

INDIAN MEDICINES PHARMACEUTICAL CORPORATION LIMITED

(A Government of India Enterprise)

MOHAN (VIA-RAMNAGAR 244715) UTTRAKHAND

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EOI Ref. No:IMPCL/PROJ/EOI/MACHINERY/01/2011-2012, DT. 02-01-2012

Last date and time for Submission of EOI:

23-01-2012 up to 15.00 Hrs

www.impclmohan.nic.in

EXPRESSION OF INTEREST (EOI)

From reputed manufacturers of Pharma Machinery for Design, fabrication, manufacture, assembly, testing including third party if required, inspection and supply including packing / forwarding, transportation and unloading at site, erection/ commissioning , all documentation & testing for cGMP compliance and providing performance guarantee for 1 Year, **on Lump Sum Turn-key (LSTK) BASIS for following Pharma Process Machinery (as per Annexure)** at Indian Medicines Pharmaceutical Co. Limited (IMPCL) plants at Mohan. All the machinery must be in compliance to Schedule-T and WHO-GMP standards.

SCOPE OF SUPPLY & WORK

The scope of supply / work under this tender covers design, fabrication, manufacture, assembly, testing including third party inspection and supply including packing / forwarding, transportation and unloading at site, erection/ commissioning , all documentation & testing for cGMP compliance and providing performance guarantee for 1 year as stipulated in General conditions of Tender, Special Terms & Conditions. The responsibility of vendor/manufacturer will also include providing training to IMPCL personnel at site for operation, maintenance, handling of deviation & safety features.

ELIGIBILITY CRITERIA FOR THE BIDDER :

The parties who will qualify for participating in the tenders must fulfil followings:

- (1) the party should have supplied & commissioned at least **8** Complete Pharmaceutical Machinery in compliance to WHO-GMP within last 1(One) years. .Documentary evidence (duly signed & stamped) must be enclosed. And at least 2-3 to TGA,MHRA or USFDA certified companies
- (2) Tenderer must have executed under their Company/ firm's name & style at least **8(Eight)** similar type of order for Supply, Erection & Commissioning of similar type of Pharma Machinery during last 1 calendar year. Documentary evidence (duly signed & stamped) must be enclosed..
- (3) Financial credential to support execution of single order value of minimum **Rs 20.00 lacs (Rupees Twenty Lakhs)** only in last 2 years (in same name and style of the firm) to be submitted. Documentary evidence (duly signed & stamped) must be enclosed..
- (4) Annual Turnover of the Firm/ company must be at least **Rs 500 Lakh** in each of last Two years. Or 1500 Lakh in Last three years. Documentary evidence (duly signed & stamped) must be enclosed.
- (5) Tenderers must have service station either in Delhi or Utrkhand
- (6) Bidders are to submit copy of valid current Income Tax Return submitted , Sales Tax Registration failing which their offer may be liable to be rejected.
- (7) Client List- same equipments supplied within last 2 years. At least 5 performance related letters
- (8) **Only Machinery Manufacturers** can participate in this Tender.

Eligible Parties who fulfil above qualify criteria shall submit following:

- (i) all the documentary proof in support of their claim for above qualifications,
- (ii) Detail technical specification of the equipment(s) meeting GMP requirements of WHO and general requirements written in the Annexure herewith. Specification should describe its each major component.
- (iii) Parties to submit the *appropriate cost* of tender-fees @ **Rs 500/- per tender-package**, by way of Demand Draft (payable to 'Indian Medicines Pharmaceutical Co. Ltd.' at Mohan).

The last date of submission of EOI is -23rd Jan 2012----- up to 15.00 Hrs.

The EOI must be sent in closed envelop superscribing the subject of EOI at the top of envelop

GENERAL CONDITIONS OF CONTRACT

1.0 This is only a Price Enquiry and not an order.

2.0 Two Bid System

Bidders are required to submit offer in two parts namely "Unpriced" & "Priced". Each part shall be submitted in separate envelope marked "Unpriced"/"Priced" as applicable. Both of above envelopes (after duly sealed) are to be kept in a large common envelope and the same is to be submitted to us by the due date.

Tender documents to be returned/forwarded (duly signed by bidder) along with the tender will be as follows:

Sr. No	Document	No of copies to be submitted with:	
		<u>Unpriced Bid</u>	<u>Priced Bid</u>
2.1	Technical Specifications with Literature & Pamphlets etc.	1	1
2.2	Agreed terms & conditions (duly filled and signed/stamped)	1	Nil
2.3	Price details	Nil	1

3.0 Validity

3.1 Quoted prices shall be valid for a period of 120 days from the due date/extended Due date (if any) of the tender.

3.2 If the Bidder is unable to meet the technical specifications as solicited, they **must not quote for any substitute.**

3.3 Detailed literature along with pamphlets and performance certificates as applicable shall be attached to the offer.

4.0 Testing/Inspection:

Equipment will be subject to inspection by Indian Medicines Pharmaceuticals Co.Ltd (IMPCL) . /3rd party / Consultant as per the scope of inspection attached. Such charges are to be borne by the bidder. *Quoted prices shall include Bidder's charges payable to 3rd party Inspection.*

5.0 Supply items

5.1 IMPCL reserves the right to reject offers not meeting its Technical requirements and commercial conditions.

5.2 IMPCL reserves the right to accept any tender in whole or in part or reject any of the tenders without assigning any reason.

5.3 IMPCL shall not be bound to accept the issued tender and reserves right to reject any tender in part or in full. Decision of IMPCL in this connection shall be final.

6.0 Prices (supply items) are to be arrived at considering following price elements :

- 6.1 Basic Price
- 6.2 Packing & Forwarding
- 6.3 Excise Duty
- 6.4 Sales Tax / VAT
- 6.5 Octroi or other charges
- 6.6 Freight charges on door delivery basis
- 6.7 Loading & Unloading charges at site
- 6.8 Transit Insurance
- 6.9 Installation & Commissioning

7.0 Terms & Conditions

7.1 Firm Prices

On placement of order, prices will remain firm till complete execution.

