**NATIONAL REFINERY LIMITED**



**SPENT CATALYST**

REQUEST FOR QUOTE

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## INTRODUCTION

National Refinery Limited (NRL) is one of the leading Petroleum Refinery in Pakistan. The refinery was established in 1963 as a public limited company. Company has ISO, EMS and OHSAS certifications.

The refinery complex of the Company comprises of three refineries, consisting of two lube refineries and one fuel refinery. First Lube Refinery was commissioned in 1966 with design capacity of 539,700 tons per annum of Crude Processing and 76,200 tons per annum of Lube Base Oils. Second Lube Refinery was commissioned in 1985 with design capacity of 100,000 tons per annum of Lube Base Oils.

The Fuel Refinery was commissioned in 1977 with design capacity of 1,500,800 tons per annum (34,500 BPD) of crude processing and after revamp the design capacity comes to 2,170,800 tons per annum (50,000 BPD) of crude processing. The Company is the only refinery producing Lube Base Oils in Pakistan.

In 2017 new blocks was commissioned under ISBL project including Naphtha Block, DHDS, HPU and Sulfur Block

NRL has performed annual turnaround of refinery in Decemer 2021 and catalyst of fuel refinery, DHT and Sulfur Block have been replaced.

## SPENT CATALYST DETAILS

Following is the detail of catalyst unloaded from different unit. The table is divided into two categories, precious metals and common metals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COMMON METALS** | | | | |
|
| **102/103-Fuel Refinery** | | | | |
| CATALYST NAME | COMPOSITION | TAG | CATALYST UNLOADED (Estimated Kg) | CATALYST UNLOADED (Dm) |
| S-120 | COMO | 102-R1 | 1942 | 29 |
| S-7 | COMO | 102-R1 | 1900 | 29 |
| **Ceramic Ball** | Al2O3 | 102-R1 | - | 2 |
| 3/4", 1/4", 1/8 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **312-SULFUR BLOCK** | | | | |
| CATALYST NAME | COMPOSITION | TAG | CATALYST UNLOADED (Estimated Kg) | CATALYST UNLOADED (Dm) |
| A918 | Al2O3 | 312-R02 | 4400 | 33 |
| A999 | Cobolt-Moly | 312-R03 | 2300 | 26 |
| A958G | Al2O3 | 312-C03 | 600 | 5 |
| Mix Catalyst Drum |  | 312-R1/R2/R3 | 400 | 3 |
| **Ceramic Balls** |  |  |  |  |
| 16 mm | Al2O3.SIO2 | 312-R1/R2/R3 | 1100 | Mix with above drums |
| 10 mm | Al2O3.SIO2 | 312-R1/R2/R3 | 1100 | Mix with above drums |
| 5-6 mm | Al2O3.SIO2 | 312-C3 | 200 | Mix with above drums |
| 10-12 mm | Al2O3.SIO2 | 312-C3 | 100 | Mix with above drums |
| **305-HPU** | | | |  |
| CATALYST NAME | COMPOSITION | TAG | CATALYST UNLOADED (Estimated Kg) | CATALYST UNLOADED (Dm) |
| KATALCO 61-1T | CoMox | 305 R-1 | 1401.361 | 16 |
| KATALCO 59-4 | Chloride Guard Bed | 305 R-2A | 595.6608 | 51 |
| KATALCO 32-5 | Desulphurizer | 11282.76 |
| KATALCO 71-5 | Fe-CrO | 305-R-4 | 5994.576 | 32 |
| KATALCO 25-4Q (30%) | NiO2 | 305-F01 | 1180 | 20 |
| KATALCO 57-6GQ (70%) | 2192 |
| KATALCO 25-4Q (30%) | NiO2 | 305-F01 | 1150 | 20 |
| KATALCO 57-6GQ (70%) | 2140 |
| KATALCO 25-4Q (30%) | NiO2 | 305-F01 | 1150 | 26 (mostly half filled) |
| KATALCO 57-6GQ (70%) | 2140 |
| Reformax 210 | NiO2 | 305-F02 | 1000 | Total 25 |
| Reformax 330 | 2000 |
| **Ceramic Balls** |  |  |  |  |
| KATALCO 92-2G | Alumina Silicate | 305-R01/R02A | 1045.675 | Mix with above drums |
| KATALCO 92-2B | Alumina Silicate | 305-R01/R02A | 1040.39 | Mix with above drums |
| KATALCO 92-2F | Alumina Silicate | 305-R01/R02A | 2177.22 | Mix with above drums |
| KATALCO 92-1G | Alumina | 305-R04 | 778 | Mix with above drums |
| KATALCO 92-1B | Alumina | 305-R04 | 778 | Mix with above drums |
| KATALCO 92-1F | Alumina | 305-R04 | 1520 | Mix with above drums |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PRECIUOS METALS** | | | | |
|
| **102/103-Fuel Refinery** | | | | |
| CATALYST NAME | COMPOSITION | TAG | CATALYST UNLOADED (Estimated Kg) | CATALYST UNLOADED (Dm) |
| R-56 | Platinum-Rhenium | 103-R6/R7/R8 | 4620 | 33 |
| **312-SULFUR BLOCK** | | | | |
| CATALYST NAME | COMPOSITION | TAG | CATALYST UNLOADED (Estimated Kg) | CATALYST UNLOADED (Dm) |
| A988 | TiO2 | 312-R01 | 6600 | 38 |

