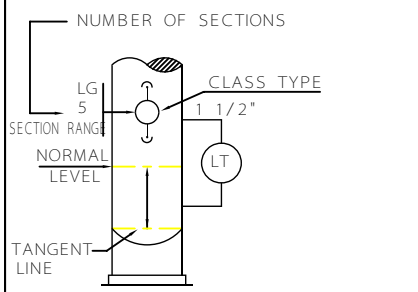
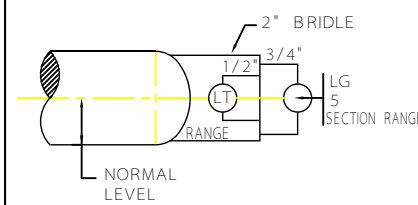


FLOW SHEET DISPLAY

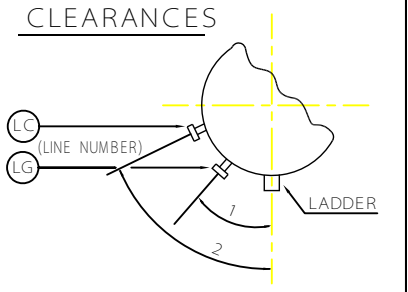


VERTICAL VESSEL
DIRECT MOUNTED

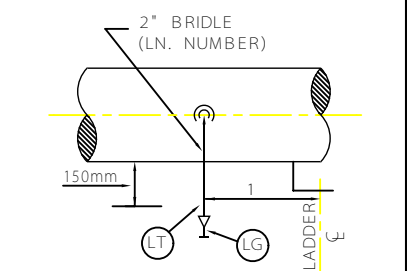


HORIZONTAL VESSEL
BRIDLE MOUNTED INSTRUMENTS

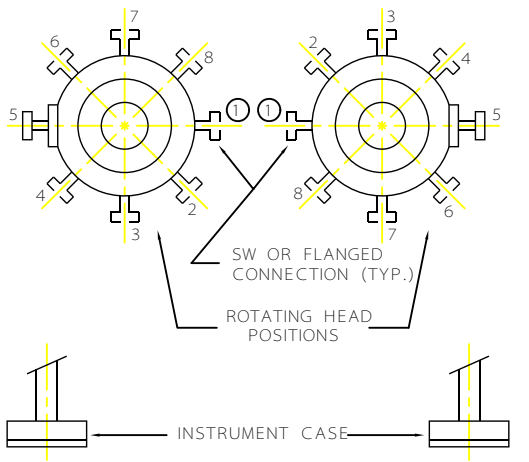
PIPING PLANT DWG.



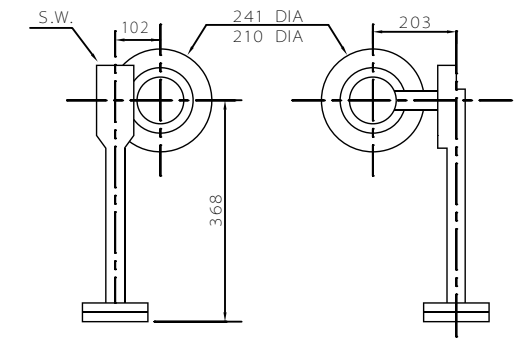
VERTICAL VESSEL



HORIZONTAL VESSEL
1- ADEQUATE CLEARANCE FROM ALL OTHER INSTRUMENTS AND OBJECTS FOR EASY MAINTENANCE IS REQUIRED.



