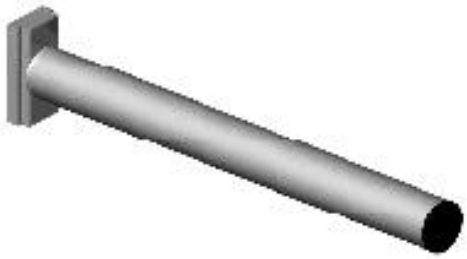
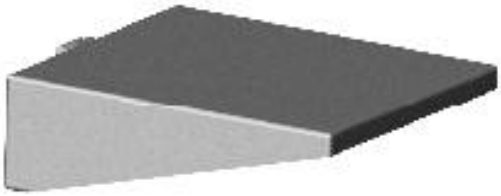
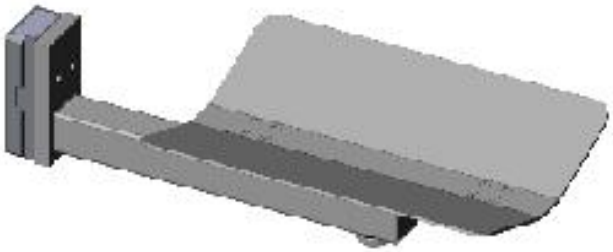
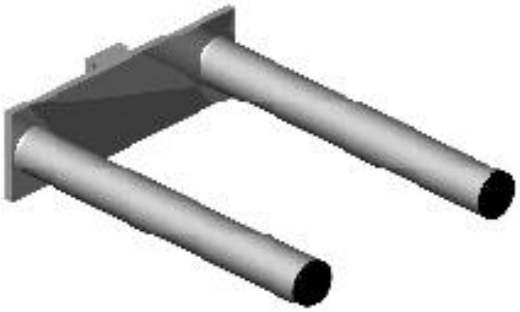
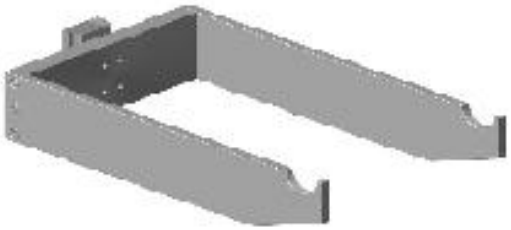
# General Lifting Attachments











# Operator Manual

**Read this manual before use**

For European models this manual supports the CE Declaration of Conformity

**Retain for future reference**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# Introduction

**Scope of Manual**

This manual has been compiled to assist in the operation and maintenance of a range of Packline Lifting Attachments and in the case of European models, to meet regulations stated in the CE Declaration of Conformity.

There are individual datasheets for the relevant Attachments and their optional features. Please ensure you have the relevant datasheet supplied with this manual. For bespoke solutions, an addendum may be supplied to give specific information on the design.

**General Safety**

**The Packline Lifting Attachments should:**

- **Be specified to your application** - Considering strength, stability and suitability. Taking into account the Safe Working Load of the Lifter and its fitted Attachment - the load should not exceed the guidelines i.e. max. load and load centre distance.

- **Be tested with the specified load/reel -** Every effort has been made to ensure that the Lifter and Attachment are suitable to most applications however, due to variations in reel construction and type of load, each application should be tested for suitability and safe operation.

- **Only be installed and maintained by competent authorised person(s).**

- **Only be operated by trained authorised personnel -** To aid in-house training, Packline are able to offer training packages.

- **Only be operated according to the instructions set out in this manual -** Ensure all relevant personnel have access to this document. Packline Ltd will not accept responsibility for any consequences arising from misuse of the Lifting Attachments.

- **Only be maintained in accordance with the National regulations -** The Packline Maintenance Schedule supports European LOLER 98 regulations.

- **NOT be operated unless all supplied covers, guards and fail-safe locks are correctly fitted.**

- **NOT be modified without the written permission of Packline Ltd -** The company will not be held responsible for any injuries to personnel or damage caused, due to unathorised modification of equipment.

