Invitation for Bids

RE-Tender Notice No.:27-1/075-76 (First date of publication:2075/09/26 (2019/01/10)

- 1. **Udayapur Cement Industries Ltd.** re-invites sealed bids from eligible ISO certified bidders for the procurement of Design, Supply, Installation of Kiln Sector Plate (Brick Retainer or Tip Casting), Kiln Burner and Inlet Seal in Full Turnkey Basis at Plant site, Jaljale, Udayapur.
- Eligible bidders may obtain further information and inspect the bidding documents at the head office of Udayapur Cement Industries Ltd., Jaljale Udayapur. Telephone No. 035-411012, Email: procurement@ucil.org.np.
- 3. Bidding documents may be purchased from the above office of Udayapur Cement Industries Ltd. by eligible bidders on the submission of a written application along with the Notarized copy of firm registration, VAT certificate and Tax clearance certificate of F/Y 2073/74from Notary Public office and upon payment of a non-refundable fee of NRs.**5000.00** (Five Thousands) only.Or, the bidder who wishes to bid through electronically or e-bidding shall visit the website http://www.ucil.org.np>eprocurement system and may download bidding document and submit them.
- Three sets of sealed Bid documents (One original + Two copies) as per ITB 22.1 must be submitted to the office of Udayapur Cement Industries Ltd., Jaljale, Udayapur as below: on or before 14:00 PM on 24thJan. 2019 (2075/10/10). Documents received after this deadline shall not be accepted.
- 5. Bids shall be opened in the presence of Bidders' representatives who choose to attend on 15:00 PM on 24thJan. 2019 (2075/10/10) at the office of Udayapur Cement Industries Ltd., Jaljale, Udayapur. Bids must be valid for a period of 90 days counting from the day of bid opening and must be accompanied by bid security, amounting to a *minimum of 2.5% for Nepalese bidders and 5% for foreign bidders, of the quoted Bid amount (exclusive of VAT)* valid up to120 days from the date of bid opening.
- 6. If bidder wishes to submit the Cash Security, the cash shall be deposited in Current Account No. of Sunrise Bank Ltd., Udayapur Branch, Jaljale, Udayapur: 02910096430012 or Global IME Bank Ltd., Udayapur Branch, Gaighat, Udayapur: 2201010000167 or NIC Asia Bank Ltd., Udayapur Branch, Gaighat, Udayapur: 4041230167524001 or RastriyaBanijya Bank Ltd., Gaighat, Udayapur: 209000053601 or Nepal Investment Bank Ltd., Gaighat, Udayapur: 03501040250283 or in any convertible currency in the form of bank draft in favor of UCIL and submit the receipt of the deposited amount of cash along with the tender document.
- 7. If the last dates of purchase, submission and opening fall on UCIL holidays, then the next working day shall be considered as the last day without any change in time and place. In such a case, the bid validity and bid security validity shall be recognized with effect from the original bid submission deadline.
- 8. UCIL may add any additional information as required for providing information to the bidders. But this additional information should not be in contrary to other provisions of the bidding document.
- 9. Udayapur Cement Industries Ltd. reserves the right to accept or reject, wholly or partly any or all the bids without assigning reason, whatsoever.



1. Technical Specifications

The following technical specifications' compliance should be filled by the bidder for T. No.27-1 074-75Design, Supply, Installation of Kiln Sector Plate, Kiln Burner and Inlet Seal in Full Turnkey Basis

Item No.	Description of Manpower	Technical Description, Specifications, and Standards		The Bidder shall state as Fully compliant/Partially compliant/Non-
		Qualifica tion	Requireme nts	compliant
1.	2.	3.	4.	5.
•	Kiln Sector Plate (Brick retainer			
<u>A</u>	<u>or Tip Casting)</u>			
1.	Design		1 Lot	
2.	Kiln Sector Plate (Brick Retainer or		1 Set	
۷.	Tip Casting),			
3.	Installation in full turnkey basis		1 Lot	
<u>B</u>	Kiln Burner			
1.	Design		1 Lot	
2	Kiln Burner		1 Set	
3	Installation in full turnkey basis		1 Lot	
<u>C</u>	Inlet Seal			
1.	Design		1 Lot	
2.	Inlet Seal		1 Set	
3.	Installation in full turnkey basis		1 Lot	

Job No.C

Design Supply & Installation of Inlet Seal:

UCIL KILN INLET SEAL SPECIFICATION:

Type of Kiln Inlet Seal	:	Metallic Seal
Diameter of Kiln Shell	:	3.8m
Radial Movement of Kiln Shell	:	$\pm 50 \text{ mm}$
Axial Movement of Kiln Shell	:	$\pm 200 \text{ mm}$
Kiln Rotation (CW or ACW)	:	CW
Rotation Speed	:	0.6-1.8 rpm



Inlet Seal should have following:

- 1. Designing , manufacturing & supply of kiln inlet Seal consist of
 - Graphite block with two adapter 46 nos.
 - Graphite seal cooling fan incl. coupling , parts & butterfly damper with guard silencer assembly , Motor 1 set.

