEEL ROLLING MILLS, INC.

SCRAP INSPECTION CHECKLIST

Inspector: [ ]
Date: [ ]
Shipper: [ ]
Scale Ticket #: [ ]

Restricted Scrap Identification
- □ #2 Bundles
- □ Tin Can Bales
- □ Low Residual
- □ #1 Factory Bundles
- □ Cast Iron
- □ Turnings
- □ Pig Iron
- □ Bushelings
- □ Shredded
- □ Mixed 1 & 2 HMS
- □ Tire Wire
- □ Railroad Wheels
- □ Bonus
- □ RR
- □ RR
- □ OTM

Unrestricted Scrap Identification
- □ Other: ______________

INSPECTION GUIDELINES

This scrap, to the extent practical, does not contain any of the following items:

- □ Free organic liquids (oils, antifreeze, fuels, lubricants, hydraulic fluids, grease, etc.), including undrain ed oil filters.
- □ Chlorinated plastics (PVC, electrical insulators, etc.).
- □ Lead and lead containing components of scrap (batteries, battery cables, wheel weights, etc.).
- □ Sealed containers (barrels, gas cylinders, propane bottles, paint cans, aerosol cans, etc.).
- □ Non-metallic debris (wood, dirt, yard debris, concrete, asphalt, glass, rubber, etc.).
- □ Mercury switches, fluorescent, neon, HID, mercury vapor lights, hazardous or toxic substances, all refrigerants and air conditioners, asbestos or asbestos containing materials, any items that contain or did contain PCBs, explosives or military scrap, and all non-ferrous metals (brass, copper, bronze, aluminum, tin).

This scrap load has failed visual inspection due to reasons other than those identified above. Explanation:

This load has been found to be (unacceptable) (acceptable) according to Cascade Steel Rolling Mills, Inc.’s scrap acceptance guidelines and scrap specifications. If this load has been found to be unacceptable, describe the course of action required.

□ Downgrade
□ Reject

EXAMPLES OF TYPICAL MERCURY - CONTAINING AUTOMOTIVE DEVICES ACCEPTED BY E.L.V.S.

TYPICAL HOOD AND TRUNK CONVENIENCE LIGHT SWITCHES
- Chrysler Light Switch
- Cadillac Light Switch
- GM Light Switch
- GM Light Switch
- Chrysler Light Switch
- GM Light Switch
- GM Light Switch
- Volvo Light Switch

ABS SWITCH MODULES
- Chrysler ABS Modules
- Audi ABS Module
- Ford ABS Module
- Subaru ABS Module

CRASH SENSOR MODULES
- Toyota Crash Sensor Module
- Volvo Air Bag Crash Sensor Module

HEAVY TRUCK SWITCHES
- International Hood Tilt Switch
- International Luggage Door Switch

SUNVISOR LIGHT SWITCHES
- Audi Light Switch
- Volvo Vanity Light Switch
- Volvo Vanity Light Switch

End of Life Vehicle Solutions

For more information see www.elvsolutions.org
EXAMPLES OF AUTOMOTIVE AND NON-AUTOMOTIVE DEVICES NOT ACCEPTED BY E.L.V.S.

**AUTOMOTIVE COMPONENTS WITHOUT MERCURY**
- ABS Wheel Sensors
- Ford Non-Mercury Front Crash Sensors
- Chassis Crash Sensors
- Ford Non-Mercury Light Switches
- ABS Wheel Sensors
- Non-Mercury Light Switches

**NON-AUTOMOTIVE COMPONENTS WITH MERCURY**
- Appliance Controls
- Mercury Manometer
- Hot Water Heater Controls
- Temperature Controls
- Large Non-Auto Mercury Switches
- Large Non-Auto Mercury Switches
- Vials of Liquid Mercury
- Vials of Liquid Mercury
- Appliance Mercury Switches

For more information see www.elvsolutions.org
**General Specifications**

| **Cast Iron** | Unless specifically purchased as a Cast Iron, Pig Iron or Hot Briquetted Iron, all scrap grades shall not contain more than 1% (by weight) cast iron products. This includes, but is not limited to, Cast Iron, Pig Iron, Hot Briquetted Iron, engine blocks and parts, castings, machines bases, composite brake shoes, etc. |
| **Sealed Containers** | All scrap grades shall not contain Closed, Enclosed or Sealed Containers. Such containers may be accepted providing they have such that: one end has been removed, a minimum of two large holes broach the sealed portion of the container, or the container has been cut in half. Closed, Enclosed or Sealed Containers include, but are not limited to: |
| | • Hydraulic or gas cylinders |
| | • Shock absorbers |
| | • Air, Freon, acetylene, oxygen, propane tanks |
| | • Closed ball valves |
| | • Automotive rear ends |
| | • Sealed units e.g. refrigerant compressors |
| | • Any vessel which contains and retains gasses, oils or fluids |
| **Cleanliness** | All scrap grades shall be free of excessive dirt, corrosion, rust, oil, or grease. No mill scale, grinding swarf, torch drippings, slag, municipal waste or incinerated scrap in any amount will be cause for rejection. |
| **Inspection** | All material is to be suitable and acceptable to Cascade Steel Rolling Mills. |
| **Hazardous Materials** | All grades shall not contain any hazardous materials including, but not limited to, \textit{Materials} explosives, radioactive materials in any form, medical waste, oil filled devices (e.g. Transformers – even if drained may contain PCB residue), etc. |
| **Loading** | Scrap must be capable of being loaded and unloaded by electromagnet. |
| **Mercury** | All grades shall have zero Mercury and Mercury containing materials. Mercury containing materials include, but are not limited to: Mercury wetted or containing relays, switch gear, rectifiers, gauges, manometers, barometers, fluorescent lighting fixtures, etc. |
| **Lead** | All scrap grades are not allowed to contain any amount of lead. Such items containing lead include, but are |
not limited to: batteries, lead-based paints, gasoline tanks, terne plate, wheel balancing weights, metal guttering, mufflers, tailpipes, Babbitt, solder, radiators, leaded joints in soil pipe, equipment counterweights, bearing journals, etc.

