
 <b>Steel Dynamics®</b> Flat Roll Group Southwest-Sinton Division	TITLE:	
	<b>Iron &amp; Steel Scrap Specifications Manual</b> <b>Sales, Terms, and Conditions</b>	
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**for**  
**Iron & Steel Scrap Specifications Manual**  
**Sales, Terms, and Conditions**

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## INTRODUCTION


Steel Dynamics, Inc. – Flat Roll Group, Southwest Sinton Division wishes to consistently provide the highest quality Ferrous Scrap Commodities and Alternative Iron units to our melt shop through global sourcing and procurement. You, our VALUED SUPPLIERS, play an integral role in our success. In order to pay competitive prices for raw materials and meet the quality demands of finished product by our customers, it is imperative that the quality of the raw materials purchased is of a high standard and delivered in a timely manner to the mill. Loose bundles, oversized, or non-conforming chemistry scrap (against the mill specification hereunder), are unfavorable to be used in a high-quality finished product.

This raw materials manual is to assist in educating our suppliers of what we deem to be acceptable quality and standards in each raw material commodity. Your efforts in applying these standards will help ensure a long continuing relationship with supplying raw materials for our mill. Please be ensured that the personnel involved in the purchasing, receiving, grading or unloading of raw materials are trained in their respective areas and are taught to be ‘FAIR AND CONSISTENT’ for all of our customers.

The standards used in this manual are derived from the Institute of Scrap Recycling Industries’ (ISRI) specifications and have been modified to meet the needs of our melt shop in Sinton.

Thank you for being a VALUED SUPPLIER and if you have any questions regarding the Raw Materials Specification Manual, please feel free to contact me or the SDI Sinton Scrap Department for further clarification.

Steel Dynamics Flat Roll Group, Southwest - Sinton Division

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## GENERAL TERMS AND CONDITIONS

1. **The Purchasing of Iron & Steel Scrap** is handled by the Purchasing Agent and can be contacted at 361-424-6200.
2. **Prices** are quoted for each commodity primarily at the beginning of each month. Steel Dynamics reserves the right to cancel any and all unfulfilled contracts on the last day of the calendar month at 5:00 P.M. EST. A purchase contract with a corresponding purchase order number will be issued for specific grades and quantities to be delivered within a specified period of time. Balances remaining on any purchase order not shipped by the specified completion date may be cancelled or extended at the discretion of the Scrap Procurement Department. All prices are quoted in gross tons and all quantities expressed on the purchase order are in gross tons.
3. **Delivery** may be in truckload or rail at agreed upon minimum weights as specified at the time of purchase.
4. **Scale Hours** are currently Monday – Friday from 7:30am – 4:30pm, but subject to change (**please contact your Omni/SDI Scrap Representative if first time delivering**); closed on December 24th and December 25th each year. Shipments will not be received midnight – 9am on the first day of every month.
5. Steel Dynamics reserves the right to modify or update the General Terms and Conditions and the Scrap Specifications manual as required.

Trucks – Shipping Guidelines
<p><b>Shipping Terms:</b> Typically, prepaid unless otherwise stated in the purchase order. A rejected truck or partial rejection/reload of a truck may be assessed a \$250 fee.</p> <p>* If fees are not paid, they will be directly deducted from payment.</p> <p>For truck safety please refer to Appendix A for additional information regarding towing in case of truck tip-over.</p>
<p><b>Shipment Period:</b> Material must be shipped by 5:00 P.M. CST the last day of the calendar month stated on the contract. Steel Dynamics reserves the right at its own discretion to review the status of the contract, on the last calendar day of the month in which the scrap was purchased, at which time the contract may be cancelled or continued until the contractual obligation has ended.</p>
<p><b>Payment Terms:</b> Net 30</p>
<p><b>Truck Equipment Requirements:</b></p> <p>All scrap must be received in a trailer with a side-hinged rear door and a steel lined trailer. Framed trailers are acceptable for all commodities. Frameless trailers are permissible for shredded, busheling, and pig iron commodity loads only. All truck drivers must be able to operate controls to raise and lower trailers from inside the cab. Truck drivers must have an operational CB radio while onsite. Seller agrees that it shall be solely liable for any and all damages, including any clean up and/or SDI down time resulting from Seller's utilization of any frameless trailers for delivery of the product covered by this Purchase Order. Seller shall be responsible for any costs, attorney fees or any consequential damages incurred by SDI for recovery of the Items due or owed by Seller under this paragraph.</p>
<p><b>Freight Terms:</b> Prepaid unless stated otherwise in the purchase order. Steel Dynamics weight tickets are the governing weight for invoices.</p>

## Rail – Shipping Guidelines

**Shipping Terms:** Typically, prepaid unless otherwise stated in the purchase order. Shipments arriving at the mill without shipping notices may be assessed a \$500 fee. A rejected railcar may be assessed a \$750 fee.