- **Be disposed of in a responsible manner** - If in doubt, contact Packline Ltd.

Terms used in this manual:

***Warning!*** This may result in injury if not observed.

***Caution*** This may cause damage to equipment if not observed.

***Note*** This highlights correct use of equipment or characteristics of the equipment.

The contents of this publication may not be copied, either whole or in part, without the consent of Packline Ltd.

Due to our policy of continuous improvement, Packline reserves the right to make technical improvements and alterations without notice.

# Operational Safety

**Do Not:**

- Attempt to lift loads that exceed the certified **SAFE WORKING LOAD** and load-centre distance of the Lifter or the Attachment.
- Lift objects other than those specified by Packline Ltd.
- Drop loads onto the Attachment, as this can bend or weaken the Attachment or the Lifter.
- Attempt to use the Attachment if damaged or malfunctioning.
- Use in a potentially explosive atmosphere.
- Run near the Lifter or Attachment.
- Operate the Lifter when a person is loading/unloading the Attachment.
- Swing or step on the Attachment - the Attachment is not for lifting personnel.
- Wear loose garments.
- Remove covers, or service Attachment unless trained.
- Allow the Attachment to rest on an obstacle whilst lowering due to the risk of overturning or dropping load.
- Maneuver a Lifter with the Attachment in the uppermost position except for positioning purposes during loading and unloading operations.
- Allow the Attachment to have direct contact with foodstuffs.
- Stand or put body parts under an elevated load.
- Operate the Attachment if the service period has expired.
- Leave equipment loaded for a period longer than required for the application. If you leave the unit, the load should be relieved.

**Always:**

- Follow HSE guidelines for safe lifting and handling.
- Ensure hands and feet are clear of all moving parts and care is taken not to trap them whilst loading/unloading.
- Transport loads at a safe speed.
- Use the Attachments as specified.
- Check the condition of the Lifter and Attachment before and after use.
- Wear protective footwear when using the Attachment and handling loads. Ensure long hair is tied back
- Wear protective gloves if using constantly.
- Engage/disengage loads properly from Attachment - follow guidelines.
- Locate Attachment with label upwards (when using with Compac Lifter)
- Observe Attachment and load combination and individual ratings.
- If using in a constricted area, operate from unobstructed side.
- Ensure adequate lighting levels and visibility for safe operation


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# Attachment Fitting

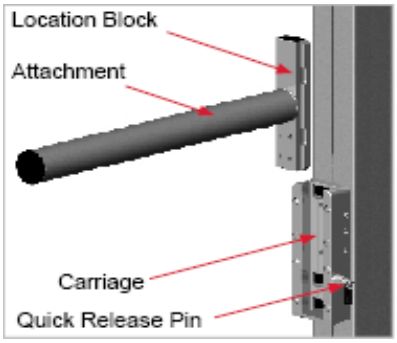
The Attachment and Lifter used will determine the way that the Attachment is fitted. The Attachment can be permanently fixed to the Lifter, or Interchangeable utilising a quick release system incorporated on the Lifter or the Attachment.

**Fixed Attachment** - the Attachment is permanently fixed on to the Lifter and so requires no fitting. Please note, the attachment should only be removed by authorised personnel.

**Interchangeable Attachment** - the Attachment can be removed from the lifting equipment incorporating a Quick Release mechanism. This mechanism is to prevent the Attachment from inadvertently riding out of the Carriage whilst lowering i.e. hitting an obstacle. The Quick Release mechanism is fitted to the Lifter on the Packline Compac and some other types of lifters and fitted to the Attachment on Heavy-Duty Stackers.

**Packline Compac Lifters**

**Fitting an Interchangeable Attachment**




1. Set the carriage at a suitable working height and ensure the Quick Release Pin is disengaged by twisting to the unlock position.
2. Lift the Attachment safely and slot the Location Block into the Carriage, ensuring the SWL label is upwards. Once the Attachment is part way into the Carriage assembly slide it down until a positive stop is reached.
3. Ensure the Quick Release Pin is fully engaged by twisting it to the locked position.

