

## Marine Design Appraisal Document

Lloyd's Register EMEA
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Date

22 January 2009

Quote this reference on all future communications

LDSS/ENG/PAS/O-96803

COMPONENT APPROVAL

MANUFACTURER: TOMOE TRITEC LTD

DESCRIPTION: TRIPLE OFFSET/DOUBLE FLANGED

BUTTERFLY VALVES

The plans listed in paragraph 1 of the appendix have been examined for compliance with the valve design requirements of Part 5, Chapter 12 and Chapter 13, Section 2.5 of LR's Rules and Regulations for the Classification of Ships and are assigned an appraisal status as indicated, subject to the following comments:-

- 1. The valves are to be manufactured in accordance with the Rule.
- 2. Materials for castings and forgings are to be produced at a works approved by LR and in general to be tested in accordance with Part 2.
- 3. Subject to the valves being identified on piping systems plans submitted for approval they could be accepted for use in ship-side locations providing they are installed in such a way that the section of pipe immediately inboard of the valve can be removed if necessary

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FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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Document No.	Rev.	Title	Status	Date
20466	Α	24 Inch Nominal Bore Class 150# Double Flanged	Α	22-Jan-2009
		Valve Short Pattern General Arrangement		
20466	Α	24 Inch Nominal Bore Class 150# Double Flanged	SI	22-Jan-2009
		Valve Short Pattern Parts List		
20373	E	22 Inch Nominal Bore Class 150# Valve Double	Α	22-Jan-2009
		Flanged Short Pattern General Arrangement		
20373	E	22 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Pattern Parts List		
20373	E	22 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Pattern Serial and Tag Number		
20374	E	20 Inch Nominal Bore Class 150# Valve Double	Α	22-Jan-2009
		Flanged Short Pattern General Arrangement		
20374	E	20 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Valve Short Pattern Parts List		
20374	E	20 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Pattern Serial and Tag Numbers		
20467	Α	16 Inch Nominal Bore Class 150# Flanged Valve	Α	22-Jan-2009
		Short Pattern General Arrangement		
20467	Α	16 Inch Nominal Bore Class 150# Double Flanged	SI	22-Jan-2009
		Vale Short Pattern Parts List		
20375	E	14 Inch Nominal Bore Class 150# Valve Double	Α	22-Jan-2009
		Flanged Short Pattern General Arrangement		
20375	E	14 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Pattern Parts List		
20375	E	14 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Pattern Serial and Tag Numbers		
20376	E	12 Inch Nominal Bore Class 150# Valve Double	A	22-Jan-2009
		Flanged Valve Short Pattern General		
		Arrangement		
20376	E	12 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Patten Parts List		
20376	E	12 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Pattern Serial and Tag Numbers		
20372	D	10 Inch Nominal Bore Class 150# Valve Double	Α	22-Jan-2009
		Flanged Short Pattern General Arrangement		
20372	D	10 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Pattern Parts List		
20372	D	10 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
		Flanged Short Pattern Serial and Tag Numbers		
20468	Α	8 Inch Nominal Bore Class 150# Flanged Valve	Α	22-Jan-2009

Short Pattern General Arrangement
FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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ENG 142438

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## **Appendix**

Α	8 Inch Nominal Bore Class 150# Double Flanged Valve Short Pattern Parts List	SI	22-Jan-2009
Α	6 Inch Nominal Bore Class 150# Flanged Valve Short Pattern General Arrangement	Α	22-Jan-2009
Α	6 Inch Nominal Bore Class 150# Double Flanged Valve Short Pattern Parts List	SI	22-Jan-2009
Е	6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement	Α	22-Jan-2009
Е	6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Parts List	SI	22-Jan-2009
E	6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Serial and Tag Numbers	SI	22-Jan-2009
С	3 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement	Α	22-Jan-2009
C	3 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
С	3 Inch Nominal Bore Class 150# Valve Double	SI	22-Jan-2009
F	2 Inch Nominal Bore Class 150# Valve Double	Α	22-Jan-2009
F	2 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Parts List	SI	22-Jan-2009
F	2 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Serial and Tag Number	SI	22-Jan-2009
	A  E  E  C  C  F	Valve Short Pattern Parts List  A 6 Inch Nominal Bore Class 150# Flanged Valve Short Pattern General Arrangement  A 6 Inch Nominal Bore Class 150# Double Flanged Valve Short Pattern Parts List  E 6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement  E 6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Parts List  E 6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Serial and Tag Numbers  C 3 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement  C 3 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Parts List  C 3 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Serial and Tag Numbers  F 2 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement  F 2 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement  F 2 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Parts List  F 2 Inch Nominal Bore Class 150# Valve Double	Valve Short Pattern Parts List  A 6 Inch Nominal Bore Class 150# Flanged Valve Short Pattern General Arrangement  A 6 Inch Nominal Bore Class 150# Double Flanged Valve Short Pattern Parts List  E 6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement  E 6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Parts List  E 6 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Serial and Tag Numbers  C 3 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement  C 3 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Parts List  C 3 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Serial and Tag Numbers  F 2 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern Serial and Tag Numbers  F 2 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement  F 2 Inch Nominal Bore Class 150# Valve Double Flanged Short Pattern General Arrangement  F 2 Inch Nominal Bore Class 150# Valve Double SI Flanged Short Pattern Parts List  F 2 Inch Nominal Bore Class 150# Valve Double SI Flanged Short Pattern Parts List

The documents previously appraised in earlier submissions, now listed in paragraph 1 above, are superseded.

## Appraisal Status Key

Approved - provided the arrangements are to the surveyor's satisfaction

SI Retained as supporting documentation for information only

All statuses that aren't applicable should be removed from the table above