Condition:

- 1. Manufacturer /Supliers must have experienced in graphite seal manufacturing & installation for the cement plant having production capacity more than 1500 TPD in Nepal.
- 2. After the installation of graphite seal, plant production must increased as well as coal consumption must be reduced.
- 3. Installation & existing position must be same as our plant. Small modification can be done.
- 4. Manufacturer should be an ISO certified company.
- 5. Design , supply, Installation & testing of complete set of graphite seal latest version (FLS or Equivalent).

Job .A

Sector Plate (Brick retainer or Tip Casting) Complete set : 1 set As per below drawing no 20167459 designed by Flsmidth

Job No.B

Design, Supply, Installation & Performance Test of Kiln Burner: UCIL Burner Specification:

CLIENT NAME	: Udayapur Cement Industries Limited
PLANT LOCATION	: Jaljale , Udayapur , Nepal
KILN No	: 1 no
PROCESS	: Dry, OPC, 53 Grade
KILN DIAMETER	: 3.8 m
KILN LENGTH	: 60 m
KILN ROTATION (CW or ACW)	: CW
SPECIFIC HEAT CONSUMPTION	N : 840 kcal/kg of clinker(Designed 950 kcal/kg of clinker)



PRECALCINER TYPE : No KILN CAPACITY : - Nominal : 770 TPD - Maximal : 1000 TPD KILN/PRECALCINER RATIO : No COOLER TYPE (grate, satellite) : Grate EXISTING KILN BURNER CHARACTERISTICS : Nippon Furnace Kogya Kaisha Ltd . Japan Brand name of existing burner Burner output • Firing rate oil : Max. 3700 kg/h Nor. 3000 kg/h Min. 370 Kg/h

 Firing rate Coal : Max . 10000 Kg/h Nor. 5350 Kg/h Min. 1000 Kg/h

Length of refractory lined front part : m

Total weight of existing burner : 2900 kg (W/castable)

EXISTING BURNER TROLLEY

Overhanging or ground : Overhanging

EXISTING PRIMARY AIR FAN (or BLOWER) CHARACTERISTICS

Primary air : $150 \text{ m}^3/\text{min}$ (m=0.14) Coal air : $57.2 \text{ m}^3/\text{min}$) m= 0.05) Press. & Temp at burner inlet Primary air 1300 mmAq 25°C Coal air 500 mmAq 50°C

<u>FUELS</u>: <u>Coal</u> <u>Coal Specification :</u>

- Origin
- Lower Calorific value
- Grain size
- Angle of respose
- Moisture



- : India
- : 5470 Kcal/kg
- : 88mm under 85%
- : 38 degree
- : Max. 1%

•	Volatile Matter	:	31.32%
•	Ash Content	:	23.93%
•	Fixed Carbon	:	44.75%
•	Total sulphur	: SO ₃	: 0.93%
•	Ash Characteristics	: SiO ₂	: 61.30 %
		Al_2O_3	: 21.50 %
		Fe_2O_3	: 8.25%
		CaO	: 4.77%
		MgO	: 0.6%
		L.O.I.	: 0.34%

Handling system (direct, indirect from coal mill) : indirect from coal mill Conveying air

• 0		
•	flow rate : (n)m	1 ³ /h
•	temperature at burner :	°C
•	Pressure at burner : mm	Aq
Coal compos	ition	
	- volatile matter	28-37 % wt
	- ash content	20-23% wt
	- sulphur content	less than 1 % wt
	- Lower heating value	5800 kcal/kg
Pet coke com	position	
	- volatile matter	% wt
	- ash content	% wt
	- sulphur content	% wt
	- Lower heating value	. kcal/kg
Fuel oil for k	iln heat-up	
-	Type (furnace oil; diesel oil)	: Diesel Oil
	- Lower heating value :	kcal/kg
041 6 1		

