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# **QUESTIONNAIRE**

New built / retrofit of a tank truck loading facility for mineral oil, chemical- and petrochemical products



## 1 Customer

1.1	Company name	

1.2	Address	

1.3	Contact person	
	(Position, Name)	

1.4	Phone	

1.5 Fax	
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1.6 E-Mail
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1.7	Address (if not equal to 1.2)	

1.8	Date	
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## 2. Type of project

2.1	New construction, if yes: what type of loading facility? *	Bottom Loading	Top Loading
		Bottom Loading	Top Loading
2.2	If retrofit, what type of facility exists? *		

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

## 3. What products shall be loaded?

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

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

#### 4. Lanes

4.1	On how many lanes will product be loaded:	

If possible, please attach layout plan drawing or mail to: <u>info@scherzer.net</u> and fill out the following details under 4.2!	
If possible, please send Google Earth- orientation:(kmz) by email	



# 5. Trucks to be loaded

5.1	Average volume (for calculation of capacity) in m <sup>3</sup> (or gallons):	
5.2	Type of trucks and other information	



## Existing or planned truck fleet:

Tank truck-	Multi section	Load	ding	Proportion	Remarks
volume (m³)	vehicle	Тор	Bottom	%	Remarks



## 6. Loading 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 <sup>0</sup> C or deg F
6.2.2	Temperature min, in <sup>0</sup> 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 <sup>0</sup> 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



#### 6.3 Flow - rates:

### Gasoline / JET:

Top-Loading:	DN 100 (2200 Litres/min)	
	DN 80 (1800 Litres /min)	
	or	Litres /min
Bottom-Loading:	DN 100 (2200 Litres /min)	
	or	Litres /min

<u>Diesel / Heating oil</u> :		
Top-Loading:	DN 150 (3000 Litres /min)	
	DN 100 (2200 Litres /min)	
	or	Litres /min
Bottom-Loading:	DN 100 (1800 Litres /min)	
	or	Litres /min



7.1

QUESTIONNAIRE

## 7. Configuration of facility, VRU and others

## \_\_\_\_\_

Vapor routing system and vapor recovery unit (VRU)

7.1.1	The erection of a vapor routing system and vapor recovery unit (VRU) exists or is needed	existing	needed
7.1.2	Erection of a vapor storage tank	existing	needed
7.1.3	Floating roof tanks	existing	needed
7.1.4	Fixed roof tanks	existing needed	
7.1.5	Max. permitted overpressure in the tanks, in mbar		
7.1.6	Permitted hydrocarbon and benzol content in the rest emmissions in the athmosphere shall not exceed mg/m <sup>3</sup> .	hydrocarbon	benzol

7.2	Is heating of products necessary?	Ja			Nein
7.2.1	Type of heating:	with water	with elect	ricity ]	others
7.2.1.1	Temperature and pressure in case of heating with steam	Temperature in C <sup>o</sup>		Pressure in bar	



7.3	Loading perforn	nance	
Produc	ct description	Daily rate, tons/day	Annual rate, tons/year

7.4	An indication of unloaded products shall be recorded?	Yes	No
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7.4.1.1	Dynamic weighing scale	Yes	No
7.4.1.2	Volume meter	Yes	No
7.4.1.2. 1	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	A pumping station shall be delivered?	Yes	No	

## Technical data of existing and new pumps:

Product-	existing pumps		new pumps			
description	Pump- capacity, in m <sup>3</sup> /h	Static head, water column in m	Capacity, in kW or HP	Pump- capacity, in m³/h	Static head, water column in m	Capacity, in kW or HP

# 9 Project time line

9.1	Dead line for offer submission	

9.2	Planned contract award date	

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

	Technical equipment and services according technical tasks	DiplIng. SCHERZER GmbH	Customer
10.1	Loading unit		
	Additiv system		
	Card reading system		
	Intercom		
	Video control system		
	Intersection lights / barrier		
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		
10.12	Turnkey construction	Yes	No



11.	Scope of delivery / Engineering:	complete d	complete detail design of:			
	Building construction:					
	Foundations	yes		no		
	Island and lanes	yes		no		
	Pump station	yes		no		
	Control room / electrical room	yes		no		
	<ul> <li>VRU – foundations and slop area</li> </ul>	yes		no		
	Steel construction:					
	Roofing filling stations	yes		no		
	Working platform filling station	yes		no		
	Pipe bridges	yes		no		
	Technologic steel construction	yes		no		
	Roofing pump station	yes		no		
	Roofing VRU	yes		no		
	Piping:					
	Filling station	yes		no		
	Pump stand	yes		no		
	• VRU	yes		no		
	Connecting pipes	yes		no		
	Electric:					
	Control room / electrical room	yes		no		
	Filling station	yes		no		
	Pump stand	yes		no		
	• VRU	yes		no		
	Field lighting	yes		no		
	USV (uninterruptible power supply)	yes		no		
	Control system / Measurement system:					
	Control room	yes		no		
	Filling stations	yes		no		
	Pump stand	yes		no		
	• VRU	yes		no		
	Visualization system	yes		no		
	<ul> <li>Connection to host computer</li> </ul>	yes		no		



## **12.** 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.