SGMF form: GFV-A.v1.2
Gas Fuelled Vessel
LNG Bunker Station
Manifolds Arrangement Information Form

Use one form per each bunker station
All dimensions in mm unless otherwise specified

Date

Note: LNG bunkering Manifold Arrangement references used in this form are as per SGMF Technical Guidance Note "TGN 06-05, LNG as a marine fuel – Manifold arrangements for gas-fuelled vessels". Please refer to TGN 06-05 for recommended Manifold Arrangement design principles and dimensions.

Vessel Identification:

Vessel Name / IMO Number:

LOA: [m] LBP: [m] Breadth: [m] Draught: [m]

Owner:

Flag:

Classification Society:

Number of LNG Bunker Stations:

Bunker Station Identification:

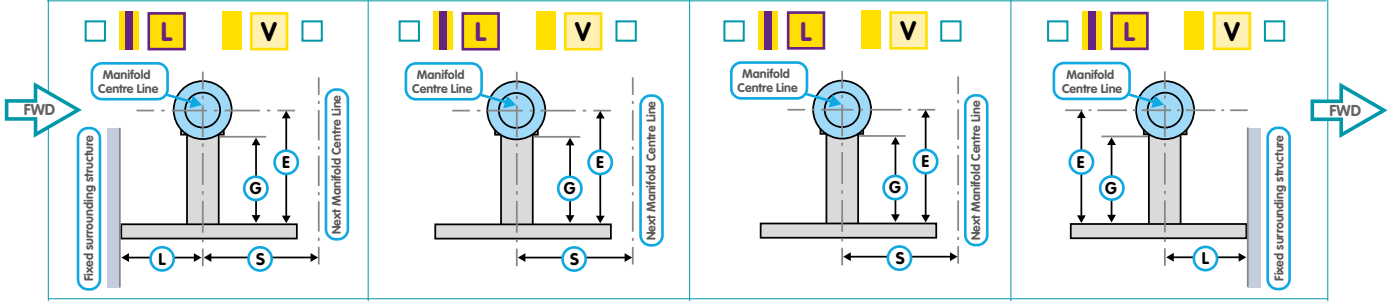
Bunker Station ID:

Number of Manifolds:

Location: ☐ Port ☐ Starboard ☐ Other (specify)

Bunker Station Layout: ☐ Open-deck ☐ Semi-enclosed or Enclosed

Manifolds Orientation:

Present – In Use: ☐	☐	☐	☐
			
Manifold ID:			
Manifold Datum Flange (most aft Liquid Line): ☐	☐	☐	☐

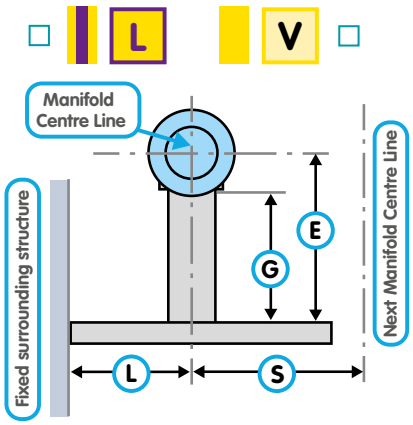
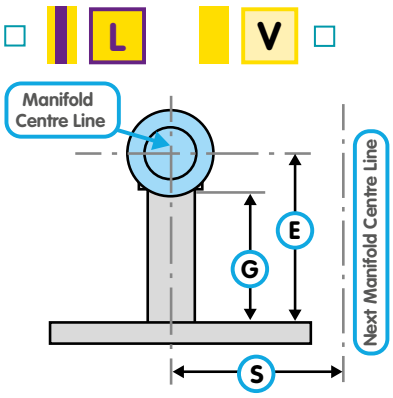
Manifolds elevation view - Looking Inboard

Vessel Name / IMO Number:

Bunker Station ID:

Manifolds Arrangement and Layout and Location (Part1):

Note: Manifold elevation view, looking inboard ⇨FWD⇨ (delete manifolds if not present or in use)