7.2 Delayed Delivery

Delivery is the essence of purchase order. In case of delay in execution of the order beyond contractual delivery date as stipulated in the order by IMPCL at its opinion can

Either

- i) accept the delayed delivery on price reduced by sum equivalent to one half of percent (1/2%) of the value of goods not delivered per week of delay or part thereof subject to a maximum of 5% of basic value of undelivered goods.

Or

- ii) Cancel the order in part or in full and purchase such cancelled quantities from elsewhere on account at the risk of the seller without prejudice to its right under (i) above in respect of goods delivered. All costs and expenses incurred by IMPCL, if any, resulting from cancellation of order shall be recovered from the seller.

7.3 Terms of payment

a) **25%** of Contract Value will be paid as mobilization advance against submission of Bank Guarantee (BG) of any Nationalised Bank of India for equal amount which shall remain valid for a period of 6(six) months with claim period of 3 months.

b) **45%** of Contract Value will be paid on receipt of equipment/material at site in *good condition* against submission of following documents along with Bill/Invoice:

- i) Delivery Challan/Lorry Receipt duly acknowledged by the Site-in-charge.
- ii) Manufacturer Test Certificate
- iii) Third Party Inspection/Clearance Report.
- iv) Manufacturer's Guarantee, which will be valid for the entire guarantee period.
- v) Necessary Civil Drawings for installation of the equipment.

c) **20%** of Contract value shall be paid after completion of commissioning.

d) **Retention money:** Balance **10%** (Ten percent) of the contract value shall be considered for release after completion of Defect Liability Period / Guarantee Period, which shall be 12months from the date of commissioning or 12 months from the date of delivery, whichever is later. The retention money shall be released against submission of Bank Guarantee of equal amount, from any Nationalised Bank of India.

Payment will be released at all stages within 30 days from the date receipt of material at site in good condition /necessary documents and submission of bill to IMPCL. For delayed suppliers, bills will be reduced by the amount as per clause no 7.2 (delayed delivery). IMPCL cannot make any advance with order or against dispatch document through Bank.

7.4 Guarantee/ Defect Liability Period

Supplier shall provide full guarantee against any manufacturing defects/poor workmanship/inferior design or quality etc. for a period of 12months from the date of commissioning or 18 months from the date of delivery, whichever is later. During this period supplier will arrange to repair/replace any defective part free of cost or replace item if required. Supplier shall guarantee that all the materials shall be supplied in grand new condition.

SPECIAL TERMS AND CONDITIONS

The special terms & conditions as stated hereunder shall be read in conjunction with General Conditions of Tender.

1.0 Definitions

In this contract unless otherwise specifically provided or defined and unless a contrary intention appears from the contract the following words and expressions are used in the following meanings:

- 1.1 The terms "Agreement" wherever appearing in this document shall be read as "Contract".
- 1.2 The "Authority" for the purposed of this contract shall be the Managing Director or any other person so appointed or authorized.
- 1.3 The "Project" shall mean proposed IMPCL Plant at Mohan, the owner of project.
- 1.4 The "Managing Director" shall mean the Managing Director of IMPCL or any person so appointed nominated by him or designated and holding the office of Managing Director.
- 1.5 The "Change Order" means an order given in writing by the Engineer/Representative of the Owner (IMPCL) to effect additions to or deletion from or alterations into the Scope of Work/Supply of items.
- 1.6 The "Contract" between the Owner and the Vendor shall mean and include all documents like enquiry, tender submitted by the Vendor and the Purchase Order issued by the owner and other documents connected with the issue of the Purchase Order and orders, instruction, drawings, change orders and the period of contract mentioned in the Contract including such periods of time extensions as may from time to time be furnished or approved in writing by the owner/authorized representative of Owner/Project.
- 1.7 "The Vendor" means the person or the persons, firm or Company whose tender has been accepted by the owner and includes the vendors legal heirs, representative, successor(s) and permitted assignees.
- 1.8 The "Drawings" shall include maps, plans and tracings or prints thereof with any modifications approved in writing by the Owner/authorized representative of Owner/Engineer-in-charge and such other drawings as may from time to time furnished or approved in writing by the Owner/authorized representative of Owner/Engineer-in-charge.
- 1.9 The "Site" means the land/location where the items/material shall be supplied.
- 1.10 The "Specifications" shall mean the various technical and the other specifications attached and referred to in tender documents it shall also

include the latest editions, including all addenda/corrigenda or relevant Indian Standard Specifications and Bureau of Indian Standards.

- 1.11 The "Sub-Vendor" means any persons or firm or Company (other than the Vendor) to whom any part of the supply items has been entrusted by the Vendor with the prior written consent of the Owner/authorized representatives, successors and permitted assignees of such person, firm or Company.
- 1.12 The "Tender" means the document submitted by a person or authority for carrying out the entire work for supply and supervision of erection and commissioning and the Tenderer means a person or authority who submits the tender offering to carry out the same as per the terms and conditions.
- 1.13 The "Work" shall mean the entire scope of work/supply as specified in the tender in accordance with the Contract or part thereof as the case may be and shall include extra, additional, altered or substituted works as may be required for the purpose of completion of the work contemplated under the contract.

2.0 Submission of Tender

- 2.1 Before submitting the Tender, the Tenderer shall at their own cost and expenses visit the site, examine and satisfy as to the nature of the existing roads, means of communications, the character of the soil, state of land, the correct dimensions of the work facilities for supply of the items delivered at site.
- 2.2 The Tenderer shall be deemed to have satisfied fully before tendering as to the correctness and sufficiency of his tender for the supply and of the rates and prices quoted in the Schedule of Quantities which rates and prices shall except as otherwise provided cover all his obligations under the contract.
- 2.3 It must be clearly understood that the whole of the conditions and specifications are intended to be strictly enforced and that no work will be considered as extra work and allowed and paid for unless they are clearly outside the scope, spirit, meaning of the contract and intent of the owner and have been so ordered in writing by Owner and/or Engineer-in-Charge/Site-in-Charge, whose decision shall be final and binding.
- 2.4 Before filling the Tender, the Tenderer will check and satisfy all drawings and materials to be procured and the schedule of quantities by obtaining clarification from the owner on all the items as may be desired by the Tenderer. No claim for any alleged loss or compensation will be entertained on this account, after submission of tender by the Tenderer/Vendor and such a claim shall not be arbitrable.
- 2.5 *No escalation in the Tender rates will be permitted* throughout the period of contract or the period of completion of the job whichever is later on account of any variation in prices of materials or cost of supervision or due to any other reasons. Claims on account of escalation shall not be liable for arbitration.
- 2.6 Owner reserve their right to award the contract to any Tenderer and their decision in his regard shall be final. They also reserve their right to reject any

or all tenders received. No disputes could be raised by any Tenderer(s) whose tender has been rejected.