\* If fees are not paid, they will be directly deducted from payment.

Failure to notice rejected loads within 24 hours of rejection notice may result in demurrage fees back-charged to the Shipper.

**Shipment Period:** Material must be shipped by 5:00 P.M. CST the last day of the calendar month stated on the contract. Steel Dynamics reserves the right at its own discretion to review the status of the contract, at which time the contract may be cancelled or continued until the contractual obligation has ended.

**Payment Terms:** Net 30

### Rail Equipment Requirements:

All railcars must be fully open top railcars with vertical sidewalls and endwalls with horizontal flat bottoms. Unacceptable railcars include v-troughs, belly troughs, or any interior ribs/framing. Scrap may be received in 65 ft length mill gondola cars. Coil gondolas are not accepted.

**Freight Terms:** Prepaid unless stated otherwise in the purchase order.

Consignee: Steel Dynamics, Southwest Sinton Division

Rail Station: Sinton, TX


Final Rail Carrier: UP or BNSF

Max Car Limit: 286,000 lbs.

Min Car Limit: Not applicable unless Steel Dynamics is covering the freight, then the GT Min Weight will be listed.

Steel Dynamics weight tickets are the governing weight for invoices.

**Delivery Terms:** Shipments will only be received at the Sinton mill against purchase orders where supplier enters shipping notices via Steel Dynamics Sinton Division website, <http://scrapportal.steeldynamics.com/>. If you are not a registered user and need to know how to sign-up for a new account, visit the website for detailed instructions and videos. Please contact the Scrap Procurement Department. Any exceptions to the above must be pre-approved by Steel Dynamics.

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## CONTRACTOR AND VISITOR SAFETY GUIDELINES

- Personal Protective Equipment must be worn onsite. Required equipment include: hardhat, safety glasses or goggles over prescription glasses, safety vests and steel-toed boots or metatarsals.
- Follow all state road laws, speed limits and other traffic controls, such as stop signs and railroad crossings and adhere to safe approach and passage distances. Come to a complete stop if your view is obstructed by steam or fog.
- Dangerous areas have signage and signals to warn of potential site hazards. Remotely activated signs will notify and warn site travelers not to enter designated areas when lights are flashing.
- Remain aware of audio warning devices – trains, auto, mobile equipment back up alarms, overhead cranes, plant start-up etc.
- Heavy equipment has the right of way at all times. Stay at least 40 feet back from all equipment. Continually check your surroundings and never position yourself in the blind spots or swing radius of mobile equipment (material handler, pot hauler, etc.). Do not move near equipment that has not acknowledged your presence. Stay out of tipping radius of any trailer that raises its bed to dump.
- Do not park on or near a railroad track. Maintain a clearance of 8 feet from the centerline of the railroad tracks at all times.
- All pedestrian and vehicle traffic is prohibited from going under any conveyor system when the slag plant is operating, due to the hazard of falling material.

## QUALITY INSPECTION POLICY

SDI understands that iron and steel by their nature, are unique commodities, and will work with all our Suppliers to ensure our quality specifications and standards are fair and equitable. To complement our Iron and Steel Specifications Manual, SDI has implemented the following:

1. A strict inspection procedure. Every truck or railcar which enters our facility will be inspected at our scales, pass through radiation detection, and be inspected by trained inspectors when dumped or unloaded. No raw materials will be received without a purchase order.
2. Any loads failing to meet our standards, as outlined, will be rejected. If the load is acceptable scrap, but does not match the intended purchased grade, it will be at the discretion of Steel Dynamics whether to accept the load as a downgrade or to reject the load. The decision will be made, and all persons notified prior to vehicle leaving site. If the load is downgraded, then the Supplier must determine whether to return the load or accept the downgraded price. Ongoing rejections and downgrades are costly and inefficient for both Suppliers and Steel Dynamics.

