LOADING YOUR FUEL
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QUESTIONNAIRE

**to prepare a technical and commercial proposal
for construction or modernization of a loading / unloading systems
of liquefied petroleum gas (LPG) for rail cars**

1 Customer

1.1	**Company name**	
1.2	**Post address**	
1.3	**Responsible person (position, name, surname)**	
1.4	**Telephone**	
1.5	**Fax**	
1.6	**e-mail**	
1.7	**Place of location**	
1.8	**Date**	

2. Object description

2.1	**New construction of loading / unloading unit for railcar**	Rail car loading ☐	Rail car unloading ☐

2.2	**The number of ways for loading/unloading**		**The number of delivered rail cars**	

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2.3	**Modernization of loading/unloading unit for rail cars**	Rail car loading ☐	Rail car unloading ☐

2.4	**The number of ways for loading/unloading**		**The number of delivered rail cars**	

2.5	**Rail car preparation estacada for loading / unloading**	**Yes**	**No**	**The number of rail cars**	

2.6	**The number of ways for loading/unloading as in pos. 2.4**		**The number of delivered rail cars**	

3. The range of products for loading/unloading LPG on the loading rack

Pos.	Product name	Product temperature [°C]	Product density [kg/m³]	Viscosity cSt
Remarks to products				

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4. Design parameters for loading/unloading rack

4.1	Design temperature	°C	Design pressure	MPa
4.2	Working temperature	°C	Working pressure	MPa
4.3	Working pressure of inert gas during rail car unloading			MPa
4.4	Working pressure of compressor station of unloading rail car rack			MPa
4.5	Working pressure of flare station			MPa
4.6	Working pressure of instrumental air			MPa
4.7	Dew point of instrumental air			°C
4.8	Working pressure of steam delivery system			MPa
4.9	Working temperature of steam delivery system			°C
4.10	Working pressure of fire extinguishing water in the cycle pipeline			MPa

Power supply (tick all that apply)

4.11	Power supply	660 V AC/50 Hz	
4.12	Power supply	380 V AC/50 Hz	
4.13	Power supply	220 V AC/50 Hz	
4.14	The control voltage	48 V DC	
4.15	The control voltage	24 V DC	

Climate conditions

4.16	Climate zone of the job site	SNIP 23-02-2003	
4.17	The temperature of the coldest five-day	SNIP 23-02-2003	°C
4.18	The absolute minimum temperature	SNIP 23-01-99	°C
4.19	The absolute maximum temperature	SNIP 23-01-99	°C
4.20	Absolute humidity	SNIP 23-02-2003	°C
4.21	Snow load	SNIP 2.01.07-86	kPa
4.22	Wind load	SNIP 2.01.07-86	kPa
4.23	Seismicity	SNIP 11-7-81	deg

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5. Working unite parameters for designing

5.1	**Working time**	
5.1.1	Working days per year	days / year
5.1.2	Downtime days to make maintenance works	days / year
5.1.3	1 – shift - 8 hours / day	
5.1.4	2 – shift - 16 hours / day	
5.1.5	3 – shift - 24 hours / day	

5.2	**Loading/unloading of product – unit productivity**				
	Product type	**loading**	**unloading**	**Yearly productivity [t/year]**	**Daily productivity [t/year]**
5.2.1	NGL PBT				
5.2.2	Propane Fri				
5.2.3	Bhutan BT				
5.2.4					
5.2.5					
5.2.6					
5.2.7					
5.2.8					
5.2.9					
5.2.10					

QUESTIONNAIRE

6. Short description of technical task

7. Technical data of rail cars, provided for LPG loading/unloading

7.1	The average volume (85%)of provided rail cars					m³
7.2	Type of rail cars	Calibration type	The length of connected rail cars [mm]	The load capacity of rail cars [t]	The volume of rail cars [m³]	The high of rail cars [mm]
7.2.1						
7.2.2						
7.2.3						
7.2.4						
7.2.5						
7.2.6						
7.2.7						
7.2.8						