LEFT - HAND MOUNT RIGHT - HAND MOUNT



- GENERAL NOTES:**
- 1- THE MATERIAL OF CONSTRUCTION, THE RATING AND THE TYPE OF CONNECTIONS FOR BLOCK VALVES MUST CONFORM TO THE SPECIFICATIONS FOR THE EQUIPMENT TO WHICH THE VALVES ARE CONNECTED.
 - 2- CONNECTIONS FOR BLOCK VALVES ARE TO BE A MINIMUM 3/4" (20mm) ON STANDPIPES AND 1" (25mm) FOR FLANGED NOZZLE DIRECTLY CONNECTED TO THE VESSEL.
 - 3- CONNECTIONS BETWEEN VESSELS AND HEAVY GAGES, CONTROLLERS, OR TRANSMITTERS SHOULD BE RELIEVED OF STRAIN BY PROPER SUPPORTING.
 - 4- LEVEL TRANSMITTER/CONTROLLER FOR 15# THRU 1500 # LINE CLASSES ARE TO BE BASED ON 2" FLANGE CONSTRUCTION.
 - 5- FLANGE RATING SHALL BE 30# MINIMUM.
 - 6- FOR VESSEL CONNECTED INSTRUMENTS THE PRIMARY BLOCK VALVE SHALL BE VESSEL NOZZLE SIZE AND MOUNTED DIRECTLY ON VESSEL NOZZLE.
 - 6- WHERE SCREW TYPE CONNECTION IS REQUIRED COUPLINGS SHALL BE PLACED BETWEEN BLOCK VALVES AND LEVEL TRANSMITTER.
 - 7- BRIDLES ARE NOT TO BE USED ON VERTICAL VESSELS, UNLESS OTHERWISE SPECIFIED.

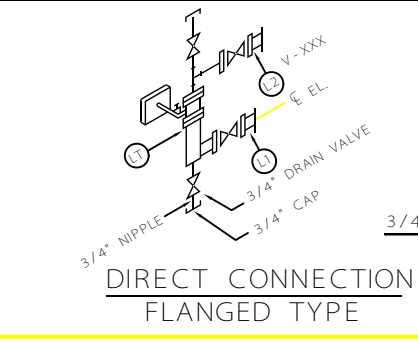
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IRANIAN PETROLEUM STANDARDS

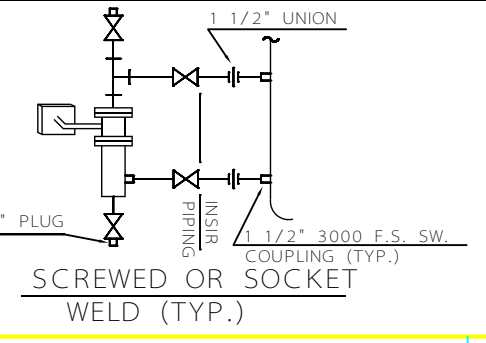
NO REVISION PERMITTED UNLESS APPROVED BY STANDARD ORGANIZATION

INSTRUMENTATION
INSTALLATION OF LEVEL TRANSMITTER/CONTROLLER
GENERAL

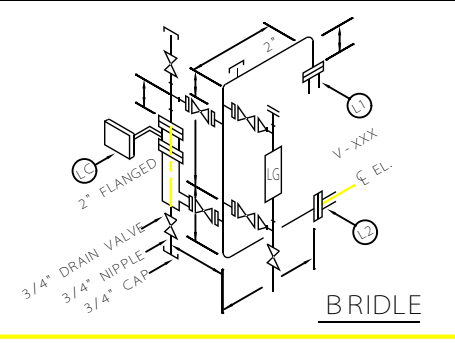
DATE	DRAWING No.	SHEET	REV.
	IPS - D - IN - 112	1	5



DIRECT CONNECTION
FLANGED TYPE



SCREWED OR SOCKET WELD (TYP.)



