

CITIC PACIFIC
MINING

SINO Iron Project

Freight Preparation & Packaging Specification

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1 Introduction

1.1 Purpose

The purpose of this document is to provide a standard procedure for all Vendor supplied materials to CITIC Pacific Mining that require packing and or packaging.

The aim of this procedure is:

- Ensure all freight is safely and suitably packaged for multiple methods of transport including air, road, rail and sea.
- Ensure all freight can withstand pilferage, multiple handling, loading and the rigours of load restraint and transport.
- Minimise the risk of injury to those involved in the freight and handling of goods.
- Minimise the risk of HSE incidents, damage to goods and damage to assets.
- Ensure all goods are transported in compliance with all applicable laws and regulations
- Outline procedures to be followed to ensure, on an ongoing basis, the requirements of this procedure are met.

1.2 Scope

Packaging Standards detailed within this Procedure apply to all methods of transport, whether contractor, third party, or company and/or company sub contracted vehicles.

This Packaging Standards document also applies to all personnel, contractors, all vendors and suppliers of any source of material that is to be transported, provided, used, or stored within the Sino Iron project and mine operation.

The Packaging Standards detailed within this document are the minimum acceptable compliance requirements for protection and packing. If the general requirements of this document do not sufficiently detail requirements for certain types of equipment, the supplier shall, in all instances, make contact with the CPM Procurement department to establish specific requirements.

Contact can be made via; perth.purchasing@citicpacificmining.com.

1.3 Definitions

The term "packaging" embraces packing, preservation, marking, distribution, and storage. The object of packaging is to ensure that materiel reaches the user in an acceptable condition with proper regard to economy.

The protection provided by any specific package depends upon the severity of risk to which it is expected to be subjected during transport, handling, storage and distribution. Since these factors are too broad to permit development of individual item requirements in one standard, the levels of packaging specified herein are defined so that an appropriate selection can be made to meet the conditions anticipated.

Term	Meaning
Bearer	A timber or metal spacer separating the top and bottom decks of a pallet and providing space for entry of tines (forks). Bearers may consist of blocks or continuous beams.
Blocking	<p>(a) A method of interior packaging that builds up irregularly shaped articles to a regular shape to protect projections from damage, to reinforce weak parts and to maintain objects in fixed positions during transit, by bracing them against each other or against the sides of the container.</p> <p>(b) An undesired adhesion between touching layers of material, such as might occur due to the effects of pressure, and sometimes temperature, during storage or use. Bonded rubber units & solid rubber mouldings to which are bonded two metal parts for securing the rubber to the inner and outer frame of a packing case or crate in suspension packaging.</p>
Brinelling	Process of wear in which similar marks are pressed into the surface of a moving part, such as bearings or hydraulic pistons. The brinelling is usually undesirable, as the parts often mate with other parts in very close proximity.
BU	Business Unit (BU), any internal CITIC Pacific Mining business department.
Box	A re-usable non-collapsible container equipped to be handled by an overhead hoist or a forklift truck
Case	A rigid, heavyweight timber box which has panels that are enclosed, as distinct from those of a crate.
Crate	Timber-framed a box consisting of substantial frame members designed to withstand the design load with sheathing applied to give strength and complete coverage.
CoR	Chain of Responsibility. Policy concept used in Australia to place legal obligations on parties in the transport supply chain across transport industries generally.
Climatic Damage	Damage caused by the effects of climate (for example, humidity, rain, wind or water immersions, solar radiation, sand, dust or salt spray and corrosive atmospheres). Corrosion preventive substance which, by intimate contact with metal surfaces, protects them from corrosion by acting as an impervious barrier by modification of the metal surface, for example; by absorption or by superficial oxide formation
Dunnage	Material used to protect and secure cargo during transportation

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Pallet	Two way pallet with bearers that permit the entry of tynes from two different directions only
Quality Assurance	All activities and functions concerned with the attainment and proof of the required quality
SWL	Safe Working Load (SWL) is the breaking load of a component divided by an appropriate factor of safety giving a “safe” load that can be carried or lifted
SDS	Safety Data Sheet. Documents that provide critical information about hazardous chemicals

2 Procedure

2.1 Statement

The purpose of this document is to assist in managing the risks relating to transportation and to ensure the compliance with all legal obligations in respect to the packaging and consigning of goods for transport in Australia. This includes but is not limited to:

- Chain of Responsibility;
- General duty of care as defined by the Australian Occupational Safety & Health Act;
- Australian & New Zealand Standards (as detailed in part 7 of this document);
- All heavy vehicle laws including vehicle size and weight;
- The NTC Load Restraint Guide 2018 (Third Edition).