## TERM & CONDITIONS

1. The spent catalyst to be sale out on weight basis,the estimated quantity is defined above, while invoice will be prepared on actual weight witness by both parties.
2. Vendor will use the catalyst and the catalyst information only for the evaluation and the metal(s) recovery.
3. It is the responsibility of vendor to lift all drums from NRL site.
4. Catalyst sample will be provided on demand for testing purpose only, and sampling results must be share with NRL.
5. It is the responsibility of vendor to arrange manpower and equipment to perform all lifting activity.
6. The final packing, tagging and transportation of spent catalyst in scope of bidder and must be as per standard procedure and prior all details will be shared with NRL.
7. Payment term and conditions.
8. The contractor must strictly follow/ comply with all NRL safety & security rules & regulations & shall ensure all necessary measures for safety & speedy execution of job.
9. Job working hours is 0830-1630 hours (from Monday to Friday) except holidays.
10. Job to be started / executed after issuance of work permits by concerned departments.
11. All safety gadgets / PPE’s to be arranged / provided by contractor to their staff / labors.
12. Meal / water arrangement to be done by contractor for their staff / labors.
13. Vehicles / Trucks / Lifters (if needed) must have valid original fitness certificates and driver must have valid driving license / CNIC.
14. Vehicle must be equipped with fire extinguisher / spare wheel.

Earnest Money:

The bidders shall furnish, as part of its bid, a pay order amounting to Rs. 300,000 of bid value in favor of National Refinery Limited. The earnest money shall be returned to the unsuccessful bidders after award of job to successful bidder whereas the earnest money of successful bidder will be treated as SECURITY DEPOSIT & shall be released after completion of job.

Mode of Payment:

After award of job, successful bidder shall make full advance payment through pay order in favor of National Refinery Limited. The quantities mentioned in the BOQ may vary but adjusted as follow;

1. If the actual weight of spent catalyst increases, additional advance payment will be made by the contractor prior to lifting of metallic material.
2. If the actual weight of spent catalyst decreases, excess payment will be refund after completion of job.
3. Weight of the spent catalyst will be carried out at NRL weigh bridge duly provide a weight slip and payment will be made/ adjusted accordingly.

## CATALYST MSDS

Complete MSDS is available and will be share after vendor finalization.

## ELIGIBLECONTRACTOR

Following is minimum requirement for Contractor;

1. The provider shall be a public institution or company operating in this field, with proven expertise in catalyst handling& recycling.
2. Legally established company or organization in their country of origin for at least 10 years before the launch date of this RFQ.
3. NRL is ISO certified company, so it is mandatory for vendor to be certified with ISO / SEPA or equivalent institute.
4. NRL have right to cancelled contract in any stage if any information shared by Contractor is fake or not satisfied.

## FOREIGN NATIONALS

This bid is open to all national and international contractor/vendor, who is legally constituted, can provide the requested quote.

The contractor shall verify that all contractor personnelare legally entitled to work in Pakistan. NRL reserves the right to request the contractor to provide with adequate documentary evidence attesting this for each contractor personnel. Each party hereby represents that it does not discriminate against individuals on the basis of race, gender, creed, national origin, citizenship.

## INVITATION

1. Through this request for Quote (“RFQ”), NRL is seeking to contract a qualified, reputable and experienced contractor to provide best quote.
2. Proposal must be contain all lifting procedure with manpower and equipment details.
3. Proposal must be submitted to the NRL within month of issuance of this RFQ.
4. Any query or clarifications need to be clarify with in proposed above period.
5. NRL will welcome, if pre-bid meeting or telephonic meeting need to be required by contractor / vendor.

The bidder with highest quote will be finalized as successful bidder.