



## **Schedule of Requirement**

**Tender Enquiry No. TE/MECH/WT/KPD-0007/TEP/2022**

**“Web Tender for Supply of Complete Bare Shaft Lube Oil Pump for Turbo Expander Installed at LPG Unit of KPD-TAY Plant”**

Sr #	Description	QTY	UOM
1	<p><b>Complete Three Spindle bare shaft pump.</b>  <b>Manufacturer:</b> LEISTRITZ PUMPEN GmbH  <b>Product Type Code:</b> L3MG-032/064- IFOGVO-G  <b>Note:</b></p> <p>A. The supplied pump should be exactly same in all aspects and interchangeable with already installed pump having serial number S/N 002070. (Specification sheet Attached)</p> <p>B. Bare shaft pump means, the pump to be supplied with mechanical seal but without motor.</p> <p>C. This pump shall be installed in place of existing pump, therefore, all dimensions and configuration has to be precisely and accurately same as the above reference model.</p> <p><b>Documentation in English :</b></p> <ol style="list-style-type: none"> <li>1. Certificate of Origin issued by Leistriz Pumpen GmbH</li> <li>2. Dimensional Drawing</li> <li>3. Cross Section Drawing with Parts List</li> <li>4. Installation, Operating and Maintenance Manual</li> </ol>	01	No

- i. The contractor shall be responsible for safe delivery of pump to the KPD-TAY Plant, Tandojam, Hyderabad, Sindh.
- ii. Valid and Verifiable Certificate of origin is to be provided along with the delivery.
- iii. Delivery of pump is to be completed in 26 Weeks from the date of receipt of firm purchase order.
- iv. The master set of tender documents (Local) available on OGDCL website ([www.ogdcl.com](http://www.ogdcl.com)) is the integral part of this tender.

# SPECIFICATION SHEET

**Manufacturer:** Leistrizt Pumpen GmbH

**Product:** Three Spindle Pump

**Product Type Code:** L3MG-032/064-IFOGVO-G

## ***Design and Operating Conditio***

<u>Description</u>	<u>UOM</u>	<u>Rated</u>	<u>Alt 1</u>	<u>Alt 2</u>
Service Fluid		Lube Oil	Lube Oil	Lube Oil
Viscosity	mm <sup>2</sup> /s	32	12.5	32
Temperature	°C	38	57	38
Flow Rate	l/min	81	79	81
Discharge Pressure	barg	37.6	8.6	10.3
Suction Pressure	barg	29	0	0
Differential Pressure	barg	8.6	8.6	10.3
Speed	rpm	2950	2950	2950
NPSH Required	mWC	2.6	2.5	2.6
Power Demand	kW	1.9	1.7	2.2
Efficiency (vol.)	%	93.6	90.8	92.9
Efficiency (mech.)	%	65.6	73.4	67.9
Sound Pressure Level	dB(A)	58	58	59
Pump Installation	Dry Installation			
Applicable Standards & Specifications	Leistrizt Standard Procedures based on DIN/EN-Standards			

## ***Site Data***

Ambient Temperature	0 to 40°C
Elevation	<= 1000 m
Location	Indoor (heated)
Special Note:	Bare shaft pump, interchangeable with previous serial no. 002070 without accessories, without motor.

## ***Design***

Bearing	Four-point bearing (lubricated by pump fluid)
Mounting	flanged (horizontal or vertical set-up)
Heating	without heating
Mounting Flange	Large mounting flange
Inlet -Outlet	Discharge and suction side flanged connections, staggered
Safety Valve	without valve
Shaft Sealing	Mechanical seal

Sense of Rotation	Clockwise -seen on the pump shaft
Flow Direction	Staggered from left to right, seen on the pump shaft
Deaeration Design	without

### **Materials**

Pump Casing	S235JR, DIN Code: 1.0038
Screws	16MnCrS5, DIN Code: 1.7139 or equivalent, nitrided
Cover Driving Side	S355J2G3, DIN Code: 1.0570
Liner	EN-GJL-150C, DIN Code: 5.1102
Gasket	Centellen WS 3822 or equivalent

