



SCHEDULE OF REQUIREMENT

TENDER ENQUIRY NO. TE/MECH-P&P/WT/KPD-0008/LO/10/2023

“WEB TENDER FOR SUPPLY OF LUBE OIL FOR INSTRUMENT AIR COMPRESSORS AT KPD-TAY PLANT”

SR #	DESCRIPTION	QTY.	UOM	UNIT COST (PKR)	TOTAL COST (PKR)	REMARKS
1	LUBE OIL, SHELL CORENA S4 R46 OR EQUIVALENT	800	LITER			

TERMS AND CONDITIONS (TECHNICAL):-

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFE DELIVERY OF LUBE OIL TO KPD-TAY LPG & GAS PROCESSING PLANT, TANDOJAM, HYDERABAD, SINDH.
- B. LUBE OIL TO BE DELIVERED IN ORIGINAL PACKING & SEAL OF MANUFACTURER. OPEN SEALS / DAMAGED PACKAGING WILL LEAD TO REJECTION OF MATERIAL. REPLACEMENT OF ALL SUCH REJECTED / DAMAGED MATERIAL WOULD BE PROVIDED WITHIN 2 WEEKS TIME FROM DATE OF INSPECTION AT SITE.
- C. REMAINING SHELF LIFE OF THE LUBE OIL MUST BE MORE THAN THREE YEARS.
- D. VALID AND VERIFIABLE MANUFACTURER CERTIFICATE & MSDS TO BE PROVIDED ALONG WITH THE DELIVERY.
- E. IN CASE OF EQUIVALENT LUBE OIL, 100 % REPLACEMENT WITH SAME EFFICIENCY / TECHNICAL SPECIFICATIONS IS REQUIRED AND BIDDER SHALL SUBMIT THE RELEVANT TECHNICAL LITERATURE TO PROVE THE SAME.
- F. IN CASE OF EQUIVALENT LUBE OIL, THE PROPOSED LUBRICANT MUST BE FULLY SYNTHETIC & MUST BE FIT FOR USE IN OIL-FLOODED SCREW TYPE AIR COMPRESSORS OPERATING AT 14 BAR WORKING PRESSURE UPTO 47°C AMBIENT TEMPERATURE AND DISCHARGE AIR TEMPERATURE IN EXCESS OF 100°C.
- G. THE DATASHEET OF SHELL CORENA S4 R46 LUBRICANT IS ATTACHED WITH THIS TENDER FOR REFERENCE. HOWEVER, MINOR DEVIATION IN PHYSICAL/CHEMICAL CHARACTERISTICS SHALL BE ACCEPTABLE WITHOUT ANY COMPROMISE ON THE QUALITY & EFFICIENCY OF THE LUBE OIL. IN ADDITION, THE QUOTED LUBE OIL MUST ALSO MEET OIL REPLACEMENT INTERVAL/EQUIVALENT RUNNING HOURS' OF UPTO 12,000 HOURS.
- H. BIDDERS QUOTING EQUIVALENT LUBE OIL MUST ALSO PROVIDE DETAILED DATASHEET/TECHNICAL SPECIFICATIONS ALONG WITH TECHNICAL BID.
- I. BIDDERS QUOTING EQUIVALENT LUBE OIL MUST PROVIDE A CERTIFICATE FROM AT LEAST THREE COMPANIES FROM PAKISTAN, STATING THAT EQUIVALENT LUBE OIL IS USED IN OIL-FLOODED SCREW TYPE AIR COMPRESSORS BY THEM AND PERFORMANCE OF SAID OIL IS FOUND SATISFACTORY. THE CERTIFICATE SHOULD ALSO MENTION THE SPECIFIC MODEL NUMBER OF THE COMPRESSOR IN USE & LUBE OIL REPLACEMENT INTERVAL / EQUIVALENT RUNNING HOURS. COPIES OF PURCHASE ORDERS (UNPRICED) MUST ALSO BE PROVIDED. THE CERTIFICATE(S)/SALES RECORD IS MANDATORY AND DUE TO NON-SUBMISSION THEREOF, THE BID WILL BE REJECTED.

- J. THE LUBRICANT MUST BE SUPPLIED IN OEM’S ORIGINAL PACKING IN THE FORM OF BARRELS / PAILS IN SIZE RANGE OF 18 LITERS TO MAXIMUM 30 LITERS.
- K. PAYMENT WILL BE MADE AFTER SUCCESSFUL DELIVERY AND INSPECTION OF GOODS AT KPD-TAY LPG & GAS PROCESSING PLANT.
- L. DELIVERY OF GOODS IS TO BE COMPLETED WITHIN 14 WEEKS FROM THE DATE OF RECEIPT OF FIRM PURCHASE ORDER.
- M. THE MASTER SET OF TENDER DOCUMENTS (LOCAL) AVAILABLE ON OGDCL WEBSITE (WWW.OGDCL.COM) IS THE INTEGRAL PART OF THIS TENDER.