<table>
<thead>
<tr>
<th>Material</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tin</strong></td>
<td>All grades shall be free of tin coated or tin containing materials with the exception of tin can bales which are bought as a separate grade.</td>
</tr>
<tr>
<td><strong>Stainless Steel</strong></td>
<td>All grades shall be free of stainless steel materials.</td>
</tr>
<tr>
<td><strong>Non-Ferrous</strong></td>
<td>All grades are to be free of Non-ferrous materials. Non-ferrous materials include, but are not limited to: copper (wiring, motors, piping, and compressors), lead, aluminum, brass, bronze, etc.</td>
</tr>
<tr>
<td><strong>Non-Metallic</strong></td>
<td>All scrap grades are to be free of Non-metallic material. Non-metallic materials include, but are not limited to: wood, plastics, paper, cardboard, fiber, rubber, foam, slag concrete, dirt, grease, oil, etc.</td>
</tr>
<tr>
<td><strong>Radioactivity</strong></td>
<td>All grades of scrap shall <strong>not</strong> contain radioactive material. Such scrap found with radioactive materials shall be processed pursuant to the CSRM Radioactive guidelines. Under no circumstances shall any radioactive scrap be accepted through downgrading.</td>
</tr>
<tr>
<td><strong>Counterweights</strong></td>
<td>All grades of scrap shall <strong>not</strong> contain counterweights in any form.</td>
</tr>
</tbody>
</table>

**Further information, in the form of Area Rule Requirements, begins on page 59.**
THE GOOD
#1 Bundles Specifications

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: #1 Bundles</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s: 208</td>
<td>AKA: #1 Factory Bundles</td>
</tr>
</tbody>
</table>

Description:
Clean steel sheet, clippings, bushelings, wire or skeletons hydraulically compressed into a bundle. May include tightly wound mandrel bundles if banded or welded across face and secured for magnet handling.

Typical Appearance

Physical Appearance

Sizing: 36” x 24” x 24”  
Typical Density: 70 (Lbs/ft3)

| Chemistry:  
<table>
<thead>
<tr>
<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Cu</th>
<th>Ni</th>
<th>Cr</th>
<th>Mo</th>
<th>Sn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%)</td>
<td>0.10</td>
<td>0.75</td>
<td>0.03</td>
<td>0.03</td>
<td>0.50</td>
<td>0.10</td>
<td>0.10</td>
<td>0.03</td>
<td>0.01</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Exclusions:  
Auto Body parts, Fender stock, De-Tinned materials, Electrical steels over 0.50 silicon, Metal coated, limed or vitreous enameled steels.
Permissible:
Zinc or galvanized coated steels and wire products such as barbed, pencil, or baling wire.
Allowances: (N/A)

Inspection Criteria:  
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
#2 Dealer Bundles

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: #2 Dealer Bundles</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s: 209</td>
<td>AKA: #2 Bundles</td>
</tr>
</tbody>
</table>

Description:
Old black and galvanized sheet steel scrap from a scrap yard, not to exceed 3 feet in any one direction. Free of tin and lead coated metals, limed, vitreous enameled, and electrical coated sheet over 0.50% silicon. No auto bales, auto slabs or shredder logs allowed.

Typical Appearance

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: 24” x 24” x 36”</th>
<th>Typical Density: 50 - 60 (Lbs/ft³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry:</td>
<td>C</td>
</tr>
<tr>
<td>(Maximum wt%)</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Exclusions:
Municipal scrap, incinerated materials, lead and tin coated, metal coated, limed steels, non-metallics and non-ferrous materials. No auto bales, auto slabs or shredder logs.

Permissible:
Zinc or galvanized coated steels and vitreous enameled materials up to 15% by weight provided the “white goods” do not contain wiring harnesses, motors, compressors, or capacitors. Any single bale may include up to 15% reinforcing bar.

Allowances: (N/A)

Inspection Criteria:
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Bonus Grade

<table>
<thead>
<tr>
<th>Material:</th>
<th>Steel Scrap</th>
<th>Grade:</th>
<th>Bonus</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>236; 231</td>
<td>AKA:</td>
<td>Bonus; Plate &amp; Structural; P &amp; S</td>
</tr>
</tbody>
</table>

**Description:**
Clean plate and structural steel scrap 1/4 inch and over in thickness. May include heavy walled pipe split in half if larger than 8 inch diameter, large diameter pipe cut in thirds if over 24 inches in diameter, and heavy railroad scrap such as bolsters, side frames, knuckles, except car sides. Railroad wheels to be bought separately from the Bonus grade.

Typical Appearance

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: 36” x 24” x 2”</th>
<th>Typical Density: 60-70 (Lbs/ft³)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemistry:</strong></td>
<td>C</td>
</tr>
<tr>
<td>(Maximum wt%)</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Exclusions:**
All counterweights, and cast iron including but not limited to engine blocks, machinery, brake calipers, rotors, truck brake drums, etc. Free of non-ferrous and non-metallics, vitreous enameled material. Railroad wheels are to be separated for independent sale.