## STEEL SCRAP GENERAL REQUIREMENTS

Commodity: ALL / Grade: ALL

### Special Definitions:

- **Downgrade:** When a particular grade of scrap is found to not conform to its represented grade, it may, by agreement by SDI-Sinton and supplier, be downgraded and accepted as an inferior grade of scrap.
- **Free of:** When specified to be "free of", the grade shall not contain any amount of prohibited material in any amount greater than that which is unavoidable in the customary preparation and handling of that particular grade.  
  
**Free of alloys:** Scrap is "free of alloys" if the residual content of the elements listed below, contained within the steel, do not occur at levels consistent with the purposeful creation of an Alloy Steel. The combined residual level, excluding manganese, shall not exceed 0.50%. Element residual levels within the Scrap shall not exceed:
  - Chromium (Cr) 0.20%
  - Nickel (Ni) 0.30%
  - Manganese (Mn) 1.5%
  - Molybdenum (Mo) 0.03%
- **Grade or Type:** A classification of scrap type based upon Institute of Scrap Recycling Industries (ISRI) ferrous scrap classification or SDI-Sinton / vendor description.
- **Off-grade:** A load of scrap shall be considered off grade if it fails to meet:
  1. Applicable size limitations
  2. Applicable requirements of material "kind"
  3. Applicable requirements of material quality
 as specified in the material's (grade's) Iron and Steel specification.
- **NORM:** Naturally Occurring Radioactive Material (NORM) emitting less than 2X background radiation level.

### General Specifications:

- **Cleanliness:** All grades shall be free of dirt, non-ferrous metals, excessive rust and corrosion, oil or grease, foreign material of any kind, and any non-metallic materials (wood, concrete, dirt, fluff, plastics, etc.). Any charges billed to SDI Sinton for dunnage left in a railcar may be passed on to the shipper.
- **Inspection:** All material is to be suitable and acceptable to Steel Dynamics, Inc.
- **Loading/Unloading:** All grades must be capable of being loaded and unloaded by electromagnet.  
  
 Seller's indemnification includes indemnification for delivery under this Purchase Order by means of any trailer. Seller agrees that it shall be solely liable for any and all damages, including any clean up and/or SDI down time resulting from Seller's utilization of any trailers for delivery of the product covered by this Purchase Order. Seller shall be responsible for any costs, attorney fees or any consequential damages incurred by SDI for recovery of the Items due or owed by Seller under this paragraph.
- **Cast Iron:** Unless specifically purchased as a Cast Iron or Pig Iron grade, all scrap grades shall contain less than 1% (by weight) of cast irons unless otherwise noted in the specification. This includes, but is not limited to, Cast Iron, Pig Iron, composite brake shoes, engine blocks and castings.
- **Stainless Steel:** All grades shall be free of stainless steel.
- **Tin Plate:** All grades shall be free of tin-plated materials.
- **Residual Alloys:** Wherever the term "free of alloys" is used in the classifications given herein, it shall pertain to highly alloyed steels such as stainless or leaded steels.
- **Off-grade:** The grade shall be free of Off-Grade materials except where the vendor can demonstrate that inclusion of negligible amounts of Off-Grade materials are unavoidable in the customary preparation and handling of the grade involved.