***Warning!*** Care should be taken when fitting/removing an Attachment to ensure no injury is caused. Do not place fingers underneath the Attachment Location Block. Always ensure hands and feet are clear of all moving parts and care is taken not to trap them whilst loading, unloading, fitting an attachment, or in adverse conditions.

**Removing an Interchangeable Attachment**

1. Set the carriage at a suitable working height and ensure the Quick Release Pin is disengaged by twisting to the unlock position.
2. Take the weight of the Attachment Assembly and then lift until the Location Block is clear of the Carriage Assembly. The Attachment can now be removed and replaced with an alternative.

***Warning!*** When the Quick Release Pin is engaged, the operator should ensure that they do not hit any obstacles whilst lowering, nor continue lowering when the Attachment has deposited the load, as this will drive the load into the obstacle or could cause the Lifter to overturn.

***Warning!*** If the weight of the Attachment falls outside of the guidelines for manual lifting, either seek assistance, use a lifting device or a purpose-built Docking Station (available as an option from Packline).

**Docking Station Option -** Packline can supply custom platforms which are designed to support the Attachments whilst fitting/removing. If this has been supplied, please consult the relevant manual for information.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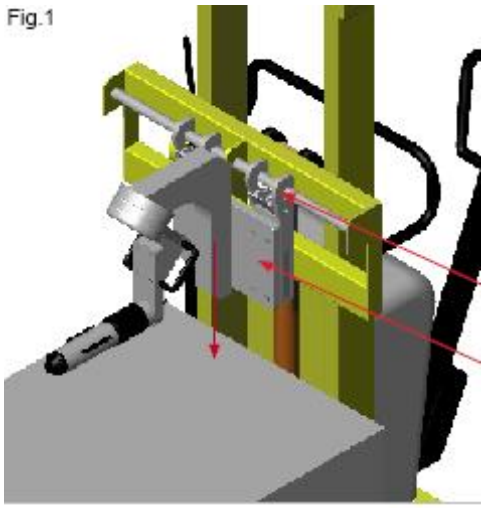
# Attachment Fitting

**Heavy Duty Stackers - Removal/Fitting of Interchangeable Attachment**

For Heavy Duty Stackers the procedure for removal of the attachment is as follows:

Fig.1

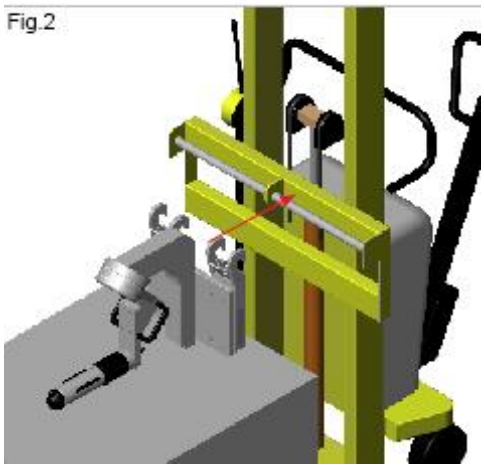


1. Position Attachment over a solid platform or surface.

2. Ensure the Quick Release Catches are pulled forwards (using the uppermost lip).

3. Lower the Attachment onto the surface until the surface has taken its weight (fig.1). Ensure the flexline bar has moved as low as it can.

Fig.2



4. Move the Heavy Duty Stacker away from the Attachment. A second person may be needed to ensure that the Attachment is stable during this procedure.

5. Fitting is the reverse of removal. Confirm the catches are engaged before transporting or lifting to ensure Attachment is secure.

***Warning!*** Care should be taken when fitting/removing an Attachment to ensure no injury is caused. Do not place hands/fingers behind the Heavy-Duty Location Assembly or in the Catch/Hook mechanism. Always ensure hands and feet are clear of all moving parts and care is taken not to trap them whilst loading, unloading, fitting an Attachment or in adverse conditions.