2.2 Duty of Care

Duty of Care is a legal obligation which is imposed on an individual requiring adherence to a standard of reasonable care while performing any acts that could foreseeably harm others.

On 1 October 2018, the Heavy Vehicle National Law was amended to provide that every party in the heavy vehicle transport supply chain has a duty to ensure the safety of their transport activities. In practical terms, this primary duty represents an obligation to eliminate or minimise potential harm or loss (risk) by doing all that is reasonably practicable to ensure safety as a party in the supply chain

2.3 Chain of Responsibility (CoR) Legislation

CoR is in place in all States and Territories throughout Australia. If any person plays a role in the transport of goods (or passengers) by road, then they are deemed to be part of the “Chain of Responsibility” (COR) under the Heavy Vehicle National Law (HVNL) and the Western Australian Road Traffic (Vehicles) Act 2012.

Any person involved in any of the following road transport activities has responsibility to comply with the requirements of the COR and may be deemed liable in the event of a breach:

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- Consigning – a person or company commissioning the carrying of goods
- Packing – placing goods in packages, containers or pallets
- Loading – placing or restraining the load of a vehicle
- Driving – the physical act of driving a vehicle
- Operating – operating a business which controls the use of a vehicle
- Receiving – paying for the goods / taking possession of the load.

Freight travelling to the Sino Iron Project generally travels significant distances and can be handled a multitude of times prior to its arrival. Packaging standards that are suitable for deliveries within the metro area and over short distances are not substantial enough to endure the journey to the Sino Iron Project, some 1500kms north west of Perth, Western Australia.

The degradation of packaging en-route can become a significant danger and pose a serious threat to the safety and welfare of:

- Freight carriage operators (drivers)
- Other road users (general public)
- Environment.
- Persons unloading / receiving goods

Any item for transportation must be presented in a manner to ensure that;

- Does not pose a threat to other road users;
- Can be handled either mechanically or manually without it being a risk to the persons involved in the activity;
- Does not cause damage to itself or other freight in its vicinity.

This document details the minimum standards acceptable for the presentation and packaging of goods travelling to the Sino Iron Project.

It is the responsibility of the person and the supplier consigning the goods to ensure compliance with this standard together with any specific requirements of any other applicable legislation

3 Documentation and Markings

3.1 Documentation

This Packaging Standard also addresses the Company requirements for the marking of goods and documentation to be included when material is transported to the Sino Iron Project.

General instructions for the placement of delivery and shipping documentation;

- Packaged goods – Attach to the outside of the package in a weather resistant document envelope;

- Non – Packaged Goods – Attach to the outside of the item in a weather resistant document envelope;
- Freight containers – Attach paperwork to inside wall in document envelope.
- CPM Purchase Order Number – must be clearly displayed on packaging

In the event that there are dangerous goods included, the SDS must be attached to the outside. The delivery address is to remain visible.

3.1.1 Safety Data Sheets (SDS)

The person responsible for the packaging of any goods or materials requiring an SDS is to ensure that a copy of the SDS is attached to both the item and the delivery documentation.

3.2 Marking of Packages

Any markings shall be durable, waterproof, fade resistant and able to withstand prolonged storage in bright sunlight and harsh conditions. The colour shall be in sharp contrast to the background on which it is marked.

Multiple items of a single consignment are to be marked with the package number and the total number of packages, i.e. 1 of 6, 2 of 6 etc. Documentation is to be attached to the first item.

Where various items from multiple vendors are consolidated and packaged by the transport provider the word MIXED is to be clearly marked on at least 2 faces of the package.

3.2.1 Special Handling Instructions

- All fragile or heavy items must be clearly marked as such.
- Any item which is to be handled by forklift must have any special instructions written so as to be clearly visible from the driving seat and be marked on all fork lift approach sides.
- Packages must be conspicuously marked with: “Handle with Care”; “Right Side Up”; “Keep Dry” and others in English and with the appropriate international standard symbols to prevent possible damage.
- Pictorial markings complying with AS 2852 Packaging – Pictorial marking for the handling of packages must be used to fully convey information regarding specific handling requirements.
- Lifting and slinging requirements must be clearly marked on goods.