**Permissible:**
Attached cast iron content not to exceed 5% by weight

**Allowances:**
Alloyed steel may not exceed 15%.

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Bushelings

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: #1 Bushelings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISRI #s:</strong> 207</td>
<td><strong>AKA:</strong> Bushelings; clippings; punchings; BHP; coils ends; low residual; charge clips</td>
</tr>
</tbody>
</table>

**Description:**
Clean steel scrap from a factory, not to exceed 4 feet in any one direction, may include slitter, low residual, punchings, BHP, coils ends, sheet clippings, stampings, etc.

Typical Appearance

![Typical Appearance Image]

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: 48” x 24” x 1/2”</th>
<th><strong>Typical Density:</strong> 70-90 (Lbs/ft³)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemistry</th>
<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Cu</th>
<th>Ni</th>
<th>Cr</th>
<th>Mo</th>
<th>Sn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%)</td>
<td>0.15</td>
<td>1.50</td>
<td>0.05</td>
<td>0.05</td>
<td>0.50</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.03</td>
<td>0.01</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**Exclusions:**
Free of coated metals, limed, vitreous enameled, and electrical coated sheet over 0.50% silicon. May not include old auto body and fender stock or excessively oily or greasy materials.

**Permissible:**
Zinc or galvanized coated steels.

**Allowances:** (N/A)

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Cast Iron

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: Cast Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s: 259; 263</td>
<td>AKA: Clean Auto cast</td>
</tr>
</tbody>
</table>

Description:
Clean auto cast iron, broken or unbroken, free of nonferrous and non-metallics. May include small amounts of grating, truck brake hubs, diesel cast and small machinery bases and steel parts.

Typical Appearance

![Image of cast iron scrap]

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: 36” x 18” x 4”</th>
<th>Typical Density: (Lbs/ft3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry: C Mn P S Si Cu Ni Cr Mo Sn Al</td>
<td></td>
</tr>
<tr>
<td>(Maximum wt%) 4.50 0.75 0.035 0.10 2.35 0.20 0.15 0.15 0.06 0.02 0.04</td>
<td></td>
</tr>
</tbody>
</table>

Exclusions:
All counterweights, stove plate, burnt iron, brake shoes or foreign materials. No dirty motor blocks or whole engines.

Permissible:
May include steel parts which does not exceed 15 percent of the load.

Allowances:
Malleable iron parts allowed.

Inspection Criteria:
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
### Raw Material Specifications

**Hot Briquetted Iron**

<table>
<thead>
<tr>
<th>Material: Hot Briquetted Iron</th>
<th>Grade: Hot Briquetted Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISRI #s:</strong></td>
<td><strong>AKA:</strong> HBI</td>
</tr>
</tbody>
</table>

**Description:**
Iron ore fines that have been subjected to a reducing atmosphere, passivated for transportation and compressed into briquettes.

---

### Typical Appearance

![Typical Appearance](image1.png)

---

### Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: 4” x 1” x 2”</th>
<th><strong>Typical Density</strong>: 300 (Lbs/ft³)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemistry: C Mn P S Si Cu Ni Cr Mo Sn Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%) 1.5 0.25 0.05 0.05 0.25 0.10 0.05 0.05 0.02 0.01</td>
</tr>
</tbody>
</table>

**Exclusions:**

**Permissible:**

**Allowances:**

---

**Inspection Criteria:**

Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Mixed 1 & 2 HMS

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: Mixed 1 &amp; 2 HMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s: 201; 205</td>
<td>AKA: #1, #2, Heavy Melt, HMS</td>
</tr>
</tbody>
</table>

Description:
Clean steel scrap ¼ inch and over in thickness. Individual pieces not over 36 inches by 18 inches by 2 inches. Prepared in a manner to insure compact charging. Thin gauge materials not to exceed 30% of the load.

Typical Appearance

Physical Appearance

Sizing: 36” x 18” x 2”
Typical Density: 45-60 (Lbs/ft3)

<table>
<thead>
<tr>
<th>Chemistry</th>
<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Cu</th>
<th>Ni</th>
<th>Cr</th>
<th>Mo</th>
<th>Sn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%)</td>
<td>0.50</td>
<td>1.50</td>
<td>0.05</td>
<td>0.05</td>
<td>0.50</td>
<td>0.50</td>
<td>0.25</td>
<td>0.25</td>
<td>0.06</td>
<td>0.02</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Exclusions:
Sealed containers in any form. Municipal, incinerated, tin cans, oil filters, sheared white goods, turnings and cast iron borings, railroad brake shoes, copper clad or copper plated steel. Loose cable and wire (not cut to 3’), all counterweights, and all loose cast iron including but not limited to engine blocks, machinery, brake calipers, rotors, truck brake drums, etc. Free of non-ferrous and non-metallics, vitreous enameled material.

Permissible:
Attached cast iron content not to exceed 5% by weight.

Allowances:
Alloyed steel may not exceed 15%.

Inspection Criteria:
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Railroad OTM (Other Track Materials)

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: Railroad OTM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISRI #s:</strong> (4),(5),(6),(34),(34A)</td>
<td><strong>AKA:</strong> OTM, plates, spikes, joint bars</td>
</tr>
</tbody>
</table>

**Description:**
OTM = Other Track Material including all spikes, track bolts and nuts, lock washers, rail anchors, tie plates, rail joints, angles, and/or splice bars and all steel coil springs.

**Typical Appearance**

![Typical Appearance Image]

**Physical Appearance**

<table>
<thead>
<tr>
<th>Sizing: 36” x 18” x 1”</th>
<th>Typical Density: 125-150 (Lbs/ft³)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemistry:</strong> C Mn P S Si Cu Ni Cr Mo Sn Al</td>
<td><strong>Maximum wt%</strong></td>
</tr>
</tbody>
</table>

**Exclusions:**
All other railroad scrap including bolsters, side frames, car sides and roofs, railroad rail, brakes, linkages, cast iron in any form, manganese in all forms.