Other fuel :

ELECTRICITY SUPPLY : For instruments : 24v ,110v ac ,5 v	V, 1ph,	Hz
For motors : 415 v,6.6 kv , 440v dc	V, 3ph,	Hz
PLANT SITE CONDITIONS		

PLANT	SITE	CONDITIONS	

Ambient temperature max./ min	45-50	°C	
Relative humidity max./ min	:	62-95	%
Altitude	:	205 m	m (asl)
Operating Time	:	24 hr/day (33	0 days/year)
Wind Velocity	:	max . 30m/s	



REPLACED NEW BURNER SHOULD BE HAVE FOLLOWING PARAMETER:

- 1. Flexible connetion for coal meal.
- 2. Duct connection for coal.
- 3. Flexible connection for primary air.
- 4. Anchor irons.
- 5. Burner pipe refractory 1 set
- 6. Burner Suspension Burner trolley, hydraulic cylinder, Rails/Support Braket for trolley , hand pump for cylinder ,Accessories for hydraulic equipment & geared motor.
- 7. Oil Burner set
- 8. Valve train with LCP for startup oil burner
- 9. Pump & filtering unit.
- Primary Air Blower Blower assembly complete with base frame, Inlet filter, silencers, V-belt drive with guard, check valve, Relief valve & pressure gauge, pressure transmitter & flow transmitter.
- 11. Pneumatic shut off damper.
- 12. Emergency air fan
- 13. Electric motor.
- 14. Pipes for primary air.

ACTIVITY/ DESCRIPTION FOR DESIGN, SUPPLY AND INSTALLATION:

- 1. Flow sheets , schematics and list.
 - 1.1. Equipment Flow diagram.
 - 1.2. Motor list(listing all motors with type and rating for equipments).
 - 1.3. Compressed air requirement list
 - 1.4. Water requirement list.
 - 1.5. Lubrication requirement list.
 - 1.6. Venting schematic diagram
 - 1.7. Project schedule for drawing submission.
- 2. General Arrangement Drawing
 - 2.1. G.A. drawings with floor plans and load data for civil design.
 - 2.2. G.A. drawings for approval of factory inspectors and pollution control authorities.
 - 2.3. Fabrication drawing for ducts for primary air.
 - 2.4. Fabrication drawings for all interconnecting chutes with matching flanges , flexible connection , with in battery limits.
 - 2.5. Fabrication drawings for stacks
 - 2.6. Development details and cutting plans for bins , hopper , process ducts , chutes & vent ducts.
 - 2.7. Coal piping layout drawing for kiln burner.



- 2.8. Coal piping detailing including supports
- 2.9. Compressed air piping drawing.
- 3. Refractory and insulation engineering drawing
 - 3.1. Refractory recommendation (concepts and specification with typical drawings)
 - 3.2. Refractory engineering -Details with shape , quality , quantity etc.
 - 3.3. Refractory anchors.
 - 3.4. Insulation Engineering.
- 4. Electrical & Instrumentation
 - 4.1. Feeder list
 - 4.2. Single line diagram.
 - 4.3. Substation G.A. drawing.
 - 4.4. Cable engg. cable trays and accessories.
 - 4.5. Earthling & lightning engineering.
 - 4.6. P & I
 - 4.7. Instrument list
 - 4.8. Alarm trip schedule.
 - 4.9. Instrument tap point location.
- 5. General Conditions
 - 5.1. Four copies of basic engineering document for the complete system.
 - 5.2. Four copies each of all drawing.
 - 5.3. Four sets of erection , operation and maintenance manuals.
 - 5.4. Four sets of process control philosophy manuals.
 - 5.5. Basic data for all the equipments to be bought by customer within battery limits as defined in the equipment flow sheet.
 - 5.6. Commissioning spares lists
 - 5.7. Two years operating spares list.

Condition :

- 1. Primary air requirement below 7 %.
- 2. Common multi fuel channel.
- 3. Replaceable heat exposed wear parts.
- 4. Flame can be adjusted according to our requirement.
- 5. Manufacturer /Suppliers must have experienced in burner manufacturing & installation for the cement plant having production capacity more than 1500 TPD in Nepal.
- 6. After the installation of burner, plant specific heat consumption should be lower than 750 kcal/kg of clinker.
- 7. Installation & existing position must be same as our plant . Small modification can be done.



