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# WEBBING/ LASHINGS

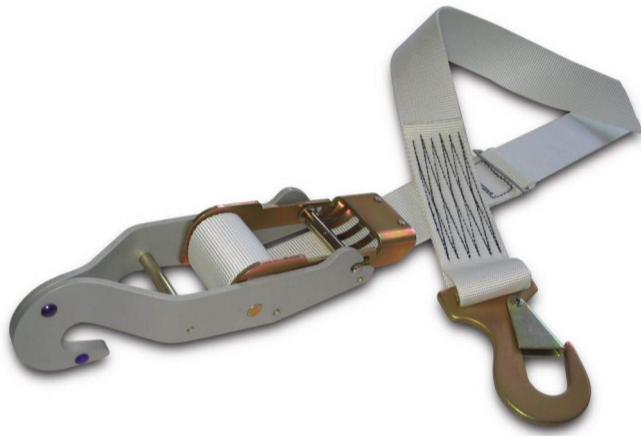
BROCHURE

# WEBBING & LASHINGS

In many cases the immediate requirement is non-standard and needs a customised solution to satisfy the need. Drallim Aerospace is always ready to provide advice and guidance to ensure the most practical and cost effective solution to any restraint requirement.

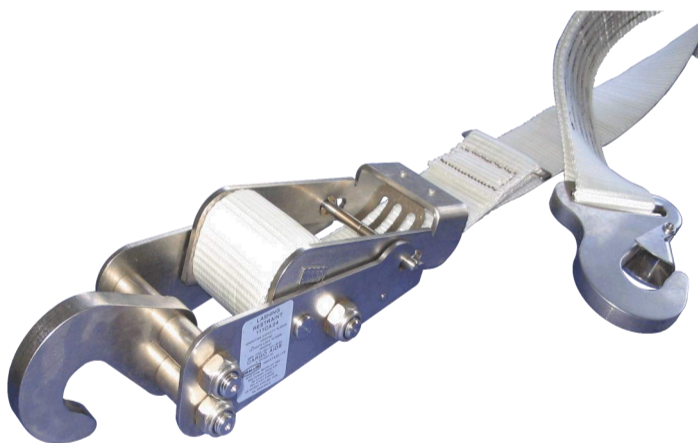
## SHIPBORNE LASHINGS

The **MC1** was initially designed to secure seaborne helicopters to ship flight decks.



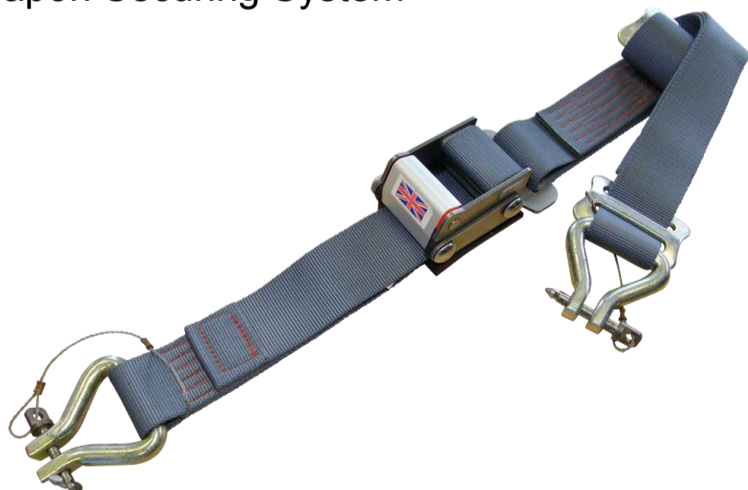
SPECIFICATIONS		
Part Number	SP4147	MC1 Webbing Tie Down
Design Load	3000 lb	1360 kg
Ultimate Load	4000 lb	2270 kg
Weight with 6m webbing	3 lb	1.36 kg
Webbing width	1¾ in	44 mm
NSN	3940-99-766-0786	

The **MC2** was designed to tie down the EH101 Merlin Helicopter securely to the deck to the deck



