



حديد الإمارات
emirates steel

Integrated Management System

Warehouse Packaging Standard and Container Stuffing Procedures

SCD-GR-PR-037

Issue No. 0 – 28.05.2020

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1. PURPOSE

To standardize packaging & container stuffing instruction of all the Raw Materials to ensure that the quality and condition of materials dispatched by supplier are received at our Warehouse are in good condition and it does not get damaged during transit period. Also, it facilitates safe and convenient offloading of the materials from containers.

2. SCOPE

This procedure is applicable to all the Raw Materials being received, stored and Issued by the warehouse section.

3. DEFINITIONS/ABBREVIATIONS

SCM – Supply Chain Management Department: Area responsible for purchasing goods and/or services, managing stock and performing logistics for both the operations and the final customers.

DoA – Delegation of Authority: Official document that states the different competent decision making and approval levels within ES.

End User / Requisitioner: Any person within ES who requests goods and/or services to be procured.

Buyer: Employee from the SCM in charge of the purchasing process.

Supplier: Company or a person contracted to provide goods and/or services to ES.

Warehouse – WH: Area within SCM responsible for receiving and storing goods, planning and maintaining stock levels, as well as delivering goods to End Users.

PR – Purchase Requisition: Formal request for purchasing goods and/or services issued by the End User through SAP and approved as per the DoA. It contains all the necessary master data for a PO/Contract.

PO – Purchase Order: Formal commitment to purchasing goods and/or services, issued by the SCM through SAP and approved as per the DoA. Acts as a legal binding document that authorizes the expenditure of the company funds for the acquisition of goods and/or services.

Container Stuffing: Process of loading goods into a container which is then sealed and made ready for transport or shipping. It is a process that requires careful planning that ensure the

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products aren't damaged while they are in transit and considering the unloading process can take place safely on the other end.

UOM: Unit of measures.

Container Un-stuffing: Process of unloading the goods from the container.

Shaped Items: Refractory Materials which are in solid conditions and with specific shape and sizes, UOM in pieces.

Un-Shaped Items: Refractory Mortars in powder shape with UOM in kilograms or tonnage.

Bulk Cargos: Ferro Alloys which are delivered loose in closed containers.

Goods' Receipt Note – GRN: Note which confirms the delivery and/or acceptance of received goods by ES.

Nonconformity / Nonconformance: Non-fulfillment or failure to meet a certain requirement. E.g. Items not meeting agreed technical specifications, Service providers not wearing the appropriate PPE inside ES, Buyers not following the required procedures/work instructions, etc.

Supply Assurance: Area within SCM responsible for registering and managing suppliers within ES.

SDS: Safety Data Sheet

HIRA: Hazard Identification Risk Assessment

JSA: Job Safety Analysis

4. RESPONSIBILITIES

SCM – Material Planner:

- Responsible for the inventory control and replenish the stock of inventory items to maintain Min-Max of the items in SAP.
- Responsible to control the end user's requirement in line with ES Inventory control policies to ensure that the inventory is maintained to the optimum level and requirement of Ender users are served appropriately.

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SCM – Buyer:

- Responsible for executing the purchasing of goods and/or services on behalf of ES, through the selection of qualified suppliers, performance of detailed commercial analysis, negotiation of commercial terms and agreements and approval of purchasing processes, as per DoA.

End User:

- Responsible for planning their needs regarding goods and/or services within reasonable time create reservation in the SAP for materials request and get the materials issued from CWH.
- End Users shall receive and confirm the receipt of materials against issue reservation created by them.

Supplier:

- Responsible for providing goods and/or services as per the requirements and details mentioned in the PO and/or contract.

SCM – Storekeeper:

- Responsible for planning and executing the offloading location for the incoming raw materials and informing all Logistics contractors.
- Responsible for receiving of the materials and supervise the offloading activity performed by the respective contractors and receiving all the documents from the drivers.
- The Storekeeper will also supervise the offloading activity performed by the respective contractors.
- Creates the Goods Receipt Note (GRN) in SAP for such items (raw materials), attaching the weighbridge control sheets and other documents, if necessary.

SCM – Shipping and Logistics (S&L):

- Responsible for coordinating and managing the transportation and clearance of international cargo as per the negotiated Incoterms and conditions.
- The S&L team must inform the WH team of all upcoming cargo with enough time for arranging any offloading requirements for it.

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5. DESCRIPTION

5.1 Standard Packaging Procedures

5.2 General Packaging Requirements

- Suitable & High-quality packaging should be provided for all the Raw Materials for safe handling at origin while container stuffing, transportation during shipment, un-stuffing from containers and minimum 6 months storage at harsh climate of Gulf region considering multiple handling by forklift and EOT cranes at shop floor.