***Warning!*** This operation can be performed manually by lifting the Attachment out of the Lifter however, if the weight of the Attachment falls outside of the guidelines for manual lifting, seek assistance, use a lifting device or a purpose-designed Docking Station (available as an option from Packline).

**Docking Station Option -** Packline can supply custom platforms which are designed to support their Attachments whilst fitting/removing. If this has been supplied, please consult the relevant manual for information.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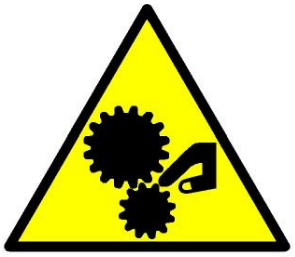
# Markings

| Label | Location & Meaning |
|---|---|
| | On Location Block or Assembly<br><br>Shows Safe Working Load (SWL) at Load Centre distance<br><br>Mass of Attachment and Centre of Mass |
| | On Location Block or Assembly<br><br>Shows assembly part number, Attachment serial number and year of manufacture |
| | On Location Block or Assembly<br><br>Warning as both the truck/Lifter capacity and Attachment capacities must be considered e.g. a high rated Attachment could be put on a low rated truck, which would exceed the truck capacity and cause damage when loaded |
|  | Optional<br><br>Warning your hand is near a pinch point |
| | Optional<br><br>Do not drive Attachment into ground or legs |

It may assist the operator to mark the Attachment with a label or tape to show the correct position for the reel or load. Where reels of various widths are to be lifted, alternative colours can be used for different sizes. Packline recommends that a reference chart is used to help this.

Alternatively, a collar could be supplied to physically limit the insertion of the spindle or Attachment.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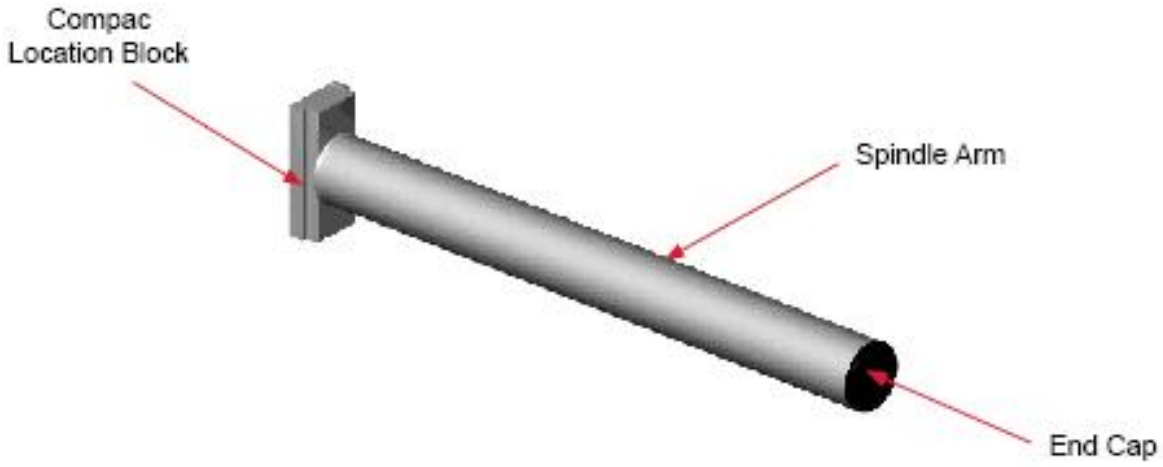
# Single Spindle Attachment




***Note*** The diagram shows the Compac Location Block. The Heavy-Duty Location Assembly is also available for this model, as an alternative.

**Capabilities**

A technical specification/datasheet for the specific Attachment purchased should be supplied separately, detailing overall dimensions and spare parts.

**Construction**

Mainly constructed from Stainless Steel 303/304 and Polypropylene. The Heavy-Duty Location kit contains zinc plated mild steel parts.

**Operating Guidelines**

The reel should be pushed back onto the Spindle as far as possible and engaged to a minimum of 75% of the reel length for safe operation.

