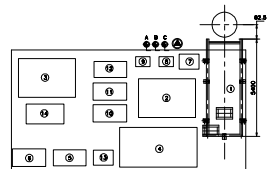
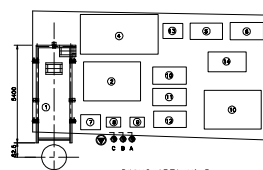


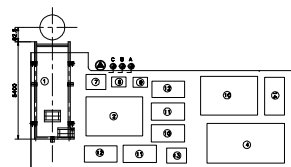
PERMANENT AREAS FOR DIVING LAUNCHING SYSTEM
TYPICAL COMPONENTS LAY-OUT AND FACILITIES
SCALE: 1/100



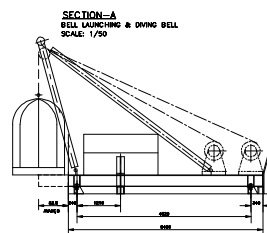
DIVING AREA N° 2/3/4/4A AS DRAWN
DIVING AREA N° 1 SYMMETRIC



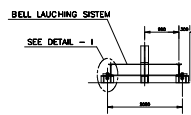
DIVING AREA N° 5



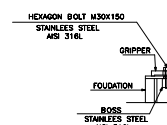
DIVING AREA N° 6



SECTION-A
BELL LAUNCHING & DIVING BELL
SCALE: 1/50

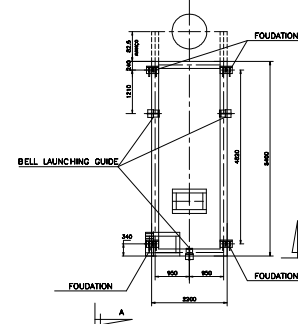


SECTION-B
SCALE: 1/50

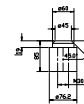


DETAIL-I

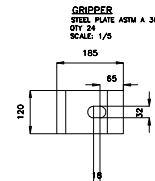
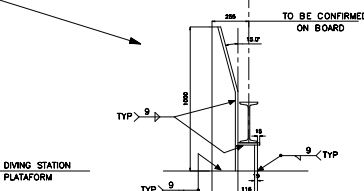
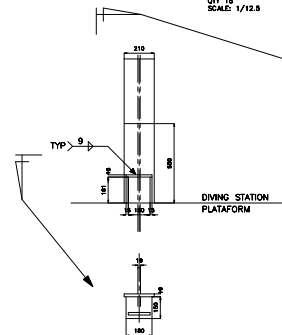
BELL LAUNCHING SYSTEM
FOUNDATION & GUIDE DEVICE
SCALE: 1/50