**Permissible:**
Allowances:

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Railroad Rail

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: Railroad Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISRI #s:</strong> 27, 28A, 28B, 28C, 29</td>
<td><strong>AKA:</strong> Cropped, cut, or broken rail</td>
</tr>
</tbody>
</table>

**Description:** Railroad rail cut 2 to 4 feet in length, may include joint bars and splices. May be broken, sheared or torch cut to size. No manganese attachments allowed.

Typical Appearance

![Typical Appearance Image]

Physical Appearance

<table>
<thead>
<tr>
<th><strong>Sizing:</strong> 48” x 7” x 2”</th>
<th><strong>Typical Density:</strong> 125-150 (Lbs/ft³)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemistry: C Mn P S Si Cu Ni Cr Mo Sn Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%) 0.70 0.75 0.025 0.035 0.35 0.15 0.15 0.15 0.03 0.01 0.04</td>
</tr>
</tbody>
</table>

**Exclusions:**
All other railroad scrap including bolsters, side frames, car sides and roofs, railroad rail, brakes, linkages, cast iron in any form, manganese in all forms.

**Permissible:**

**Allowances:**

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

#2 Shredded

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: #2 Shredded</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s: 210; 211</td>
<td>AKA: Auto Shred; Fragmentized; Shredded</td>
</tr>
</tbody>
</table>

**Description:**
Homogenous shredded steel scrap magnetically separated from automobiles, unprepared #1 Heavy Melt and #2 Heavy Melt steel, and miscellaneous sheet goods.

**Typical Appearance**

**Physical Appearance**

<table>
<thead>
<tr>
<th>Sizing: 8” x 8” x 1”</th>
<th>Typical Density: 55-75 (Lbs/ft³)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemistry</th>
<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Cu</th>
<th>Ni</th>
<th>Cr</th>
<th>Mo</th>
<th>Sn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%)</td>
<td>0.25</td>
<td>1.50</td>
<td>0.05</td>
<td>0.05</td>
<td>0.50</td>
<td>0.22</td>
<td>0.10</td>
<td>0.10</td>
<td>0.03</td>
<td>0.015</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**Exclusions:**
Free of coated metals, limed, vitreous enameled, and electrical coated sheet over 0.50% silicon. Municipal, incinerated, tin cans, excessive oil filters, excessive fluff, copper clad or plated steel.

**Permissible:**
Zinc or galvanized coated steels. Cast iron content not to exceed 5% by weight.

**Allowances:**
Due to the nature of processing this grade, small amounts of copper wiring and motor windings will be entrapped with the steel.

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Tin Can Bales

| Material: Steel Scrap          | Grade: Tin Can Bales |
| ISRI #s: 213                  | AKA: Tin Bales, Steel Can Bales |
| Description:                  |
| Clean steel can scrap compressed for easy magnet handling and weighing not less than 45 pounds per cubic foot. Cans may be baled without removal of paper labels, but free of all other non-metallics and food products. Minimum of 7 wire bands around the bale.

Typical Appearance

Sizing: 48” x 36” x 24”

Typical Density: 45-55 (Lbs/ft³)

<table>
<thead>
<tr>
<th>Chemistry</th>
<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Cu</th>
<th>Ni</th>
<th>Cr</th>
<th>Mo</th>
<th>Sn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%)</td>
<td>0.10</td>
<td>0.30</td>
<td>0.020</td>
<td>0.055</td>
<td>0.25</td>
<td>0.05</td>
<td>0.05</td>
<td>0.005</td>
<td>0.45</td>
<td>0.025</td>
<td></td>
</tr>
</tbody>
</table>

Exclusions:
All non-metallics such as plastics, wood, aluminum, other than can labels.

Permissible:
De-tinned materials allowed with prior melt shop approval.

Allowances:
Clean, triple rinsed 5 gallon tin coated containers.

Inspection Criteria:
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Railroad Wheels

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: Railroad Wheels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISRI #s:</strong> (2),(2A),(3),(3A),(42)</td>
<td><strong>AKA:</strong> Railroad Wheels and axles</td>
</tr>
</tbody>
</table>

**Description:**
Solid car, locomotive friction bearing and roller bearing axles, and solid cast steel wheels, pressed, forged and/or rolled steel car and/or locomotive wheels not over 43 inches in diameter. Axles may be cut in half between wheels or at wheel connection.

**Typical Appearance**

![Image of railroad wheels and axles]

**Physical Appearance**

<table>
<thead>
<tr>
<th>Sizing: 43” x 18” x 6”</th>
<th><strong>Typical Density:</strong> 80-100 (Lbs/ft3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemistry:</strong></td>
<td>C</td>
</tr>
<tr>
<td>(Maximum wt%)</td>
<td>0.80</td>
</tr>
</tbody>
</table>

**Exclusions:**
All other railroad scrap including bolsters, side frames, car sides and roofs, railroad rail, OTM (Other Track Materials), brakes, linkages, cast iron in any form, manganese in all forms.

**Permissible:**
Roller bearings and friction bearings without the brass/bronze bearings.

**Allowances:**
(N/A)

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
**Raw Material Specifications**

**Pig Iron**

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: Pig Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>AKA: Pig Iron</td>
</tr>
</tbody>
</table>

**Description:**
Pig iron formed in the casting machine for uniform size. May be from United States, Brazil, or Russian source based on carbon and silicon content.