For applications where the operator needs to manually push the reel off the Single Spindle to transfer it to a mandril, the Spindle is generally only suitable for reels with a cardboard core up to 65kgs, or a plastic core up to 100kgs due to the forces involved. An option in this instance would be to make it a two person operation, or to have a special variation.

When pushing the reel off, ensure that the load is not taken on the end of the Spindle. If this is unavoidable, the rating might need adjusting to account for a load centre at the end of the Spindle.

If the reel or application changes in any way, you **MUST** contact the Packline office for verification on suitability.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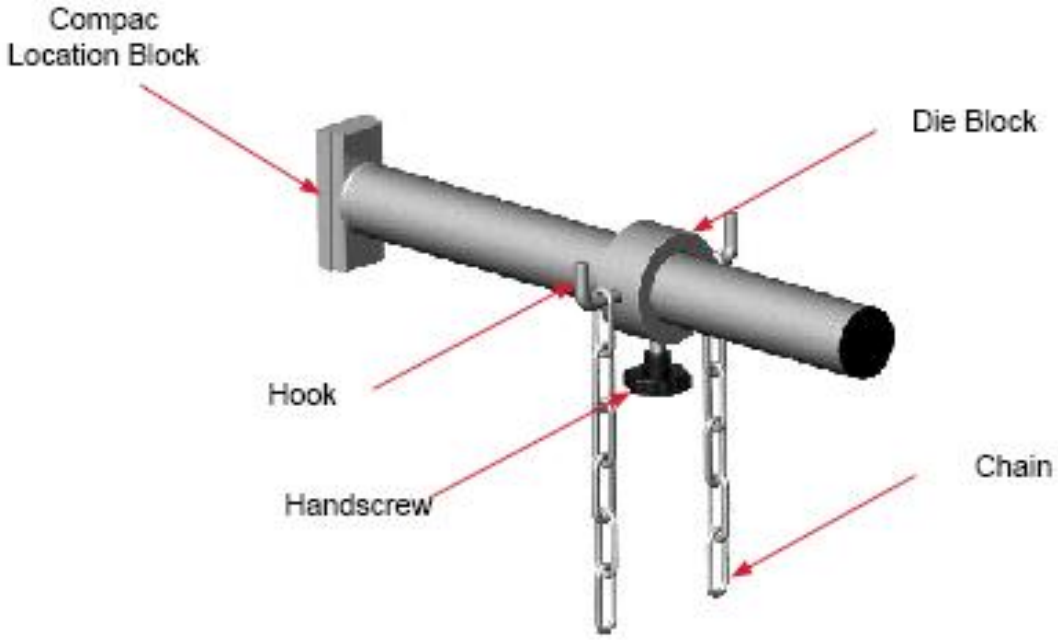
# Single Spindle Attachment with Die Block




***Note*** The diagram shows the Compac Location Block. The Heavy-Duty Location Assembly is also available for this model as an alternative.

**Capabilities**

A technical specification/datasheet for the specific Attachment purchased should be supplied separately, detailing overall dimensions.

**Construction**

Mainly constructed from Stainless Steel 303/304 and Polypropylene. The Heavy-Duty Location kit contains zinc plated mild steel parts.

**Operating Guidelines**

Care should be taken to ensure that the hub is positioned as close to the Location Kit as is practical to reduce overhang to a minimum. Ensure the locking nut is tightly secured onto the Single Spindle before lifting. The hub should be fully engaged onto the Spindle as a minimum and never partly engaged when attempting to lift.