3.2.2 Shelf Life

Any shelf life or preservation requirements must be clearly indicated on or with each applicable item.

4 Dangerous Goods

The packaging and transport requirements for the carriage of dangerous goods by road, rail and air shall be in accordance with the latest issues of the relevant Dangerous Goods transport legislation and codes.

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All Dangerous Goods transported within Western Australia shall be identified by correct shipping name, labelled, packaged and packed in full compliance with the directives detailed within the Australian Dangerous Goods (ADG) Code Edition 7.5.

The ADG Code should be read in conjunction with relevant state or territory law. The relevant authority for the transport of dangerous goods in Western Australia is:

- The Chief Dangerous Goods Officer
Resources Safety
Department of Mines, Industry Regulation and Safety

5 Packaging Requirements

5.1 General

It is the responsibility of the Consigner of the goods (supplier) to ensure that all items are prepared and marked in accordance with this Packaging Standard and the following detail:

- All packaging must be substantial enough to withstand road transport over long distances and rough terrain. It must be strong enough to withstand multiple handlings en-route;
- All packaging must be capable of being safely lifted on and off transport vehicles several times;
- It is preferable that packaging materials are environmentally friendly. Substitutes for polystyrene foam and plastic beads are to be used whenever possible;
- All items that require fork lifting must have forklift access points. For standard forklifts access points must be sufficient to allow the use of tines that are 210mm wide x 80mm high;
- Any lifting lugs must be approved and tested with the approved SWL and labelled as such (AS3990);
- Where multiple items are contained in the one package, heavy items must be packed at the bottom;
- Any item that does not fit into a case or crate must be strapped with suitable strapping to a skid or pallet. The skid or pallet must be strong enough to support the weight of the item and be able to sustain multiple handling movements.
- Straps should be placed around the pallet bearers wherever possible, not the pallet boards. Steps to protect the item from abrasion damage from the securing devices must be taken;
- Where the amount of items in a cage is insufficient to effectively block the items from moving, then the items must either be restrained to the cage by way of straps or by blocking, using timber or similar to prevent movement.

Note: Shrink-wrapping of heavy items onto a pallet is not considered to be a suitable means of restraint.

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5.2 Packaging Methods

5.2.1 Cases, Boxes and Crates

- All crates must be capable of being lifted by forklifts and afford suitable tine access. Where slings are to be used on crates, particularly those weighing over 300kg, the top edges must be sufficiently reinforced to withstand the loads applied by slinging;
- Where timber is used, either internally and externally, it must be free of bark and insect infestation. Plastic or steel is the preferred construction material;
- Contents must for the purposes of handling and transportation, fit snugly inside the case and be restrained from movement by blocking the items. Where metal or prepared paintwork may come into contact with the case timbers, it must be protected from damage by abrasion.
- Timber cases, boxes and crates must be secured with straps capable of bearing the unrestrained weight of the item. Straps must be secured in a manner consistent with the strapping material type. For example, metal straps must utilise crimped steel seal or nylon and propylene straps must be secured using either plastic buckles, crimping or appropriate heat technology. Where possible, screws should be used to close up timber crates or cases, not nails.

5.2.2 Cages

Where the number of items in a cage is insufficient to effectively block the items from moving, then the items must either be restrained to the base of cage by way of straps or by blocking, using timber or similar media to prevent movement.

5.2.3 Pallets and Palletised Items

It is preferred that pallets are non-returnable: however some delivery points may choose to accept hire pallets. In these cases the pallets will be made available for return and the return of hire pallets is to be managed by the 3PL service provider.

- Pallets must be, preferably hardwood, suitable to adequately support the item and with an SWL exceeding the weight of the item. Pallets must be two-way, flush sided and under railed.
- Pallets are to be used for items that:
 - Items that require mechanical lifting during handling;
 - Cannot be handled manually by one person or designed to be lifted by a forklift;
 - Have dimensions that allow stable loading on the pallet and do not exert excessive point loads on the pallet.
- Palletised items must be secured to the pallet to prevent movement.
- Cylindrical items and items likely to roll or fall must be chocked and strapped with steel straps capable of bearing the unrestrained weight of the item to the pallet.
- Chocks should be fixed directly onto the pallet.
- The approved strapping method is to secure to the pallet bearers; not the pallet boards.

