

WAGON TYPE	COMMODITY
FEA Mullet	Rail & S&C Ironwork 19.5m – 28m

Carrying Capacity:

Wagon Tare Weight – 20,700kg (see individual wagon details)

Wagon Carrying Capacity – 61.3t (see individual wagon details)

Wagons are loaded with 3 x 20' load modules

Load Module Tare - 1670kg (3 x 1670kg = 5010kg)

Load Module Carrying Capacity when fitted with bolsters - 12t (3 x 12t = 36t)

For exact loading limits see individual wagon on TOPS.

FEA A Mullet wagon bolster positions						Total weight
C	B	A	A	B	C	
6	6	6	6	6	6	36 t

See Diagram 1 for bolster details.

Load Positioning:



FEA Mullet loaded with long rails

CEN 56E1 (113 lb) Rail (158.75mm H x 140mm W @56kg/m)

Max. 2 tiers up to 13 rails per tier = 26 rails max

CEN 60E2 Rail (172mm H x 150mm W @60kg/m)

Max. 2 tiers up to 12 rails per tier = 24 rails max

Conductor Rail 75 kg (138mm H x 140mm W @75kg/m)

Max. 2 tiers up to 13 rails per tier = 26 rails max

Bullhead Rail (Heads up) (145.26mm H x 69.85mm W @ 47kg/m)

Max. 2 tiers up to 24 rails per tier = 40 rails max

S&C ironwork with baseplates attached

Max. 2 tiers

Wagon types	Load Lengths
FEA Mullet wagon only	Max length of load 20,500 mm loaded central
FEA Mullet wagon + Single Runner wagon	Max length of load 24,000 mm loaded with overhang at one end only. (equivalent length = 28,000 mm)+
YLA Mullet wagon + Runner at each end	Max length of load 28,000 mm loaded central

The FEA Mullet is designed to be loaded with rails of between 19.5m and up to 28m in length. Rails shorter than 19.5m shall be loaded into a FEA Super Tench wagon.

Position loads centrally across (transverse) and along (longitudinal) the wagon. Rails are normally loaded in a pyramid formation (lower tiers wider than upper tiers) but may also be loaded in an equal pack.

Calculate the overall weight and width of each tier before loading so that the wagons are not overloaded and so that optimum stanchion positions are selected.

There shall be an overhang of at least 300 mm beyond the outside edge of the end bolster.

Do not load shorter rail lengths under longer lengths.

Wherever possible, load shorter rail lengths inside longer rail lengths (of the same tier) so that the short rails are contained.

Load short rails centrally along the wagon bolsters (i.e. do not load them at one end).

Rail ends may overhang the wagon headstocks by 300 mm. It is permitted to have facing overhangs up to 300 mm on adjacent wagons coupled together.

Each tier of rails shall be level and of the same rail type.

Load the foot of each rail close together to prevent voids.

Do not let the foot of the rail become lipped over another rail.

Load rails heads up.

Position loads centrally on the wagon.

S&C rails may be loaded on top of tiers of flat bottom or conductor rails if adequate stanchion protection and load securing is provided.

S&C rail loads shall rest on one wagon only.

The weights and numbers of individual lengths of S&C ironwork will dictate the width of the load and number of S&C ironwork per tier that may be loaded on each wagon.

Stanchions: There are two stanchions per bolster with each bolster having an outer, intermediate and an inner stanchion pocket position on each side.

Position the stanchions as close to the load as possible.

Stanchions shall be positioned on both sides of the load on each occupied bolster, if this is not possible then loads must be contained by a minimum of 4 stanchions on each side of the load, the load must be contained by stanchions positioned on each side of the end supporting bolsters. Stanchions shall exceed the height of the load by a minimum of 100mm.

Take care when positioning any bent/damaged stanchions so they do not protrude wider than the wagon. Remove any cracked stanchions from service.



Bolsters: The wagon is fitted with 6 x bolsters. These shall be in good condition and of a uniform height.

Bolsters are 1450mm above rail height.
Bolsters are 1920mm wide inside the outer stanchion positions.

Stanchions may be stored in the bolster when not in use, ensure the stanchion sits behind the keeper plate.



Dunnage : Each tier shall be separated by at least four timbers formed at right angles to the wagon sides. More may be required depending on the nature of the load. Minimum timber dimensions shall be 75 mm x 75 mm.

Timbers shall exceed the width of the load by at least 100 mm but shall not exceed the width of the wagon.

Timber shall be positioned as close to the supporting bolster as possible, end timbers shall be positioned on the inside of the end stanchion.

If bolsters require additional packing this shall be nailed in position.

Remove timber and nails from the bolsters after use.