Chain lengths:
500mm - max 500mm x 600mm tooling (45-degree chains) - longer side towards front - 350mm drop to fixings
300mm - max 300mm x 400mm tooling - 210mm drop to fixings
400mm - max 400mm x 500mm tooling - 280mm drop to fixings

The Attachment is not designed to have only one chain bearing all of the load on one side; the load must be spread between both hooks. Ensure that any chains or slings are suitably secured to the hooks or eyebolts (depending on the design) before attempting to lift. If four chains are provided, all 4 chains **MUST** be secured before lifting.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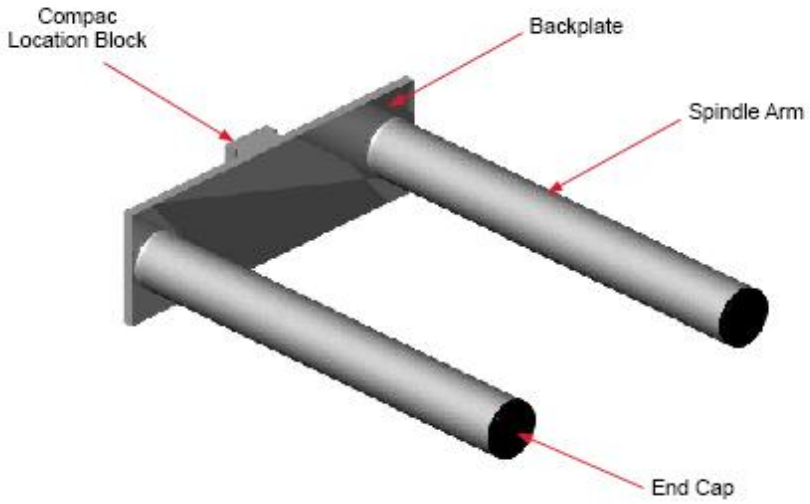
# Twin Spindle Attachment




***Note*** The diagram shows the Compac Location Block. The Heavy-Duty Location Assembly is also available for this model, which would replace this.

***Capabilities***

A technical specification/datasheet for the specific Attachment purchased should be supplied separately, detailing overall dimensions.

***Construction***

Mainly constructed from Stainless Steel 303/304 and Polypropylene. The Heavy-Duty Location kit contains zinc plated mild steel parts.

**Operating Guidelines**

Care should be taken to ensure that the reel is fully engaged on the Spindle, the back of the reel is against the Backplate and the reel sits safely on the arms and cannot fall between them. For safe operation, the Spindle should be engaged to a minimum of 75% of the reel length, although full engagement is preferable to ensure maximum safety and stability.

To raise the load higher than the column, a load backrest is required if an extension block is used.

As the diameter of the reel increases, the angles of the resultant forces decrease the load on the Spindles, allowing them to support heavier large reels compared to lighter small reels.

Additional height from spindle centre to reel centre = $\sqrt{(((\text{Reel Diameter} + D1) / 2)^2 + (SW1 / 2)^2)}$

If a reel is on its side on the pallet and is to be picked up using a Twin Spindle, it is very important to specify the correct pitch between the arms so that the arms are wide enough to get either side of the reel whilst lying flat, but not too wide that the reel is not supported enough. The maximum and minimum sizes for each model are given on the technical specifications.

Larger diameters than the max. stated can be lifted however, the reel cannot be picked up when lying on its side. Special arrangements would be required to raise the reel up, or to turn/heave/place the reel onto the Spindles.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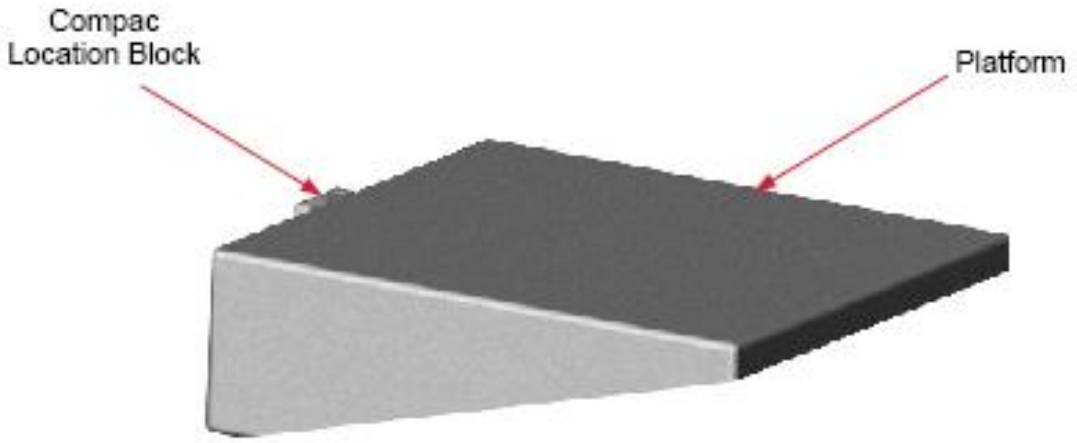
# Platform Attachment