BOSS
STAINLESS STEEL AISI 316 L
SCALE: 1/5

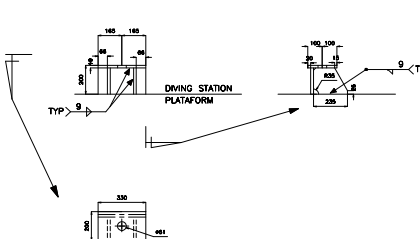


BELL LAUNCHING GUIDE
STEEL PLATE CLASS. SV. GR. AH 36 THICK 19MM
QTY: 24
SCALE: 1/12.5



GRIPPER
STEEL PLATE ASTM A 36
QTY: 24
SCALE: 1/5

FOUNDATION
STEEL PLATE CLASS. SV. GR. AH 36 THICK 19MM
QTY: 24
SCALE: 1/12.5



ITEM	EQUIPMENTS	DIMENSIONS	WEIGHT
1	DIVING BELL LAUNCHING SYSTEM	5400x2200x3800	4500 KG
2	DIVE CONTROL CONTAINER	3150x2150x2450	3500 KG
3	MECHANICAL SHOP CONTAINER	3150x2150x2450	4000 KG
4	DESCOMPRESSION CHAMBER	4300x2200x2200	4000 KG
5	LOW PRESSURE AIR COMPRESSOR - CHAMBER	1850x960x1540	1340 KG
6	AIR VOLUME TANK - CHAMBER	1800x900x1100	420 KG
7	COMPRESSED AIR RACKS 12 - CHAMBER	1100x830x2000	1600 KG
8	COMPRESSED AIR RACKS 06 - CHAMBER	800x550x1900	540 KG
9	OXYGEN RACKS	800x550x1900	800 KG
10	HIGH PRESSURE AIR COMPRESSOR	1850x960x1540	1340 KG
11	LOW PRESSURE AIR COMPRESSOR - DIVE	1850x960x1540	1340 KG
12	AIR VOLUME TANK - DIVE	1800x900x1100	420 KG
13	COMPRESSED AIR RACKS 12 - DIVE	1100x830x2000	1600 KG
14	CLOTHING CONTAINER	1570x690x2000	1430 KG

SYMB	DESCRIPTION
	DIVING RECEPTACLE 440V
	DN 3/4" - AIR DISTRIBUTION
	DN 1" - SEA WATER
	DN 3/4" - FRESH WATER

GENERAL NOTES

- 1- THE DIVING AREA'S LOCATION SHALL BE PROPOSED BY THE DESIGNER AND SUBMITTED TO PETROBRAS FOR APPROVAL.
- 2- THEY SHALL MAKE POSSIBLE THE DIVER'S ACCESS TO ALL UNIT STRUCTURING.
- 3- THE MAXIMUM RADIUS OF ACTION TO BE REACHED BY THE DIVER MUST BE 50.0m FOR OPERATIONS DURING THE DAY AT NIGHT, AS NORMS NR-15 AND NORMAM-15. THE MAXIMUM DISTANCE ALLOWED BETWEEN THE DIVING BELL AND THE WORKING PLACE CANNOT BE BIGGER THEN 33.0m (THIRD THREE METERS).
- 4- THEY MAY UTILIZE, ALWAYS AS POSSIBLE, THE PLATFORM DEVICES FOR MOBILIZATION AND DISMOUNTING OFF ALL DIVING SYSTEM EQUIPMENTS, WHEN IT'S NOT POSSIBLE THE RESCUE FOR IT MUST BE OBTAINED. IT SHALL DO THE TRANSFER OF THE DIVING EQUIPMENT FROM LAY-DOWN AREA TO THE DIVING AREA, AS WELL MAKE POSSIBLE THE MOBILIZATION AND DISMOUNTING OF THE DIVING SYSTEM EQUIPMENTS, THE CARGO TO BE HANDLED IS 7 TONS.
- 5- THIS AREA SHOULD BE PROTECTED WITH 1.2m x 6m, OUTSIDE OF THE SHIP'S DECK. THE TOTAL DIVING SYSTEM WEIGHT IS 30 TONS. WHERE THE DIVING AREA WILL BE PROPOSED, THE MATERIAL MUST BE REMOVABLE, BECAUSE THE SYSTEM WILL EXTEND THROUGH IT.
- 6- SPECIAL ATTENTION MUST BE TAKEN FOR NO GASES DISCHARGE IN THE DIVING AREA.
- 7- THIS DOCUMENT IS APPLIED FOR FPSO, FPSO AND FPSO WITH RISER BACKWASH LAYOUT BETWEEN 80m AND 120m.

REV.	DESCRIPTION	DATE	EXEC.	CHECK	APPROV.
1	PETROBRAS S.A. PETROBRAS				EAP - SERV US-SUB/MIS
CLIENT: EAP					
AREA: FPSO SPREAD MOORING					
TITLE: DIVING AREA					
PROJ.	EXEC.	CHECK	APPROV.		
SCALE	INDICATED	SIZE	SHEET	1	1
DATE	N°	DE-3000.00-1300-041-PEN-003	REV.	0	