**General Specifications (cont.):**

- **Hazardous Materials:** All grades shall be free of hazardous materials including but not limited to:
  - Asbestos-containing material (typically in brake shoes, pipe insulation, etc.)
  - PCB-containing Material (Polychlorinated Biphenyls) – no units containing PCBs or PCB residues
  - Refrigerants or refrigerant-containing materials (e.g. air conditioners or condensers)
  - Explosives, Military-scrap (including ammunition casings), Munitions, Bullets, Military Target Range Scrap or other Explosives
  - Ignition Sources, Flammable or Combustible materials
  - Fracking scrap - All grades are to be free of gas and oil well perforation tools/piping and all other hazardous materials (e.g.) explosives associated with fracking
  - Hazardous Wastes, Other regulated wastes, and their containers
  - Radioactive materials
  - Oil-filled devices (e.g. capacitors or transformers) and free-flowing oil (on surface or containerized)
  - Batteries of any type
  - Electronic waste (to the extent practicable)
  - Mercury containing materials including but are not limited to mercury-wetted or -containing relays, switch gear, rectifiers, gauges, manometer, barometers, thermometers, and fluorescent lighting fixtures.
  - Tires or tire pieces of any type
  - Nonmetallic material (wood, paper, fibers, rubbers, foam, fluff, insulation, concrete, dirt, plastic, oils, greases, etc.)
  - Nonferrous materials (electric motors, piping, compressors, wires, brass/bronze castings, copper plate bundles, tin plated materials, lead, etc.)
- **Other Prohibited Contaminants:** All grades shall be free of prohibited contaminants including but not limited to:
  - Materials that contain free organic liquids include, but are not limited to, oil filters engine blocks, oily turnings, oily machine shop borings, or storage drums or totes.
  - Materials that contain chlorinated plastics include, but are not limited to, consumer products (e.g., carpeting, clothing, foam, furniture, Styrofoam), containers (e.g. bags, bottles, food packaging, packaging materials), or plastic motor vehicle components (e.g. battery casings, bumpers, plastic parts).
  - Lead-containing materials include, but are not limited to lead-based paints, gasoline tanks, mufflers and tail pipes, wheel balancing weights, babbitt, solder, radiators, leaded joints in soil pipe, and terne material.
  - Motor vehicle shredded scrap commodity providers must participate in the National Motor Vehicle Switch Removal Program (NMVSRP) or another U.S. EPA-approved mercury switch removal program.
- **Radioactive Material:** All inbound scrap by truck and railcar is scanned by radiation detection equipment. Scrap shipments found containing radiation sources or NORM that triggers a radiation alarm will be immediately rejected. Under no circumstances shall any radioactive scrap be subject to acceptance through downgrade.
- **Sealed Containers:** All grades shall not contain Closed, Enclosed, or Sealed containers. Such containers are a serious explosion hazard, which may result in the loss of life, limb, and /or property. Any scrap shipment arriving that is found to contain a closed container will be rejected, and if any vendor fails to address the issue may result in the suspension or termination as an approved scrap supplier to Steel Dynamics Sinton. Containers may only be accepted providing they have been processed 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, compressed gas cylinders or tanks, oxygen or propane tanks, fire extinguishers, aerosol cans that have not been properly vented or depressurized, or any vessels which contains or retains gases, oils, fluids or pressurized substances, sheared pipe that is not open on both ends, auto/truck drive shafts, shock absorbers, struts, torque converters, gear boxes, conveyor rollers, closed ball valves, etc.
- **Deviations:** Deviations from the general classifications of iron or steel commodities given herein may be allowed by mutual written agreement between Steel Dynamics Sinton and the supplier.



<b>#1 Heavy Melt</b>	Sizing Dimensions: 60"x24"x12" maximum
<b>Grade: #1 HMS</b>	Thickness: 1/8" minimum thickness
<b>ISRI #s: 200</b>	Min Density: 55 lbs/ft <sup>3</sup>
	Max Weight per Piece: 1500 lbs
<b>DESCRIPTION / TYPICAL CONSTITUENTS</b>	Consists of steel scrap and wrought iron. This material may be black, painted, or galvanized. It may also include automobile scrap that has been properly prepared, skeleton plate and structural beams
<b>Restrictions / Prohibitions</b>	Non-metallic, non-ferrous metals, excessive dirt, grease, oil, soil pipe with leaded joints, tin plate, tin cans, municipal waste, turnings, borings, radioactive material, engine blocks, transmission gearing, exhaust system components, torque converters, uncut tanks, cylinders, sealed units, electric motors, alternators, wiring harnesses, cast iron, nails, high alloy steel, finer stock, no more than 25% coated material.
<b>Acceptance Criteria:</b> Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.	

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	96	96	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	0.30	0.50	1.50	0.30	0.050	0.030	0.60	0.050	0.100





<b>#2 Shred</b>	Sizing Dimensions: 10" maximum in any direction
<b>Grade: #2 Shredded</b>	Thickness: n/a
<b>ISRI #s: 210, 211</b>	Minimum Density: 55 lb/ft <sup>3</sup>
	Typical Density: 55 - 70 lb/ft <sup>3</sup>
<b>DESCRIPTION / TYPICAL CONSTITUENTS</b>	Homogeneous shredded steel scrap processed through a shredder and magnetically separated originating from automobiles, appliances, heavy melting steel, and miscellaneous sheet steel. All obvious nonmetallics and copper should be manually removed. Total copper content must not exceed 0.30%.
<b>Restrictions</b>	Motor vehicle shredded scrap commodity providers must participate in the National Motor Vehicle Switch Removal Program (NMVSRP) or another U.S. EPA-approved mercury switch removal program.
<b>Prohibitions</b>	Municipal scrap, incinerator scrap, lead-coated steel, vitreous enameled materials, tin cans or tin-plated materials, copper-clad or plated steel, electric motors, reinforcing bar or rebar, turnings, borings, high alloy steel, wire, excessive fluff, nonmetallic over 1 ton or over 1 foot.
<b>Acceptance Criteria:</b> Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.	