Drawings







LIST OF BANK ACCOUNTS

S. No.	Commercial Bank	Location	Current A/C No.
1.	Sunrise Bank Ltd, Udayapur Branch.	Jaljale, Udayapur	02910096430012
2.	Global IME Bank Ltd., Udayapur Branch.	Gaighat, Udayapur	2201010000167
3.	NIC Asia Bank Ltd., Udayapur Branch.	Gaighat, Udayapur	4041230167524001
4.	RastriyaBanijya Bank Ltd.	Gaighat, Udayapur	20900053601
5.	Laxmi Bank Ltd	Gaighat, Udayapur	06011000406
6.	Nepal Bank Ltd.	Gaighat, Udayapur	17200100953266000001
7.	Nepal Bank Ltd.	Lahan, Siraha.	03600100288113000002
8.	Agricultural Development Bank Ltd.	Gaighat, Udayapur	1104600554630011
9.	Nepal Investment Bank Ltd.	Gaighat, Udayapur.	03501040250283
10.	Sanima Bank Ltd	Gaighat, Udayapur.	053000004301



PROCEDURE FOR E-BID SUBMISSION

- 1. Either Purchase the Bid document directly from UCIL office or may download the bid document from website and deposit the equivalent amount in the account of UCIL as specified in the notice.
- 2. Prepare the following documents in PDF format, scan and upload in the specified website.
 - i. Bid form
 - ii. Price Schedule.
 - iii. Firm registration, VAT/PAN, & Tax Clearance Certificate.
 - iv. Power of attorney.
 - v. Information sheet.
 - vi. Bid Bond Guarantee in Specified format.
 - vii. Cash Receipt or Bank voucher of bid document Purchase.
- 3. Bidder who have submitted their bids electronically should submit original bid documents within 7(Seven) days from the date of bid opening.





उदयपुर सिमेण्ट उद्योग लि.को म्याद थप सम्बन्धि सूचना । प्रकाशित मिति २०७४ /१०/०७ (2019/01/21)

उद्योगको बोलपत्र नं. २७-९/०७४-७६ अन्तर्गत Design, Supply, Installation of Kiln Sector Plate, Kiln Burner and Inlet Seal in full Turnkey Basis कार्यका लागि मिति २०७४/०९/२६ गतेको गोरखापत्र दैनिकमा सूचना प्रकाशन गरिएकोमा उक्त बोलपत्र खुल्ने म्याद १४(पन्ध) दिन थप गरिएको छ । सोको विस्तृत विवरण उद्योगको Website: ucil.org.np मा हेर्नु हुन समेत सम्बन्धित सबैको जानकारीको लागि यो सूचना प्रकाशन गरिएको छ ।





उदयपुर सिमेण्ट उद्योग लि.को <u>म्याद थप सम्बन्धि सूचना ।</u> प्रकाशित मिति २०७४/१०/२२ (2019/02/05)

उद्योगले विभिन्न सामान खरिदको लागि तपशिलमा उल्लेखित बोलपत्र/शिल्ड कोटेसनमा उल्लेखित सामान खरिदको लागि विभिन्न मितिमा गोरखापत्र दैनिकमा सूचना प्रकाशित गरिएकोमा तपशिल अनुसार म्याद थप गरिएको छ । सोको विस्तृत विवरण उद्यागको Website: ucil.org.np मा हेर्नु हुन समेत सम्बन्धित सबैको जानकारीको लागि यो सूचना प्रकाशन गरिएको छ ।

तपशिल

बोलपत्र⁄ शिल्ड कोटेसन नं.	समानको नाम	सूचना प्रकाशित मिति	म्याद थप गरिएको दिन
पूनःबोलपत्र नं. २७-१ ⁄ ०७४ - ७६	Design, Supply, Installation of Kiln Sector Plate, Kiln Burner and Inlet Seal in full Turnkey Basis	मिति २०७५ / ०९ / २६	१५(पन्ध)
बोलपत्र नं. २९-१ ⁄ ०७४ -७६	Main Drive Gear (Hansen drive) and Pinion Shaft for Metalic Conveyor	मिति २०७४/१०/०६	१५(पन्ध)
बोलपत्र नं. ३१-१ ∕ ०७५ -७६	Different Types of Bearings	मिति २०७५/०९/२४	३०(तीस)
न. २१-17 ७७२-७२ शिल्ड कोटेसन नं. ४२-१∕०७५-७६	Consultancy for the kiln shell Inspection, Finalization of damage shell length and recommendation for	मिति २०७१ / ०९ / २१	१ ४(पन्ध)
	the replacement works		