***Note*** The diagram shows the Compac Location Block. The Heavy-Duty Location Assembly is also available for this model as an alternative.

**Capabilities**

A technical specification/datasheet for the specific Attachment purchased should be supplied separately, detailing overall dimensions**.**

**Construction**

Mainly constructed from Stainless Steel 303/304. The Heavy-Duty Location kit contains zinc plated mild steel parts.

**Operating Guidelines**

It is important for this Attachment that the load is not too awkward or too heavy to be lifted or slid off the platform when at the required height.

The load should be evenly distributed on the Platform and pushed as far back as possible.

Specials can have lips added to prevent slippage and reinforcement ribs for added strength.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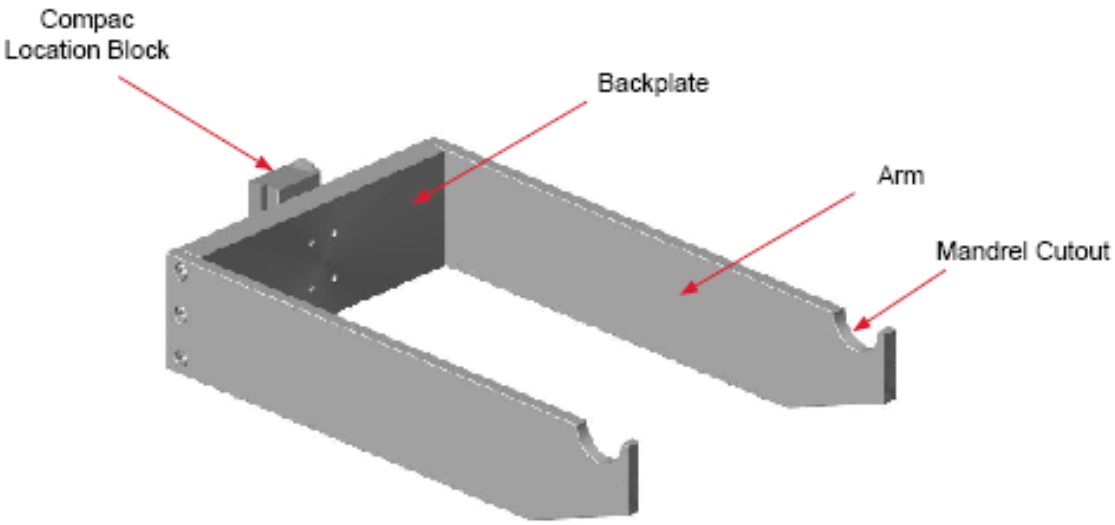
# Cradle Attachment




***Note*** The diagram shows the Compac Location Block. The Heavy-Duty Location Assembly is also available for this model as an alternative.

**Capabilities**

A technical specification/datasheet for the specific Attachment purchased should be supplied separately, detailing overall dimensions.

**Construction**

Mainly constructed from Stainless Steel 303/304 and anodised Aluminium 6082/T6. The Heavy-Duty Location kit contains zinc plated mild steel parts.