BRIDLE

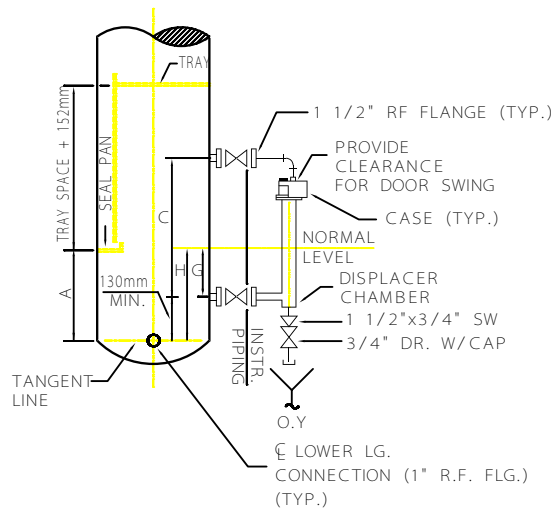


FIGURE I
TOP/SIDE CONNECTION

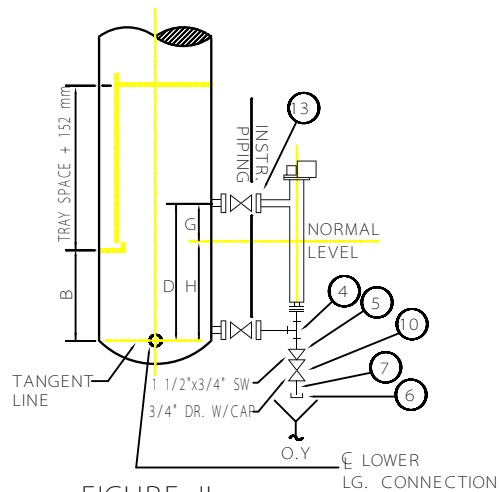


FIGURE II
SIDE - BOTTOM CONNECTION

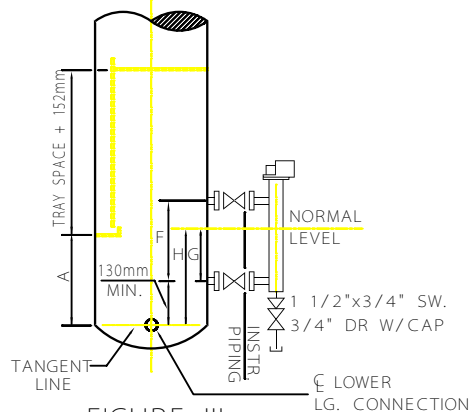


FIGURE III
SIDE/SIDE CONNECTION
SEE NOTE 5

TABLE 1: DIMENSIONAL TABLE (SEE NOTE 4)

MOUNTING DIMENSIONS								
FLOAT RANGE	FLOAT RANGE	A	B	C	D	F	G	H
mm.	inch.	FLANGED						
356	14	508	654	686	629	356	178	178
813	32	965	1111	1143	1086	813	406	406
1219	48	1372	1518	1549	1492	1219	610	610
1524	60	1676	1822	1854	1797	1524	762	762
1829	72	1981	2127	2159	2102	1828	914	914
2134	84	2286	2432	2464	2407	2134	1067	1067
2438	96	2591	2737	2769	2711	2438	1219	1219

TABLE 2:

ITEM	SIZE	DESCRIPTION
4	1 1/2"	TEE EQUAL
5	1 1/2"x3/4"	SWAGE NIPPLE
6	3/4"	CAP SCRDR
7	3/4"	NIPPLE
10	3/4"	GATE VALVE
13	1 1/2"	FLANGE WITH GASKET, NUT & BOLT

GENERAL NOTES:

- 1- MOUNTING DIMENSIONS, GIVEN IN DIMENSION TABLE BLOW CAN BE USED FOR TRANSMITTERS AND CONTROLLERS FOR 1 1/2" OR 2" FLANGED TYPE.
- 2- VESSEL NOZZLES UP TO AND INCLUDING 600 # WILL BE CENTER TO CENTER THE SAME AS SHOWN.
- 3- FIG. III IS USED ONLY WHEN SPACE IS LIMITED. IS NOT PREFERRED FOR EXACTNESS REQUIRED IN NOZZLE PLACEMENT.
- 4- DIMENSIONS IN TABLE 1. ARE BASED ON CERTAIN MANUFACTURERS MODEL. IN ALL CASES REFER TO WENDOR CATALOGUES FOR APPROPRIATE DIMENTIONS.
- 5- FOR TYPICAL PURGE DRAWING REFER TO PAGE 4/5 OF THESE DRAWINGS.