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	95	95	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	0.30	0.18	1.50	0.30	0.03	0.03	0.20	0.05	0.10



<b>#1 Shred</b>	Sizing Dimensions: 10" maximum in any direction
<b>Grade: #1 Shredded</b>	Thickness: n/a
<b>ISRI #s: 210, 211, 212</b>	Minimum Density: 60 lb/ft <sup>3</sup>
	Typical Density: 60 - 70 lb/ft <sup>3</sup>
<b>DESCRIPTION / TYPICAL CONSTITUENTS</b>	Homogeneous shredded steel scrap processed through a shredder and magnetically separated originating from automobiles, appliances, heavy melting steel, and miscellaneous sheet steel. All obvious nonmetallics and copper should be manually removed. Additional processing is performed to further reduces amount of copper in shredded material. Total copper content must not exceed 0.20%.
<b>Restrictions</b>	Motor vehicle shredded scrap commodity providers must participate in the National Motor Vehicle Switch Removal Program (NMVSRP) or another U.S. EPA-approved mercury switch removal program.
<b>Prohibitions</b>	Municipal scrap, incinerator scrap, lead-coated steel, vitreous enameled materials, tin cans or tin-plated materials, copper-clad or plated steel, electric motors, reinforcing bar or rebar, turnings, borings, high alloy steel, wire, excessive fluff, nonmetallic over 1 ton or over 1 foot.
<b>Acceptance Criteria:</b> Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.	

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	95	95	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	<b>0.20</b>	0.15	1.50	0.20	0.02	0.03	0.20	0.05	0.10






<b>Plate &amp; Structural</b>	Sizing Dimensions: 60" x 24" x 12" maximum
<b>Grade: Plate &amp; Structural</b>	Thickness: 1/4" minimum
<b>ISRI #: 231, 232, 236</b>	Typical Density: n/a
<b>DESCRIPTION / TYPICAL CONSTITUENTS</b>	Clean cut structural and plate scrap. Structural shape crop ends, shearings, or broken steel wheels. Side frames and bolsters from rail cars, vintage ship and barge plate of known chemistry, heavy gauge large diameter tubing and pipes.
<b>Restrictions</b>	Loads may include heavy-walled pipe if not pinched and not exceeding 20% of the load. Torch-cut pipe and tubing only (no sheared or pinched pipe).
<b>Prohibitions</b>	Die blocks, cut up machinery, cam shafts, crank shafts, torque converters, cables, chains, springs, gears or gear boxes, electrical panels, motor or motor blocks of any kind, counter weights, reinforcing bar, and sheared or pinched pipe and tubing.
<b>Acceptance Criteria:</b> Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.	

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	98	97	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	<b>0.18</b>	0.20	1.50	0.30	0.01	0.03	0.60	0.03	0.10



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<b>Rail Road Crops</b>	Sizing Dimensions: 3 ft maximum
<b>Grade: #1 Bundles</b>	Thickness: n/a
<b>ISRI #: 27, 28A, 28B, 28C, 29</b>	Typical Density: n/a
<b>DESCRIPTION / TYPICAL CONSTITUENTS</b>	Standard section, original weight 50 lbs per yard and over, 3 feet in length rail sections.
<b>Restrictions</b> n/a	
<b>Prohibitions</b> n/a	
<b>Acceptance Criteria:</b> Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.	

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	95	95	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	0.18	0.15	1.50	0.30	0.02	0.03	0.20	0.05	0.10



**Rail Road Wheels**
**Grade: #1 Bundles**
**ISRI #s: 42**

Sizing Dimensions: 42" diameter maximum

Thickness: n/a

Typical Density: n/a

**DESCRIPTION /  
TYPICAL CONSTITUENTS**

Solid cast steel, forged, pressed, and/or rolled steel car and/or locomotive wheels. Axles cut flush to wheel is acceptable.