- 2.7 Employees of the State and Central Govt. and employees of the Public Sector Undertakings, including retired employees are covered under their respective service conditions/rules in regard to their submitting the tender. All such persons should ensure compliance to the respective/applicable conditions, rules etc. Any person not complying with those rules etc. but submitting the tender in violation of such rules after being noticed shall be liable for the forfeiture of the Earnest Money Deposit made with the tender, termination of contract and sufferance on damages arising as a result of termination of contract.
- 2.8 At any time after acceptance of tender, the Owner reserves the right to add, amend or delete any item, the bill of quantities at a later date or reduce the scope of work/supply in the overall interest of the work by prior discussion and intimation to the vendor. The decision of the owner with reasons recorded therefore shall be final binding on both the Owner and the Vendor. The Vendor shall have not the right to claim compensation or damage etc. in that regard. The Owner reserves the right to split the supply items under this contract between two or more Vendors without assigning any reasons.
- 2.9 Vendor shall not be entitled to sublet, sub-vendor or assign, the supply under this contract without the prior consent of the Owner obtained in writing.
- 2.10 All signatures in tender document shall be dated as well as all the pages of all sections of the tender documents shall be initialled at the lower position and signed, wherever required in the tender papers by the Tenderer or by a person holding Power of Attorney authorizing him to sign on behalf of the Tenderers before submission of tender.
- 2.11 The tender should be quoted in English, both in figures as well as in words. The rates and amounts tendered by the Tenderer in the schedule of rates for each item and in such a way that insertion is not possible. The total tendered amount should also be indicated both in figures and words with the signature of Tenderer.
- 2.12 All corrections and alterations in the entries of tender paper will be signed in full by the Tenderer with date. No erasers or over writings are permissible.
- 2.13 Transfer of tender document by one intending Tenderer to another one is not permissible. The Tenderer on whose name the tender has been sent only can quote.
- 2.14 Bidders are required to submit offer in two parts namely "Technical " & "Financial". Each part shall be submitted in separate envelopes marked "Technical"/" Financial" as applicable. Both above envelopes (after duly sealed) are to be kept in a large common envelope and the same is to be submitted by the due date.
- 2.15 If the Bidder is unable to meet the technical specification, they may quote for the closest available substitute giving details of same for Owner's consideration.

3.0 Deposits

3.1 Earnest Money Deposit (EMD)

The Tenderer will be required to pay 2% of the Bid-value, as earnest money deposit along with the tender by a crossed Demand Draft of any Nationalised Bank in favour of 'Indian Medicines Pharmaceuticals Co. Ltd.Mohan'.The earnest money deposit will be refunded to non-successful bidders after finalization of the contract.

Note: Public Sector Enterprises and Small Scale Units registered with National Small Scale Industries are exempted from payment of Earnest Money Deposit. Small Scale Units registered with National Small Scale Industries should enclose a photocopy of their registration certificate with quotation to make their quotation eligible for consideration. The registration certificate should remain valid during the period of the contract that may be entered into such successful bidder. Such Tenderer should ensure validity of the Registration Certificate for the purpose.

3.2 Security Deposit

The Tenderer, with whom the contract is decided to be entered into and intimation is so given will have to make a security deposit @1% of the total contract value in the form of Account Payee crossed Demand Draft of any Nationalised Scheduled Bank drawn in favour of Indian Medicines *Pharmaceuticals Co.Ltd.Mohan* or *Bank Guarantee of any Nationalised Scheduled Bank in the Performa prescribed* within 15days from the date of intimation of acceptance of their tender, failing which the owner reserves the right to cancel the Contract and forfeit the EMD. Security Deposit shall be released after completion of commissioning subject to certification from respective Site In charge /Engg. Dept.

4.0 Inspection

4.1.0 The material will be subject to inspection by Owner/3rd Party as per the relevant codes standards and specification.

4.2.0 Before commencement of dispatch, the goods shall be stamped clear for transportation to project site by the inspector and a note of acceptance will be released by the inspector to the Vendor indicating acceptance of the goods offered by the Vendor for inspection. Only after the release of such note it will be deemed that the goods (or concerned part thereof) are acceptable to Owner/authorized representative of Owner/Engineer-in-Charge.

4.3.0 It shall be the option of owner/authorized representative of Owner/Engineer-in-charge to allow the Vendor to replace the rejected goods or to cancel the order for the goods rejected.

5.0 Warranties & Guarantees

- 5.1 Vendor shall warrant to owner that the goods supplied shall give the required operational performance shall be suitable for the service intended and be of the quality specified or of the best grade of their respective varieties if no quality specified and shall conform to the specifications, drawings, samples and other descriptions contained in the Purchase Order.
- 5.2 Vendor shall guarantee the Owner and their authorized representatives against any and all defects in design, workmanship. Materials and performance for a period of eighteen (18) months from the date of supply or twelve (12) months from the date of operation whichever is later. Should any defect develop during the guarantee period, it shall be remedied *promptly* free of charge by the Vendor and all expenses for transportation of goods necessitated for such repairs or replacement shall be borne by the vendor. The goods, unless otherwise expressly stated herein are ordered by Owner in reliance on each and all of the warranties and guarantee specified herein and implied by law or usage of trade.
- 5.3 The above warranties and guarantees shall control even if Vendor's quotation to Owner or acknowledgement or acceptance of this Purchase Order attempts to disclaim the said warranties or guarantees or limits the Owner's remedies fro breach. Acceptance of goods by Owner or their authorized representatives shall not release Vendor from responsibilities arising out of the above mentioned guarantees and warranties.

