LOADING YOUR FUEL
Dipl.-Ing. SCHERZER GmbH

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QUESTIONNAIRE

New built / retrofit of a railcar loading facility for mineral oil, liquid gas, 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**	
1.6	**E-Mail**	
1.7	**Address (if not 1.2)**	
1.8	**Date**	

2. Kind of project

2.1	**New built, if yes: which type of loading facility ***	Serial loading ☐	On spot loading ☐
2.2	**If retrofit, which type of facility exists ***	Serial loading ☐	On spot loading ☐

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

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3. Loaded products

Product - description *	Technical data			
	Loading temperature °C (deg F)	Stock temperature °C (deg F)	Density kg/m^3 (lbm / ft3)	Viscosity CSt

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

4. Tracks

4.1	**On how many tracks will product be loaded:**	

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

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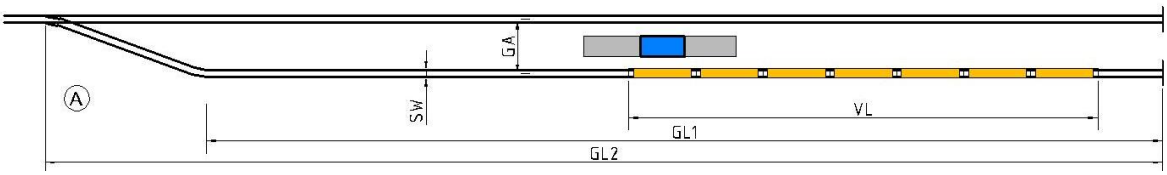
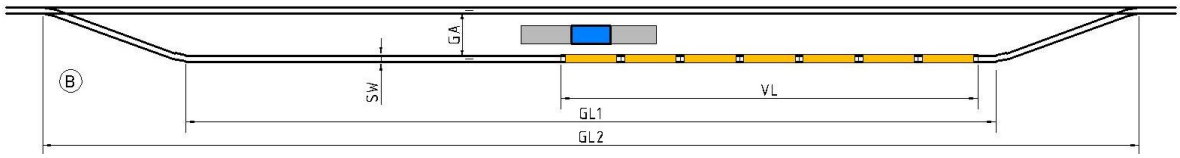
Ending track (dead end) or connected track





4.2	**Space between tracks, length of tracks provided for loading 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	Line up length / length of all railcars, m (ft) (VL)	
4.2.5	Total length of tracks (GL2)	
4.2.6	Downgrade of tracks if existing	
4.2.7	Track gauge	
4.2.8	Rail profile	
4.2.9	Is it possible to extend straight line (GL1), if yes: how long in m (ft)?	
4.2.10	If new construction: maximum amount of railcars in total compound	
4.2.11	Other information regarding tracks related to this project:	

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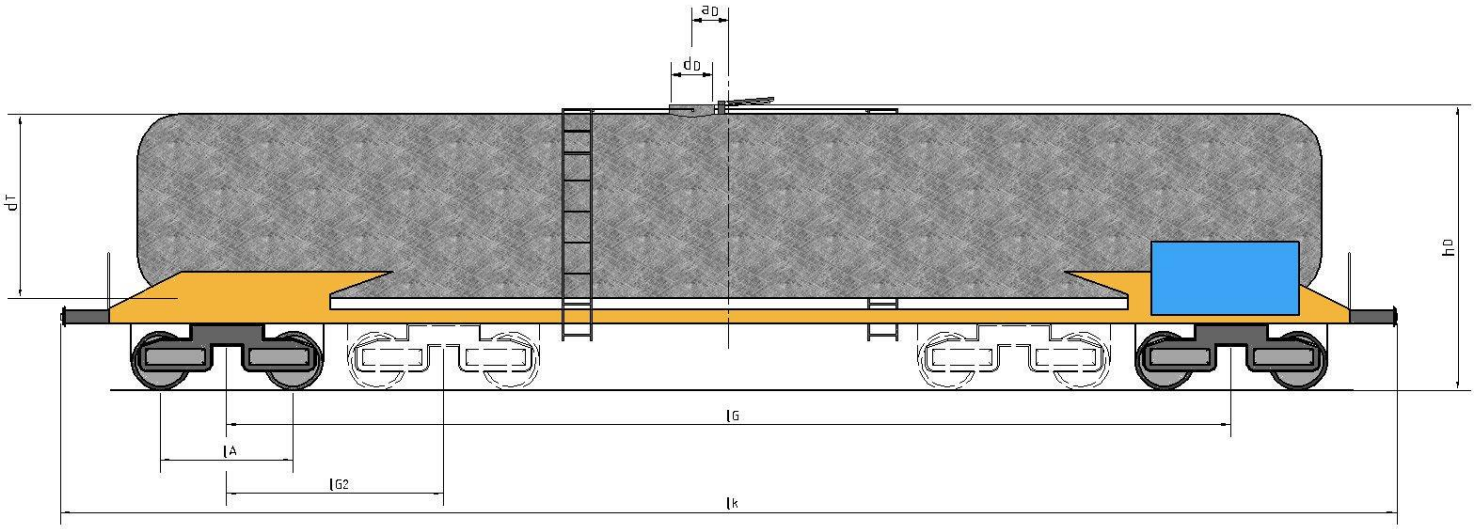
5. Railcars to be loaded