**Restrictions** n/a

**Prohibitions** No axles. Only axles cut flush to wheel is acceptable.

**Acceptance Criteria:** Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	95	95	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	0.18	0.20	1.50	0.30	0.02	0.03	0.20	0.05	0.10





<b>#1 Busheling</b>	Sizing Dimensions: 60" x 24" maximum
Grade: #1 Busheling	1" x 1" minimum
ISRI #s: 207	Thickness: 1/4" maximum
	Minimum Density: 65 lb/ft <sup>3</sup>
	Typical Density: 65 - 80 lb/ft <sup>3</sup>
<b>DESCRIPTION / TYPICAL CONSTITUENTS</b>	Clean industrial sheet steel scrap, clippings, stampings, punchings, or skeleton scrap that may include black, galvanized and zinc-coated materials. Feedstock may be galvanized or zinc-coated. Tubing feedstock shipped in busheling loads must meet all specifications.
<b>Restrictions</b>	Tangled material may be cause for rejection. Dense busheling is desired over low density "fluffy" busheling that may become tangled. Torch-cut pipe and tubing only (no sheared or pinched pipe).
<b>Prohibitions</b>	Enameled steels, electrical steel, nails, wire, nuts, bolts, screws, tin cans, high alloy steel, structural steel beams, mandrel coils, slitter coils, entangled material / streamers, strapping, torque converters, shock absorbers. Sheared or pinched pipe and tubing.
<b>Acceptance Criteria:</b> Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.	

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	98	97	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	0.10	0.20	1.50	0.30	0.015	0.03	0.50	0.03	0.05



<b>#1 Bundles</b>	Sizing Dimensions: 48" x 36" x 24" maximum
<b>Grade: #1 Bundles</b>	Minimum Density: 75 lb/ft <sup>3</sup>
<b>ISRI #s: 208</b>	Typical Density: 75 - 90 lb/ft <sup>3</sup>
<b>DESCRIPTION / TYPICAL CONSTITUENTS</b>	Hydraulically compressed bundles consisting of steel sheet scrap, clippings, or skeleton scrap that may include black, galvanized and zinc coated materials.
<b>Restrictions</b> n/a	
<b>Prohibitions</b> Wire, terne plate, tin plate or chemically de-tinned material, tubing, steel wire, rebar, or material that has been copper-plated.	
<b>Acceptance Criteria:</b> Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.	

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	98	97	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	0.10	0.10	1.50	0.10	0.01	0.03	0.50	0.03	0.05





### Factory Bundles

**Grade: #1 Bundles**

**ISRI #s: 208**

Sizing Dimensions: 48" x 36" x 24" maximum

Minimum Density: 75 lb/ft<sup>3</sup>

Typical Density: 75 - 90 lb/ft<sup>3</sup>

### DESCRIPTION / TYPICAL CONSTITUENTS

Hydraulically compressed bundles consisting of new automotive stampings that may include black, galvanized, and zinc-coated materials **derived from a single source baled at the factory source, not baled at a scrap yard or collection yard.**

**Restrictions** n/a

**Prohibitions** Wire.

**Acceptance Criteria:** Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.

Chemistry	Fe Total	Fe Met	Cu	Cr	Mn	Ni	Sn	Mo	Si	P	S
Minimum wt %	98	97	--	--	--	--	--	--	--	--	--
Maximum wt %	--	--	0.10	0.10	1.50	0.10	0.01	0.03	0.50	0.03	0.05



<b>Pig Iron</b>	Sizing Dimensions: 6" x 12" x 6" maximum
<b>Grade: Pig Iron</b>	4" to 9" base pyramid typical
<b>ISRI #: n/a</b>	Thickness: 4" minimum
	Minimum Density: 250 lb/ft <sup>3</sup>
<b>DESCRIPTION / TYPICAL CONSTITUENTS</b>	Cast Iron or Blast Furnace Iron that has been reduced from iron ore. Liquid iron is cast into individual small pigs, grouped pigs that have been broken into smaller pieces, or pyramids. Residual content is extremely low.
<b>Allowances</b>	Fines must not exceed 5% maximum.
<b>Restrictions</b>	A quality certification must be provided for each barge or shipment.
	Fines must not exceed 5% maximum.
<b>Prohibitions</b>	May not contain beach iron, kish, home scrap, broken castings (other than broken pigs), cast iron castings.
<b>Acceptance Criteria:</b> Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.	
Chemistry specifications are defined mutually for each lot purchase or a contract. Examples of materials used by SDI are given below:	