No timber is to be left on the wagon platform.



Unsecured Loads : N/A

Securing Equipment : A securing strap shall be used for each occupied bolster.

Position straps using the nearest winch position applicable to the bolster in use.

Strangle-wrap straps are to be positioned where rail ends are present.

Use protection sleeves/rubber pads where required to protect straps.

Unused straps shall be rolled up and placed in the strap stowage box.

Voids : Keep voids to a minimum by staggering S&C fitted with baseplates so as to interlock individual pieces.

Doors/ Sides : N/A

Special Equipment : N/A

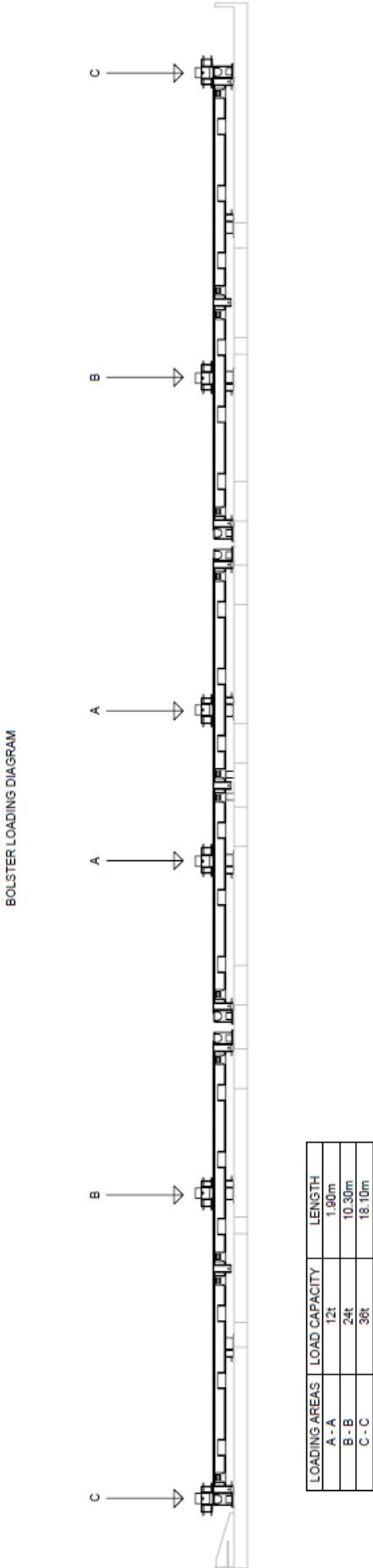
Competency Level:

LE Super Salmon (staff undertaking this role must be competent in gauging equivalent widths for long projecting loads)

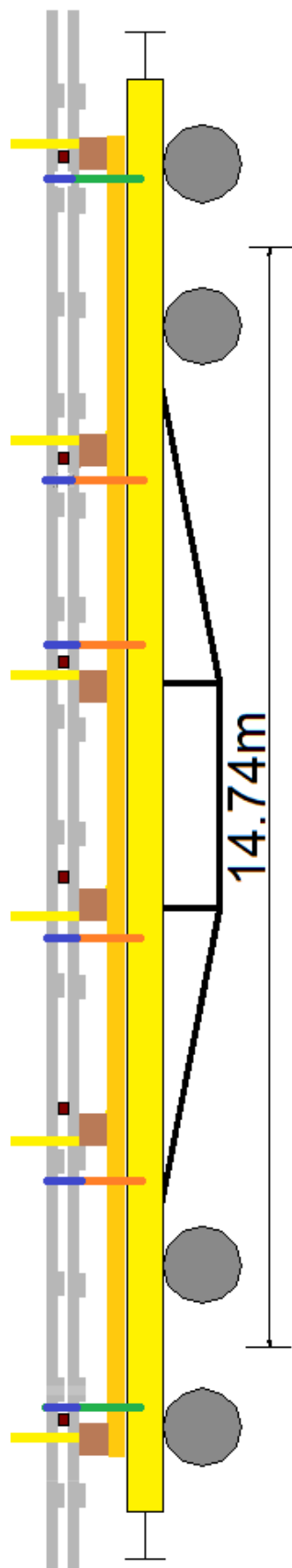
Safety : The 20' load modules are primarily secured upon the intermodal spigots at each corner, secondary securing is provided using fitted bolts through the spigot holes at diagonally opposite corners of each module.

The FEA(W) wagon has bogie centres of 14.74m

Diagram 1: FEA Mullet Bolster Details



FEA Mullet loaded with Rail/S&C



Strangle strap | Throw over strap | Stanchion ■ Dunnage