6.0 Performance Guarantee

The Vendor shall undertake to be responsible for defective goods supplied by him including shortcomings in the guaranteed qualities and performance

7.0 Insurance

7.1 Transit Insurance

Vendor shall indicate in his offer the transit insurance up to the project site. However, if the same being arranged by owner and the supplier shall intimate to Owner/Insurance Company timely regarding the dispatch details of goods/material. However after the packing crates/boxes are opened at site, should there be any shortage of any quantity of goods due to damage/pilferage in transit the vendor shall immediately replace the lost/damaged goods failing which no payment will be released for the concerned consignment till the replenishment is made to the Owner's full satisfaction.

8.0 Discrepancy in Tender Document

Should there be any discrepancy, inconsistency, error or omission in the Tender Documents, the Tenderer shall bring it to the notice of the Owner/Engineer-in-Charge for necessary clarification/action. In the event of such matters those are referred to later for the decision of the Owner/Engineer-in-charge directing the manner in which the work is to be

carried out shall be final and conclusive and the Vendor shall carry out work in accordance with this decision.

9.0 Heading/Titles

All heading & titles/Notices to the clauses, specifications/drawings are solely for the purpose of indicative reference and not as summary of the contents and thus shall not be deemed to be part of the clauses of the contract.

10.0 Singular and Plural

Unless otherwise stated or repugnant to the context the singular shall include plural and vice-versa.

11.0 Revision/Changes/Quantity Variation

11.1 Owner may make in writing any revisions or changes in the particular order, subject to mutual acceptance by both parties including additions to or deletions from the quantities ordered in the specification or drawings.

The vendor shall carry out such revision/changes and be bound by the same terms and conditions to the extent applicable, though the said revisions/changes were not incorporated in the initial order.

11.2 Owner reserves the right to increase or decrease the tendered quantity to any extent or replace specification, drawings, and design of any or every item delete them out at any stage of the work. The Vendor's claim for compensation or damages on account of this shall not be entertained. Such deviation shall be adjusted at the rates contained in the Contract or by issuing variation order(s) at the prevailing market rates, if the rates are not available in the contract.

12.0 Vendor's Liability

12.1 The Vendor's workmen or employees shall under no circumstances be deemed to be the Owner's employees and the Vendor shall hold himself responsible for any claim or claims which they or their heirs dependents or representatives may have to make for damages on compensation for anything done or committed to be done in the course of carrying out the compensation fro anything done in the course of carrying out the work covered by this purchase order whether arising on work site or elsewhere and agrees to indemnify Owner against all any such claims or claims made against Owner and all cost as between attorney and owner or proceedings, suit or action which owner may incur or sustain in respect of the same. The Vendor shall also be responsible fro compliance of existing laws in respect of his workmen and employees.

12.2 Vendor shall protect, indemnify and keep the owner or their authorized representatives absorbed at all times from and against any and all liability from payment of the amount or any otherwise discharge such lien or claim thereof Owner shall have the right to deduct or retain sum necessary to

discharge such lien or claim out of any payment due or to become due from Owner to the Vendor.

12.3 The period of liability of vendor for the supplies includes the performance guarantee period.

13.0 **Force Majeure**

13.1 Any delay in or failure of the performance of either part hereto shall not constitute default hereunder or give rise to any claims for damage, if any to the extent such delays failure of performance is caused by occurrences such as acts of God or an enemy, expropriation or confiscation of facilities by Government authorities, acts of war, rebellion, sabotage or fires, floods, explosions, riots or strikes. The Vendor shall keep records of the circumstances referred to above and bring these to the notice of the Engineer-in-Charge/Site-in-Charge in writing immediately on such occurrences. The amount of time if any, lost on any of these count shall not be counted for the contract period. On decision of the owner arrived at after consultation with the Vendor, shall be final and binding. Such a determined period of time be extended by the Owner to enable the Vendor to deliver the items within such extended period of time.

13.2 If Vendor is prevented or delayed from the performing any of its obligations under this agreement by Force Majeure, then Vendor shall notify Owner the circumstances constituting the Force Majeure and the obligations performance of which is thereby delayed or prevented within seven days of the occurrence of the event.

14.0 **Arbitration**

Disputes, if any ,shall be invariably sorted out by mutual discussions and resolved. In case of disputes, not resolved by this process shall be referred to the Sole Arbitrator, to be appointed by the Managing Director, Indian Medicines Pharmaceuticals Corporation Limited (IMPCL). Based on the recommendations of the Arbitrator, the decision of the Managing Director, IMPCL shall be binding on both the parties.

15.0 **Instruction To Consignee:**

Consignor:

Consignee: *Indian Medicines Pharmaceutical Corporation .Ltd*
For Mohan (via-Ramnagar 244715) Uttarakhand

Purchase Order No:

Net Weight

Gross Weight

Dimensions

Package No

(SI No. of total packages)

Tag/Item No

15.1.0 Despatch:

- 15.1.1 Unless otherwise specifically advised in writing, goods shall not be dispatched without prior inspection, testing and release notes/materials acceptance certificates issued by Owner/authorized representative of Owner.

Despatch of goods shall be made in accordance with relevant terms of and to destination as stated in the Purchase order. Any change in mode of transport shall be resorted to only after prior approval in writing. Vendor shall ensure despatch of equipment/materials immediately after the same intimate status of despatch by Fax/Telegram to the Owner/authorized representative of the owner.

- 15.1.2 The goods shall be dispatched on "Freight Paid" basis only, by the most economical and expeditious mode of transport.

- 15.1.3 The Vendor will note the destination of the Material to be dispatched. Demurrage or other expenses incurred owing to any negligence, delay or default on the part of the Vendor will be to Vendor's account and deducted from his invoice before payment.