**Example Pig Iron Chemistries (%'s)**

	#1	#2	#3	#4	#5	#6	#7
<b>Fe</b>	95	94.8	95	94.3	94.5	94.8	94.3
<b>C</b>	4.8	4.5	4.5	4.6	4.75	4.75	4.5
<b>Si</b>	0.5	0.75	0.4	1	0.3	0.3	0.82
<b>Mn</b>	0.3	0.05	0.07	0.15	0.4	0.33	0.13
<b>P</b>	0.1	0.04	0.05	0.04	0.09	0.13	0.1
<b>S</b>	0	0.01	0.03	0.01	0.01	0.01	0.02



**Hot Briquetted Iron  
(HBI)**

Grade: HBI

ISRI #: n/a

Sizing Dimensions: 1.1 mm x 50 mm x 30 mm

4.1" x 1.9" x 1.2"

Thickness: 1" minimum

 Bulk Density: 2.5 – 2.8 t/m<sup>3</sup>

 Apparent Density: 5.0 – 5.5 t/m<sup>3</sup>
**DESCRIPTION /  
TYPICAL CONSTITUENTS**

Iron that has been reduced in a process that uses natural gas or other reductant. During later stages of processing the iron is hydraulically compacted or briquetted into a cohesive solid.

Briquettes are typically 4" x 2".

**Restrictions** A quality certification must be provided for each barge or shipment.

Fines must not exceed 2% less than 1/4" sizing.

**Prohibitions** n/a

**Acceptance Criteria:** Material is subject to visual inspection and visual classification, inspection for prohibited items and over/undersized material, mechanical weighing on certified scales, and radiation detection All conditions apply as detailed in Steel Scrap General Requirements.

Chemistry specifications are defined mutually for each lot purchase or a contract. Examples of materials used by SDI are given below:

**Example HBI Chemistries (%'s)**

	#1	#2	#3	#4	#5
<b>Fe(Tot)</b>	91	90	91	89.5	90
<b>Fe(Met)</b>	85.5	83.5	81	85	85.5
<b>C</b>	1.5	0.8	0.8	1	0.8
<b>P</b>	0.04	0.13	0.08	0.08	0.08
<b>S</b>	0.01	0.02	0.03	0.01	0.01
<b>Gangue</b>	6	7	4.4	6.5	6.6
<b>SiO<sub>2</sub></b>	2.5	2.75	2.5	3.5	3.75





## APPENDIX A – ADDITIONAL TRUCKING INFORMATION



### DRIVERS MUST READ THIS CARD BEFORE UNLOADING AT STEEL DYNAMICS:

SIDE 1

**Think Safe Work Safe**

#### **SAFETY - Your Safety Is Your Personal Responsibility**

1. **HARD HAT** - Must be **WORN AT ALL TIMES**.
2. **GLASSES** - Must wear safety glasses **WITH SIDE SHIELDS**.
3. **SHIRT** - Short sleeve shirt with a minimum of a 4" sleeve
4. **LONG PANTS** - Are required, this means **NO SHORT PANTS** while on site.
5. **CLOSED-TOE SHOES** - Leather, tennis shoes or boots **WHILE ON SITE**.
6. **HI-VIS VEST** - Must be worn when outside the truck.



#### **DRIVING ON STEEL DYNAMICS PROPERTY**

- Drivers **MUST** obey the speed limit signs. Where no signage is posted **20 MPH** is the maximum speed.
- Drivers **MUST** come to a full stop at all **STOP** signs and railroad tracks.
- Trucks **MUST NOT** park or stop on railroad tracks and must park at least 15 ft. from tracks.
- NO** alcohol or drugs are permitted on SDI property.
- NO** passengers or pets are allowed **OUTSIDE THE CAB** of the truck upon entering the main gate. Passengers Must Be 18yrs of age or older.
- Railroad and pedestrian traffic **ALWAYS** have the right of way.
- NO** talking on cellular phones, hands-free or text messaging premises. **PULL OVER TO USE** these devices.
- Drivers **MUST STAY 10' AWAY** from railroad cars at all times.
- Drivers **MUST** wear seat belts when driving in the plant.
- Firearms or other weapons are **NOT** allowed on the plant site.