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



Dimension of railcars							
Description		Type of railcar / description of railcar					
Axis space (LA)	mm (ft)						
Bogie space (IG2) 8-Axis-railcar	mm (ft)						
Number of axis							
Bogie space	mm (ft)						
Length over all (LK)	mm (ft)						
Dome diameter (dB)	mm (ft)						
Height of dome over upper level of track (hD)	mm (ft)						
Dome offset from the center (aD)	mm (ft)						
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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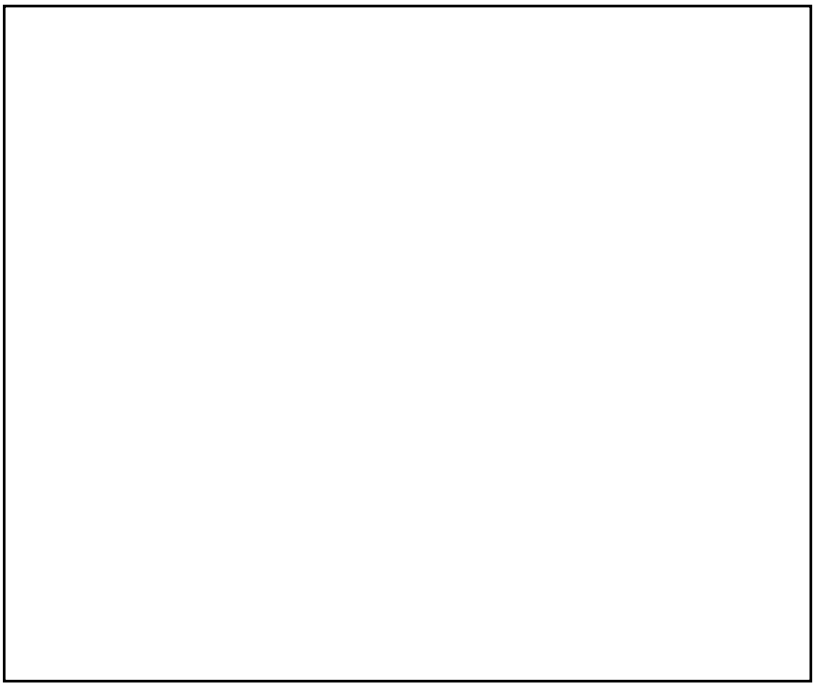
5.3	**Layout of domes and dimensions:**
Sketch of railcar dome and hardware in the railcar top	

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	

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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 ^{0}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	

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7. Configuration of facility, VRU and others

7.1	**Is a shunting unit / robot needed** **(On - spot loading)**	**Yes** ☐	**No** ☐

7.2	**Vapor routing system and vapor recovery unit (VRU)**

7.2.1	Is a construction of a vapor routing system and vapor recovery unit (VRU) needed or does it exist	exist ☐	needed ☐
7.2.2	Construction of a vapor bladder (surge) tank	exist ☐	needed ☐
7.2.3	Floating roof tank	exist ☐	needed ☐
7.2.4	Fixed roof tank	exist ☐	needed ☐
7.2.5	Maximum permitted over pressure in the tanks, in mbar (inch H2O)		
7.2.6	The permitted hydrocarbon - and benzene content in the rest emissions in the atmosphere shall not exceed, ….. mg/m^3 % by vol or ppm	Hydrocarbon	Benzene

7.3	**Heating of loaded products**	**Yes** ☐		**No** ☐
7.3.1	Mode of heating	with water ☐	with energy ☐	Other ☐
7.3.1.1	Temperature and pressure for steam heating	Temperature in C^o or deg F		Pressure in bar (psi)

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7.4	**Loading performance**	
Product description	Daily loading rate, tons/day	Annual rate, tons/year

7.5	**Shall indication of loaded products be recorded?**	**Yes** ☐	**No** ☐

7.8.1	If yes, by

7.8.1.1	Track weighing scale	Yes ☐	No ☐
7.8.1.2	Volume counter	Yes ☐	No ☐
7.8.1.2.1	A temperature compensation shall be used	Yes ☐ (°C or deg F)	No ☐
7.8.1.3	Mass metering	Yes ☐	No ☐

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7.9	**Power supply**		
	Electrical information	**Existing**	**Planned**
7.9.1.	690 V/660V		
7.9.2	400/380 V		
7.9.3	460 V-480V		
7.9.4	230 V		
7.9.5	208V		
7.9.6	….. V		
7.9.7	110 V		
7.9.8	Frequency range 50 Hz		
7.9.9	Frequency range 60 Hz		
7.9.10	Parallel flow 48 V		
7.9.11	Parallel flow 24 V		
7.9.12	Parallel flow ……		

7.10	**A pump station shall be delivered**	**Yes** ☐	**No** ☐

8 Technical data of existing and new pumps

Product-description	existing pumps			new pumps		
	Pump-capacity, in m^3/h (gal/min)	Difference in height, in m (ft) water column	Capacity, in kW or HP	Pump-capacity, in m^3/h (gal/min)	Difference in height, in m (ft) water column	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**	

10. Scope of delivery and performance:

	Scope & Tasks	Dipl.-Ing. Scherzer GmbH	Customer
10.1	Loading 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		
10.12	Turnkey construction	Yes ☐	No ☐

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11. Short description of planned loading 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.