REV	DESCRIPTION	DATE
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IRANIAN PETROLEUM STANDARDS 
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INSTRUMENTATION
INSTALLATION OF LIQUID LEVEL
TRANSMITTERS/CONTROLLERS
FLANGE TYPE

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	IPS - D - IN - 112	2	5

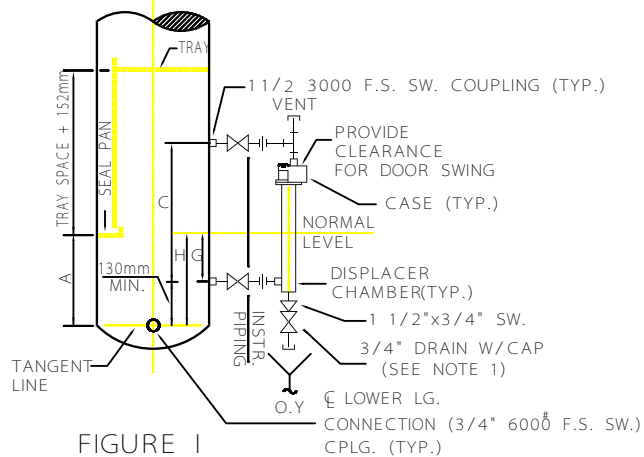


FIGURE I
TOP/SIDE CONNECTION

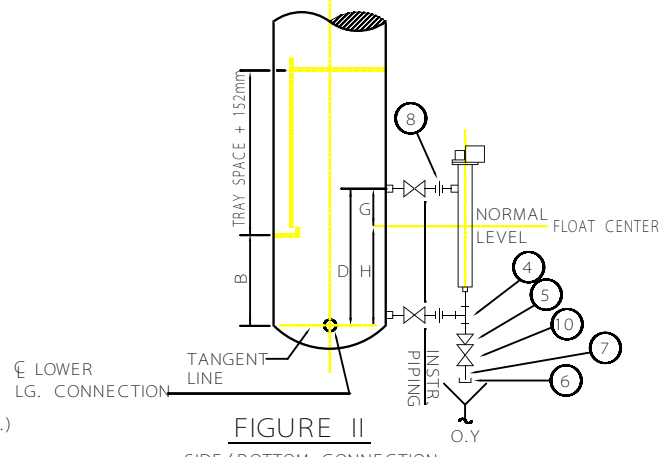


FIGURE II
SIDE/BOTTOM CONNECTION

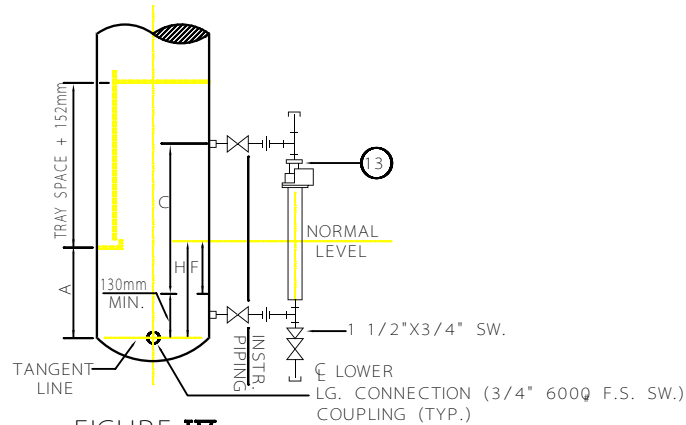


FIGURE IV
TOP/BOTTOM CONNECTION

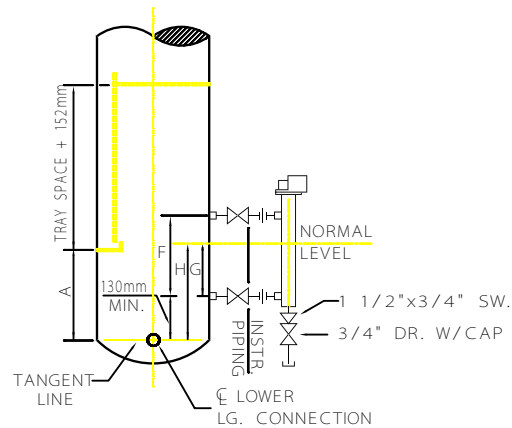


FIGURE III
SIDE/SIDE CONNECTION
SEE NOTE 5

TABLE 3: DIMENSIONAL TABLE (SEE NOTE 6)

MOUNTING DIMENSIONS									DIMENSION AS SHOWN ON FLOW DIAGRAM
FLOAT RANGE	FLOAT RANGE	A	B	C	D	F	G	H	
mm.	inch.	SW OR FLGD	SW	SW	SW	SW OR FLANGED			
356	14	508	570	597	545	356	178	178	
813	32	965	773	1054	1002	813	406	406	
1219	48	1372	1434	1461	1408	1219	610	610	
1524	60	1676	1738	1765	1713	1524	762	762	
1829	72	1981	2043	2070	2018	1829	914	914	
2134	84	2286	2348	2375	2323	2134	1067	1067	
2438	96	2591	2653	2680	2627	2438	1219	1219	

TABLE 4:

ITEM	SIZE	DESCRIPTION
