

Radiometric Interface Profile – Multi-Point Density Array

Company Name: _____	Customer Contact Name: _____
Customer Address: _____	Phone and Fax: _____
City, State, Zip: _____	Cell: _____
Sales Person/Rep.: _____	Email: _____
Representative Firm: _____	Tag Number: _____



Process Material

1. Description/Name: _____
2. Density ranges: SG kg/m³ lb/ft³
 Phase 1: Low: _____ High: _____
 Phase 2: Low: _____ High: _____
Example: Oil @ 700 kg/m³
 Water @ 990 kg/m³
3. Process temp.: Max: _____ Operating: _____
 °F °C
4. Process pressure: Max: _____ Operating: _____
 psig bar
5. Do any of the above parameters change during operation?
 Yes* No
 **If yes, which parameter(s) and what are their ranges? _____*
6. Process buildup on vessel wall: Yes* No
 **If yes, how much: _____* in mm

Drywell

7. Drywell: Customer supplied VEGA supplied
 Pipe size _____ Schedule _____
 a. Drywell Material Requirements:
 Stainless Steel Other _____
 b. Piping standard: _____
 c. Includes: Radiograph welds Hydrostatic test
 Liquid penetrant welds Other
 d. Vessel design pressure: _____ psi bar
 e. Vessel design temperature: _____ °F °C
6. Vessel nozzle for mounting (*Provide vessel drawing*)
 Nozzle(s) available Identify available nozzle(s) _____
 New nozzle added if required: Yes No

Vessel (Please provide vessel drawing)

9. New or existing vessel? New Existing
 Shape of vessel:  
 Other: Please sketch _____
 Vessel liner material: _____
 Example: Gunnite
 a. Vessel ID: _____ in mm
 b. Vessel Material: _____
 Wall thickness in measurement area: _____
 c. Vessel insulation: Yes No
 Material thickness: _____
 Material and density: _____
 d. Vessel jacket: Yes* No
 **If yes, describe: _____*
 e. Vessel internal obstructions: Yes* No
 **If yes, describe: _____*
10. Height of process levels (from vessel bottom): in mm
 HIL: _____
 NIL: _____
 LIL: _____
11. Measurement span from lowest measurement point to highest measurement point:
 See diagram point "A" _____ in mm
12. Lowest measurement point elevation (from vessel bottom):
 See diagram point "B" _____ in mm
13. Number of desired density measurements within span:
 See diagram point "C" _____
14. Vessel height clearance restriction: Yes* No
 See diagram point "D"
 **If yes, height: _____* in mm

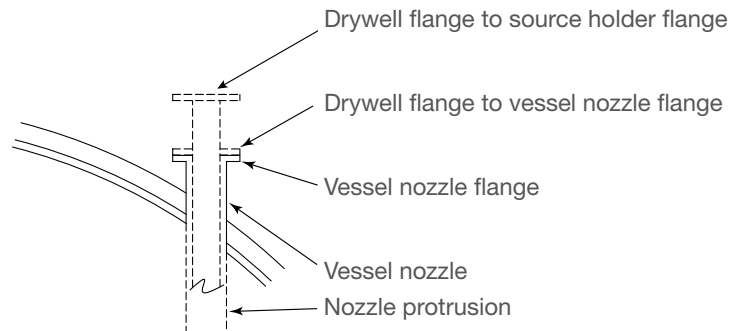
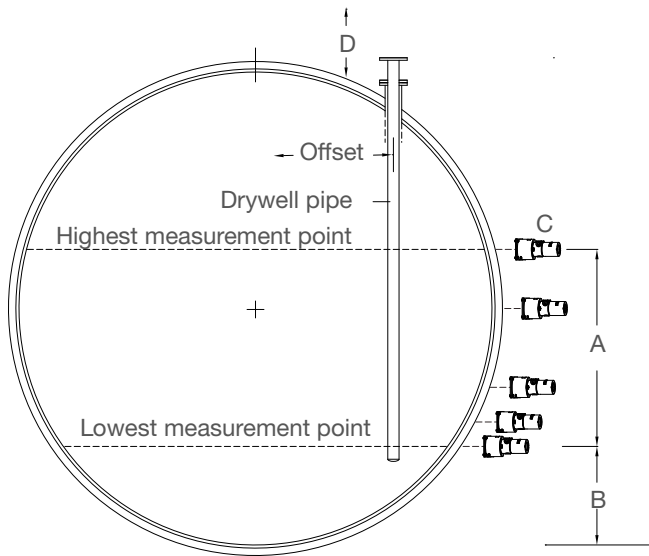
Electronics