**Typical Appearance**

- **Sizing:** 36” x 6” x 6”
- **Typical Density:** 180-200 (Lbs/ft3)

**Chemistry:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Maximum wt%</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>4.50</td>
</tr>
<tr>
<td>Mn</td>
<td>0.50</td>
</tr>
<tr>
<td>P</td>
<td>0.050</td>
</tr>
<tr>
<td>S</td>
<td>0.060</td>
</tr>
<tr>
<td>Si</td>
<td>2.25</td>
</tr>
<tr>
<td>Cu</td>
<td>0.05</td>
</tr>
<tr>
<td>Ni</td>
<td>0.05</td>
</tr>
<tr>
<td>Cr</td>
<td>0.05</td>
</tr>
<tr>
<td>Mo</td>
<td>0.01</td>
</tr>
<tr>
<td>Sn</td>
<td>0.010</td>
</tr>
<tr>
<td>Al</td>
<td>0.025</td>
</tr>
</tbody>
</table>

**Exclusions:**
All non-metallics such as plastics, wood, aluminum.

**Permissible:**
May be linked between sections up to 3 feet long.

**Allowances:**
(N/A)

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Raw Material Specifications

Turnings

<table>
<thead>
<tr>
<th>Material: Steel Scrap</th>
<th>Grade: Turnings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISRI #s:</strong> 219; 221</td>
<td><strong>AKA:</strong> Machine Shop Turnings; Shoveling Turnings</td>
</tr>
</tbody>
</table>

**Description:**
Clean steel turnings drillings, or screw cuttings. May include any such material whether resulting from crushing, raking, or other processes. May contain small amounts of springy or bushy material.

**Typical Appearance**

**Physical Appearance**

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th><strong>Typical Density:</strong> 45-55 (Lbs/ft3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemistry:</strong></td>
<td>C</td>
</tr>
<tr>
<td>(Maximum wt%)</td>
<td>0.50</td>
</tr>
</tbody>
</table>

**Exclusions:**
Free from tangled, matted material, lumps, cast iron borings, badly rusted or corroded stock, and oil/cutting fluids. No mill scale, grinder swarf, grinder sludge, polishing filter media, nonferrous materials such as but not limited to brass, bronze, copper, lead, tin, aluminum, etc.

**Permissible:**
Small amounts of solids from rod stock or other turned materials.

**Allowances:** (N/A)

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
THE BAD
Raw Material Specifications

Cast Mixed with Other Grades

<table>
<thead>
<tr>
<th>Material: Cast</th>
<th>Grade: Cast</th>
<th>CSRM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>AKA:</td>
<td></td>
</tr>
</tbody>
</table>

**Description:**
Cast in all forms, but not limited to, machinery, valves, brake shoes, calipers, drums, all engine parts, all diesel engine parts, manhole covers, grating, etc.

**Physical Appearance**

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry:</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>(Maximum wt%)</td>
</tr>
</tbody>
</table>

| Exclusions:     | (N/A)                     |
| Permissible:    | (N/A)                     |
| Allowances:     | (N/A)                     |

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance

- Automotive Head
- Brake Calipers
- Disc Brake Calipers
Raw Material Specifications

Copper

<table>
<thead>
<tr>
<th>Material: Copper</th>
<th>Grade: Copper</th>
<th>CSRM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>AKA:</td>
<td></td>
</tr>
</tbody>
</table>

Description:
Copper in all forms that are free formed such as copper tubing and wiring, and coated wiring, radiator fins, etc.

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry: C</td>
<td>Mn</td>
</tr>
<tr>
<td>(Maximum wt%)</td>
<td></td>
</tr>
</tbody>
</table>

Exclusions: (N/A)
Permissible: (N/A)
Allowances: (N/A)

Inspection Criteria:
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance

Copper Motor

Copper Tubing
Copper Pipe

Copper Wiring

Truck Radiator
Dirt

<table>
<thead>
<tr>
<th>Material: Dirt</th>
<th>Grade: Dirt</th>
<th>CSRM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>AKA:</td>
<td></td>
</tr>
</tbody>
</table>

**Description:**
Dirt in all forms including dust, clumps, etc.

---

**Physical Appearance**

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry: C</td>
<td>Mn</td>
</tr>
<tr>
<td>(Maximum wt%)</td>
<td></td>
</tr>
</tbody>
</table>

**Exclusions:** (N/A)

**Permissible:** (N/A)

**Allowances:** (N/A)

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance
Raw Material Specifications

Mixed Grades

<table>
<thead>
<tr>
<th>Material: Mixed Grades</th>
<th>Grade: Mixed Grades</th>
<th>CSRM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISRI #s:</strong></td>
<td><strong>AKA:</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Description:**
Any shipment of scrap not consistent with the individual scrap specification as agreed to between CSRM and the SSI purchasing/brokerage/shipping point entity. This does not include the intentional mixing of #1 and #2 materials to form the grade of mixed #1 & 2. It does pertain to items such as turnings mixed into shred or mill scale mixed into low residual.

**Physical Appearance**

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry: C Mn P S Si Cu Ni Cr Mo Sn Al</td>
<td></td>
</tr>
<tr>
<td>(Maximum wt%)</td>
<td></td>
</tr>
</tbody>
</table>

**Exclusions:** (N/A)
**Permissible:** (N/A)
**Allowances:** (N/A)

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance

![Image of typical appearance with labeled Turnings]

*Turnings*
Non Conductor

<table>
<thead>
<tr>
<th>Material: Non Conductor</th>
<th>Grade: Non Conductor</th>
<th>CSRM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>AKA:</td>
<td></td>
</tr>
</tbody>
</table>

Description:
Non Conductors of electricity including wood in all forms including, but not limited to, logs, timbers, telephone poles, building lumber, sheets, pallets, boxes, etc.; concrete items like ecology blocks, cement filled bollards, large attached cement on rebar, etc.; whole tires; plastic lined pipe/tubing; paper rolls; rocks; clothing.