- Loads must where possible avoid overhanging the forklift entry points of the pallet.
- Where timber is used, either internally and externally, it must be free of bark and insect infestation.
- Where possible, steel pallets and skids should be used, for the packaging of large and heavy materials.

Hardwood pallets remain the primary method for transporting all mining freight due to sturdy nature.



The use of chipboard (pressed wood) lightweight HDPE or cardboard pallets should be avoided as they are not robust enough for long distance road transport.



Chipboard



Cardboard



Light weight plastic

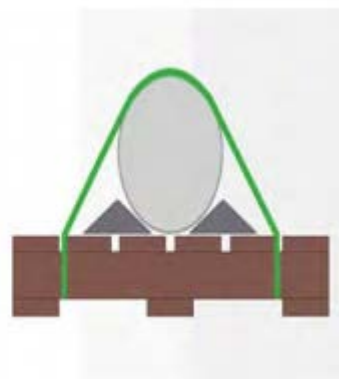
All pallets should be inspected for defects which could lead to failure during transport.

5.2.4 Skids

Skids are small pallets without under rails and are usually made of wood less rather than metal.

Skids have very limited application being suitable only for light and low-profile items. An example of such an item would be small cylinders. Skids are typically not weight rated and without this certification there is a heightened risk in handling Items over 1.0 m high need to be carefully assessed for stability. Some items will be unloaded on uneven ground which may increase the chance of the item becoming unstable during handling.

It is essential that each individual load be assessed to ensure compliance. Item weights and measurements should be considered prior to submitting on skids or remanufactured wood products to ensure skids are capable of supporting consignments. Broken skids will be returned to supplier for rectification.



5.2.5 Sacks and Bags

Where protection from dust, dirt or moisture is necessary, liners must be used on the inside of the sacks and bags.

5.2.6 Bundles

Each bundle must be treated as an individual package and marked accordingly. All items must be segregated in accordance with length and size and bundled into units with steel straps capable of bearing the unrestrained weight of the item.



5.2.7 Pails and Drums

Pails and drums must be restrained on hardwood pallets. The strapping used must be suitable to restrain the pails / drums on the pallets.

The strapping must be positioned to prevent movement of the pails / drums and prevent the board of the pallet being dislodged due to vibration or from applied restraint lifting the boards / slats.

The use of plastic wrapping as a means of restraint is not acceptable. Plastic wrapping is only to be used to protect the items against dust and weather.



5.2.8 Hoses

All supplied hoses for transport required to be strapped / restrained to pallets or in crates or cages for transport.

Hoses should be banded together with PET banding and restrained under the pallet bearers to ensure safe transport. They can also be crated to ensure safe transport.



5.2.9 Wet Cell Batteries

Batteries are to be suitably restrained to pallets to prevent movement and damage during transport and forklift loading / unloading operations.

Strapping with plastic strapping only should be sufficiently applied to prevent movement and possible dislodgement from pallet.



5.2.10 Tyres

All supply of tyres from vendors are required to be adequately restrained to pallets wherever size permits. The practise of securing tyres with the use of plastic wrap does not effectively restrain goods and presents hazards in the loading / unloading and during the transport phase. Larger tyres shall be handled in accordance with their size.

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Tyres for transport need to be either delivered / restrained in approved tyre stillage's, or adequately strapped to pallets to prevent movement strapping shall be a PET type, not metal / steel straps.



5.2.11 Wheeled Cases / Consignments

All freight that is delivered on wheels is required to be restrained to prevent free movement. These items must be stabilised for transport and the use of pallets underneath loads, with applied straps under the under bearers.



5.2.12 Ground Engagement Tools (GET)

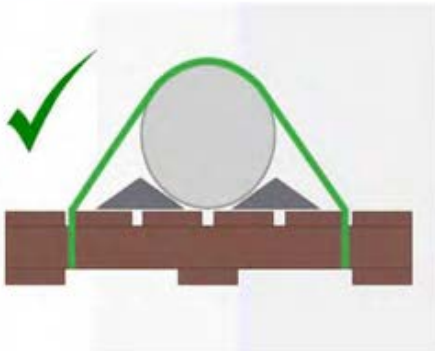
Heavy GET items need to be securely strapped to suitable pallets or crates to ensure safe transport and potential multiple handling.



NOTE: Sole use of plastic wrap/shrink wrapping is not an accepted method of restraining these goods to pallets. Freight must have either metal or PET strapping applied otherwise freight will be rejected and will not travel. This is due to the high potential for these heavy items to vibrate loose during transport.

