

QUESTIONNAIRE

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

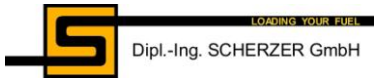
1 Customer

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 <input type="checkbox"/>	On spot loading <input type="checkbox"/>
2.2	If retrofit, which type of facility exists *	Serial loading <input type="checkbox"/>	On spot loading <input type="checkbox"/>

**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/m³ (lbm / ft3)	Viscosity CSt

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

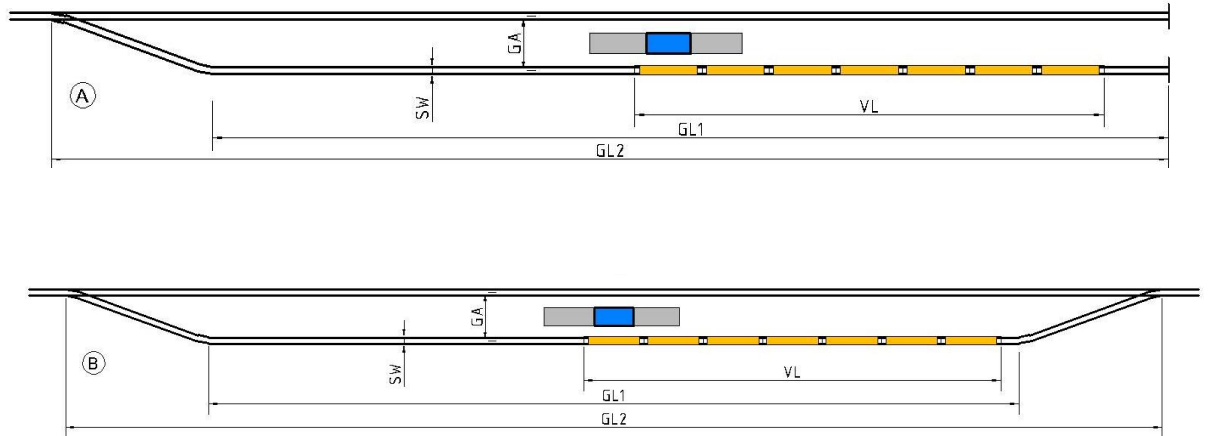
4. Tracks

4.1	On how many tracks will product be loaded:	
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<p>If possible, please attach layout plan drawing or mail to: info@scherzer.net and fill out the following details under 4.2!</p> <p>If possible, please send Google Earth-orientation:(kmz) by email</p>	
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Ending track (dead end) or connected track



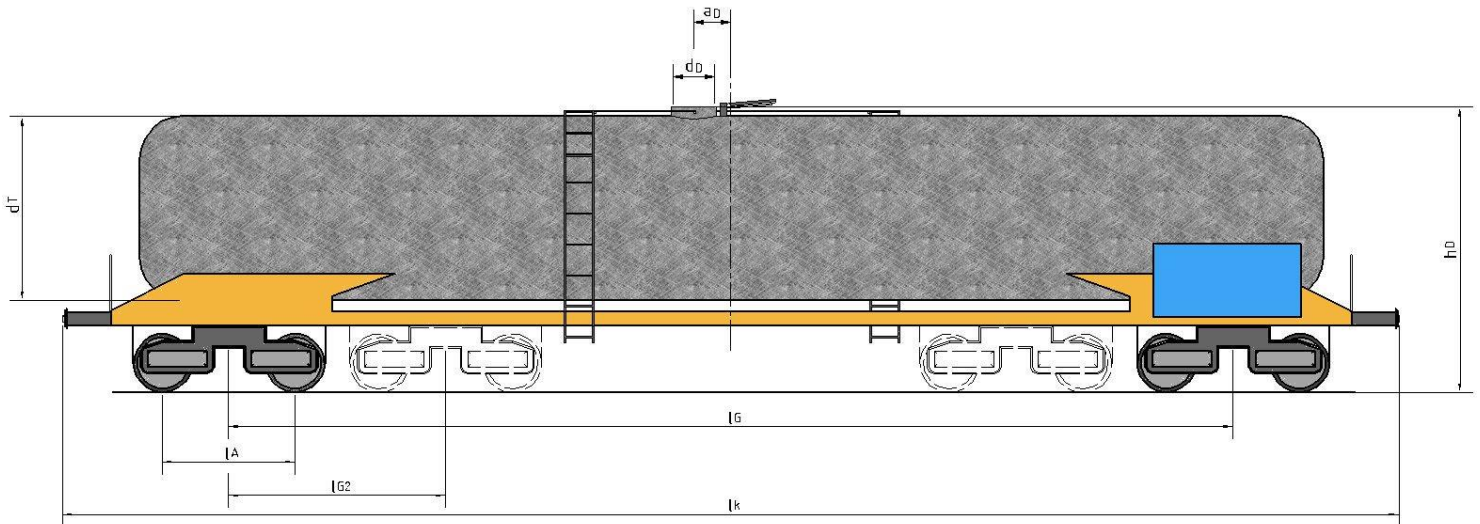
4.2	Space between tracks, length of tracks provided for loading and other information related to location and tracks:
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4.2.1	Axis space of tracks (GA)	
4.2.2	Version A: Ending tracks with total length (GL1)	
4.2.3	Version B: Connected tracks with total 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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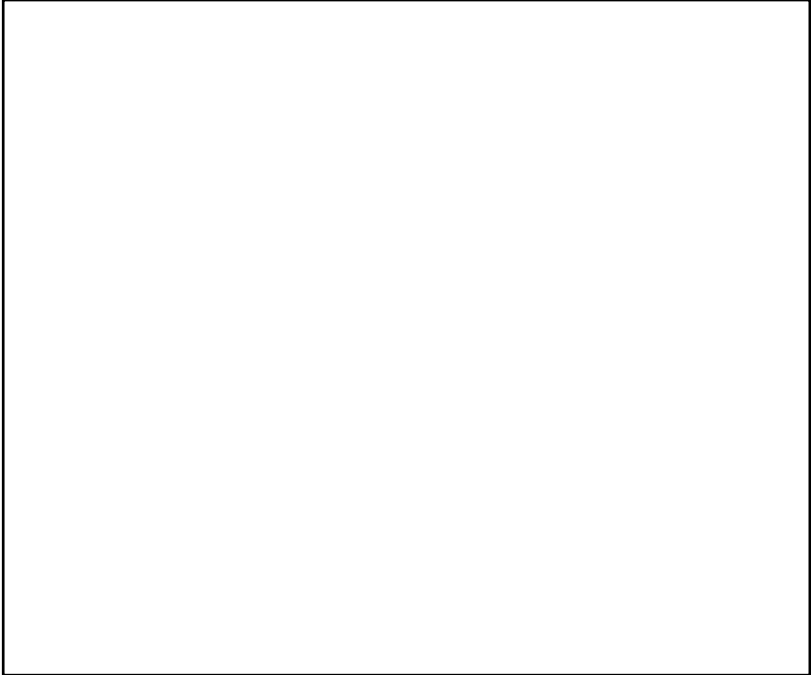
5. Railcars to be loaded