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft³)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemistry: C Mn P S Si Cu Ni Cr Mo Sn Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclusions: (N/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible: (N/A)</td>
</tr>
<tr>
<td>Allowances: (N/A)</td>
</tr>
</tbody>
</table>

Inspection Criteria:
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance

Wood
Raw Material Specifications

Oversized Materials

<table>
<thead>
<tr>
<th>Material: Oversized</th>
<th>Grade: Oversized</th>
<th>CSRM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>AKA:</td>
<td></td>
</tr>
</tbody>
</table>

**Description:**
Oversized materials in all forms, but not limited to, Bonus, Mixed #1 & #2, Dealer Bundles, Cast Iron, Railroad scrap, home scrap, etc.

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft3)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemistry: C Mn P S Si Cu Ni Cr Mo Sn Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%)</td>
</tr>
</tbody>
</table>

**Exclusions:** (N/A)

**Permissible:** (N/A)

**Allowances:** (N/A)

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance

8 ft. Pipe

I-Beam

Side Frame

Center Beam
Center Beams

8 ft. Long Billets
UGLY SCRAP

UGLY SCRAP

UGLY SCRAP
Raw Material Specifications

Rubber, Fluff, Plastic

<table>
<thead>
<tr>
<th>Material:</th>
<th>Rubber, Fluff, Plastic</th>
<th>Grade:</th>
<th>Rubber, Fluff, Plastic</th>
<th>CSRM Code:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ISRI #s:</th>
<th></th>
<th>AKA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Rubber, shredder fluff, plastic materials in all forms</td>
<td></td>
</tr>
</tbody>
</table>

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft³)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemistry:</th>
<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Cu</th>
<th>Ni</th>
<th>Cr</th>
<th>Mo</th>
<th>Sn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Maximum wt%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exclusions: (N/A)  
Permissible: (N/A)  
Allowances: (N/A)

Inspection Criteria:
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance

Mattress

Hydraulic Hose
Raw Material Specifications

Sealed Containers

<table>
<thead>
<tr>
<th>Material: Sealed Containers</th>
<th>Grade: Sealed Containers</th>
<th>CSRM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>AKA:</td>
<td></td>
</tr>
</tbody>
</table>

**Description:**
Sealed Containers in all forms that have the ability to hold a gas or liquid. These include, but are not limited to, all tanks and cylinders, shock absorbers and struts, paint cans, sealed units e.g. refrigerant compressors, any other vessel that has the ability to hold liquids or gases.

**Physical Appearance**

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft3)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemistry</th>
<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Cu</th>
<th>Ni</th>
<th>Cr</th>
<th>Mo</th>
<th>Sn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Maximum wt%)

**Exclusions:** (N/A)
**Permissible:** (N/A)
**Allowances:** (N/A)

**Inspection Criteria:**
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance

Torque Converters

Torque Converters
Raw Material Specifications

Oxidized Materials

<table>
<thead>
<tr>
<th>Material: Oxidized</th>
<th>Grade: Oxidized</th>
<th>CSRM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRI #s:</td>
<td>AKA:</td>
<td></td>
</tr>
<tr>
<td>Description:</td>
<td>Oxidized materials in all forms.</td>
<td></td>
</tr>
</tbody>
</table>

Physical Appearance

<table>
<thead>
<tr>
<th>Sizing: Various</th>
<th>Typical Density: (Lbs/ft3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry: C</td>
<td>Mn</td>
</tr>
<tr>
<td>(Maximum wt%)</td>
<td></td>
</tr>
<tr>
<td>Exclusions: (N/A)</td>
<td>Permissible: (N/A)</td>
</tr>
</tbody>
</table>

Inspection Criteria:
Material is subject to visual inspection and classification based on visual and chemical analysis, inspection for prohibited materials, sizing constraints, mechanical weighing on certified scales and radiation detection. All conditions and requirements of the CSRM Raw Material Specifications for Steel Scrap General Requirements apply.
Typical Appearance

Oxidized Slag

Oxidized Torch Drippings
Area Source Rule Requirements
Area Source Rule Requirements

The following information details scrap requirements under 40 CFR Part 63, Subpart YYYYY (National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities).

National Vehicle Mercury Switch Recovery Program

The National Vehicle Mercury Switch Recovery Program (NVMSRP) is a national partnership of steel producers, scrap recyclers, vehicle manufacturers, State agencies, environmental organizations, and the U.S. Environmental Protection Agency (EPA) formed with the goal of reducing mercury in the scrap feedstock for Electric Arc Furnace (EAF) Steelmaking Facilities. The NVMSRP program is designed to facilitate the removal of mercury-containing switches from end-of-life vehicles before they are flattened, shredded, and melted to make new steel. Participation in the NVMSRP is required by all parties in the scrap supply chain in order to achieve the desired mercury reduction goals.

The NVMSRP is administered by the End of Life Vehicles Solutions Corporation (“ELVS”). At no cost, ELVS will supply scrap providers with a collection bucket, educational materials and detailed shipping instructions for the switches. ELVS will cover all of the shipping and disposal costs for the switches collected by participating scrap providers. Monetary incentives for participation are also provided by ELVS. For additional information, and to participate in the program and receive these materials at no cost, scrap providers should contact ELVS at www.elvsolutions.org, or by calling toll free, 1-877-225-3587.