5.2.13 Rollers and Cylindrical Items

Rollers & cylindrical items and be restrained to prevent **lateral and vertical** movement by the use of blocking on pallets or by crating the items. Some larger cylindrical items will require specialised frames.



5.2.14 Fragile and Sensitive Components

All instruments, protection relays or other fragile parts must be placed in sealed plastic bags and packed in plastic cushioning, or some equally effective shock absorbent material, in timber boxes. Polystyrene foam alternatives are to be used where available. All fragile components must be securely supported to prevent damage in transit and must be packed in separate crates and not with heavy items.

The sensitive nature of the freight must be clearly marked on the outside of the packaging.

5.2.15 Freight Containers

- Containerised items must be blocked, bracketed and/or bolted to prevent movement within the container.
- Items that cannot be anchored or blocked, or where size or weight prohibits containerisation, must be packed and shipped separately.
- Prior to international shipping of containers, the supplier must provide a packing plan to the Freight Forwarding agent for review.

For further information refer The IMO/ILO/ UN ECE Guidelines for Packing of Cargo Transport Units.

5.3 Equipment Protection

Equipment must be suitably protected and packaged to prevent damage or corrosion during transport and be protected from climatic damage during storage

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on site. If there are specific packaging requirements, these are to be placed on the Purchase Order.

In the event of no specific requirements the following guidelines apply;

- Where applicable, all machined surfaces, bearings and electrical components must be protected against the ingress of salt air, water vapour, seawater, moisture and other corrosive and harmful substances;
- Where applicable all bearings must be protected against “brinelling” by suitable locking of shafts or false bearings used to relieve bearings of the load during transportation;
- All doors on equipment must be locked, the keys labelled and securely taped to the door handles. Keys must not be left in locks during transport;
- All painted items must be packed and handled in such a way that minimises damage to the surface;
- All openings must be sealed. Engines, drivelines, pumps, valves, hoses, pipes and similar should be plugged or capped and filters replaced where appropriate prior to dispatch. This is to avoid wind sucking fluid from items while on the back of trucks;
- Equipment such as electrical switchboards and panels, office machines and precision instruments must be packed within a moisture/vapour-proof barrier with a suitable desiccant to absorb moisture within the package. The packaging of this type of equipment and the application of desiccants must comply with AS2400.18 – SAA Packaging code-Part18-Use of desiccants in packaging;
- Openings in electric motors, generators and other electrical equipment must be sealed with waterproof tape or in some equally effective manner;
- Where possible, goods containing oils or lubricants such as gearboxes, hydraulic components or transmissions, should be drained before transport, and carry a tag stating "NO OIL";
- Where goods containing oils or lubricants such as gearboxes, hydraulic components or transmissions are being dispatched for *repair and have leaking seals or can be expected to leak oil during transport, these must be drained before transport* and carry a tag stating "NO OIL";
- Gearboxes, exciters, suitable hydraulic components and transmissions must contain in quantities sufficient to ensure effectiveness, the corrosion inhibitor "Shell VSI 8235" or a Site approved equivalent, for internal corrosion protection for a shelf life of at least 6 months. A tag nominating the presence of corrosion inhibitor and the date it was applied must be clearly displayed. Ensure all vents breathers and openings are plugged. Breathers to be attached to the gearbox in a clean plastic bag with a tag stipulating “attach to gearbox after installation”. This is due to the corrosion inhibitor being effective only in a closed area;
- Exposed machined surfaces must be coated with the corrosion inhibitor "Valvoline Tectyl 506" or a Site approved equivalent. Hydraulic and pneumatic cylinder rods must be in the fully retracted position.

Equipment with exposed rubber parts or linings shall be cleaned and protected to acceptable standards. Direct exposure to sunlight shall be avoided. A UV resistant protective coating / cover shall be applied to prevent possible UV damage due to exposure to sunlight.

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5.4 Security

To minimise the risk of theft or loss, small packages and components and those considered attractive must be packaged separately or consolidated into larger containers; NOT packed inside equipment such as pumps, electrical cubicles or other items.