5.3 Pallet Specification

- Strong wooden pallet as per specification & Dimension should be used for packaging of shaped and unshaped materials referring to Annexure 1-5.

5.4 Palletizing, Strapping and Packaging

- Proper palletizing, strapping, and packaging shall be followed as per Annexure 1-5 Jumbo Bags Specification
- Suitable and High quality, heavy-duty Jumbo bags of minimum. 220 GSM with safety factor, polypropylene laminated fabric with UV treatment should be used for supply of unshaped materials.

5.5 Shipping Labels or Labeling/ Tagging Requirement

- Each pallet should have identification label and it should contain information as per materials requirement.
- The label should be fixed all the four sides of the pallet,
- Label should have identification with permanent marking.
- Following information must be available in shipping labels:
 - Box/Pallet No.
 - Supplier Name.
 - Supplier's Invoice No
 - Materials Description.
 - Material Size
 - ES Item Code
 - ES PO No.
 - Production Date

- Expiry Date
- Qty.

5.6 Container Stuffing

- Supplier must ensure that packages are stuffed in safe and secured manner in containers.
- Stuffing of the packaging should be done ensuring convenient and safe offloading of the packages at ES warehouse.
- Stuffed packages must be secured with proper latching to ensure no movement and damaging of the materials during transit.
- As required appropriate support e.g. Air Bags, Nylon Strap and Wooden Logs should be used to secure packages inside the containers to prevent movement of packages during transit.
- All the packages must be stuffed with strong wooden pallets.



- Graphite Electrodes must always be supplied in open top containers
- In addition to above requirement, some specific additional requirement have been detailed in Annexure 1-5 for some materials

6. ENVIRONMENT, HEALTH & SAFETY

The below requirements shall be followed;

- HIRA and JSA shall be followed for activities in line with HSD-GR-PR-019, as applicable.
- PPE as suggested by the SDS and HIRA / JSAs shall be provided.
- If Hazardous Chemicals are involved, Chemical Safety requirements of Emirates Steel in line with HSD-GR-PR-029 shall be followed.
- Safety Signages for the Hazardous substances, as applicable shall be provided.

7. Support Documents

- Annexures 1 : Shaped Refractory
- Annexure 2 : Un-Shaped Refractory
- Annexure 3 : Carbon Injection and Charge Carbon.
- Annexure 4: Recarburizer
- Annexure 5 : Graphite Electrodes

8. ISSUE HISTORY

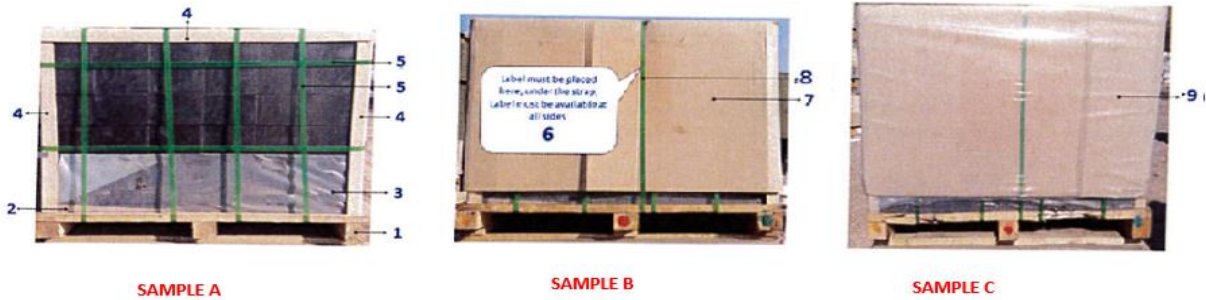
Issue	Date	Pages	Revision
0	28.05.2020	All	First Issue

Annex-1: Packaging Guideline –Shaped Refractory

1. Packaging Requirement

Proper palletizing, strapping, and packaging should be provided as per below mentioned details.

1.1 Standard designed strong wooden pallet to be used (See Sample A).



- 1.2 All the shaped refractory should be properly arranged, stacked, and packed securely ensuring that it does not get loose during transportation and multiple handling. (See Sample A).
- 1.3 Good Quality of protection with plastic lining of minimum of 80 Micron should be used for protection of bricks. (See Sample A).
- 1.4 Corner and edges of bricks should be properly protected with secured packaging materials. (See sample A)
- 1.5 Packed Shaped refractory should be properly secured with high quality plastic strap to ensure that pallet does not get loosen and remain intact during multiple handling,
- 1.6 4 straps vertically and 2 straps horizontally. (See sample A)
- 1.7 Packed Shaped refractory should have standard label should fixed on each pallet on all the four sides. (See sample B)
- 1.8 Each Pallet should be packed with strong carton box. (See sample B)
- 1.9 Each Pallets packed with cartons should be secured with nylon Strap (See sample B)
- 1.10 Pallets must be protected with internal lining & covered with external cover of waterproof & heat resistance thick plastic sheet (minimum 80 micron)

2. General Instructions

- 2.1 Mixing of two different types of items in one pallet should not be done.
- 2.2 Maximum weight of each pallet should not exceed more than 1500 Kg.