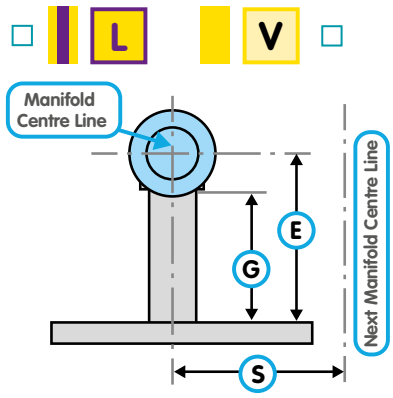
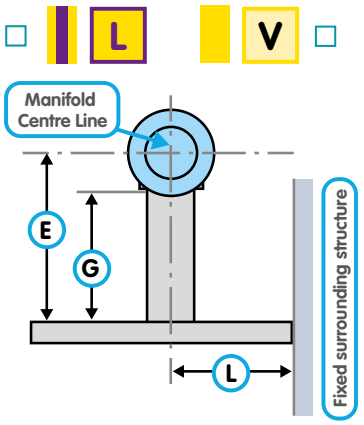
	Manifold type		
Manifold Arrangement dta (Dimensions in mm unless stated)	**Manifold ID**		
	Bunker Line diameter (inch)		
	Manifold Datum Flange (most aft Liquid Line)		
	Manifold Flange type	☐ ASME B16.5 RF150 ☐ Other specify	☐ ASME B16.5 RF150 ☐ Other specify
	Manifold Flange bolt arrangement	☐ out of principal axis ☐ on the principal axis	☐ out of principal axis ☐ on the principal axis
	[E] Elevation	mm	mm
	[G] Clearance	mm	mm
	[L] Manifold Free Space	mm	mm
	[S] Manifold Intra-Spacing	mm	mm
	[C] Cantilever	mm	mm
	[M] Manifold flange platform setback	mm	mm
	[MS] Manifold flange ship side setback	mm	mm
	[X] Ship's Side Free Space	mm	mm
	[Y] Ship's Side deckhead clearance	mm	mm
Presentation Flange	**Presentation Flange Type & Size**	Coupling receptacle Type Size ☐ ASME B16.5 RF150 ☐ Other specify	Coupling receptacle Type Size ☐ ASME B16.5 RF150 ☐ Other specify
	[P] Presentation Flange Setback	mm	mm
	Presentation Flange bolt arrangement	☐ out of principal axis ☐ on the principal axis	☐ out of principal axis ☐ on the principal axis
Additional information	**Manifold pipe Schedule**		
	Bunker piping: Rating pressure [barg]; Rating temperature [-160°c/-196°c]		
	Manifold TRV size & settings [barg]		
	Strainers type and ASTM mesh size		

Vessel Name / IMO Number:

Bunker Station ID:

Manifolds Arrangement and Layout and Location (Part2):

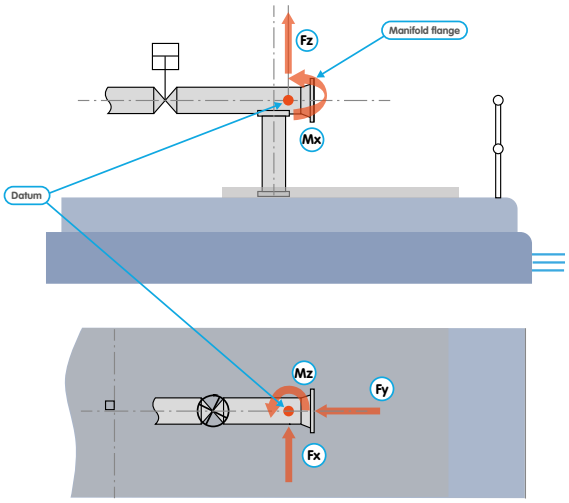
Note: Manifold elevation view, looking inboard ⇨FWD⇨ (delete manifolds if not present or in use)