15. Area classification: _____ (Class/Zone/Division) General Purpose
16. Ambient temperature range: Min: _____ Max: _____ °F °C Indoors Outdoors
17. Input power: 110 V AC 220 V AC 24V DC
18. Display: Remote User Interface Display Integral None

Radiation Specification

19. Will the detector be exposed to external X-ray radiation during operation? Yes No
20. Does the customer have a license to possess/use radioactive material? Yes No
21. Does the customer facility have a plant standard radiation specification (5mR@12 in Standard)? Yes No
 *If yes: _____ mR μSV @ in mm
22. Are there potential external obstructions in the detector mounting area? Yes* No
 *If yes, describe: _____
23. Rank the following by importance (1-4 Highest to Lowest):
 Best Density Resolution _____ Fast Response Time _____ Low Radiation _____ Low Price _____

Diagrams



Nozzle flange size: _____ Flange rating: _____
 External projection: _____ Nozzle ID: _____
 Nozzle protrusion: Yes* No
 *If yes, depth: _____
 Nozzle offset from center line: _____ in mm

Please use this diagram to answer questions 11-14 on page 1.

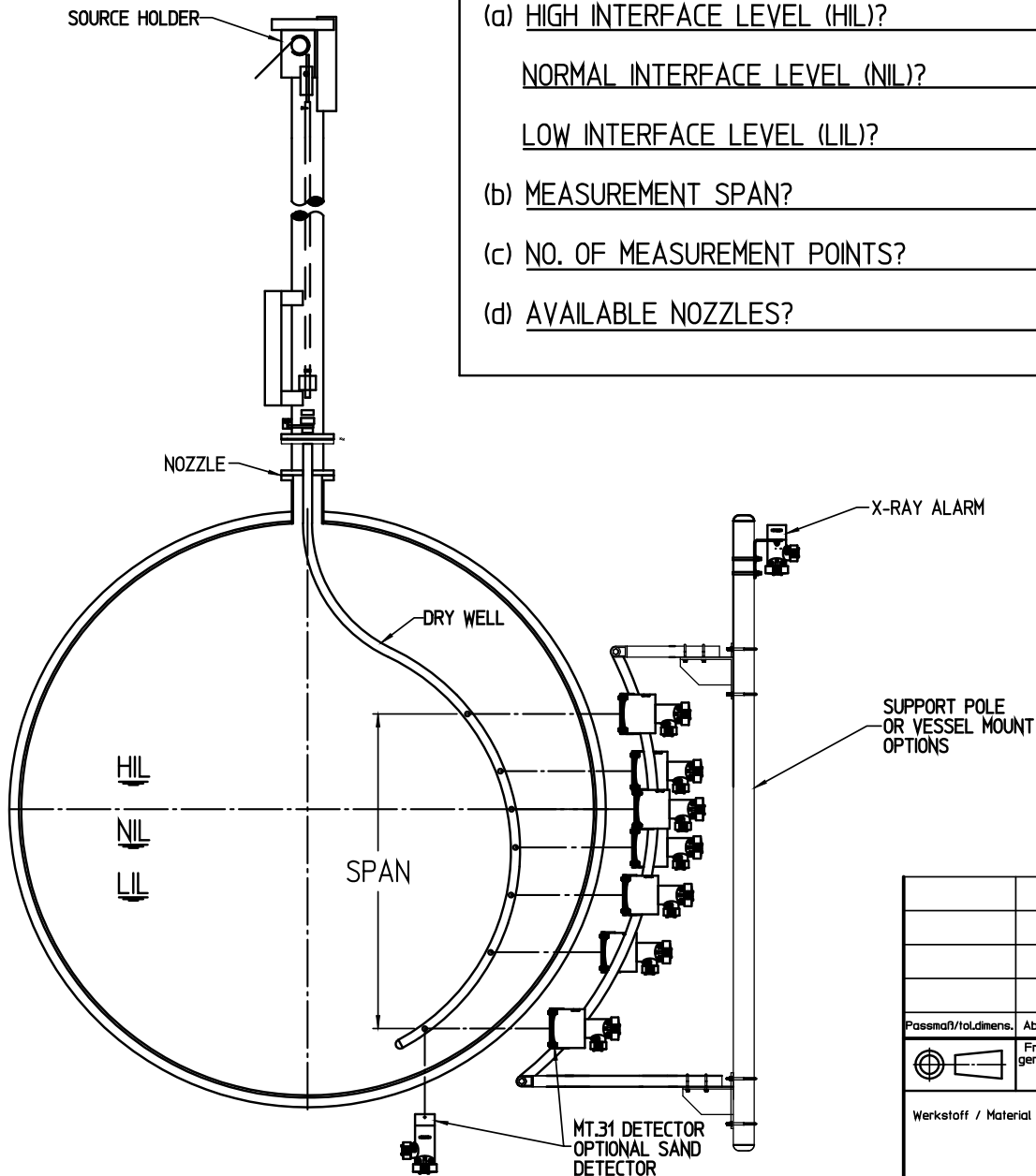
- A. Measurement span
- B. Elevation from bottom of vessel
- C. Number of sensors
- D. Vessel height clearance restriction