Additional Pollutants Under the Area Source Rule

The Area Source Rule which requires removal of mercury switches from end-of-life vehicles further defines the standards for scrap which is acceptable for purchase by EAF Steelmaking Facilities. Included in the following pages is Cascade’s Pollution Prevention Plan for the Control of Contaminants in Scrap Under the Area Source Rule for Electric Arc Furnace (EAF) Steelmaking Facilities (PPP). The PPP details Cascade’s compliance strategy for the Area Source Rule.

---

1 As of September 25, 2008 the “bounty” for recovered mercury switches submitted to ELVS was $4.00/switch.
Pollution Prevention Plan for the Control of Contaminants in Scrap Under the Area Source Rule for Electric Arc Furnace (EAF) Steelmaking Facilities

Contaminants such as chlorinated plastics, free organic liquids, lead (except for leaded steel) and mercury are not appropriate or desired for the production of steel in EAF facilities. However, these contaminants are found in the scrap metal that is the basic feedstock for the production of new steel.

EPA has identified EAF facilities as potential sources of HAP emissions and, on December 28, 2007, promulgated final regulations (codified at 40 CFR part 63, subpart YYYY) intended to control or minimize such emissions.

The regulations require EAF facilities, among other things, to restrict the use of certain scrap or follow a pollution prevention plan (PPP) for scrap purchased as production feedstock to minimize the amount of specified contaminants in such scrap.

Schnitzer Steel, Inc. is the sole agent for purchasing scrap for Cascade Steel Rolling Mills, Inc. (CSRM). As the agent for scrap purchased for CSRM, SSI accepts this PPP and its conditions for all scrap consumed.

CSRM is committed to complying with the requirements of the EAF Area Source Rule and to the goal of removing at least 80% of mercury convenience-light switches from motor vehicle scrap. CSRM is also committed to minimizing to the extent practicable the presence of other contaminants in scrap that may result in the emission of hazardous air pollutants (HAP).

Accordingly, CSRM has adopted and will comply with the provisions of this PPP designed to control the presence of such contaminants in scrap that is consumed in the EAF by adopting:

1. A specification for scrap that addresses contaminants identified by EPA
2. Procedures for verifying compliance with the specification
3. Procedures for taking corrective action against vendors who do not comply with the specification
4. Program policies, implementation elements, and training and outreach materials sufficient to demonstrate how CSRM will
appropriately implement its responsibilities under the EPA-approved National Vehicle Mercury Switch Recovery Program (NVMSRP) or other EPA-approved program.

This PPP must be approved by USEPA or a delegated authority. Any deficiencies identified by the permitting authority must be addressed within 60 days of disapproval of the PPP. A copy of the plan and supportive documentation must remain onsite for a period of three years.

The terms used in this Pollution Prevention Plan and in the outreach materials attached and incorporating to the PPP shall have the same definitions as those enumerated in EPA’s Final Area Source Rule found at 40 CFR Part 63 Subpart YYYYY. As outlined in the final rule, the term “mercury switch” denotes only mercury switches that are part of a convenience light switch mechanism installed in a vehicle.

I. General Scrap Specifications:
The following restrictions apply to all scrap steel purchased or used by CSRM in its EAF steelmaking process:

A. Scrap materials must be depleted to the extent practicable of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.

B. Lead-containing components of scrap, such as batteries, battery cables, and wheel weights, must be removed, to the extent practicable, prior to charging in the furnace unless the scrap is used to produce leaded steel.

C. Scrap must be purchased from providers that have minimized the presence of mercury in scrap through participation in the NVMSRP or another EPA-approved program.

II. Verification of Compliance with Specifications

A. Free Organic Liquids, Chlorinated Plastics, Lead and Lead-Containing Components:

1. Visual Inspection: CSRM conducts a visual inspection of incoming scrap loads to
ensure that the scrap meets existing quality and/or purchase order specifications for grade, type, density, and content. Scrap inspection will be required also to determine whether there is an obvious presence of free organic liquids, chlorinated plastics, or lead-containing components. Records of scrap inspections will be maintained on site for one year. Scrap inspection records shall include the identity of the scrap provider for any load that fails visual inspection.

2. **Inspection for Free Organic Liquids:**

Turnings, borings, and other forms of scrap that were generated as a result of the processing of metal with use of cutting, lubricating or cooling fluids will be visually inspected prior to charging to the furnace to ensure that such scrap does not contain free organic liquids.

3. **Depletion of Lead and Chlorinated Plastics from Shredded Scrap:** Scrap that has been processed through a shredder that utilizes magnetic or density separation techniques to separate ferrous and non-ferrous materials will be presumed to be depleted scrap of chlorinated plastics and lead to the extent practicable.

4. **Inspections:** CSRM shall identify any scrap provider whose scrap (except as described in Paragraph 5 below) is not subject to inspection pursuant to this plan. CSRM shall audit or inspect the facilities from which such uninspected scrap is provided on a periodic basis at a rate of not less than 10-25% of such facilities each year.

5. **Unrestricted Scrap:** Certain types of scrap, including:
Bonus
Busheling
Coils
Factory bundles
Flashings
HBI
Home scrap
Low residual
Pig iron
Pit scrap
Plate and structural
Return scrap
Rail
Railroad wheels
Slitter
Tire wire

as defined by common industry practice, as well as similar uncontaminated scrap, are not expected to contain free organic liquids, chlorinated plastics, or lead and will be presumed to be free of these contaminants. This scrap is not subject to the inspection and verification requirements of this plan.