	Manifold type		
Manifold Arrangement dta (Dimensions in mm unless stated)	**Manifold ID**		
	Bunker Line diameter (inch)		
	Manifold Datum Flange (most aft Liquid Line)		
	Manifold Flange type	☐ ASME B16.5 RF150 ☐ Other specify	☐ ASME B16.5 RF150 ☐ Other specify
	Manifold Flange bolt arrangement	☐ out of principal axis ☐ on the principal axis	☐ out of principal axis ☐ on the principal axis
	[E] Elevation	mm	mm
	[G] Clearance	mm	mm
	[L] Manifold Free Space	mm	mm
	[S] Manifold Intra-Spacing	mm	mm
	[C] Cantilever	mm	mm
	[M] Manifold flange platform setback	mm	mm
	[MS] Manifold flange ship side setback	mm	mm
	[X] Ship's Side Free Space	mm	mm
	[Y] Ship's Side deckhead clearance	mm	mm
Presentation Flange	**Presentation Flange Type & Size**	Coupling receptacle Type Size ☐ ASME B16.5 RF150 ☐ Other specify	Coupling receptacle Type Size ☐ ASME B16.5 RF150 ☐ Other specify
	[P] Presentation Flange Setback	mm	mm
	Presentation Flange bolt arrangement	☐ out of principal axis ☐ on the principal axis	☐ out of principal axis ☐ on the principal axis
Additional information	**Manifold pipe Schedule**		
	Bunker piping: Rating pressure [barg]; Rating temperature [-160°c/-196°c]		
	Manifold TRV size & settings [barg]		
	Strainers type and ASTM mesh size		

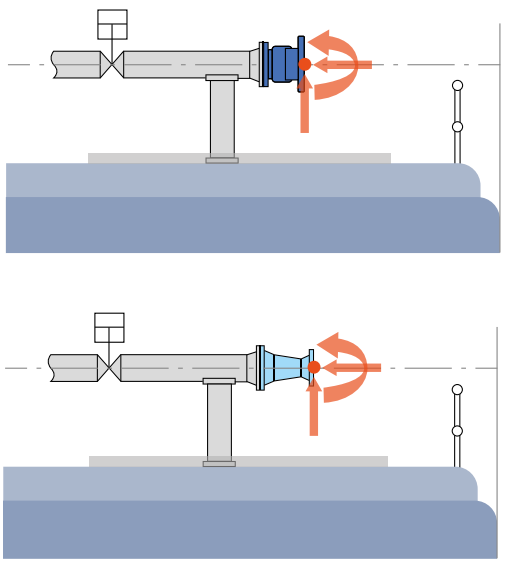
Vessel Name / IMO Number:

Bunker Station ID:

Manifold Mechanical Loading:

Reference	All loads in N, all moments in Nm	
Fx		
Fy		
Fz		
Mxz		
Mt		

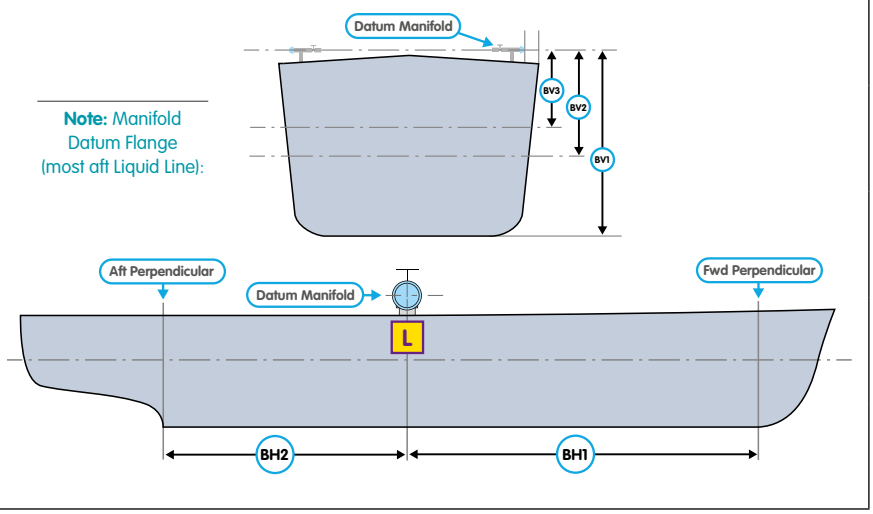
Presentations flanges loads restrictions:

Reference	Loads restrictions and remarks	
Coupling receptacle (Fx,Fy,Fz,Mxz,Mt)		
Spool piece ASME B16.5 RF150 (Fx,Fy,Fz,Mxz,Mt)		
Other specify (Fx,Fy,Fz,Mxz,Mt)		

Vessel Name / IMO Number:

Bunker Station ID:

Bunker Station Location:

Reference	Dimensions [m]	
BH1	[m]	
BH2	[m]	
BV1	[m]	
BV2	[m]	
BV3	[m]	

Bunker Station Accessibility:

Reference	Notes
Handrails (fixed, removable, high, etc.)	
Shell Doors (opening, dimensions, etc.)	
Barrier & Obstructions	

Bunker Station Lifting Gear:

Reference	Notes
Description (type, numbers, location, etc.)	
Reach & SWL	

Vessel Name / IMO Number:

Bunker Station ID:

Bunker Station Protection from Spillage:

Reference	Notes
Drip Tray (Location, dimensions, point of discharge, etc.)	
Water Curtain (Location, extensions, etc.)	
Others (type, location, etc.)	

Additional notes and Remarks:

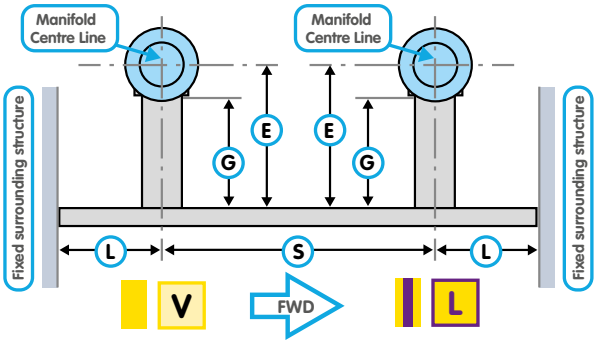
Reference	Notes

Vessel Name / IMO Number:

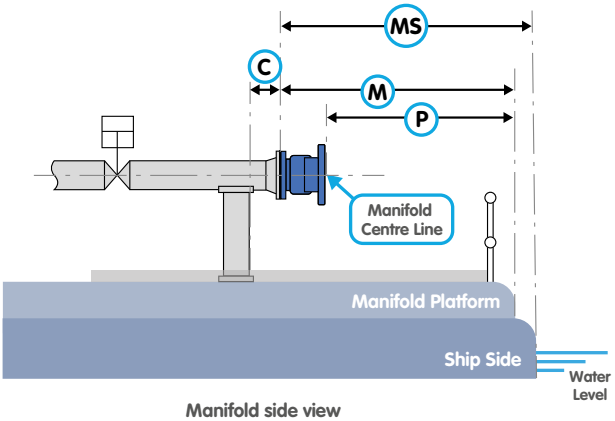
Bunker Station ID:

Dimensions References (ref: TGN 06-04):

ID	Name	Description
[C]	Cantilever	Distance from the manifold flange to the first structural support
[G]	Clearance	Distance from the manifold presentation flange to the manifold platform
[E]	Elevation	Distance from the manifold centre line to the manifold platform
[M]	Manifold flange platform setback	Distance from the manifold flange to the end of the manifold platform
[L]	Manifold Free Space	Lateral distance from the manifold centre line and surroundings structure.
[BH1]	Manifold Horizontal Location	Distance from flange datum to vessel forward perpendicular
[BH2]	Manifold Horizontal Location	Distance from flange datum to vessel aft perpendicular
[S]	Manifold intra-spacing	Distance between the centre lines of two manifolds
[BV1]	Manifold Vertical Location	Elevation from vessel moulded baseline to flange datum
[BV2]	Manifold Vertical Location	Elevation from minimum unloaded draft to flange datum
[BV3]	Manifold Vertical Location	Elevation from maximum loaded draft to flange datum
[P]	Presentation Flange Setback	Distance from the presentation flange to the end of the manifold platform
[Y]	Ship's Side Deckhead Clearance	Distance from the manifold centre line to the extent of the overboard deckhead vertical clearance
[X]	Ship's Side Free Space	Distance from the outer manifold centre line to the extent of the overboard free space
[H]	Spool Piece / Reducer	Length of spool pieces and reducers
[MS]	*Manifold flange ship side setback*	*Distance from the manifold flange to the ship side*



Manifold elevation view, looking inboard



Manifold side view

Note: While this document is based on current good industry practices and available information, it is intended solely for guidance and use at the owner's/operator's own risk. No responsibility is accepted by SGMF – nor by any person, company or organisation related to SGMF – for any consequences resulting directly or indirectly from compliance with, or adoption of, any information or recommendations contained herein.