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# Unified Container Inspection and Repair Criteria (UCIRC)

For Steel General Purpose Containers

Revision 3 - July 2023

# Unified Container Inspection and Repair Criteria (UCIRC) For Steel General Purpose Containers (For use at all container interchanges)

Jointly prepared by:



The Bureau International des Containers (BIC) was founded in 1933 under the auspices of the ICC as a neutral, non-profit, international organization. BIC seeks to promote efficiency, safety, security, standardization and sustainability in the container supply chain. Publisher of the BIC Code Register since 1970, BIC also operates other industry databases, including the BoxTech Global Container Database ([bic-boxtech.org](http://bic-boxtech.org)), the BIC Facility Code Database, and the Global ACEP Database. BIC holds official observer status at IMO, WCO, and UN/CEFACT. BIC participated in developing the CTU Code.

More information is available at: [www.bic-code.org](http://www.bic-code.org)



ICS is the global trade association for shipowners and operators, representing the world's national shipowner associations and over 80 % of the world merchant fleet. ICS was established in 1921 to ensure the development, promotion, and application of best practices throughout the shipping industry. As the collective voice of the international shipping industry, ICS articulates and advocates shipowner positions to international regulators International Maritime Organization and International Labour Organization as well as to other government regulators and relevant stakeholders. ICS aims to positively influence regulatory changes while maintaining high standards of quality, safety and environmental protection.

More information is available at: [www.ics-shipping.org](http://www.ics-shipping.org)



The World Shipping Council (WSC) is the united voice of liner shipping, the international container and vehicle carriers that make global trade possible. We work with policymakers and industry groups to shape the future growth of a socially responsible, environmentally sustainable, safe, and secure shipping industry. We are a non-profit trade association with offices in London, Brussels, Singapore and Washington, D.C. The WSC has observer status with the IMO and the WCO and was actively involved in the development of the CTU Code. WSC has for the past several years also been actively involved in efforts to minimize pest risks in the sea container pathway at the IPPC; it is also a member of the North American Sea Container Initiative (NASCI).

More information is available at: [www.worldshipping.org](http://www.worldshipping.org)

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# 1. Introduction

## 1.1 General

- These criteria are designed for use at all container inspections
- The criteria should not vary between an in-service and on/off hire survey inspection and should be accepted on a universal basis by shipping lines, container leasing companies and container operators supporting these criteria for all general worldwide container interchanges
- Items not specifically detailed in the criteria are covered by this general introduction **only if** they require repair
- Any user of these criteria requiring a standard above that detailed in the criteria should negotiate directly with the depot and/or owner and operator concerned
- The tolerances/permitted damages listed are not the minimum necessary to meet basic safety requirements but are selected to ensure the container is serviceable while minimising the need for repair and thereby preserving asset life
- The repair method selected should be the most economical and suit the particular repair location
- Both the **interior** and the **exterior** of the container must be inspected for Pest contaminants which, if found, must be removed, and disposed of
- When cleaning Pest contaminants<sup>1</sup> reference should be made to the publication “Prevention of Pest Contamination of Containers: Joint Industry Guidelines for Cleaning of Containers”<sup>2</sup>

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<sup>1</sup>Pest contamination means visible forms of animals, insects or other invertebrates (alive or dead, in any lifecycle stage, including egg casings or rafts), or any organic material of animal origin (including blood, bones, hair, flesh, secretions, excretions); viable or non-viable plants or plant products (including fruit, seeds, leaves, twigs, roots, bark, intact or broken wood packing material, including dunnage); or other organic material, including fungi; or soil, or water; where such products are not the manifested cargo within the container

<sup>2</sup>Prevention of Pest Contamination of Containers: Joint Industry Guidelines for Cleaning of Containers (in English) can be accessed at: (<https://ecs.page.link/8E5c8>). The document is also available (in Chinese) which can be accessed at: (<https://ecs.page.link/aQTUe>)

## 1.2 Acceptable Damage

This is defined as damage that is **not** to be repaired and includes:

- All flange damage except damage to weld connections
- Deformation of structural members up to ISO +10mm on the side face and ISO +5mm on the end face; and
- Previous repairs should not be reworked unless the structural integrity of the container is compromised or it is unsuitable for cargo

## 1.3 Non-Acceptable Damage

This is defined as damage that **must** be repaired or addressed because:

- The International Convention for Safe Containers, 1972, as amended (CSC) is violated and container safety is affected
- The Customs Convention on Containers 1972 is violated
- Visible pest contamination either on the **interior** or **exterior** of the container
- There is a reduction in the internal height dimension by more than 70mm and/or the internal width/length dimension by more than 50mm
- The container is unsuitable for cargo
- Cracks in welds are present unless otherwise stated; and
- Corrosion, not due to paint failure, which causes loss of structural integrity

## 1.4 Wear and Tear

This is defined as unavoidable change or deterioration of the condition of the container brought about by routine operational use and **includes**:

- General paint deterioration
- Deterioration of door gaskets and fittings
- Deterioration of door fixings arising from deterioration of doors
- Flooring delaminations resulting from routine cargo loading and unloading cycles

## 1.5 Manufacturing Defects

- Manufacturing defects or suspected manufacturing defects are to be reported to the owner

