

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION A

(To be completed, filled in, signed
and stamped by the principal)

ANNEXURE 'A'

Material CHEMICAL INJECTION PACKAGES
Tender Enquiry No PROC-FA/CB/PROD/PUMP-4835/2020
Due Date
Evaluation Criteria FULL

SCHEDULE OF REQUIREMENT

Sr No	Description	Unit	Quantity	Unit Price (FOB)	Total Price (FOB)	Unit Price C & F BY SEA	Total Price C & F BY SEA	Deviated From Tender Spec. If Any
1	CHEMICAL INJECTION PACKAGE,02 PUMPS SKID MOUNTED,DRIVEN BY SOLAR POWER 12V DC MOTOR,CAP:10-150 LTRS/DAY,DISCHARGE PRESSURE:2500 PSI,TANK SS316L,CAP:1000 LTRS(IN 2 PARTS 500/EACH),TEMP:14-200F,PRESSURE:700-1500PSI,ALONG WITH ALL ACCESSORIES	Number	20					

Note:

- 1. Bid Bond Amount:** USD 6,000/= (United States Dollar Six Thousand Only) or equivalent Pak Rupees
- 2. Evaluation Criteria:** - Full Consignment wise C&F By Sea Karachi
- 3. Delivery Period:** 90-120 days from establishment of LC
- 4. Bidders** are advised to carefully read all the terms and conditions of the Tender Document available on OGDCL website which is an integral part of this Schedule of Requirement

SPECIFICATIONS, TERMS AND CONDITIONS.

1. DESCRIPTION

Solar power driven Skid-Mounted Chemical Injection Packages, with all accessories are required for injection of various chemicals.

2. CHEMICAL INJECTION PUMP'S PARAMETERS

S.#	Description	Requirement
a.	Pumping Capacity of each pump	10-150 Ltrs / day
b.	Suction Pressure	Atmospheric Pressure
c.	Discharge Pressure	Max. 2500 Psig
f.	Storage Tank Capacity	1000 Ltrs (SS316L) (In two Parts each of 500 Ltrs)
j.	Motor	12V DC, 1/8HP, 14 Amp, Explosion Proof or proposed by Vendor
k.	Solar panels rating	90 Watts or proposed by Vendor
l.	Battery Bank	Back up at least for 3-4 days without Sun light
l.	Out Let Connections	1/4" FNPT Suction and Discharge Ports, Connected pump halves - standard, Separated pump halves - optional

3- TECHNICAL REQUIREMENT:

- i. Two Dc Power Motor driven pumps shall be required on each skid as single unit.
- ii. Separate outlet connections for various chemicals at discharge should be provided for pump.
- iii. All internal parts specially wet parts of all pumps shall be sufficiently tough / hard for such pressures and made of corrosion resistant material.
- iv. Each pump unit shall have Kenco gauge to measure per stroke discharge rate.
- v. The instrumentation (pressure gauges, level gauges, level transmitters, level switches) shall be designed, selected and provided in accordance to the international standards as well as piping material (valves, fittings, pipes)
- vi. Pressure control valve shall be provided with Proportional life, spring loaded, Material Stem Housing & spring: stainless steel as per NACE Compliance.
- vii. Ball Valve shall be provided with Full port, bubble tight shut- off body carbon steel Ball & Stem Stainless steel, threaded end connection as per API 6D, NACE compliance.
- viii. Needle Valves shall be supplied with body stem & Packing ring: stainless steel 316 packing PTFE (NACE compliance, with standard round handle and threaded inlet & out let connections.
- ix. Non Return valve shall be installed at all the out let / discharge lines of each pump with the capacity to hold pressure as per pump specification.

M/S

- x. Strainer / filter shall be designed & provided to at all the inlet / suction line between the storage tank & each pump.

3.1.1 CHEMICAL STORAGE TANK

- i. Chemical Injection tank shall be of SS-304/316 with a wall thickness not less than 4 mm and capacity of not less than 1000 Ltrs.
- ii. The tank shall be provided with Glass level gauge, kanko gauges, Vent, Drain etc. on both portions.
- iii. Storage tank shall have two separate parts and also provision for inter-connectable system / parts so as to accommodate two different chemicals to be stored and injected simultaneously in case it is desired.
- iv. Each part shall be of 500 Ltrs hence total capacity of the tank will be 1000 liters.
- v. Provision of connections shall be given from each part of the tank to both the pumps.
- vi. A flash connection with valve not less than 1 ½ "dia shall be given at bottom of each portion of the tank.
- vii. Tank's top should be covered with SS-304/316 with locking provision.
- viii. Welding shall comply with ASME IX.
- ix. Should be mounted on injection package as per international standard either through clamping or through compatible international welding standard keeping the Weight Balance principle during loading & Unloading.

3.1.2 SPARE PARTS.

- a. Bidder shall quote and provide separately two years spare parts for the critical spares along with electrical control panel card of solar for charging and storage for each unit.

3.1.3 TYPICAL PROPERTIES OF CHEMICALS TO BE INJECTED.

Properties	Corrosion Inhibitor	Demulsifier	Scale Inhibitor
Specific Gravity	0.8 – 0.95	0.935-0.950	1.09 – 1.25
Solubility	Oil Soluble	Oil Soluble	Water Soluble
Density	0.89-0.90 @ 20 C		
Boiling Point		300 Deg F	95 – 100 Deg C
Flash Point	40 – 45 C	180 Deg F	95 – 100 Deg C
Viscosity	1-15 cst	<12 cst	1-20 cst

- i. The package shall be designed / manufactures and packaged for installation in a Class 1, Zone II Hazardous area locations.
- ii. Vendor has to provide conceptual drawing with working philosophy of whole unit as well as each major part of chemical injection package on standard drawing format both in soft and hard copy at the time of bid submission, as built drawings along with P & IDs failing which shall leads to disqualification.
- iii. Vendor to provide suitable chemicals tank Filling connections / system to avoid air mixing during chemical's manual tank filling operation.
- iv. line sizes & tubing shall be capable enough to hold pressure of pump without any leakage
- v. The chemical injection pumps /instrument fittings and connections, and other necessary equipment for package shall be from reputable manufacturer having minimum 07 years manufacturing experience of the same. List of spares and special tools kits should be submitted by the vendor with prices. ✓
- vi. Vendor to provide complete details i.e. make, model, ordering code & detailed specifications of Pressure Indicators, needle valve, ball valve, pressure safety valve, in their bids. Failing to comply will lead to rejection of the bid.
- vii. Third party inspection for all units through reputable international 3rd party (such as SGS, Moody, Lloyds, Beaurio Veritas etc.) shall be carried out by OGDCL before shipment of Packages at contractor's site.
- viii. The pump and all other accessories should be clamped properly to a skid or other surface in a number of ways, to counter the dumping effect.
- ix. Skid should be framed in a Carbon steel cage provided with proper lugs for loading / unloading through Crane & fork Lifter and should be designed properly considering the weight balance of skid.
- x. The bid of only original pump chemical injection packager will be accepted who have proven track record of minimum 07 years international experience of manufacturing / fabrication / packaging of chemical injection packages for Oil, Gas and Petro services sector. (Bidder must provide with technical bid, the track record in terms of P.Os for supply of CIPs – otherwise the bid will not be considered further for evaluation).
- xi. Bidder having proven track record of supplying similar type of chemical injection packages to E&P companies. Subletting of the contract shall not be allowed in any way.
- xii. Vendor should manufacture / package all the chemical injection packages as per API codes, other relevant standards and good industry practice applicable in Oil and Gas sector.