16.0 Compliance with Regulations

Vendor shall warrant that all goods and services covered by this conditions shall have been produced, sold, supplied, dispatched, delivered and furnished in strict compliance with all applicable laws, regulations, labour agreements, working conditions and technical codes and requirements as applicable from time to time. The Vendor shall execute and deliver such documents as may be required to be incorporate in agreements of this character are hereby deemed to be incorporated by these references. The owner and their authorized representatives disown any responsibility for any regularity, contravention or infringement of any statutory regulations in the manufacture of supply of goods/services covered by this order.

17.0 Part Order

- 17.1 Owner reserves the right to accept any tender in whole or in part or reject any or all tenders without assigning any reason.

- 17.2 Owner shall not be bound to accept the lowest tender and reserves right to accept any or more tenders in part. Decision of Owner in this connection shall be final.

18.0 Patents & Royalties

Vendor, if licensed under any patent covering, Equipment, Machinery, Materials or compositions of matter to be used or supplied or methods and process to be practiced or employed in the performance of the process equipment/supplies, agrees to pay all royalties and license fess which may be due with the respect thereto. If any Equipment, Machinery, Material, Composition matters to be used or supplied or methods and process to be practiced or employed in the performance of this the process equipment/supplies, is covered by a patent under which the Vendor is not licensed then the Vendor before supplying or using the equipment, machinery, materials, compositions method or processes shall obtain such licenses, and

pay such royalties and license fees as may be necessary for performance of the process equipment/supplies. In the event fails to pay any such royalty or obtain any such license any suit for infringement of such patents which is brought against the Vendor or the Owner as a result of such failure will be defended by the Vendor at his own expense and the vendor will pay any damages and cost awarded to such suit.

Technical Specifications:-

1. Rapid Mixer Granulator Cap - 600Ltrs. GMP Model.

Gross Capacity : 600 Ltrs.

Working Capacity: 480 Ltrs.

MOC : S.S. 316.

Machine will be complete with Mixing Bowl, Mixing Blades, Granulator, Pneumatic Discharge, Pneumatic Lid Opening, Main Motor, Chopper Motor, Gear Box, Operating Panel and the Control Panel.

- **MIXING BOWL :**

The Mixing Bowl is cylindrical with a large diameter and flat base. The Top portion of the bowl is conical in shape to assist circulation of cohesive powders.

The Bowl is fabricated from S.S. 316 Quality Stainless Steel with all internal and external surfaces polished to mirror finish.

- **TOP LID**

Pneumatically operated lid opening arrangement.

- **MIXING BLADE**

Mixing blade consisting of three Nos. specially designed for intense mixing. Continuous action of this with the different ingredient immensely mixes thoroughly with homogeneously.

Mixing blade assembly is mounted on main shaft with separate bearing housing which fully eliminate any chance of cross contamination of product with any lubricants. The upper portion of the housing contains specially designed Teflon seal along with air purging facility. Lower stage housing contains bearing along with oil seals that make it completely leak proof.

BEARING HOUSING :-

The bearing housing of the main shaft connected to gearbox by means of heavy-duty chain coupling. Chopper blade assembly consists of a separate bearing housing coupled to motor by means of flexible coupling..

- **GRANULATING BLADE**

A high speed Granulator is inserted horizontally through the wall of the bowl to assist blending of powder and to break the lumps of the products in to granules of required sizes. These lumps are formed while wet mixing.

- **DISCHARGE VALVE**

Machine has a side discharge outlet with pneumatically operated. The discharge valve is exactly matching the profile of the intervene bowl with perfect sealing arrangement. Pneumatic cylinder housing is specially designed with swivel type arrangement, which helps for easy cleaning. Safety interlocks are provided to discharge valve as well as top lid with limit switches.

- **MACHINE BASE**

Rigid Machine base frame made from m.s. Square pipe is designed to accommodate the mixing bowl and the control panel. The motor V belt drive and reduction gear are also housed in the frame.

The machine base is totally enclosed and removable flush type. Removable S.S. Cover finished to mirror finish on all side of the machine base frame. Inside of the M.S. base frame duly epoxy painted to avoid any rusting.

- **PLATFORM AND STEPS / LADDER :**

S.S. 304Q plate with Dimples and also the steps are provided with S.S. 304Q with dimples.

- **MAIN DRIVE**

MOTOR

Pole : 2 Speed Pole Changing.
Make : "Crompton"/"Bharat Bijli"/ equal
HP : 40/50
Type : Horizontal Spindle, Foot Mounted.
Speed : 750/1500RPM.
Volt : 415/3Phase/50CS
Rating : TEFC
Ambient Temp. : 50° C
Power Tran. : Through V' Belt Drive.

- **REDUCTION GEAR BOX**

Make : Elecon /Radicon

Size : 9" NU
Ratio : 10:1
Mounting : Inverted output shaft, projecting upwards.

- **GRANULATING DRIVE**

MOTOR

Pole : 2 Speed Pole Changing.
Make : "Crompton"/"Bharat Bijli"/equal
HP : 5/7.5
Type : Horizontal Flange
Speed : 1500/3000RPM.
Volt : 415/3Phase/50CS
Rating : TEFC Continuous rating
Ambient Temp. : 50° C

CO-Mill GMP Model S.S 316 contact Parts with A.C. Frequency Drive: (Optional)

Working Principle :-

The Processed material enters through the discharge valve fed into a granulating mill (Co-mill) the material drops into the conical sieve

chamber. The rotating motion of the blade plays a whirling action to the material and through the granules to the sieves surface by centrifugal force. Due to this action processed material passes through a perforated sieve and form a uniform granules. The size of the particles can be adjusted by the size of the mesh.

Unit consists of S.S 316 material with rotor shaft driven coupled with 3HP Motor. The unit is provided with conical perforated screen as per the requirement.

Complete unit housed in a S.S Cylindrical shell with detachable hopper.

Unit will be mounted near the discharge of the Rapid Mixer Granulator with hinge type arrangements.

Complete unit as above GMP Model S.S 316 Contact Parts polished to mirror finish inside and outside.