5.5 Transport and Handling Prior to Packaging

- During transportation of material, interim protection against climatic and physical damage shall be provided. During loading and unloading of vehicles all material shall be protected against the direct effects of the weather;
- Care must be taken when handling all materials particularly those items that are fragile or small;
- Material shall not be handled with bare hands if deterioration might be caused by doing so. Gloves worn during handling shall be replaced when they become soiled or contaminated;
- Material shall be inspected on receipt at the packaging site to verify that it is in an acceptable condition and in accordance with the accompanying documentation;
- Material about which there is doubt shall be placed in quarantine and referred back to the originator;
- Unless it is to be cleaned or preserved by methods involving heating, material consisting mainly of metal shall be stored for a minimum period of 24 hours to allow it to reach equilibrium with the atmospheric conditions of the packaging section before any processes are applied;
- Interim protection against climatic and physical damage shall be provided. If practicable, material shall be stored on pallets, stillage's or racks in such a manner that neither physical damage nor deterioration can occur through contact. Large and heavy equipment shall be kept out of direct contact with floors and walls. Material received in specially designed transit containers or within protective coverings shall not be removed from them until the packaging operations commence;
- Material shall not be placed near any heating apparatus.

5.6 Air Shipments

Items for air transport must be packed to acceptable airline industry standards in such a way as to afford maximum mechanical protection, ease of handling and the minimisation of total weight of shipping units.

5.7 Load Restraint

Correct restraint of packages and items onto transport vehicles is critical. The National Transport Commission (NTC) Load Restraint Guide (Third Edition) 2018 should be used as a reference to assist with material specific packaging and restraint guidelines.

- Load restraint equipment such as Load-binders, chains, ropes, gates must be compliant and in suitable condition to perform the task;

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- Dunnage is to be used to assist with the restraint of items. Loose dunnage is to be placed in an approved dunnage cage;
- Due to safety risks associated with the use of 'over centre' 'lever" style load-binders (dog and chain), this type of load restraint equipment must not be used. Ratchet tie down devices such as the "Ausbinder" or "Ev-Cam" should be used in their place;
- Any lengths of steel should be correctly secured to its own dunnage for ease of loading and transportation.

5.8 Centre of Gravity

Equipment and materials must be packed to ensure an even weight distribution within the package.

Where this is not possible, particularly in the instance where a case or crate conceals the internal goods, the supplier must ensure that the centre of gravity and hoisting position are marked on two sides to ensure loading, unloading and handling can be done in a safe manner. For example, top-heavy containers or unbalanced loads must be clearly marked with centre of gravity including sling marks to facilitate safe loading, unloading and handling.

5.9 Large Equipment

Large equipment requiring disassembly before transport must be clearly match-marked prior to disassembly to facilitate efficient reassembly on Site.

Loose accessories in each package must be identified individually, by a metal or weather resistant label indicating the purchase order number, tag number, name of the main equipment, and names of accessories, quantity and its position number on assembly drawings.

5.10 Furniture

Furniture and office equipment generally requires special handling and where possible shall be transported in covered vans with trolleys and blankets designed for the purpose. Instructions from CPM Procurement are to be sought by the vendor and the CPM preferred 3PL.

Furniture with readily detachable components shall be disassembled for packing and transportation to minimise damage in transit and for ease of handling.

6 Freight in Frames

If the item to be transported requires a frame the vendor is to liaise with the CPM Procurement representative to confirm the type and specifications of the frame. The specifications and associated costs of the frame are to be reflected on the purchase order.

Purpose-built transport frames must be designed, checked and manufactured to Australian Standard AS4991 (Lifting Devices). They must also incorporate load restraints and lashing points as described in the National Transport Commission publication "Load Restraint Guide" 2018 Third edition. Spreader beams or

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transport frames incorporating lifting beams must also conform to AS1418 (Cranes Hoists & Winches). Wherever possible, manufacture and structural integrity of all transport frames must conform to AS3990 (Mechanical Steelwork) including non-destructive testing of lifting lugs.

Frames are to be permanently marked with 'Property of CITIC Pacific Mining' using running weld or similar.

If frames appear not to have been manufactured to the above standards, or there is doubt regarding the adequacy of a transport frame, the CPM preferred 3PL is empowered to act on behalf of CPM and request a formal inspection and verification certificate.

If the frame is assessed to be non-compliant with the standard the CPM preferred 3PL is empowered to reject the freight, and contact the CPM representative.

6.1 Modifications to Frames

No modifications are to be carried out to Original Equipment Manufacturers (OEM) frames other than by the OEM themselves.

