

Engineering Guidance NoteDocument AFITA-019Page 1/1Information for Equipment CataloguesRev. Date 04-April-2019Rev AFITA-019

SCOPE

Australian Standard AS2359.6 requires particular information to be published on the data plate affixed to attachments designed to be used with Industrial Truck.

This Engineering Guidance Note details the information required on attachment data plates and the recommended information that should be published in attachment equipment manufactures catalogues and data sheets to enable correct selection by users.

Industrial trucks may be equipped with attachments to allow handling of non-standard and non-palletised loads. Attachments fall into the following general groups:

Carriage Mount

- Hydraulic controlled
- Mechanical

Quick Fork Mount

- Hydraulic controlled
- Mechanical

Depending on the type of attachment and mounting style the information required to allow selection of, and capacity rating of the truck with the attachment, will vary.

| Basic Information for Selection | The basic information required to select an attachment: 1. Type of load to be handled 2. Dimension of load to be handled 3. Weight of load to be handled 4. Mounting Type required |
|---------------------------------|--|
| Carriage Mount Attachments | Information required for selection: 1. Carriage ITA Class, eg, 2 3, 4 etc 2. Minimum carriage width for the attachment to mount 3. Number of Hydraulic functions (hydraulic attachment) 4. Minimum pressure and Flow rate (hydraulic attachment) |
| Quick Fork Mount Attachments | Information required for selection: 1. Fork pocket dimensions, to suit class, eg, 2 3, 4 etc a. Fork pocket open or closed end 2. Minimum/Maximum fork spread required 3. Number of Hydraulic functions (hydraulic attachment) 4. Minimum pressure and Flow rate (hydraulic attachment) |



| Engineering Guidance Note | Document AFITA-019 | Page 2/1 |
|--------------------------------------|----------------------------|-------------|
| Information for Equipment Catalogues | Rev. Date 04-April-2019 | Rev A |

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| Information for Determination of | Information required for determination of the trucks capacity |
| truck Capacity | when an attachment if fitted: |
| | Weight of attachment (kg) |
| | 2. Capacity of attachment (kg) |
| | 3. Load centre distance for rated capacity (mm) |
| | 4. Effective Thickness / Lost Load Distance (mm) |
| | 5. Horizontal Centre of Gravity (mm) |
| | 6. Vertical Centre of Gravity (mm) |
| | 7. Lateral Centre of Gravity (mm) |
| | 8. Maximum side shift distance (mm) for attachments with |
| | side shift function |
| | |
| | Note: some attachments may have more than one |
| | orientation/configuration. In these instances, the rating should |
| | be based on the orientation/configuration with the lowest |
| | capacity. For example, a rotating roll clamp has four (4) |
| | orientations: |
| | Maximum Roll Diameter – Standard position |
| | Minimum Roll Diameter – Standard position |

Maximum Roll Diameter—Bilge position Minimum Roll Diameter — Bilge position

Information required on attachment data plates is defined in AS2359.6-2013

AS 2350.6-2013 Clause 6.3.1.2 Removeable Attachments states:

Removable attachments shall be marked legibly and indelibly (e.g. weather-proofed, profiled letters) with at least the following details:

- a) name and address of the attachment manufacturer or his authorized representative;
- b) model or type;
- c) serial number and year of manufacture;
- d) mass of attachment, which may vary from the stated figure by up to \pm 5 % or 200 kg, whichever is the lower of the two;
- e) distance of the centre of gravity of the attachment from its mounting face on the truck;
- f) rated capacity;
- g) in the case of hydraulically or pneumatically operated attachments, the maximum operating pressure recommended by the attachment manufacturer;
- h) load centre, if applicable;
- i) lost load centre distance;
- j) the instruction "The capacity of the truck and attachment combination shall be complied with".



Engineering Guidance Note

Information for Equipment Catalogues

Document AFITA-019 Rev. Date 04-April-2019

3/1 Rev A

Page

Information for Equipment Catalogues

Equipment catalogues providing information on attachments for Industrial Trucks should provide, as a minimum the following information to assist with the selection of an attachment:

- 1. Type of attachment and model designation, eg Clamp, rotator, fork positioner etc.
- 2. Capacity (SWL) of the attachment
- 3. ITA carriage type, if carriage mounted
- 4. Fork spread for Quick Fork Mount attachment
- 5. Number of hydraulic functions
- 6. Recommended pressure and flow rate for operation
- 7. Weight of attachment (kg)
- 8. Capacity of attachment (kg)
- 9. Load centre distance for rated capacity (mm)
- 10. Effective Thickness / Lost Load Distance (mm)
- 11. Horizontal Centre of Gravity (mm)
- 12. Vertical Centre of Gravity (mm)
- 13. Lateral Centre of Gravity (mm)
- 14. Maximum side shift distance (mm) for attachments with side shift function
- 15. Statement indicating Industrial Truck manufacturer or their agent must approve the use of the attachment, and is responsible for approving and making changes to capacity plate
- 16. Special requirements as defined in AS2359 for particular attachments

Requirements for Particular Attachments

AS2359 require particular treatment of the following attachments

- 1. Maintenance cages
- 2. Jibs for handling suspended loads
- 3. Extension (Slipper) forks

Maintenance Cage



Maintenance cages shall only be used with High Lift Reach or Counterbalance trucks, where:

- Reach truck minimum capacity is 1000 kg; or 3x the total of the maintenance cage mass and capacity, whichever is the greater.
- 2. Counterbalance truck minimum capacity is 1800 kg; or 5x the total of the maintenance cage mass and capacity, whichever is the greater.
- 3. Truck be equipped with a feature to lockout/disable auxiliary functions when the maintenance cage is in use.
- 4. Maintenance Cage shall comply with AS2359.1



Engineering Guidance Note Document AFITA-019 AFITA-019 Rev. Date Rev 04-April-2019 A

Jibs



The actual capacity rating of the truck with the jib installed shall be derated to 80% of the calculated capacity to compensate for the dynamic effects of the suspended load.

Note: Jibs with tilting jib arms may allow an effective increase in lift height, which must be considered when determining the truck capacity when using a tilting Jib.

Extension (Slipper) Forks



Extension forks have the following requirements:

- 1. The parent supporting fork shall have a minimum length equal to or greater than 60% of the extension fork length
- 2. The internal width of the extension fork shall be of a dimension having a total clearance of minimum of 10 mm and a maximum of 10% of the fork blade width.
 - For example, for a 125 mm wide fork the extension fork internal pocket width shall be 135 to 137.5 mm