Safety: Co-Mill cannot start when it is not in line with discharge port.

- **Electric Control Panel:**

Main Panel:

All the main Circuit like Switch gears, Relays, MCBs etc. will be contained in a S.S. Panel box and kept in Non Flame Proof area.

- **PLC With MMI [Man Machine Interface] (Optional)**

“Mitsubishi” make PLC Unit with suitable MMI and Touch Screen, programmable digital timer, auto mode indicating lapsed/balance time, provision to Alpha numeric printer to print Batch No./Date/Operator Code/Set Time/Real Time/Start/ Stop.

- **Safety Features:**

Machine can not start/instantly stop

- a. If the top lid is open.
- b. If the Air Pressure is less than the set pressure.
- c. Is the Discharge valve is open for cleaning.
- d. If motors over-load.

- **Electrical Control Panel**

Control Panel :

All the main Circuit like Switch gears, Relays, MCBs etc. will be contained in a M.S. Panel box and kept in service floor.

- **Operating Panel with PLC MMI [Man Machine Interface] (Optional)**

Control panel is located on the platform. All the safety features are taken care.

- **Safety Features :**

Machine can not start/instantly stop

- a. If the top lid is open.
- b. If the Air Pressure is less than the set Value.
- c. If the Discharge valve is open for cleaning.
- d. If motors over-load.

- **Pneumatic Systems**

The machine is supplied with duly required pneumatic systems of “**Camozzi**” (ITLY) Make. The customer has to ensure, supply of oil free compressed air, also free from any other possible impurity, which may contaminate the product. Air filter and lubricator are also provided with the machine.

Pressure regulator is provided to regulate the desired air pressure. The systems is suitable to accept an Input air pressure of 7kg/cm² to be terminated at ½" " BSP" terminal. Air lubricator is provided to lubricate solenoid valves and pneumatic cylinders is incorporated in the system.

Pressure Switch

A Pressure Switch (Indfos” make) is incorporated in the Pneumatic circuit to ensure that unless required minim air pressure is available in the system the machine cannot be started. And once the machine starts and if drop below pre-set the value the machine stops immediately. In case the Flame Proof Machine the pressure Switch is fitted in main panel.

WIP

S.S. 316 Spray Ball provided For Wash In Place

Light & Sight Glass , Spray Port & Charging Hole also provided on the Lid.

**Items or accessories required for complete installation/commissioning-
-----vender to quote**

Note:-

DQ, IQ & OQ , Fat, MOC Certificate, G.A Drawing of the machine, wiring diagram will be supplied with the machine.

Sr. No	Item	Unit Price in (RS.)
1.	Rapid Mixer Granulator 600 Ltrs. Cap. GMP Model S.S 316 Contact Parts Non contact parts S.S. 304/claded	
1a.	Additional cost of PLC “Mitsubishi” Make with 1061 Touch Screen with Colour display online comill arrangement with “ABB” make VFD Additional cost for “ABB” make VFD for main drive Additional cost for Spray system with pump	

(2) FLUID BED DRYER

Fluid Bed Dryer are required for drying wet Herbal powder, granules

Body:

Single Vessel i.e. Filter bag chamber & Retarding chamber made out of 3 mm thick In S.S.-316 . The top dish made out of 3 mm thk. S.S.-316 quality. The cylindrical chamber is provided with inspection window with Toughened Glass. Filter bag made out of P.C. Satin cloth mounted on movable hanger . Bottom of the Filter bag is fixed in SS fixing ring & provided with inflating tube which when inflated Seals filter bag with inner surface of filter bag housing. No product now can travel in between the filter bag and the chamber walls. One inflating tube is provided for Lifting chamber and another for retarding chamber.

All the inflatable gaskets are provided with pressure gauge , Electro-pneumatic Switches and also interlocking system with the unit. I.e. if unit is not sealed properly, the Blower motor will not start.

The Exhaust duct is provided with butterfly valve with gasket & pneumatically operated Rotary actuator and this valve will close fully at the time of filter bag shaking cycle. A positive ear thing is provided it means that the dryer will not start with any ear thing Fault. Height of the Expansion chamber is more enough to ensure proper heat transfer between product and hot air. Inlet air ducting will be fitted rear side of the chamber.

A.H.U.:

The rear chamber is made out of 2mm thk. S.S.-304 in this chamber . 20 micron washable pre-filter followed by 5 micron (Optional – Quote separately) . Air Filters And Steam Radiator/Heaters are fixed at rear side. All Pneumatic Controls are of “Camozzi” (Italy) make or equal

Plenum Chamber:-

It is made out of 3 mm thk. S.S.-304 and provided with dished bottom. Water Drain plug is provided. S.S. Butter fly valve is provided to control inlet Air and also to isolate unit from inlet air preparation unit and valve is provided with Cylinder And will remain close at the time of shaking or when the unit is not in operation.

Product Container :-

Conical shape & made out of S.S.-316, 3 mm thk. It is provided with Perforated air distribution plate along with S.S.-316 110 mesh . Perforated plate & mesh are fixed to container by means of quick change clamp type arrangement. Glass Window is provided in the

container for observation. The container mounting trolley is made out of S.S.-304 Round pipe and provided with 4 Nos. S.S. Castors with P.U.Wheels.The container .Is also provided with on line sampling port to draw the sample without stopping the dryer. The container can be tilted for emptying the product .

Explosion Vent:-

Horizontal Explosion relief opening fixed with Fike S.S. 304. is provided in rear side of filter bag chamber. It is tested at 0.2 K.G./cm² pressure.

Blower :-

The blower housing is made out of S.S. -304 4mm thk. With 15 H.P.

“ Crompton/Bharat Bijli” make Motor/ equal. Impeller is made out of S.S.-304 and Dynamically & statically balanced. Impeller is centrifugal type with backward curved blades. Blower is to be installed in remote area to avoid noise level in Process room.

Technical Specifications:-

Batch Capacity - 120-150 kg

Volume of the Product Container- 425 lit

Steam consumption :- vender to specify

Blower capacity: vender to specify

Drag developed in mm of Water: 600 mm of water gauge.