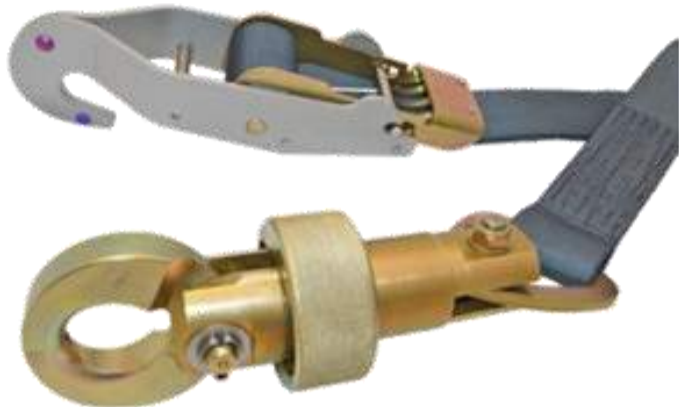
SPECIFICATIONS	
Part number	111CA24
Design Load	10,000 lb (4536 kg)
Ultimate Load	15,000 lb (6804 kg)
Unit Weight with 6 m Webbing	9 lb (4.1 kg)
Webbing Width	60 mm
NSN	1730-99-1518223
Material	Stainless Steel

Weapon Securing System



SPECIFICATIONS	
Ultimate Load	4,800 lbs (2,177 kg)
Unit Weight	1.3 lb (0.6 Kg)
Webbing	Nylon

### MC1/QRC Combination Deck Lashing



PRODUCT SPECIFICATION	
Part number	92CA24
Design Load	3,000 lb (1360kg)
Ultimate Load	5,000 lb (2268kg)
Unit Weight with 6 m Webbing	9 lb (2.75 kg)
Webbing	45 x 6000 mm
NSN	1730-99-3205005
Webbing Material	Nylon

### CA235 Webbing Retractor



PRODUCT SPECIFICATION
Marine corrosion environment
Low force retraction system
Vibration resistant
Quick release facility

### Example Case Study: The Rigid Raider (UK Royal Navy)



In 2007, Drallim Aerospace (previously Cargo aids) were contacted by the contractor regarding the urgent design of a restraint required for a vessel that was due to be commissioned the following day. The restraint was to ensure that the Rigid Raider would not be lost during engine maintenance, where it was imperative for the derrick to be detached.

Cargo Aids responded immediately and designed, produced and delivered the required restraint to the vessel at another location during sea trials, all done within July 2007. This allowed the vessel to sail to the South Atlantic for an extended deployment with sufficient restraints to complete the mission.

## General Lashings

**Lightweight General Purpose Restraint**



**Heavy Duty Restraint (Component in 13,600kg, 30,000lb) systems**



**2,268 kg (5,000lb) Ratchet Strop**



**2,268kg (5,000lb) Wheel Restraint**



# WEBBING

Ratchet Straps can be produced to most strengths and sizes in any configuration that may be required to satisfy the task. Other options of fastening are always available including over-centre buckles, non-sew hooks, and one-way buckles in many different materials.



25mm Webbing



35mm Webbing



50mm Webbing



75mm Webbing

## Polyester Webbing

The cargo restraint webbings meet the requirements of the European and British standards EN12195 and BS5759: 1987. Webbing is supplied in widths of 25mm, 35mm, 50mm and 75mm in a range of colours and load capacity's

25mm up to 2000kg (4409 lb)

35mm up to 4500kg (9921 lb)

50mm up to 6000kg (13228 lb)

75mm up to 13500kg (29762 lb)



# RATCHET BUCKLES

Drallim offers a range of ratchet buckles from 25mm light duty to 75mm heavy duty.



Narrow Handle

Long Narrow Handle

Wide Handle

Long Wide Handle

25mm up to 2000kg (4409 lb), 35mm up to 3000kg (6614 lb), 50mm up to 6000kg (13228 lb), 75mm up to 10000kg (22046 lb)

## Over Centre Buckles

Range to suit 25mm, 45mm & 50mm Webbing

25mm up to 450kg (992lb)

45mm up to 2300kg (5071lb)

50mm up to 2000kg (4409lb)



## Cam Buckles

Range to suit 25mm, 35mm and 50mm webbing

25mm up to 800kg (1764lb)

35mm up to 600kg (1323lb)

50mm up to 1400kg (3086lb)



## Types of Ends for different size webbing.

S Hook 25mm - 1500kg (3307lb)



Delta Ring 25mm - 1600kg (3527lb)  
35mm - 3000kg (6614lb)



Delta ring 50mm - 5000kg (11023lb)



Delta Ring 75mm - 20000kg (44092lb)



Anchor Plate 25mm - 1000kg (2205lb)  
50mm - 1500kg (3307lb)



Flat Hook 25mm - 500kg (1102lb)