QUESTIONNAIRE

8. Rail ways of LPG loading/unloading unite

8.1	**The type of rail ways for rail car delivery**	
8.1.1	Passing way	
8.1.2	Dead end way	

8.2	**Number of rail ways**	
8.2.1	One way (1) unit	
8.2.2	Two ways (2) unit	

8.3	**Number of delivered rail cars / way**		**pc**
8.4	**The length of parallel ways**		**m**
8.5	**The distant between parallel located rail ways**		**m**
8.6	**Strait part of rail ways after the crossing to the direction of the unit to install the wagon scales = 82 m ***	available ☐	not available ☐

* tick all that apply

9. Commercial account system of LPG loading/unloading

9.1	**Commercial account system***	yes ☐	no ☐
9.1.1	Measuring device Coriolis, the accuracy of ± 0,1 % *		
9.1.2	Dynamic wagon scales, the accuracy of ± 0,25 % *		
9.2	**Commercial account system to regulate loading/unloading process (to limit loaded amounts) ***	yes ☐	no ☐
9.2.1	The measuring device on the principle of eddy current - volume, the accuracy of 0,55% *±		
9.2.2	Float-type flowmeter, the accuracy of ± 0,8 % *		
9.3	Without commercial account / rail car *		

* tick all that apply

QUESTIONNAIRE

10. The battery limits of delivery for LPG loading/unloading unite

	Technical equipment and service according to the technical task	Dipl.-Ing. Scherzer GmbH	Customer
10.1	Delivery of equipment for LPG unite*	☐	☐
10.2	Delivery of electrocontainer and operator container, fully assembled and ready for operation *	☐	☐
10.3	Delivery of equipment for pump stand to pump products to the rack *	☐	☐
10.4	Delivery of compressor station to unload the product from rail car and to level the pressure in the rail car up to 0,07 MPa *	☐	☐
10.5	Delivery of LPG vaporizer to provide compressor station with it during the cold season *	☐	☐
10.6	Prefabrication, delivery and mounting steel structures for the LPG rack *	☐	☐
10.7	Delivery and mounting pipeline system for LPG rack*	☐	☐
10.8	To make service for equipment supervision / commissioning, training stuff *	☐	☐
10.9	Basic engineering for delivered equipment of LPG rack *	☐	☐
10.10	To make the detail designing for electrical and instrumentation *	☐	☐
10.11	To make the LPG rack, as “turn key” project*	☐	☐

* tick all that apply

QUESTIONNAIRE

10.1 Equipment delivery for LPG rack

	Delivered equipment for LPG rack	Dipl.-Ing. Scherzer GmbH	Customer
10.1.1	Loading/unloading equipment*	☐	☐
10.1.2	System of automation - Instrumentation *	☐	☐
10.1.3	Commercial accounting system *	☐	☐
10.1.4	Power distribution system for electrical equipment*	☐	☐
10.1.5	Cable and installation material*	☐	☐
10.1.6	Lighting Systems*	☐	☐
10.1.7	Intercom Systems*	☐	☐
10.1.8	Gas alarm system*	☐	☐
10.1.9	System of video monitoring*	☐	☐
10.1.10	Emegrency valves*	☐	☐
10.1.11	Slop tank*	☐	☐
10.1.12	Unit of instrumentation air*	☐	☐
10.1.13	Delivery of spare parts*	☐	☐
10.1.14	Delivery of wearing parts *	☐	☐

* tick all that apply

QUESTIONNAIRE

10.2 Delivery of electrocontainer and operator container, fully assembled, tested and ready for operation

	Delivery of container for electrics and insrtumentation	Dipl.-Ing. Scherzer GmbH	Customer
10.2.1	Container, 3-section, with heating, air conditioning and forced air ventilation *	☐	☐
10.2.2	CO2 fire extinguishing system by the operator for the container / container, electrics and Instrumentation *	☐	☐