Blower motor : 15 H.P. “Crompton /Bharat Bijli” make

Air Consumption - 15 CFM at 4 Kg / cm² Pressure

Electric Supply - 440 volt, 3 phase and Neutral , 50 Hz

Fluid bed granulator Or processor
(Optional)-Quote Separately

, machine chamber can be made longer to fix in future top spray system as required in Processor or Fluid bed granulator. height is required . Spraying nozzles , Solution tank ,Peristaltic pump with PLC has to be done before dispatch. Customer can use the machine as dryer and if required in future machine can convert to processor or Fluid bed granulator by adding Peristaltic pump, Solution tank and spray nozzles.

Granule Bed thumping device:

With the help of PLC you can get the bed thumping effect where by quickly closing inlet BFV (rotary actuator) the entire mass of the Product Container lifted momentarily and thus mass movement inside the chamber can be generated.

Control Panel ;- S.S.-304 (Manual)

R,Y,B Lamp

“L&T” make contactors and relays

Amp. & Volt meter

Digital “Paragon” Radix, or equal make Temp. Controller

Digital “Paragon” Radix, or equal make Temp. Indicator

Digital “Paragon” Radix, or equal make Process Timer

Digital “Paragon” Radix, or equal make Shaking Timer

Digital “Paragon” Radix, or equal make Cooling timer

Heater On Off

MCB

Single phasing preventor

Earth fault relay

Emergency push button

Main switch

Safety :-

1. Machine can not start without proper earthing.
2. Blower stops if the air pressure is low below set value.
3. Blower stops if the product container top and bottom Gasket and filter bag sealing gasket not sealed properly.

Note:-

DQ, IQ & OQ , Fat, MOC Certificate, G.A Drawing of the machine, wiring diagram will be supplied with the machine.

Items or accessories required for complete installation/commissioning-----vender to quote

120 Kg F.B.D. GMP Model with S.S.-316 contact parts With inflating tube sealing for product container and filter bag sealing , Auto Bag shaking ,Filter bag lowering system , on line sampling device, safe earthing arrangement & Heat retardant air filters, Silicon molded sieve for product container, Two stage 20 & 5 micron filtration etc, S.S. 316 Spray Ball for WIP (Transparent silicon food Grade Inflating tube)	
Additional cost for spare 1 no. product container in S.S.-316 with trolley in SS 304 with P.U. wheels	
Additional cost for 0.3 micron HEPA Filtration unit with 20 H.P. Blower instead of 15 H.P. (OPTIONAL)	
Additional cost for Solid Flow monitor to prevent the Product losses in case of rupture of Filter bag.	
Additional cost for “Mitsubishi” make PLC with Touch Screen color display with complete Manual Control Panel in case of failure of PLC	
Additional cost for convert the machine in to Fluid Bed Granulator with Top spray arrangement	
Additional cost for “ABB” make VFD for Fluidization Control	
Inlet & Exhaust duct and Explosion duct (Pipe, Flanges and Bend)	
Additional cost for Inflating tube set i.e. (Total tube -3 Nos.) Transparent silicon food Grade	
Additional cost for P.C. satin filter bag	
Installation, Commissioning etc as per scope of work of NIT	

3) Multimill GMP Model :-

MULTI MILL is self contained portable unit useful for high speed granulation, pulverizing, mixing, shredding and chopping etc. of a wide range of wet and dry materials without special attachment. As compared to the four common principles of size reduction i.e. grinding, compression, impact, and shearing which often do not produce controlled size reduction this machine utilizes the principle of variable force swing hammer blades having both knife and impact edges rotating within a carefully selected screen to control size reduction.

Technical Specifications :-

- Motor - 3 HP/2800 RPM/440 V/3ph "Remi"/equal make
- Speed (RPM) - 750 to 2800 with VFD
- Beaters - 12 Nos. knife and impact edges 2 scraper blades.
- Overall Dimensions - (Approx.) 875 x 755 x 1670 mm (Ht.)

Material Charging Height – 1450 mm (Approx.)

Material Discharge Height – 750 mm (Approx.)

Output – Approx. 250 kg/ Hr. (Depend upon mesh size)

Complete set of mesh (1mm to 8mm)

Control Panel :-

- S.S. 304
- R,Y,B Indicating Lamp
- "ABB" make VFD
- On- Off, Rev. & Forward
- Main Switch
- Emergency push button

All contact parts SS 316 (GMP Model)

Non contact parts S.S.-304 with P.U. wheels with Brakes & Vent Filter

Note:-

DQ, IQ & OQ , Fat, MOC Certificate, G.A Drawing of the machine, wiring diagram will be supplied with the machine.

4) > Vibro Sifter 30” GMP Model :-

The machine Drive is totally enclosed by circular cladding. Drive mechanism through specially designed vibrating motor working on 1440 RPM.415 V, 3phase AC supply with adjustable vibrating petals directly mounted on the top plates which is rest on spring pads to achieve continuous vibration. The vibrating energy screen unit consisting of circular pre-tightened screen mounted on the top plates. The top weight petals caused vibration in the horizontal plane which causes the material to move across the screen towards the Perry. The lower weight petals act to till the machine which caused vibration in the vertical tangential axis. The angle of lead of the lower weight with relation to the upper weight provide, variable control of the screening pattern.

Technical Specifications :-

- Screen Size – 750 mm
- Vibro Motor Non-FLP (special purpose Vibration type) – 0.5HP, VPM 1440

Output is depend upon mesh size.

SS 316 contact parts 30” GMP Model with Single deck :

With S.S.-316 Silicon molded sieve , S.S. bracket

& P.U. wheels with Brakes.

DQ, IQ & OQ , Fat, MOC Certificate, G.A Drawing of the machine, wiring diagram will be supplied with the machine.

5) Octagonal Blender Cap- 600 Ltrs. GMP Model

Octagonal blender made out of SS316 quality. All joints are Argon arc welded. Rigid stand provided from SS-304 square pipe. Butterfly valve, safety guard For machine,SS-304 control panel also provided. All non contact parts made out of s.s.304.

