



Parts List					
ITEM	QTY	TITLE	PART NUMBER	MATERIAL	MASS (k)
1	1	Frame Structure	AF64-1010M10	Welded Steel S355	773,7
2	1	Lifting Joint Assembly	AF64-1011M01	(S165M)	31,2
3	1	ROV Latch assembly	AF64-1017M01	(S165M)	83,0
4	1	ROV-Bullet joint	AF64-1018M01		25,6
5	2	Wide-bow Shackle	SWL6,5T	Steel, Alloy	1,8
6	12	Bolt M16 x 90	DIN 931-1	A4-80	0,2
7	24	Washer M16	DIN 125	A4	0,0
8	12	Nut M16	DIN 985	A4	0,0
9	6	Bolt M12x60	DIN 912	A4	0,1
10	6	Washer M12	DIN 125	A4	0,0
11	6	Nut M12	DIN 985	A4	0,0

- Notes & General Requirements:**
- Design & Certification:  
DNV Standard for Certification No 2.22, Lifting Appliances.
  - Overall Design Factor: 4.0
  - Safe Working Loads:
    - Central Lifting Joint & Attachment: SWL 12T
    - Padeyes (for emergency recovery) SWL 12T
    - Cursor Frame attachment: SWL 12T
    - Suspended load (ROV weight) : SWL 10T
  - Load testing: 2xSWL, (prior to surface treatment)  
Load test 1: Applied to central Lifting Joint ass'y; 2xSWL 12T = 24T  
Load test 2: Applied to Shacles/Padeyes: 2 x SWL 12T = 24T  
Load holding duration: min 5 minutes
  - Load testing shall preferably be performed with "Lifting Joint ass'y" (2) and "Latch Assembly" (3) fitted to Frame Structure (1), and "ROV Bullet Joint" (4) attached to ground, for combined testing. If not present, load test of "Frame Structure" could be performed with suitable substitute flanges and attachments.
  - Load testing of bottom attachment (suspended load SWL 10T) is part of Load tests 1 & 2 above (note 4.) and a separate test is not required .
  - Calculated Frame Assembly weight: ~900kg  
Calculated TMS Assembly weight: ~2000kg

3	16.11.2015	ROV-Bullet incl., re-iss. for info.	MT	AHO	EKB
2	29.10.2015	Updated, reissued for info.	MT		
1	08.08.2015	Issued for information	MT		
Rev	Date	Description / Comments	Prep	Chk	Appr

# TMS KD-10

Drawing Title  
**TMS Frame**  
Lifting Arrangement & Load Test  
Cerfication & Load Test Information

**KYSTDESIGN**  
SUB-SEA TECHNOLOGY  
WWW.KYSTDESIGN.NO

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Scale  
**1:25**

File Name / Dwg. No  
**AF64-1000M03**

Sheet Size  
**A3**

Sheet No  
**1**

of (sheets)  
**1**