No modifications are to be carried out to BU-owned frames unless it is approved by an authorised and qualified CPM Maintenance or Engineering representative. Relevant BU change management processes must also be followed.

6.2 Single Use Frames

Packing that typically accompanies equipment delivered from overseas OEM to local vendors in containers will not normally suffice for long distance road haulage.

If the supplier chooses to use a single-use frame, it must be built to a standard that will safely transport goods from point of origin to final destination. If a suitable single-use frame is not available, a multiple-use frame must be used.

6.3 Multi Use Frames

Whenever an item is placed in a frame, an independent inspection is to be carried out by a Supervisor, or person deemed to be competent, to ensure that the item has been prepared correctly for transport, the item is secure that a Frame Checklist or similar has been completed. Suppliers and BUs using frames intended for multiple uses must maintain a Transport Frame Procedure that, as a minimum, should include the following information:

- Design standard;
- Frame register;
- Engineering calculations;
- Engineering drawings;
- Tag system (for repair agency and BU use).

All transport frames must be engineered and fit for purpose. Inspection regimes for frame integrity must be implemented by the Supplier and should be auditable by CPM.

Freight retained in supporting frames should be secured using washers combined with an appropriate minimum torque on the stud or nut to retain the item in the frame. Nyloc nuts, castellated nuts or similar must be used to ensure the retaining nuts do not vibrate loose in transit.

Lifting and tie-down points must be clearly indicated on the frame. Frames owned by CPM or its BUs are to be inspected as part of the Scope of Works (SOW). (SOW) and their fit-for-purpose condition, or otherwise, noted.

The serial number must be noted in the quotation response. If a frame is received that does not have a serial number, contact the person nominated on the purchase order to arrange the issuing of a number.

7 Relevant Standards and Documents

In preparing this document, the following documents have been used as resources:

Document Reference	Document Title
AS2852	Packaging – Pictorial marking for the handling of packages
AS4068	General purpose flat pallets – Principle dimensions and tolerances (international pallet sizes)
AS3990	Mechanical and Steelwork
AS2400.1	Packaging code Part 1: Glossary of Packaging Terms
AS2400.6	Packaging code Part 6: Paper and Paperboard
AS2400.7	Packaging code Part 7: Timber boxes
AS2400.10	Packaging code Part 10: Protection against shock and vibration (cushioning)
AS2400.18	Packaging code Part 18: Use of desiccants in packaging
AS4991	Lifting devices
AS1418	Cranes, Hoists and Winches
NTC Load Restraint Guide	National Transport Commission – Load Restraint Guide (third edition) 2018
ADG 7.5	Australian Dangerous Goods (ADG) Code Edition 7.5.
AS1678	SAA/SNZ 76:2010 Emergency Response Guide (EPG)
	The IMO/ILO/ UN ECE Guidelines for Packing of Cargo Transport Units
	CPM standard Terms and Conditions
WorkSafe	General Duty of Care Guidance Notes

Appendix A – Commonly Detected Packaging Issues



The contents have not been bolted or blocked causing it to breach the side of the crate.



Dunnage bags used as a blocking media. This ensures the contents do not move during transit.



The cardboard carton was not suitable for the weight of the contents



This pallet has been poorly stacked allowing the bottom layer to collapse.



Placing a damage skid on a good one does not solve the issue.



This crate is not strong enough for the contents and the contents are not blocked causing extra stress on the crate.



All mounting bolts must be tightened prior to despatch.



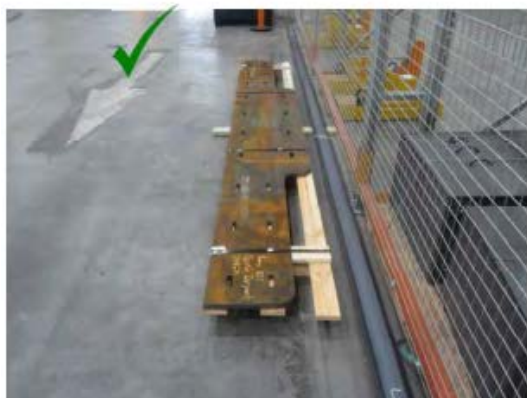
No weight on the boards has caused them to pull during transit and handling.



There has been no lateral restraint applied to these star pickets.



This load has not been restrained to prevent portions of it moving during handling.



This steel section is well packaged and restrained.



Shrink wrap was the only restraint applied to this load which proved inadequate prior to it being sent to site.