Technical specifications:-

Gross Volume	:	600 Ltrs.
Working Volume	:	480 Ltrs. (240 K.G.)
Motor:		2HP “Remi, Crompton, Bijli make
Gear Box	:	“Bonfiglioli” make
RPM	:	4 to 15 RPM (through VFD, Timer control
Discharge Valve	:	6” Dia. Butterfly Valve
Baffles	:	Provided.
Drive Mechanism	:	direct couple to gear box
Earthing arrangement,		
PLC with printing facility (Mitsubishi), (Optional)		
Single Phasing preventer,		
Charging system Mechanical & by Vacuum. (Optional)		
Blender should be manually fixed in any position		
WIP System		

DQ, IQ & OQ , Fat, MOC Certificate, G.A Drawing of the machine, wiring diagram will be supplied with the machine.

6) Starch Paste Kettle Cap- GMP Model :-

Working Volume – 100 ltrs.

Gross Volume – 130 ltrs.

All contact parts are in S.S. 316

- All non contact parts are in S.S. 304“
- S.S. 304 pipe for mounting stand
- Manual tilting arrangement
- Hemispherical shape
- 4 mm thick. Inside vessel in S.S. 316
- Steam cum electrical heated
- 4 mm S.S. 304 jacket
- 50 mm S.S. 304 Glass wool Insulation.

Testing Pressure – 4 kg/cm².

Working Pressure – 2 kg/cm².

Air Vent & Drain plug provided. with steam trap assembly

DQ, IQ & OQ , Fat, MOC Certificate, G.A Drawing of the machine,will be supplied with the machine.

TABLET COMPRESSION MACHINES

TECHNICAL SPECIFICATION:

“D” Tooling Double Rotary Tableting Machine GMP Square Model with 5 H.P. Electric Motor, AC frequency drive for Main and Force Feeder Motor, Detachable type separate control Panel and Auto Lubrication system. (WITH ONE SET DIES & PUNCHES),and dust extraction unit

DETAIL SPECIFICATIONS OF TABLETING MACHINE

Sr. NO.	DESCRIPTION	DETAILS
1	Tooling	D
2	Station	vender to specify
3	Turret Speed	18 to 50 rpm
4	Feeder Speed	10 to 120 rpm
5	Max. Output (Tab/Hr.)	1,70,000
6	Min. Out put (Tab/Hr.)	60,000
7		

Note: Output will be depend upon tablet size, shape, material characteristic & ambient condition.

8	Max. Tablet Dia.	25 mm
9	Max. Depth of Fill	20 mm
10	Upper Punch Penetration	3 to 8 mm
11	Max. Pressure	10 Tons
12	Main Motor	3.75 kW/5 HP, 1440 rpm, 415V, 3 Phase, 50 Hz, AC supply.
13	Force Feeder Geared Motor (2 Nos.)	Make: Bonfiglioli Motor : 0.18 kW/0.25 HP,1440 rpm, 220 V, 50 Hz, 3 Phase, AC supply
14	Force Feeder Geared Motor (2 Nos.)	Make: Bonfiglioli Motor : 0.18 kW/0.25 HP,1440 rpm, 220 V, 50 Hz, 3 Phase, AC supply
15	AC Drive for Main Motor	5 HP , 415 V, 3 Phase , AC Supply Make: Allenbradely / Mitsubishi / siemens

16	AC drive for Force Feeder Motor	0.5 HP, 220V, Single phase, 50 Hz, AC Supply. Make : Allenbradely / Mitsubishi / siemens
17	Auto Lubrication Pump	Make : Maruti Enterprise Motor : 90 Watt, 1350 rpm, 220V, 50 Hz, Single phase motor.
18	Electromagnetic clutch, Make and type.	The turret drive is through Electromagnetic clutch device so that engage and disengagement can be done quickly and easily. EMCO Supply : 24 VDC
19	Dust Extraction	Well designed Dust Extraction nozzles are provided near both side of the compression point for the effective dust extraction. And these nozzles are connected to dust extraction system.
20	Control Panel	Detachable type separate control panel will provided with the machine
21	MOC	
22	Turret	Graded C.I.
23	Upper & Lower Pressure Roll	vender to specify- for Herbal Products
24	Hopper	SS 316
25	Discharge Chute	SS 316
26	Feeder Plate	G. M.
27	Feeder Paddles	SS 316
28	Scraper	Brass
29	Suction Nozzle	SS 316
30	Upper & Lower cam Tracks	M.S. Case Hardened and ground Profile.
31	Upper Guard	Acrylic
32	Lower Guard	SS 304
33	Safety	<ul style="list-style-type: none"> • Interlocking is provided for Upper guard. • Emergency switch is provided on approachable location.

34	Electrical Supply	AC / 3 Phase
35	Power Supply	Any of one option as per your requirement Voltage: 220 V / 380 V / 415 V / 500V Frequency : 50 / 60 Hz
36	Other features at an extra cost	
37	Powder Level Sensor	Sensor is provided in each hopper in the slant position so that when ever the powder level will go below the sensor the machine will be stopped after preset time to avoid the empty run of the machine.
38	SS 316 Die table	Three piece turret with SS 316 Die table are also available.
39	Gravity feeder assembly	The gravity feeder assembly is also available for some special requirement.
40	Electro less Nickle plating on Turret	Electro less Nickel plating can also be provided on demand for some specific products requirement.
41	Vibratory Hopper / Augur at hopper	Vibratory Hopper / Augur at hopper can be provided if any requirement of the product.
42	Core rod provision	Core rod provision for the ring shape tablets are also available.
43	Over all dimension (With open guard)	vender to specify

44	Case Size (L X W X H)	vender to specify
45	Net Weight	vender to specify
46	Gross Weight	vender to specify

Note:-

DQ, IQ & OQ , Fat, MOC Certificate, G.A Drawing of the machine, wiring diagram will be supplied with the machine

Items or accessories required for complete installation/commissioning -vender to quote individually

FOR OTHER ITEMS –TENDER WILL BE PUBLISHED SHORTLY