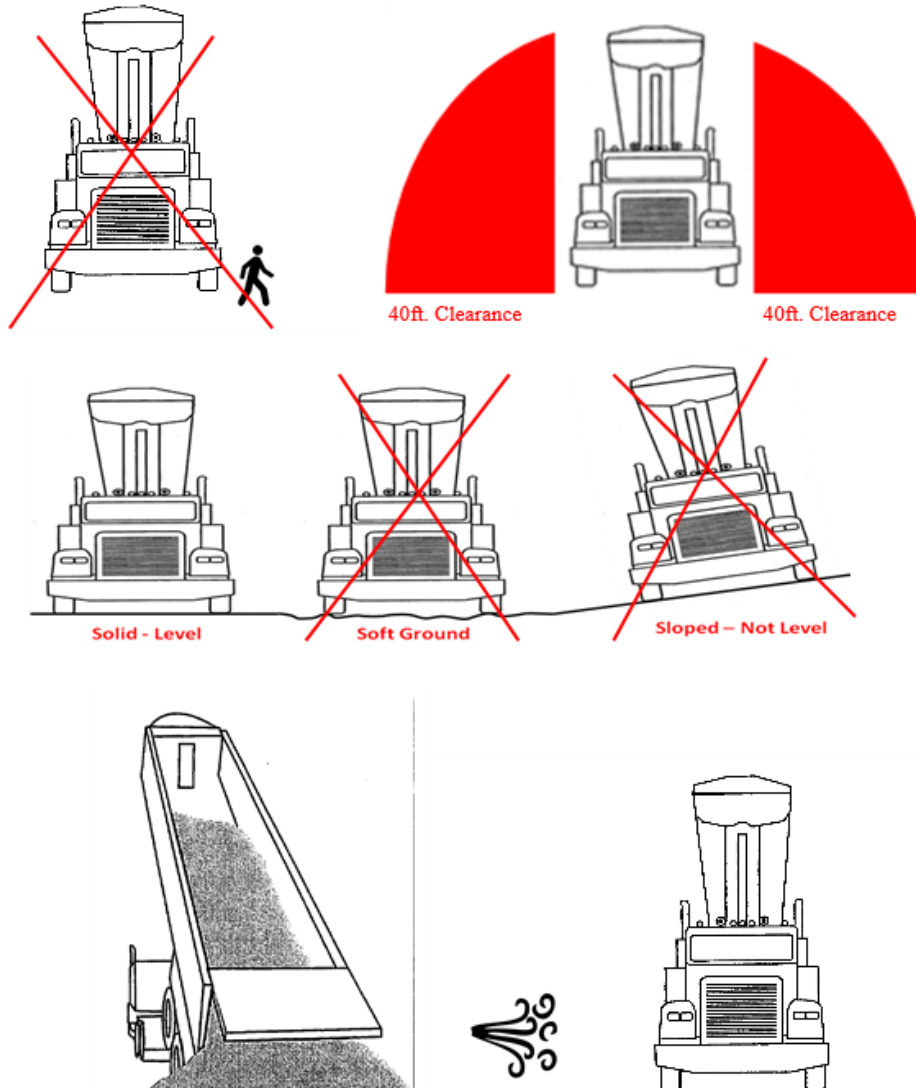
(CONTINUED ON BACK)

Ultimately it is the drivers responsibility to determine if the load is safe to dump. Failure to adhere to any of the above requirements will result in not being unloaded and may jeopardize future participation with Steel Dynamics Inc.

SDI Monitors Channel: #10

## **DUMP TRAILER TURN OVER PREVENTION** SIDE 2

### **NO EXCEPTIONS ZERO TOLERANCE**




Before dumping verify that the load has not shifted in transit.

Do not dump or raise the trailer for any reason with high gusty winds.

**TOWING AND RECOVERY CALL LIST FOR RECLAIM**

**APOLLO TOWING SERVICE – (361) 853-0003**



 <b>Steel Dynamics®</b> Flat Roll Group Southwest-Sinton Division	TITLE:	
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## APPENDIX B: EXAMPLES OF NON-CONFORMING OR OFF-SPEC MATERIALS

#1 Busheling	NONCONFORMANCES SUBJECT TO REJECTION
<b>1. Low Density, Tangled Material</b>	
	
	



**#1 Busheling (cont)**

**NONCONFORMANCES SUBJECT TO REJECTION**

**2. Oversize length and/or thickness**



**Bundles Commodities**

**NONCONFORMANCES SUBJECT TO REJECTION**

**1. Wire, Copper Wire, Rebar, etc.**



**2. Nonmetallics, Fines, Millscale, Dirt, etc.**





**Miscellaneous**

**NONCONFORMANCES SUBJECT TO REJECTION**

**1. Nonmetallics, Dirt, Yard Clean-ups, etc.**