3. Labeling/Tagging requirement

- 3.1 Each Bricks should have identification tag mentioning Bricks quality, Size and shape mark. Which should be as per the description mentioned in invoice/packing list, marking should permanent and readable; e.g. **(PN-GL 70 230 X114 X60)**.
- 3.2 For Bricks boxes, laminated label tag should be available on each package with details.
- 3.3 The label should be fixed on all the four sides of the packages.
- 3.4 Label should have identification with permanent marking.

4. Specimen Label

Item Name	
ES Item Code	
Item Description/Shape Mark	
ES PO No.	
Date of Manufacturing	
Date of Expiry	
Qty	
Country of Origin	

Note: All applicable requirements of Health, Safety & Environment shall be complied

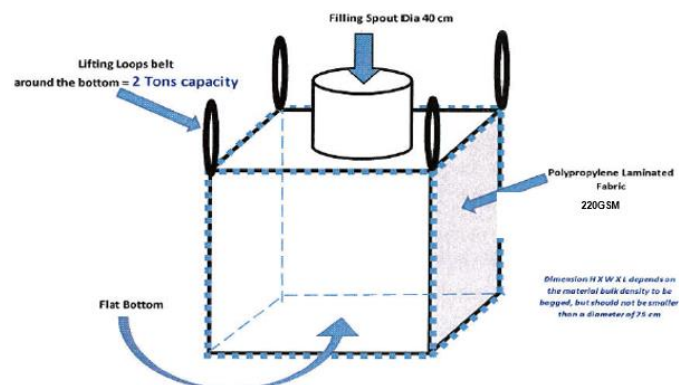
Annex-2: Packaging Guideline – Un-Shaped Refractory

1. Packaging Instructions:

- 1.1 Packaging of Un-shaped materials should be suitable for safe handling and storage of materials.
- 1.2 Materials should be packed in heavy duty Polypropylene Bags.
- 1.3 Packaging should be suitable & strong enough to withstand transport mode, harsh climate and extreme temperature of UAE at open yard.
- 1.4 Packaging must guarantee an adequate protection of the packaged items during transport, handling and storage.
- 1.5 Packaging must ensure that material is free from any contamination.
- 1.6 Bags should be mounted on adequate dimension strong wooden pallet.
- 1.7 Each package must not contain materials more than 1500 Kg.

2. Jumbo Bags Specification:

- 2.1 Heavy duty polypropylene bags.
- 2.2 Lifting Loops : 50 CM length 2 MT capacity belt around the sides to bottom.
- 2.3 Top Filling Spout : Diameter 40 CM/Height 50 CM.
- 2.4 Flat Bottom Materials : Polypropylene Laminated fabric with side lining 2MT capacity.
- 2.5 Body Materials : 220 GSM, Polypropylene laminated fabric, with UV treatment 2 MT capacity.
- 2.6 Dimension: Depending upon Materials bulk density to be bagged, but should not be smaller than 75 CM.



3. Materials Bagging and Palletizing:

3.1 Jumbo bags should be mounted on pallet of above-mentioned specification.

3.2 Filled bags should be tightly closed.

3.3 Bags placed on pallet should be well strapped to the pallet.

3.4 Refractory mortars should be wrapped with water and temperature resistance plastic films as shown in below photographs.

3.5 Bags Supplied without pallet shall not be acceptable.

3.6 Mentioned Below are sample standard packaging of unshaped refractory.



4. Labeling/Tagging requirement:

4.1 Each Bags should have identification tag mentioning Item Name, Quantity, Description, Date of Manufacturing, Date of Expiry (If applicable). Which must be as per the description mentioned in invoice/packing list, marking should be permanent and readable.

4.2 Laminated label should be available on each package with details.

4.3 The label should be fixed all the four sides of the pallet.

4.4 Label should have identification with permanent marking.

5. Specimen Label

Item Name	
ES Item Code	
Item Description/Shape Mark	
ES PO No.	
Date of Manufacturing	
Date of Expiry	
Qty	
Country of Origin	


Note: All applicable requirements of Health, Safety & Environment shall be complied

Annex-3: Packaging Guideline – Carbon Injection and Charge Carbon

1. Packaging Instructions

- 1.1 Packaging of Carbon Injection and Charge Carbon should be suitable for safe handling and storage of materials.
- 1.2 Packaging should be suitable & strong enough to withstand transport mode, harsh climate and extreme temperature of UAE at open yard.
- 1.3 Packaging must guarantee an adequate protection of the packaged items during transport, handling and storage.
- 1.4 Packaging must ensure that material is free from any contamination.
- 1.5 Bags should be mounted on adequate dimension of strong wooden pallet.