GENERAL TERMS AND CONDITIONS:

- A. BIDS MUST BE SUBMITTED UNDER SINGLE STAGE SINGLE ENVELOPE BIDDING SYSTEM i.e. TECHNICAL & FINANCIAL BID ON DUE DATE.
- B. THE BIDS WILL BE BROUGHT TECHNICALLY AT PAR BY SEEKING CLARIFICATIONS. THE BIDDERS WILL NOT BE ASKED FOR ANY PRICE CHANGE IN THEIR BIDS DUE TO CERTAIN CLARIFICATIONS AND SUBSEQUENT CHANGE IN THEIR 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 BIDS AND TO ADJUST THEIR QUOTED PRICE SUBSEQUENTLY AFFECTED DUE TO CHANGE IN PROPOSALS.
- C. OGDCL RESERVES THE RIGHT TO REJECT ANY OR ALL THE BIDS WITHOUT ASSIGNING ANY REASON.
- D. 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.
- E. QUOTED PRICES SHALL BE VALID FOR 90 DAYS FROM THE OPENING DATE OF THE BID.
- F. OGDCL RESERVES THE RIGHT TO EVALUATE THE BID(S) EITHER ITEM-WISE OR FULL PASKAGE BASIS WITHOUT ASSIGNING ANY REASON.
- G. 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 the bid(s) will not be accepted.

Documents	To be attached with the Technical / Financial Bids	Compliance	
		Yes	No
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"/>



Previous Name: Shell Corena AS

Shell Corena S4 R 46

- Extra Long Life
- Improved Efficiency
- Severe Applications

Advanced Synthetic Rotary Air Compressor Oil

Shell Corena S4 R is primarily an advanced synthetic air compressor oil incorporating a unique high performance additive system. It is designed to deliver the highest performance lubrication of rotary sliding vane and screw air compressors. It uses an advanced additive system to provide excellent protection and performance for compressors running at pressures over 25 bar and in excess of 100°C discharge temperatures with oil maintenance intervals of up to 12,000 hours. Shell Corena S4 R is also perfectly suitable to cover applications where a synthetic bearing & circulating oil or R&O oil (ISO VG 32-68) is needed.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Long oil life – Maintenance saving**

Shell Corena S4 R is capable of providing oil maintenance intervals of up to 12,000 hours (where allowed by manufacturers) even when operating at maximum discharge temperatures in excess of 100°C.

The advanced formulation of Shell Corena S4 R helps deliver exceptional oil life through:

- Exceptional resistance to thermal and chemical breakdown.
- Resist formation of deposits on rotating components in screw compressors and in sliding vane slots for continuous efficient operation.
- Exceptionally low levels of deposit formation to help maintain excellent internal surface cleanliness particularly in oil/air separator and coalescer systems.

- **Outstanding wear protection**

Shell Corena S4 R is designed to provide rapid air release without excessive foaming to give trouble-free operation even under cycling conditions helping to ensure reliable start-up and continuous compressed air availability.

Shell Corena S4 R has low volatility and oil carryover to provide reduced oil top-up requirements in combination with increased air quality.

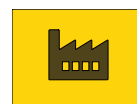
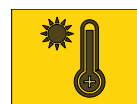
- **Maintaining system efficiency**

Shell Corena S4 R is designed to provide rapid air release without excessive foaming to give trouble-free operation even under cycling conditions helping to ensure reliable start-up and continuous compressed air availability.

Shell Corena S4 R has low volatility and oil carryover to provide reduced oil top-up requirements in combination with increased air quality.

In addition, Shell Corena S4 R has excellent water separation properties to help ensure continuous efficient operation of the compressor even in the presence of water.

Main Applications



- **Rotary sliding vane and screw air compressors**

Shell Corena S4 R is suitable for oil-flooded/oil injected, single or two-stage compressors, operating at pressures of in excess of 25 bar and with air discharge temperatures of over 100°C (including intermittent operation under these conditions).

- **Severe service conditions**

May also be used where exceptionally high ambient temperatures are found, when the oil temperature cannot be reduced to normal levels.

- **ABB Turbochargers**

The product is recommended for use in ABB turbochargers fitted to low and medium speed diesel engines used in marine and power generation applications.

- **Bearing & Circulating oil**

Perfectly suitable to cover applications where a synthetic bearing & circulating oil or R&O oil (ISO VG 32-68) is required and will provide benefits due to increased resistance to deposit formation, improved low temperature fluidity, and lowering equipment operating temperatures.

- When a higher viscosity grade synthetic oil is required we recommend to use Shell Morlina S4 B grades for such applications.

Specifications, Approvals & Recommendations

- ISO 6743-3A-DAJ.

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Compatibility & Miscibility

- **Miscibility**

Shell Corena S4 R oils are fully miscible with mineral oils, although dilution with mineral lubricants will markedly reduce its performance. Care must be taken to avoid mixing Shell Corena S4 R with certain other types of synthetic fluids. Contact your Shell representative for further information.

- **Seal Compatibility**

Shell Corena S4 R oils are compatible with seal materials specified for use with mineral oils.

Typical physical characteristics

Properties			Method	S4 R 46
ISO Viscosity Grade			ISO 3448	46
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	46
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	7.7
Viscosity Index (VI)			DIN ISO 2909	135
Density	@15°C	kg/m ³	ASTM D1298	843
Flash Point (COC)			ASTM D92	230
Pour Point			ASTM D97	-45
Air Release				2
Rust Prevention - Synthetic Sea Water			ASTM D665B	Pass
Water Separability			ASTM D1401	10
Rotating Pressure Vessel Oxidation			ASTM D2272	2200
FZG Load Carrying Test			CEC-L-07-A-95	>12

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

- **Health and Safety**

Shell Corena S4 R Oil is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

- **Protect the Environment**

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

- **Advice**

Advice on applications not covered here may be obtained from your shell representative.

Viscosity - Temperature Diagram for Shell Corena S4 R