Additional Information

Please provide a current copy of your current radioactive materials license, if available.

FOR INFORMATION ONLY

PLEASE FILL IN VALUES FOR ITEMS (a), (b), (c), (d) AND RETURN TO SALES REPRESENTATIVE



(a) HIGH INTERFACE LEVEL (HIL)?
NORMAL INTERFACE LEVEL (NIL)?
LOW INTERFACE LEVEL (LIL)?

(b) MEASUREMENT SPAN?

(c) NO. OF MEASUREMENT POINTS?

(d) AVAILABLE NOZZLES?

NOTES:

- 1) EXISTING NOZZLE USED MAY BE ON OR OFF VESSEL CENTERLINE OR NEW NOZZLE MAY BE ADDED
- 2) DRY WELL PIPE SIZE AND CURVATURE DICTATED BY NOZZLE ID. AND PROJECTION
- 3) SPACING AND NUMBER OF DETECTORS/SOURCES MAY VARY. DETECTORS/SOURCES TO BE STRATEGICALLY PLACED TO MONITOR DESIRED CONTROL POINTS/RANGE.
- 4) SOURCES MUST REMAIN SUBMERGED IN LIQUID. NOT FOR MEASURING VAPOR DENSITY
- 5) HIGH INTERFACE LEVEL (HIL), NORMAL INTERFACE LEVEL (NIL) AND LOW INTERFACE LEVEL (LIL) REFER TO THE DESIRED INTERFACE CONTROL RANGE
- 6) OPTIONAL DETECTOR AVAILABLE FOR MEASUREMENT OF SAND/SLUDGE BUILDUP IN BOTTOM OF VESSEL

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CLIENT: Enter Client Name Here	QUOTE#	Quote #
PROJECT: Enter Project Name Here	VESSEL ID:	Vessel ID
REFERENCE: Enter Reference Here		
DETECTOR TAG(S):	Enter Detector Tag(s) Here	
SOURCE TAG(S):	Enter Source Tag(s) Here	

Passmaß / tol. dimens.	Abmaß / allowance	Änderung / revision		Änd. Nr. / Rev. No.	Datum / Date	gezeichnet / freigegeben / drawn / checked
		-			03.08.2017	riedyj
		initial release				
		initial release				
Freimaß / tolerance general tolerance	gezeichnet / drawn	Datum / Date	Name / Name	Benennung	Description	
	freigegeben / checked	03.08.2017	riedyj	Generic MDA Template	Generic MDA Template	
Werkstoff / Material	Maßstab / Scale	VEGA		Art.Nr. / Art.No.	SK7046	Änd.-Zust. / Rev.
	1:1	VEGA Americas Inc. 4241 Atterdorf Drive Cincinnati, Ohio 45209 USA		Zchnngs.-Nr. / Drawing No.	SK7046	-
	Original format size of origin			Var.Fam.:	Var.Fam.2:	
	B			Teil ähnl. / sim. part	Ersatz f./replacement f.	
	Blatt / Sheet			Arb.Anw. / work.instr.	all dimensions are in in. (mm)	
	1					

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