

**JALPAIGURI SILIGURI PLASTIC ENGINEERING CENTRE
SILIGURI**

TENDER FORM

Memo No:-

Date:-

To
The Director,
Jalpaiguri Siliguri Plastic Engineering Centre,
327, Bidhan Road,
Near Auto Stand,
Siliguri-734 001. (W.B.)

**Sub: Submission of Tender against NIT No. Jspec/Tender/P & M/02 dated 26.02.2014.
for Supply of plant & machinery, testing machines, measuring & hand tools and DG set
for the Common Facility Centre (CFC) of the Rajganj Plastic Processing Cluster, Dist.-
Jalpaiguri, West Bengal.**

Sir,

With reference to your tender related to the subject cited above, I/We am/are submitting herewith the price of the plant & machinery/testing machines/measuring & hand tools/DG set with description, along with the following documents. The price quoted are inclusive of all taxes, duty, VAT etc., erection & commissioning, transit insurance, free delivery at the Jalpaiguri Siliguri Plastic Engineering Centre "Common Facility Centre" at Vill.-Chaturagachh, P.O.-Sahudangi Hat, P.S.-Bhaktinagar, Dist.- Jalpaiguri, W.B.

(1) Name and address of the firm :

(2) Telephone Number :

(3) Name & address of the Directors/ Partners/Proprietor:

(4) Name of Banker with Account Number :

(5) Nature of business :

(6) Address and phone Number of the Works:

(7) VAT Registration No. :

(8) Copy of Trade License and Professional :
Tax clearance Certificate

(9) Details of Earnest Money Deposit :
(Demand Draft/ Bankers Cheque/
Bank Guarantee should be drawn in
favour of **Jalpaiguri Siliguri Plastic
Engineering Centre**, payable at Siliguri)

(10) List of reputed Organisation/
Institutions, where similar orders have
been executed:

(11) Declaration of details and nature
of maximum warranty period offered:

(12) Dealership certificate on the
offered products (in case of dealer or vendor) :

(13) Other documents submitted:

- a) Trade license issued by competent authority.
- b) Proof of carrying out of similar work earlier.
- c) Status of the firm regarding quality certification (ISO certification) if any
- d) I.T clearance certificate.
- e) Xerox copy of PAN card.
- f) Financial statement for the last year.

All the statements given and documents submitted herein are true to best of my/our knowledge. I/we will be liable for any deviation of statement/ specification as envisaged in tender documents and abide by the terms and conditions of the work order.

Signature & seal of the Bidder

Encl: - As stated above & EMD.

JALPAIGURI SILIGURI PLASTIC ENGINEERING CENTRE

327,BIDHAN ROAD, (NEAR AUTO STAND), SILIGURI- 734 001

Phone: 094342 58599

TENDER NOTICE

NIT No. Jspec/Tender/P & M/02

Date: 26-02-2014

The Director of The Jalpaiguri Siliguri Plastic Engineering Centre, Jalpaiguri, West Bengal invites sealed tenders from the interested and eligible Original Manufacturers/ Authorized Dealers/ Authorized vendors for quality procurement of following plant & machinery/testing machines/measuring & hand tools/DG set for the COMMON FACILITY CENTRE (a project under MSE-CDP scheme of Ministry of MSME, Govt. of India) of The Jalpaiguri Siliguri Plastic Engineering Centre (hereinafter termed as 'SPV') as per the specification given in the Schedule annexed to the Tender hereto.

The bidders are requested to read the tender document carefully and ensure compliance with all instructions herein. Noncompliance with instructions in this document will disqualify the bidders from the tender process.

Requirement of the various plant & machinery/testing machines/measuring & hand tools/DG set are as per the specifications laid down in Annexure-I to Annexure-VIII

Time Schedule for various Bids related events:-

Closing date and time of Bid submission: 20/03/2014 up to 1.00 p. m.

Opening date and time of Bids: 20/03/2014 at 2.00 p. m.