* tick all that apply

10.3 Delivery of equipment for LPG pump stand to pump products to the rack *

	Dilrvery of equipment for LPG pump stand	Dipl.-Ing. Scherzer GmbH	customer
10.3.1	**Pumps delivery ***	☐	☐
10.3.2	**Delivery of an automation system ***	☐	☐
10.3.3	**Power distribution system for electrical equipment ***	☐	☐
10.3.4	**Delivery of frequency conversion system ***	☐	☐
10.3.5	**Cable and installation material ***	☐	☐
10.3.6	**Lighting Systems ***	☐	☐
10.3.7	**Delivery of fittings and devices***	☐	☐
10.3.8	**Gas alarm system ***	☐	☐
10.3.9	**Delivery of spare parts***	☐	☐
10.3.10	**Delivery of wearing parts ***	☐	☐

* tick all that apply

QUESTIONNAIRE

10.4 Equipment delivery for compressor station

	Delivered equipment for compressor station	Dipl.-Ing. Scherzer GmbH	Customer
10.4.1	The station of rotary screw compressors to get the operating excessive pressure for LPG unloading from railcar s*	☐	☐
10.4.2	Heated and ventilated container to place the compressor station*	☐	☐
10.4.3	Fittings and devices to unload the rail cars with gas and vapor removal *	☐	☐

* tick all that apply

10.5 Equipment delivery of evaporator for compressor unite

	Delivered equipment of LPG evaporator	Dipl.-Ing. Scherzer GmbH	Customer
10.5.1	Delivery of LPG evaporator unit*	☐	☐
	Electric heating *	☐	☐
	Steam heating *	☐	☐
10.5.2	Delivery of LPG supply system*	☐	☐
10.5.3	Delivery of fittings and devices*	☐	☐

* tick all that apply

10.6 Delivery of steel structures for LPG rack

	Delivered equipment for steel structures of working platform and LPG shed rack	Dipl.-Ing. Scherzer GmbH	Customer
10.6.1	Prefabrication, delivery and mounting of steel structures for the LPG rack *	☐	☐

* tick all that apply

QUESTIONNAIRE

10.7 Delivery and mounting pipeline system for LPG rack

	Delivery and mounting of LPG pipeline systems	Dipl.-Ing. Scherzer GmbH	Customer
10.7.1	Delivery and mounting of LPG pipeline systems *	☐	☐

* tick all that apply

10.8 To make service for equipment supervision / commissioning, training stuff

	To make service for equipment supervision / commissioning, training stuff	Dipl.-Ing. Scherzer GmbH	Customer
10.8.1	To make service for supervision of delivered equipment	☐	☐
10.8.2	To make commissioning of LPG loading / unloading rack*	☐	☐
10.8.3	To make training stuff to operate of LPG loading / unloading rack*	☐	☐

* tick all that apply

10.9 Basic engineering for delivered equipment of LPG loading / unloading rack

	Basic engineering for delivered equipment as a basic to make detailed engineering	Dipl.-Ing. Scherzer GmbH	Customer
10.9.1	Basic engineering for delivered equipment *	☐	☐

* tick all that apply

QUESTIONNAIRE

10.10 To make the detail designing for electrical and instrumentation part of LPG rack

	To make the detail designing for electrical and instrumentation	Dipl.-Ing. Scherzer GmbH	Customer
10.10.1	To make the detail designing for electrical and instrumentation in the amounts of delivered equipment and in all application programs*	☐	☐

* tick all that apply

10.11 To make LPG rack, as «turn key» project

	To make LPG rack, as «turn key» project	Dipl.-Ing. Scherzer GmbH	Customer
10.11.1	Complete construction of LPG rack with equipment supply, mounting and commissioning *	☐	☐

* tick all that apply

11. Commercial part to prepare the offer

11.1 Delivery terms of equipment

	Delivery terms of equipment and service according to INCOTERMS 2000	
11.1.1	Condition E, delivery from the plant Ex-Work (EXW) *	
11.1.2	Condition F, expenses are carried by Customer (FCA) *	
11.1.3	Condition D, expenses are carried by Supplier (DDU) *	

* tick all that apply

QUESTIONNAIRE

11.2	Terms of proposal validity	Date

11.3	The dead line for submission of technical – commotion proposal	Date

11.4	Remarks to the proposal of LPG loading/unloading rack

The author of questionnaire:

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