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 (dD)	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:	
<p>Sketch of railcar dome and hardware in the railcar top</p>		

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 °C or deg F	
6.2.2	Temperature min., in °C or deg F	
6.2.3	Layout temperature for planned equipment mechanic in °C or deg F	
6.2.4	Layout temperature for planned equipment EMSR in °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 <input type="checkbox"/>	No <input type="checkbox"/>
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7.2	Vapor routing system and vapor recovery unit (VRU)		
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7.2.1	Is a construction of a vapor routing system and vapor recovery unit (VRU) needed or does it exist	exist <input type="checkbox"/>	needed <input type="checkbox"/>
7.2.2	Construction of a vapor bladder (surge) tank	exist <input type="checkbox"/>	needed <input type="checkbox"/>
7.2.3	Floating roof tank	exist <input type="checkbox"/>	needed <input type="checkbox"/>
7.2.4	Fixed roof tank	exist <input type="checkbox"/>	needed <input type="checkbox"/>
7.2.5	Maximum permitted over pressure in the tanks, in mbar (inch H ₂ O)		
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 <input type="checkbox"/>	No <input type="checkbox"/>	
7.3.1	Mode of heating	with water <input type="checkbox"/>	with energy <input type="checkbox"/>	Other <input type="checkbox"/>
7.3.1.1	Temperature and pressure for steam heating	Temperature in C° 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 <input type="checkbox"/>	No <input type="checkbox"/>
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7.8.1	If yes, by
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7.8.1.1	Track weighing scale	Yes <input type="checkbox"/>	No <input type="checkbox"/>
7.8.1.2	Volume counter	Yes <input type="checkbox"/>	No <input type="checkbox"/>
7.8.1.2.1	A temperature compensation shall be used	Yes <input type="checkbox"/>	No <input type="checkbox"/>
		(°C or deg F)	
7.8.1.3	Mass metering	Yes <input type="checkbox"/>	No <input type="checkbox"/>

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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 <input type="checkbox"/>	No <input type="checkbox"/>
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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	
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9.2	Planned contract award date	
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9.3	Anticipated start-up date	
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10. Scope of delivery and performance:

	Scope & Tasks	Dipl.-Ing. Scherzer GmbH	Customer
10.1	Loading unit	<input type="checkbox"/>	<input type="checkbox"/>
10.2	Steel construction	<input type="checkbox"/>	<input type="checkbox"/>
10.3	Pumps	<input type="checkbox"/>	<input type="checkbox"/>
10.4	Cables and installation material	<input type="checkbox"/>	<input type="checkbox"/>
10.5	Piping material	<input type="checkbox"/>	<input type="checkbox"/>
10.6	Supervision	<input type="checkbox"/>	<input type="checkbox"/>
10.7	Commissioning	<input type="checkbox"/>	<input type="checkbox"/>
10.8	Training of operating staff	<input type="checkbox"/>	<input type="checkbox"/>
10.9	Basic project	<input type="checkbox"/>	<input type="checkbox"/>
10.10	Detail project	<input type="checkbox"/>	<input type="checkbox"/>
10.11	Other deliveries and performances needed	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
10.12	Turnkey construction	Yes <input type="checkbox"/>	No <input type="checkbox"/>