**Operating Guidelines**

Care should be taken to ensure that only shafts designed to fit the mandrel cutouts are used and that larger diameter shafts are never used.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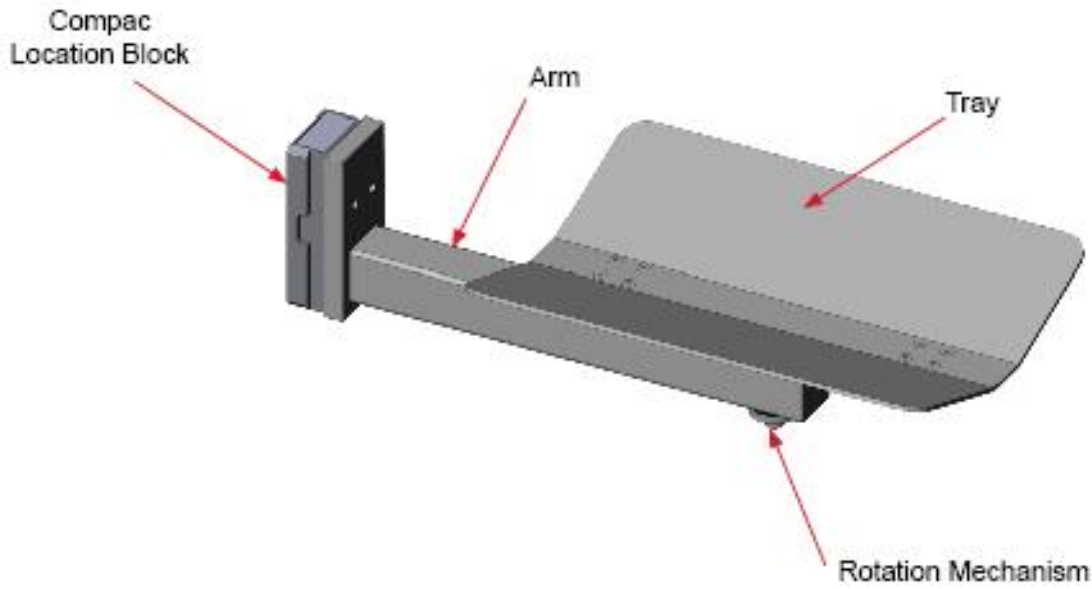
# Rotating Tray Attachment




***Note*** The diagram shows the Compac Location Block. The Heavy-Duty Location Assembly is also available for this model, as an alternative.

**Capabilities**

A technical specification/datasheet for the specific Attachment purchased should be supplied separately, detailing overall dimensions.

**Construction**

Mainly constructed from Stainless Steel 303/304, anodised Aluminium 6082/T6 - 5251H22 and Acetal/Delrin. The Heavy-Duty Location kit contains zinc plated mild steel parts.

**Operating Guidelines**

Care should be taken to ensure that the reel is loaded centrally on the Cradle. Do not drop the load onto this Attachment as this could shorten the attachment's working life.

Manual effort is required to either roll the reel onto the Attachment (the pallet may need raising) or to turn/heave it on if the reel is light enough. There is also light effort involved in rotating the reel on the tray, via a friction bearing.

If a reel is rolled onto the tray, the Attachment may fatigue and flatten under an excessive load. The larger the reel, the lower the rating. During rotation, the diagonal of the reel needs to clear the Location Kit with a safe distance.

When loading the reel onto the machine, ensure there is enough room belowl to allow the Attachment to be lowered down far enough to be free of the reel for easy withdrawal.

Additional height to centre of reel RH1 = (Reel Diameter x 0.47) + 60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# Maintenance

**Overview**

Your Lifting Attachment has been manufactured to ensure that maintenance is kept to a minimum and the materials used should minimise corrosion however, the unit should regularly be wiped down to support this. Packline does not recommend that chlorine-based cleaners are used on their Lifting Attachments.

***Warning!*** Always remove the Attachment from the lifter before any maintenance is undertaken.

**Every Shift**

1. Check Attachment condition and function.

**Annually**

In accordance with the Health and Safety Regulations, it is a legal requirement that all lifting equipment is thoroughly and regularly examined and tested if necessary.

Packline can provide a full maintenance package for supplied equipment if relevant, as the Attachments in this manual require minimal maintenance. Please contact the office for details.

A technical specification/datasheet for the individual Attachment purchased should be supplied separately detailing overall dimensions and spare parts (if applicable).


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# Your Partner in Safe Handling

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