4	1 1/2"	TEE EQUAL
5	1 1/2 x 3/4"	SWAGE NIPPLE
6	3/4"	CAP SCRCD
7	3/4"	NIPPLE
8	1 1/2"	UNION
10	3/4"	GATE VALVE
13	1 1/2"	FLANGE

GENERAL NOTES:

- FOR ALL PRESSURE RATING 1 1/2" OR 2" CONNECTIONS SHOULD BE USED.
- MOUNTING DIMENSIONS, GIVEN IN TABLE 1 CAN BE USED FOR TRANSMITTERS AND CONTROLLERS FOR SCREWED OR SOCKETWELD ACCORDING TO PIPING CLASS RATING.
- VESSEL NOZZLES UP TO AND INCLUDING 600 # WILL BE CENTER TO CENTER THE SAME AS SHOWN.
- FOR VESSEL CONNECTED INSTRUMENTS THE PRIMARY BLOCK VALVE SHALL BE VESSEL NOZZLE SIZE AND MOUNTED DIRECTLY ON VESSEL NOZZLE.
- SIDE-SIDE CONNECTION TO BE USED ONLY WHEN SPACE IS LIMITED. NOT PREFERRED BECAUSE OF EXACTNESS REQUIRED IN NOZZLE PLACEMENT.
- DIMENSIONS GIVEN IN TABLE 3 ARE GENERAL SIZES OF CERTAIN MAKES. IN ALL CASES REFER TO VENDOR'S CATALOGUES FOR APPROPRIATE DIMENTIONS.
- WHEN DRAIN VALVE IS SCREWED PLUG SHALL BE USED IN PLACE OF NIPPLE & CAP.

REV	DESCRIPTION	DATE
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IRANIAN PETROLEUM STANDARDS 
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INSTRUMENTATION
INSTALLATION OF LIQUID LEVEL
TRANSMITTERS/CONTROLLERS
SCREW TYPE

