

1. Sequence of Ballast Exchange




< Ballast Arrival Condition : Same as page 5 - 9 of Trim & Stability Booklet >

Step	FPT			1WB		2WB		3WB		4WB		5WB		APT	Draft		TRIM (m)	Max.(%)		Prop. Immer. (%)	Visib- ility(m)	Diff. of Water (M3)
	C	P	S	P	S	P	S	P	S	P	S	P	S	C	Aft	Fwd		SF	BM			
BALLAST ARR.COND.																						
0	F	F	F	F	F	F	F	F	F	F	F	F	F	F	11.63	8.87	2.77	43.0%	74.1%	106.9%	496.5	0
Deballasting : 2. STEP 1 - BALLAST EXCHANGE																						
1	E	E	F	F	F	F	F	F	F	F	F	E	F	F	11.37	6.45	4.91	41.5%	45.6%	103.8%	628.5	21599.8
Ballasting : 3. STEP 2 - BALLAST EXCHANGE																						
2	E	F	F	F	F	F	F	F	F	F	F	F	F	F	12.42	7.70	4.72	34.3%	59.6%	114.6%	592	17528.3
Deballasting : 4. STEP 3 - BALLAST EXCHANGE																						
3	E	F	E	F	F	F	F	F	F	F	E	F	F	F	11.38	6.45	4.93	41.4%	45.7%	103.9%	629.4	17489.5
Ballasting : 5. STEP 4 - BALLAST EXCHANGE																						
4	E	F	F	F	F	F	F	F	F	F	F	F	F	F	12.42	7.70	4.72	34.3%	59.6%	114.6%	592	17489.5
Deballasting : 6. STEP 5 - BALLAST EXCHANGE																						
5	E	F	F	E	F	F	F	F	F	E	F	F	F	F	11.37	6.20	5.17	52.6%	84.9%	103.8%	646.3	19609.2
Ballasting : 7. STEP 6 - BALLAST EXCHANGE																						
6	E	F	F	F	F	F	F	F	F	F	F	F	F	F	12.42	7.70	4.72	34.3%	59.6%	114.6%	592	19609.2
Deballasting : 8. STEP 7 - BALLAST EXCHANGE																						
7	E	F	F	F	E	F	F	E	F	F	F	F	F	F	11.37	6.20	5.17	52.7%	84.9%	103.8%	646.3	19609.2
Ballasting : 9. STEP 8 - BALLAST EXCHANGE																						
8	E	F	F	F	F	F	F	F	F	F	F	F	F	F	12.42	7.70	4.72	34.3%	59.6%	114.6%	592	19609.2
Deballasting : 10. STEP 9 - BALLAST EXCHANGE																						
9	E	F	50%	F	F	E	F	F	F	F	50%	F	F	F	11.34	6.33	5.01	41.6%	68.3%	103.5%	635.9	18733.1
Ballasting : 11. STEP 10 - BALLAST EXCHANGE																						
10	E	F	F	F	F	F	F	F	F	F	F	F	F	F	12.42	7.70	4.72	34.3%	59.6%	114.6%	592	18733.1
Deballasting : 12. STEP 11 - BALLAST EXCHANGE																						
11	E	50%	F	F	F	F	E	F	F	50%	F	F	F	F	11.35	6.33	5.02	41.6%	68.4%	103.6%	636.5	18713.7
Ballasting : 13. STEP 12 - BALLAST EXCHANGE																						
12	E	F	F	F	F	F	F	F	F	F	F	F	F	F	12.42	7.70	4.72	34.3%	59.6%	114.6%	592	18713.7
Deballasting : 14. STEP 13 - BALLAST EXCHANGE																						
13	E	F	F	F	F	F	F	F	F	F	F	E	F	F	11.58	8.14	3.44	26.5%	42.9%	106.3%	533.3	2220.02
Ballasting : 15. STEP 14 - BALLAST ARR.COND.																						
14	F	F	F	F	F	F	F	F	F	F	F	F	F	F	11.63	8.87	2.77	43.0%	74.1%	106.9%	496.5	6291.5

Notes:

- The conditions of Step 0, 14 are the same.
The conditions of Step 2, 4, 6, 8, 10 and 12 are the same.
- All conditions are made based on ballast Arrival Condition.
- F** indicates full filled. **E** indicates empty. **xx%** indicates xx% filled.
- Visibility is the Invisible Distance according to SOLAS Visibility(Reg.22) : Less than 500.00 m

Legend

-  : Before Exchange
 : Being Exchanged
 : After Exchange