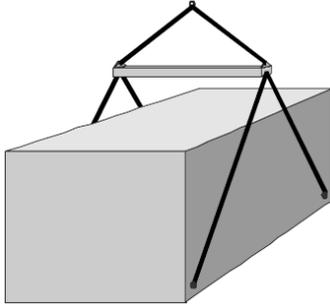


Camlok Container Lug Marking and Use

CLB / TCU

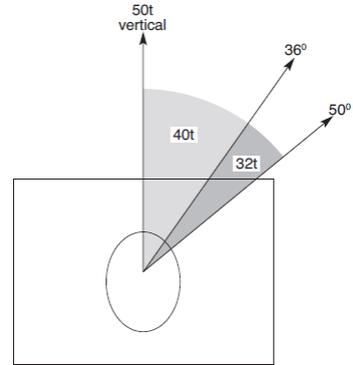
The Container bottom lifting lug CLB / TCU has been modified to include marking for the three main loading arrangements that the product is used for.

This allows the lug to be used in any of the three arrangements and removes the necessity of stamping the lug with the required arrangement load before sale.



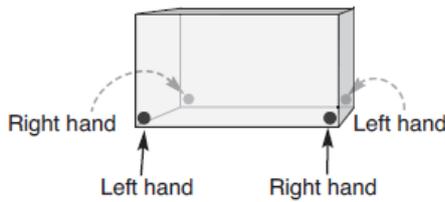
The standard arrangement of a simple spreader beam can now be used @ 50° for 32T and 36° for 40T containers by simply lengthening the side slings.

Load diagram for a LH CLB lug the lug cannot be used outside of the shaded area.



Marking of the lug

The lugs are marked RH or LH to suit the container fitting position. The diagram shows the standard arrangement for use with simple spreader beam. If the lugs are to be used with the slings outward as in some container carriers then the handness needs to be reversed.



The photo shows a RH lug with the loading clearly marked for spreader beam use.

10 tonnes per lug (40T total per set) at 36° from vertical and

8 tonnes per lug (32T total per set) at 50° from vertical



The reverse of the lug has the loading for lifting frame use.

12.5 tonnes per lug (50T per set of 4) when used vertically

(The bar code and stamping are the individual serial number of the lug and the CE identification of manufacturing date)

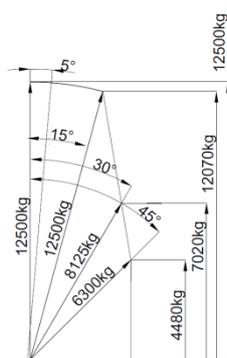
This modification negates the need to ask the customer for loading arrangement at point of sale and allows the customer freedom of use.

Only 1 part number is now needed for the lifting set.
Individual spare lugs need to be identified RH or LH

Part Number	Unit of Measure	Camlok CLB	Tigrip TCU
Lifting set (4 lugs)	SET	N4300001400	N53508014
RH lug	Each	N4300008885	N53508043
LH lug	Each	N4300008884	N53508042

Side Loading

For full load capacity the attachment sling should lay parallel to the side of the container. For splayed attachment slings the W.L.L should be reduced in accordance with the following side load line force diagram.



The full line force can be used for splay angles of 5° and less. Therefore there is no reduction in the W.L.L of the lug.

For angles of 5-15° a maximum line force of 12500kg should be used. But a projected resultant capacity of 12070kg used to calculate the W.L.L of the set.

For angles of 15-30° a maximum line force of 8125kg should be used. But a projected resultant capacity of 7020kg used to calculate the W.L.L of the set.

For angles of 30-45° a maximum line force of 6300kg should be used. But a projected resultant capacity of 4480kg used to calculate the W.L.L of the set.

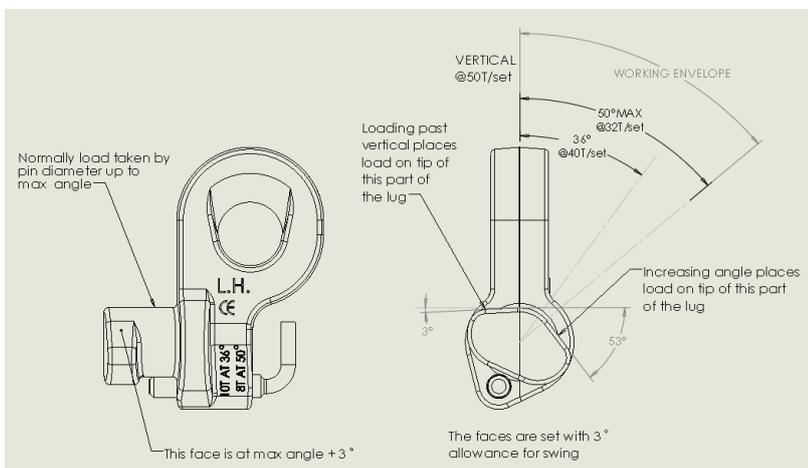
The container lifting lug should not be side loaded more than 45°

Eg. A straddle carrier is fitted with CLB lifting lugs to handle faulty containers. The position of the attachment points will give a 90° projected included angle and a 20° splay to the lifting slings.

$$\begin{aligned} \text{W.L.L} &= 4 T \cos (\phi/2) \text{ from the side loading diagram } 20^\circ \text{ has a projected force of } 7020\text{kg} \\ &= 4 \cdot 7020 \cos 45^\circ = 19855 = \text{W.L.L of lifting arrangement } 19.8\text{T} \end{aligned}$$

Using CLB lugs vertically

The maximum capacity of the CLB lug is obtained when used vertically. This arrangement requires



the use of a frame, twin hoists or a cascade of beams. Great care must be used to control or eliminate the effects of sway, level, incorrect centres and cross loading.



Damage to the lug can be caused if used outside of the working envelope