DATE	DRAWING No.	SHEET	REV.
	IPS - D - IN - 112	3	5

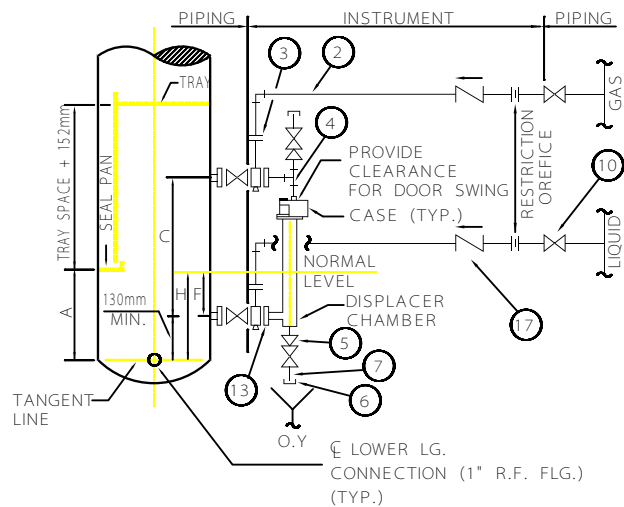



FIGURE 1
PURGE CONNECTION TYP.

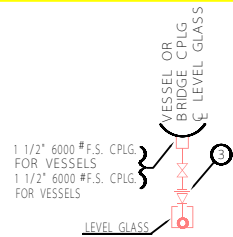
TABLE 5:

ITEM	SIZE	DESCRIPTION
2	3/4"	LINE PIPE
3	3/4"	FLANGE
4	1 1/2"	TEE EQUAL
5	1 1/2 3/4	SWAGE NIPPLE
6	3/4"	CAP SCRD
7	3/4"	NIPPLE
10	3/4"	GATE VALVE
13	1 1/2"	FLANGE WITH GASKET, NUT & BOLT
17	3/4"	CHECK VALVE

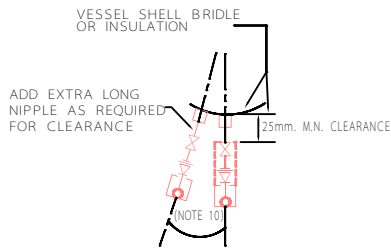
GENERAL NOTES:

- 1- RATING OF PURGING SYSTEM TO BE IN ACCORDANCE WITH PIPING CLASS.
- 2- CAPPED TEES AT TAPS TO BE CLEAR FOR REAMING
- 3- PURGING WITH GAS MAY NOT BE NECESSARY FOR SOME APPLICATIONS.

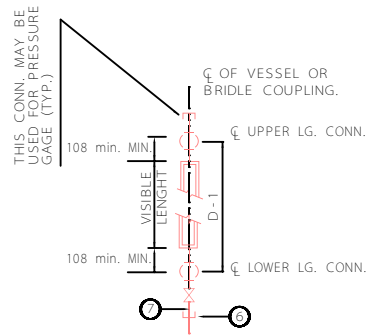
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INSTRUMENTATION INSTALLATION OF LIQUID LEVEL TRANSMITTERS/CONTROLLERS W/PURGE FLANGE TYPE		
DATE	DRAWING No.	SHEET REV.
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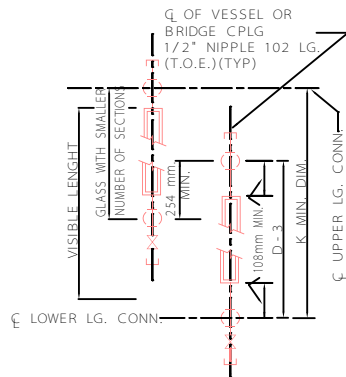
PLAN