6. **Baghouse Bags, Internal Process and Maintenance Materials:** Baghouse bags and baghouse maintenance materials that are routinely recycled by charging to the electric arc furnace, including personal protective equipment (PPE) and baghouse dust, are exempt from this PPP and not subject to the inspection and verification requirements of this plan.

B. **Mercury**

1. Schnitzer Steel, Inc. shall ensure that motor vehicle scrap providers are participating
in the National Vehicle Switch Recovery Program (NVMSRP) by conducting a review of the End of Life Vehicle Solutions (ELVS) database to confirm that the motor vehicle scrap provider is enlisted as a participating member. SSI will conduct a semi-annual review of the ELVS database to determine whether the provider remains identified as an NVMSRP participant;

a. SSI may not be able to confirm that some motor vehicle scrap providers such as Brokers are enlisted as a participating member in the NVMSRP through the ELVS database. In these cases SSI will confirm that the broker is participating in the NVMSRP or another EPA-approved program by obtaining from the broker written assurance that any motor vehicle scrap provided by such broker to CSRM was procured from other suppliers who are signed up for and are participating in the NVMSRP or another EPA-approved program;

b. SSI will require motor vehicle scrap brokers to confirm such written assurance on a semi-annual basis.

2. SSI will conduct a semi-annual review the ELVS database to corroborate that the participant is implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles by turning in mercury switches.
a. Some motor vehicle scrap providers participating in the NVMSRP or another EPA-approved program may not be able to demonstrate their participation in NVMSRP or another EPA-approved program to minimize the presence of mercury in the motor vehicle scrap from end-of-life vehicles by turning in mercury switches because they refuse to accept motor vehicle scrap that contains mercury switches. Examples would be a broker who purchases motor vehicle scrap from program participants, or a shredder that accepts only flattened vehicles from which the mercury switches already have been removed to the extent practicable prior to delivery to the shredder. For these motor vehicle scrap providers, SSI will obtain written assurances from the provider or obtain other means of corroboration to verify that the participant is implementing appropriate steps to minimize the presence of mercury in the scrap from end-of-life vehicles. Written assurance will be confirmed on a semi-annual basis.

3. If a motor vehicle scrap provider does not participate in or demonstrate through written assurance that it purchases motor vehicle scrap through NVMSRP or another EPA-approved program for the removal of mercury switches,
SSI shall only purchase motor vehicle scrap from such provider pursuant to an EPA-approved facility-specific program for the removal of mercury switches.

**III. Corrective Action**

**A. Lead, Chlorinated Plastics, Free Organic Liquids**

1. If, during inspection of scrap pursuant to Part II(A) above, CSRM determines that the scrap provider has not met the specifications in part I, the scrap provider will be subject to corrective action.

   a. A nonconforming scrap load will be rejected, the vendor may ship Unrestricted Scrap so long as it adheres to the provisions outlined in Part II(a)(5).

   b. After a failure to meet the scrap specifications in Part I, the scrap provider must sign a statement acknowledging the requirements of the scrap specifications and provide either certification or another comparable form of reasonable assurance that the scrap specifications will be met in the future.

   c. If the vendor continues to fail to meet the scrap specifications, SSI will consult with the scrap provider on the cause or reasons why the scrap loads are nonconforming and
Area Source Rule Requirements

will inform the scrap provider that it may be suspended if the problem is not resolved.

B. Mercury

1. If, SSI reasonably believes, either as a result of inspection, site visits to a scrap yard, or review of the ELVS database or by other means, that a scrap supplier is not taking appropriate steps to minimize the presence of mercury switches in scrap from end-of-life vehicles, the facility shall:

   a. Issue a letter to the scrap provider reiterating the requirements of the NVMSRP or another EPA-approved program and threatening suspension if the scrap provider fails to fulfill its responsibilities under the NVMSRP or another EPA-approved program.

   b. Suspend the scrap provider if, within six months of receipt of the letter described above, the scrap provider again fails to show that it is aware of the need for and is implementing appropriate steps to minimize the presence of mercury switches in auto shred. The suspension shall only apply to shipments of motor vehicle scrap by The provider will then have to re-qualify by demonstrating that it has cured the defect that caused the failure to meet the scrap specification.
c. For purposes of Section III A and B, if the nonconforming scrap is purchased through a broker, SSI will require the broker to provide written assurances that the broker implemented corrective action as set forth in Section III of this plan with respect to the supplier of such non-conforming scrap.
Cascade Steel recognizes that education, continual learning, skills development, and a successful business go hand-in-hand. To assist in developing essential skills for our personnel, this course along with others are being introduced.

We also encourage professional certification and development of skills through recognized organizations. Here's the value in becoming certified:

*Everybody knows that MD following an individual’s name means Medical Doctor, and that CPA signifies Certified Public Accountant. Associations and professions use certification to recognize qualified and competent individuals.*

The certification process is one of the single most important steps in career development. Some advantages are:

1. Certification grants you professional credentials.
2. Certification demonstrates your commitment to the profession.
3. Certification enhances the profession’s image.
6. Certification can improve career opportunities and advancement.
7. Certification may provide for greater earnings potential.
8. Certification improves skill and knowledge.
9. Certification prepares you for greater on-the-job responsibilities.
10. Certification offers greater recognition from peers.
Cascade Steel is firmly committed to maintaining a safe and healthful work environment. In keeping with this commitment to safety, all employees are required to be trained in the proper safe operating procedures for their jobs and specialized equipment.

No training program can cover all potential safety issues that you may encounter during work. In the event you are faced with a question about a procedure and/or safety when working, follow the procedures outlined in the current company safety policies and procedures to prevent accidents or injuries, consult with your shift supervisor and use your good judgment.