Wire Hook 25mm - 2000kg (4409lb)  
35mm - 3000kg (6614lb)  
50mm - 5000kg (11023lb)  
75mm - 10000kg (22046lb)



Snap Wire Hook 35mm - 3000kg (6614lb)  
50mm - 5000kg (11023lb)



Flat Snap Hook 25mm - 2500kg (5512lb)  
45mm - 2500kg (5512lb)  
50mm - 5000kg (11023lb)



Twisted Snap Hook 25mm - 1500kg (3307lb)  
35mm - 3000kg (6614lb)  
50mm - 5000kg (11023lb)



Flat J Hook 50mm - 3000kg (6614lb)



Flat J Hook With Keeper 50mm - 3000kg (6614lb)



Rav Hook Flat 50mm - 5000kg (11023lb)



Rav Hook 35mm - 3000kg (6614lb)  
50mm - 5000kg (11023lb)  
75mm - 10000kg (22046lb)

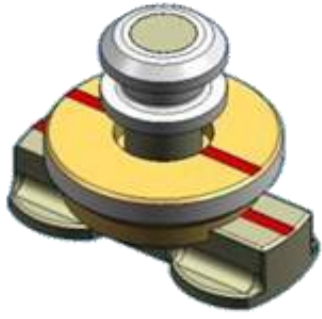


Three bar Slider 50mm - 1000kg (2204lb)



These are some examples of the more popular end fittings used.

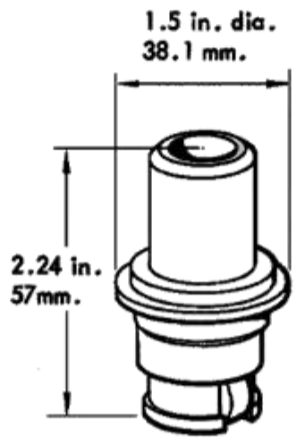
# Seat Tube / Floor pan fittings



This non-standard fitting was designed to allow for the rapid fitting and removal of seats in an airframe cabin utilising the manufacturers original floor configuration.

These examples show the many solutions that can be supplied.

The Seat Tube fitting quickly snaps on to the stud of the floor fitting which allows land, sea and air transporters to be changed from cargo carrying to passenger carrying in minutes.



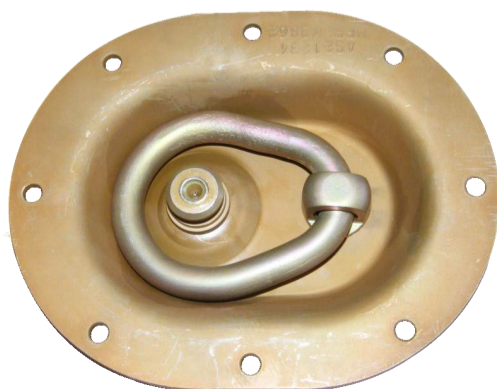
Specification - Seat Tube Fitting	
Part Number	51CA16
Proof Load	1200lb (544kg)
Ultimate Load	1800lb (816kg)
Weight	3oz (0.08kg)



Specification - Floor Fitting	
Part Number	53CA16
NSN Number	1560-99-4156266
Proof Load	1200lb (544kg)
Ultimate Load	1800lb (816kg)
Weight	6oz (0.17kg)



Minimum Specification Ring and Stud Fitting				
Part Number	123CA16			
NSN Number	1680-99-820-8601			
	Ring		Stud	
	Vertical Pull	45 Deg	Vertical Pull	45 Deg
Proof Load (lbf)	2250	1875	3750	2909
Ultimate Load (lbf)	3000	2500	5000	5230
Weight	0.38lbs (0.172kg)			



Minimum Specification Ring and Stud Fitting				
Part Number	AS21234			
NSN Number				
	Ring		Stud	
	Vertical Pull	45 Deg	Vertical Pull	45 Deg
Proof Load (lbf)	5000	5000	5475	2300
Ultimate Load (lbf)	7500	7500		
Weight	1.0lbs (0.475kg)			





## CONTACT US

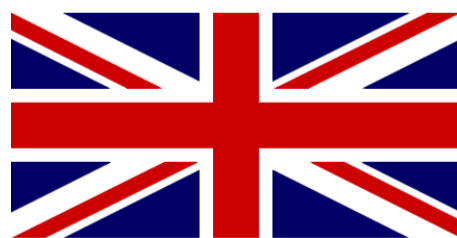
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