DETAIL II



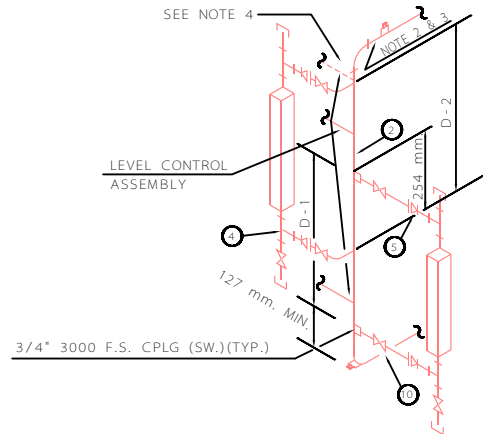
ONE LEVEL GLASS



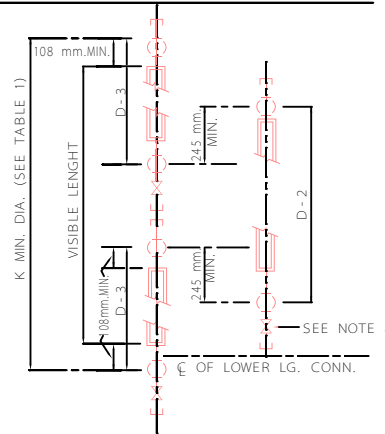
TWO LEVEL GLASSES

TABLE 3: DIMENSIONAL TABLE (SEE NOTE 6)
MOUNTING DIMENSIONS FOR LEVEL GLASSES

NUMBER OF GLASSES	VISIBLE GLASSE LENGTH	No. OF SECTIONS	Ø OF CPLG EACH GLASS			MIN. K DIM	MIN. DIA. OF HORIZ. LENGTH	
			D-1	D-2	D-3			
1	302	1	556					762
	641	2	895					1067
	631	3	1235					1524
	1321	4	1575					1981
	1661	5	1915					2286
2	1622	2/3		895	1235	1876	2286	
	1952	3/3		1235	1235	2216	2591	
	2302	3/4		1235	1575	2556	2896	
	2642	4/4		1575	1575	2896	3200	
	2981	4/5		1575	1915	3236	3505	
	3321	5/5		1915	1915	3575	3962	
3	3623	4/3/4		1235	1575	3877	4267	
	3962	4/4/4		1575	1575	4216	4572	



TWO LEVEL GLASSES



THREE LEVEL GLASSES

TABLE 7:

ITEM	SIZE	DESCRIPTION
2	1 1/2"	LINE PIPE
4	3/4"	TEE EQUAL
5	1 1/2"/3/4"	SWAGE NIPPLE
6	3/4"	CAP SCRDR
7	3/4"	NIPPLE
9	1 1/2"	UNION
10	1 1/2"	GATE VALVE

GENERAL NOTES:

- GAUGE GLASS AND ACCESSORIES RATINGS ARE TO FOLLOW LINE CLASSES AS PER ANSI STANDARDS.
- BRIDGES ARE NOT TO BE USED ON VERTICAL VESSELS UNLESS OTHERWISE SPECIFIED.
- BRIDLE SHOWN IS FOR SHELL MOUNTING.
- LEVEL GLASS DIMENSIONS GIVEN IN TABLE ARE SUITABLE FOR A FEW MANUFACTURERS FOR DIMENSIONS REFER TO CATALOGUES.
- (TOP LEVEL GLASS - 3 SECTION)
(BOTTOM LEVEL GLASS - 4 SECTION)
- USE SCREWED FITTINGS IN PLACE OF SOCKET WELD IN 1 1/2" (40 mm) AND SMALLER SIZES.
- WHEN DRAIN VALVE IS SCREWED, PLUG SHALL BE USED IN PLACE OF NIPPLE & CAP.
- DRAINS TO BE ROUTED TO NEAREST DRAIN FUNNEL WHEN INDICATED ON FLOW DIAGRAM.
- ANGLE WILL VARY WITH DIAMETER OF VESSEL PROVIDE CLEARANCE AS INDICATED.
- USE SCREWED FITTING IN PLACE OF FLANGES IN LOW PRESSURE APPLICATIONS.
- FOR SCREWED OR WELD TYPE LEVEL GAUGES, USE 1/2" BLOCK VALVES AND FITTINGS.

REV	DESCRIPTION	DATE
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IRANIAN PETROLEUM STANDARDS

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INSTRUMENTATION
INSTALLATION OF LIQUID LEVEL
TRANSMITTERS/CONTROLLERS W/PURGE
HIGH PRESSURE SERVICE

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	IPS - D - IN - 112	5	5