### **Shaft Sealing**

Seal Face	Carbon
Static Face	Silicon Carbide
Secondary Seals, Spring, Metal Parts	Viton, Stainless Steel, Stainless Steel
Design	Single Acting Unbalanced, Independent of Direction of Rotation without quenching
Manufacturer	John Crane
Type	58B

### **Major Connections**

Discharge Flange	ASME; 1"; 600; RF
Suction Flange	ASME; 1 1/2"; 300 lbs; RF

### **Painting and Preservation**

Painting	Leitritz Standard Painting for Temperatures up to 100°C, total dft 110 µm.
Color Final Layer	RAL 5021

### **Nameplate**

Nameplate	Standard (3 lines large) acc. E1848166
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**Pump Driver :** Not in scope of supply

**Accessories:** No accessories included

**GENERAL TERMS AND CONDITIONS:**

- A. BIDS MUST BE SUBMITTED UNDER SINGLE STAGE TWO ENVELOPES BIDDING SYSTEM i.e. TECHNICAL & FINANCIAL BID SEPARATELY ON DUE DATE.
- B. FINANCIAL BIDS OF ONLY TECHNICALLY RESPONSIVE BIDDERS WILL BE OPENED PUBLICLY.
- C. AFTER TENDER OPENING "TECHNICAL BIDS" WILL BE REVIEWED. THE BIDS WILL BE BROUGHT TECHNICALLY AT PAR BY SEEKING CLARIFICATIONS. THE BIDDERS WILL NOT BE ASKED FOR ANY PRICE CHANGE IN THEIR FINANCIAL BIDS DUE TO CERTAIN CLARIFICATIONS AND SUBSEQUENT CHANGE IN THEIR TECHNICAL PROPOSALS. THE BIDDERS WILL NOT BE ALLOWED TO SUBMIT SUPPLEMENTARY PRICE PROPOSALS IN A SEPARATE SEALED ENVELOPE TO MAKE IT A PART OF THE ALREADY SUBMITTED UNOPENED FINANCIAL BIDS AND TO ADJUST THEIR QUOTED PRICE SUBSEQUENTLY AFFECTED DUE TO CHANGE IN TECHNICAL PROPOSALS.
- D. SEALED FINANCIAL BIDS OF TECHNICALLY NON-RESPONSIVE BIDDERS WILL BE RETURNED UNOPENED.
- E. OGDCL RESERVES THE RIGHT TO REJECT ANY OR ALL THE BIDS WITHOUT ASSIGNING ANY REASON.
- F. PRICES MUST BE QUOTED IN PKR INCLUSIVE OF ALL TAXES AND DUTIES, INDICATING UNIT PRICE AND TOTAL BID PRICES. GST MUST BE QUOTED SEPARATELY ALONG WITH COPY OF GST CERTIFICATE.
- G. QUOTED PRICES SHALL BE VALID FOR 90 DAYS FROM THE OPENING DATE OF THE TECHNICAL BID.
- H. BIDS WILL BE EVALUATED ON FULL PASKAGE BASIS.
- I. BIDDERS TO SUBMIT THEIR COMPANY PROFILES, EXPERIENCE OF SIMILAR SUPPLIES IN PAKISTAN ALONG WITH TECHNICAL BIDS.

**MANDATORY CHECKLIST:**

Please confirm the compliance of the following mandatory information along with the bid(s) failing which bid(s) will not be accepted.

Documents	To be attached with the Technical / Financial Bids	Compliance	
Original Bid Bond	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Copy of NTN Certificate	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Copy of GST Certificate	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Confirmation that the Firm is appearing FBR's Active Taxpayer List	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly Signed and Stamped Annexure-A(Un-priced)	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly filled, signed and stamped Annexure-B	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly filled, signed and stamped Annexure-D	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly signed and stamped Annexure-L on Company's Letter Head	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly signed and stamped Annexure-M on Company's Letter Head	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly signed and stamped Annexure-N on Non-Judicial Stamp paper duly attested by Notary Public	Technical Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly Filled, signed and stamped Annexure-A (Priced)	Financial Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly Filled, signed and stamped Annexure-C	Financial Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Duly Filled, signed and stamped Annexure-E	Financial Bid	Yes <input type="checkbox"/>	No <input type="checkbox"/>