2. Jumbo Bags Specification

Item Name	Carbon Injection	Charge Carbon
Packaging	Heavy Duty Propylene Bags	
	Jumbo bags Mounted on wooden pallet.	
Lifting Loops	50cm Length 2MT capacity belt around the sides to bottom	
Top Filling Spout	Diameter 40 cm/ Height 50cm	
Body Materials	220 GSM, Polypropylene laminated fabric with UV treated 1.5 MT capacity	
Quantity/ Bag	1100 KG	
Jumbo Bags Dimension & Pallet Type	L 110 X W110 X H100 CM	
		

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3. Materials Bagging and Palletizing

- 3.1 Maximum weight/Quantity per bags should not exceed 1100KG.
- 3.2 Jumbo bags should be mounted on two-way pallets. (as shown on above photos).
- 3.3 Filled bags should be tightly closed.
- 3.4 Bags placed on pallet should be well strapped to the pallet.
- 3.5 Jumbo bags should be wrapped with water and temperature resistance plastic films.
- 3.6 Materials Supplied without pallet shall not be acceptable.

Note: All applicable requirements of Health, Safety & Environment shall be complied

Annex-4: Packaging Guideline – Recarburizer

1. Packaging Instructions

- 1.1 Recarburizer must be supplied in 20 Kg Paper bags.
- 1.2 20 Kgs paper bags should be kept into 1.0 MT Jumbo Bags mounted on wooden pallets.
- 1.3 Packaging of Recarburizer should be suitable for safe handling and storage of materials.
- 1.4 Packaging should be suitable & strong enough to withstand transport mode and to harsh climate and extreme temperature of UAE at open yard.
- 1.5 Packaging must guarantee an adequate protection of the packaged items during transport, handling and storage.
- 1.6 Packaging must ensure that material is free from any contamination.
- 1.7 Small bags should be mounted on adequate dimension strong pallet (as detailed below)

2. Paper & Jumbo Bags Specification

- 2.1 Paper Bags : 20 Kg/Bags
- 2.2 Qty/Jumbo Bags : 20 Kg X 50 Bags (1000 Kg)
- 2.3 Heavy duty polypropylene bags
- 2.4 Lifting Loops : 50 CM length 2 MT capacity belt around the sides to bottom
- 2.5 Top Filling Spout : Diameter 40 CM/Height 50 CM.
- 2.6 Flat Bottom Materials : Polypropylene Laminated fabric with side lining 2MT capacity.
- 2.7 Body Materials : 220 GSM, Polypropylene laminated fabric, with UV treatment
2 MT capacity.



20 Kg Bags Kept into 1.00 MT Bags.



Packed 1.0 MT Bags rapped with Plastic Film.

Note: All applicable requirements of Health, Safety & Environment shall be complied

Annex-5: Packaging Guideline – Graphite Electrodes & Nipples

1. Packaging Guideline

- 1.2 Packaging of Graphite Electrodes should be done in Strong Wooden Crates. as shown in below photographs
- 1.3 Packaging should have provision handling with Forklift and EOT cranes.
- 1.4 Packaging must guarantee an adequate protection of the packaged items during transport, handling and storage.
- 1.5 Nipple of Graphite electrodes must be packed with Thermocole packaging to secure from getting damaged.
- 1.6 Graphite Electrodes must be secured tightly by strong Steel/Nylon strap with wooden crate.
- 1.7 Wooden Crate should be wrapped with High Quality plastic stretch film



2. Container Stuffing Guideline

- 2.1 Graphite Electrodes and Nipples must always be shipped in Open Top Containers.
- 2.2 Stuffing of containers should be done in a manner that it can easily be un-stuffed from containers without getting damaged.
- 2.3 Stuffed materials must be secured with proper latching to ensure no movement during transit.
- 2.4 Strong nylon belt and wooden crates should be used to for latching inside containers to protect stuffed materials from movement and getting damaged during shipment.

3. Labeling/Tagging requirement

- 3.1 Each Crates should have identification tag mentioning Electrodes Size, ES Item Code, Manufacturer name etc. Which should be as per the description mentioned in invoice/packing list, marking should permanent and readable. E.g. **(PN-GL 70 230 X114 X60)**
- 3.2 laminated label tag should be available on each crate with details.
- 3.3 The label should be fixed on Two sides of the crates.
- 3.4 Label should have identification with permanent marking.

4. Specimen Label

Item Name	
ES Item Code	
Item Description/Shape Mark	
ES PO No.	
Date of Manufacturing	
Date of Expiry	
Qty	
Country of Origin	

Note: All applicable requirements of Health, Safety & Environment shall be complied