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QUESTIONNAIRE

New built / retrofit of a railcar unloading facility for mineral oil, chemical- and petrochemical products

1 Customer

1.1	Company name	

1.2	Address	

1.3	Contact person (Position, Name)	
	(i osicion, Name)	

1.4	Phone	

1.5	Fax	
1.6	E-Mail	

1.7	Address (if not equal to 1.2)	

1.8	Date	
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QUESTIONNAIRE

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2. Type of project

2.1	New construction, if yes: what type of unloading facility? *	Conventional unloading	Intake and pump out over reservoir
2.2	If retrofit, what type of facility exists? *	Conventional unloading	Intake and pump out over reservoir

* Dipl.-Ing. SCHERZER GmbH will recommend a type of facility after analysis of all information

3. What products shall be unloaded?

Product description*	Technical data			
ucsenption	Unloading temperature (in °C)	Stock temperature (in °C)	Density (in kg/m³)	Viscosity (in CSt)

* If possible, please attach material safety data sheets (MSDS)!



4. Tracks

4.1	On how many tracks will product be u	nloaded:	
or mai	sible, please attach layout plan drawing il to: <u>info@scherzer.net</u> and fill out the ring details under 4.2!		
-	sible, please send Google Earth- ation:(kmz) by email		

4.2	Space between tracks, length of tracks provided for unloading and other information related to location and tracks:	
4.2.1	Axis space of tracks (GA)	
4.2.2	Version A: Ending tracks with total length (GL1)	
4.2.3	Version B: Connected tracks with total length (GL1)	
4.2.4	Downgrade of tracks if existing	
4.2.5	Track gauge	
4.2.6	Rail profile	
4.2.7	If new construction: maximum amount of railcars in total compound	
4.2.8	Other information regarding tracks related to this project:	



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5. Railcars to be unloaded

5.1	Average volume (for calculation of capacity) in m ³ (or gallons):	
5.2	Type of railcars and other information	



Dimension of railcars					
Description	Entity	Type of railcar / description of railcar			
Description	Entity				
Axis space (LA)	mm (ft)				
Bogie space (IG2) 8-axis-railcar	mm (ft)				
Number of axis					
Bogie space (IG)	mm (ft)				
Length over all (LK)	mm (ft)				
Connection nominal diameter of unloading (dS)	mm (ft)				
Connection height (hS)	mm (ft)				
Unloading connection offset from the center (aS)	mm (ft)				
Nozzle form (A-sideways / B= down)					
Tank diameter (dT)	mm (ft)				
Empty weight	tons				
Maximal filling weight / working load	tons				
Total volume	m ³ (gal)				
Maximal filling volume	m ³ (gal)				



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5.3	Bottom unloading connection	and dimensions:
Sketch o of unload	r picture ding connection	

6. Unloading conditions:

6.1	Operating period

6.1.1	8 hours/day	
6.1.2	16 hours/day	
6.1.3	24 hours/day	
6.1.4	Other operating periods	
6.1.5	Working days / year	



6.2	Climatic conditions	
6.2.1	Temperature max, in ⁰ C or deg F	
6.2.2	Temperature min, in ⁰ C or deg F	
6.2.3	Layout temperature for planned equipment mechanic in $^{\circ}$ C or deg F	
6.2.4	Layout temperature for planned equipment EMSR in ⁰ C or deg F	
6.2.5	Layout pressure, in bar (psi)	
6.2.6	Geodetic height (NN)	
6.2.7	Maximal freeze depth in m (ft)	
6.2.8	Ground water level in m (ft)	
6.2.5	Precipitation, average in 24 hours, in mm (inches)/day	

7. Configuration of facility

7.1	Storage system, Vapor routing system and vapor recovery unit (VRU)				
7.1.1	Storage in				
7.1.1.1	Floating roof tanks				
7.1.1.2	Fixed roof tanks				
7.1.2	Max. storage performance				
		in m³/h (gal/h)			
7.1.3	If storage in fixed roof tanks: Shall balance vapor be recovered?	Yes	No		
7.1.4	If yes, then by	Vapor storage	Vapor recovery unit		
			(VRU)		
7.1.5	If Vapor recovery unit (VRU)	Hydrocarbon technology	Membrane technology		



7.2	Is heating of products necessary?	Yes		No	
7.2.1	Type of heating:	with water	with ele	ectricity	others
7.2.1.1	Temperature and pressure in case of heating with steam	Temperature in C ^o		Pre	ssure in bar

7.3	Unloading performance					
Produ	ect description	Daily rate, tons/day	Annual rate, tons/year			



7.4	Shall indication of unloaded products be recorded?	Yes	No
7.4.1	If yes, by:		
7.4.1.1	Dynamic weighing scale	Yes	No
7.4.1.2	Volume meter	Yes	No
	Shall temperature compensation be used?	Yes (°F or °C)	No
7.4.1.3	Mass metering	Yes	No

7.5	Power supply				
	Electrical data	existing	planned		
7.5.1.	690/660 V				
7.5.2	400/380 V				
7.5.3	460 V-480V				
7.5.4	230 V				
7.5.5	208 V				
7.5.6	V				
7.5.7	110 V				
7.5.8	Frequency range 50 Hz				
7.5.9	Frequency range 60 Hz				
7.5.10	Parallel flow 48 V				
7.5.11	Parallel flow 24 V				
7.5.12	Parallel flow				



8	Shall a pumping station be delivered?	Yes	Νο

Technical data of existing and new pumps:

Product-	existing pumps			new pumps		
description	Pump- capacity, in m ³ /h	Static head, water column in m	Capacity, in kW or HP	Pump- capacity, in m ³ /h	Static head, water column in m	Capacity, in kW or HP

Project time line 9

9.1	Dead line for offer submission	

9.2	Planned contract award date	

9.3	Anticipated start-up date	
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Scope of delivery and performance: 10.

	Technical equipment and services according technical tasks	DiplIng. SCHERZER GmbH	Customer
10.1	Unloading unit		
10.2	Steel construction		
10.3	Pumps		
10.4	Cables and installation material		
10.5	Piping material		
10.6	Supervision		
10.7	Commissioning		
10.8	Training of operating staff		
10.9	Basic project		
10.10	Detail project		
10.11	Other deliveries and performances needed		
		Voc	No
10.12	Turnkey construction	Yes	No



QUESTIONNAIRE

11. Short description of planned unloading unit or other comments:

Thank you for filling out this questionnaire. If there are any questions, do not hesitate to contact us by Email or Phone over our representative or by direct Email: info@scherzer.net

Your information will help us to consider your specific needs in our design recommendations and subsequent system quotation.

We will treat your specific information and data as highly confidential, and we will analyze your inputs in a short time to prepare an offer according to your requirements.

Further, we recommend visiting one of the loading facilities designed by Dipl.-Ing. SCHERZER GmbH. We are pleased to provide information on the location of the closest facility to your office. We are also pleased to escort you on a detailed site visit to see firsthand the Scherzer system. For additional information, please also visit our Website at www.scherzer.net to search among various countries and a portfolio of Scherzer designed loading facilities.