## 2. Main Structural Components

### 2.1 Rails, Headers & Sills

Components	Damage	Recommended Repair Methods
Top side rail	Holed, cut, torn, broken, cracked Deformation in excess of 30mm	Weld or straighten, or straighten and weld, or insert, or section, or renew
Bottom side rail – web  Flange	Holed, cut, torn, broken, cracked Deformation in excess of 50mm  Cracks or tears which extend into web radius  Pest contamination	Weld or straighten, or straighten and weld, or insert, or section, or renew  Weld or straighten and weld  Remove, clean and dispose of contaminants
Front & rear headers	Holed, cut, torn, broken, cracked Deformation in excess of 40mm	Weld or straighten, or straighten and weld, or insert, or section, or renew
Front & rear sill	Holes, cut, torn, broken, cracked Deformation exceeding 50mm  Pest contamination	Weld or straighten, or straighten and weld, or insert, or section, or renew  Remove, clean and dispose of contaminants

## 2.2 Posts

Components	Damage	Recommended Repair Methods
Corner posts	<p>Holed, cut, torn, broken, cracked</p> <p>Dents exceeding 25mm</p> <p>Bend, bow or deformation, if exceeding outer faces of corner castings by +5mm on end face or +10 mm on side face</p>	<p>Weld, or straighten and weld, or insert or renew</p> <p>Straighten, or insert or renew</p> <p>Straighten, or insert or renew</p>
Corner castings	<p>Cracked, deformed, broken</p> <p>Deformation preventing correct twistlock operation</p> <p>Pest Contamination is present in apertures or on surfaces.</p>	<p>Replace</p> <p>Replace</p> <p>Remove, clean and dispose of contaminants</p>



## 2.3 Floor Understructure

Components	Damage	Recommended Repair Methods
Fork lift pocket & goose neck tunnel assembly	<p>Top plate separation from floor in excess of 10mm or floor screws ineffective</p> <p>Web holed, cut, torn, or cracked in excess of 500mm or extending into a weld connection</p> <p>Lower flange connection to bottom side rail, holed, cut, torn, cracked extending into web radius</p> <p>Web deformation below line of corner castings</p> <p>Top plate pushed up in excess of 50mm, cut, torn or broken</p> <p>Strap broken, cracked, cut, torn, missing</p> <p>Pest contamination</p>	<p>Straighten or weld, or straighten and weld, or insert, or renew</p> <p>Weld, or straighten and weld, or insert, or renew</p> <p>Weld, or straighten and weld, or insert, or section or renew</p> <p>Straighten, or straighten and weld, or insert, or renew</p> <p>Straighten or weld, or straighten and weld, or insert, or renew</p> <p>Weld, or straighten and weld, or replace</p> <p>Remove, clean and dispose of contaminants</p>
Cross members	<p>Web holed, torn, broken, cracked, cut, missing</p> <p>Web deformed in excess of 75mm</p> <p>Web upper flange separated from floor by more than 10mm</p> <p>Bowed up by more than 50mm or below line of corner castings</p> <p>Pest contamination</p>	<p>Weld, or straighten and weld, or insert, or renew</p> <p>Straighten, or renew</p> <p>Straighten and refix, or renew</p> <p>Straighten, or renew</p> <p>Remove, clean and dispose of contaminants</p>

### 3. Other Components

#### 3.1 Floor

Components	Damage	Recommended Repair Methods
Floor planks and panels	Gouge greater than 15mm deep irrespective of length	Section or renew
	Gouge more than 6mm deep and greater than 150mm wide irrespective of length	Section or renew
	Delamination or other damage (affecting floor strength)	Replace if structural
	Difference in height between adjacent planks / panels greater than 10mm	Refasten
	Holes other than nail holes	Plug (maximum 25mm diam.)
	Pest contamination	Remove, clean and dispose of contaminants
Floor fastenings	Protruding	Refasten
	Three or more adjacent broken / loose, missing fasteners	Refasten or replace

#### 3.2 Doors

Components	Damage	Recommended Repair Methods
Door	Holed, cut, torn, broken, cracked component or weld, or deformation affecting security and operation of doors	Weld or straighten, or straighten and weld, or patch, or insert, or renew
	Missing / broken or loose parts which affect door operation or watertightness	Replace or refix
J Bars	If interfering with door operation	Weld or straighten, or straighten and weld, or insert
Data plates	Loose or missing plates	Refasten or replace

### 3.3 Panels

Components	Damage	Recommended Repair Methods
Side / front / Roof panels including header plate	<p>Dents into cube which reduce the internal width by more than 50mm from the inner corrugation including multiple dents, or 70mm from the floor to the roof inner corrugation</p> <p>Holed, torn or cut</p> <p>Dents exceeding the outer face of corner castings +40mm</p>	<p>Straighten, or straighten and weld, patch, insert or renew</p> <p>Weld, or straighten and weld, patch, or insert</p> <p>Straighten, or straighten and weld, or patch, or insert</p>

## 4. Other Items

Components	Damage	Recommended Repair Methods
Lashing rings	Broken, cracked or missing or non-functional	Weld, or replace, or straighten
Surfaces – Exterior & Interior	Glue (Sticky)  Odour, infestation, debris, contamination that can be transferred  Pest contamination  Vents blocked, loose, damaged and not weathertight, missing  Graffiti / foreign markings - offensive / possibly offensive	Clean and/or paint  Clean and/or remove  Remove, clean and dispose of contaminants  Repair/replace  Repair / remove
ISO decals	Missing or illegible	Replace
Rain gutters	Damage affecting door operation or exceeding outer face of corner castings +10mm	Straighten or remove
Hazardous labels	Remaining on panels	Remove

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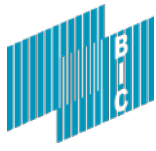
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