**Tender opening venue: 327, Bidhan Road, Near auto stand, Siliguri-734001, West Bengal.
(i.e, at the registered office of the company)**

Terms and conditions:

- 1. Bidder must provide the following information along with the Technical Bid:**

- a) Technical capability of manufacturer/ dealer/ vendor of supplying such bulk stores as mentioned in Annexure-I to Annexure-VIII (Particulars of Plant and machinery/testing machines/measuring & hand tools/DG set) within a short period (Max. 60 days). A copy confirming the terms of supply should be included. Bidder who is willing to quote for the Plant and machinery/testing machines/measuring & hand tools/DG set of the Annexure-I to annexure-VIII, should have the experience of supply of those particular Items earlier.
 - b) Proof of bulk supply of similar stores in last year.
 - c) Income Tax, Sales Tax/ VAT and other statutory clearances.
 - d) Manufacturer's price list, technical leaflet, catalogue, wherever applicable, should invariably be enclosed.
 - e) List of reputed Organizations/ Institutions, where similar orders have been executed.
 - f) Copy of ISO 9001, 14001 certificates, if any.
 - g) Xerox copy of PAN card.
 - h) Declaration of details and nature of maximum warranty period offered by the vendor.
 - i) Dealership Certificate on the offered products in case the vendor or a dealer.
 - j) A delivery schedule of the quoted items will have to be enclosed.
 - k) In-house Testing Facilities to carry out Tests as per requirement of machinery shall have to be submitted in case of a manufacturer.
2. The concerned authority reserves the right to verify information submitted and inspect the manufacturer's/ dealer's/ vendor's facilities, if required, to confirm their capabilities.
 3. The concerned authority reserves the right to change the quantity (upward/downward) be tendered and vendor must have the ability to supply additional quantity, if any, within the validity of the quotation period.

4. Decision of the Purchase Committee as constituted by the competent authority of the Directorate of MSSE & T, Govt. of West Bengal on any matter regarding short listing of vendors shall be final and any applicant shall not enter into any correspondence with the SPV. No Bid/ enquiry on telephone will be entertained. However, the hard copy of the Bid paper with necessary documents should reach the SPV within stipulated date & time.
5. Vendor would be qualified based on data and documents provided by them and also based on information available with the SPV with regard to vendor's credential.
6. Unless otherwise specifically mentioned in this tender document, the general terms and conditions of the SPV for submission of quotation for supply of stores will be applicable.
7. The price bids of only those vendors shall be opened whose technical bids are found qualified.
8. THIS IS AN OPEN-BID SYSTEM. BIDDERS/VENDORS ARE PERMITTED TO ATTEND THE TECHNICAL BID/PRICE BID MEETING SUBJECT TO PRODUCTION/SUBMISSION OF LETTER OF AUTHORITY. NO SEPARATE LETTER WILL BE ISSUED IN THIS RESPECT. NO TA/DA WOULD BE ADMISSIBLE.
9. In case of dispute, the matter shall be settled mutually, failing which the decision of the Directorate of MSSE & T, Govt. of West Bengal shall be final and binding.

Special Conditions:

1. No payment shall be made for any damage caused by rain, snowfall, flood, earthquake or any other natural causes whatsoever during the execution of work. The damages to the work will be made good by the Manufacturer/dealer/vendor at his own cost and no claim on this account shall be entertained.
2. The Manufacturer/dealer/vendor shall at his own cost arrange for necessary licenses/permissions/clearances, etc. required to import the material for completion of work within stipulated period.
3. If the material or finished work is not found acceptable, the Manufacturer/dealer/vendor shall arrange for the replacement of material required for re-executing the work as per contract.
4. The rate quoted shall be inclusive of all taxes, expenditure on the requisite approvals/quality assurance tests/certification/freight and insurance and installation &

commissioning of the machinery to be carried at the CFC location at Vill.- Chaturagachh, P.O.- Sahudangi Hat, P.S.- Bhaktinagar, Dist.- Jalpaiguri, West Bengal.

5. The maintenance period will be twelve months from the date of recording of completion certificate by SPV. During maintenance period any defects if found in the items, it will be the responsibility of the Manufacturer/vendor/dealer to rectify the same as per the requirement at his own cost at the earliest so that production is not affected.
6. Plant & machinery and others shall be offered strictly conforming to the technical specification of this tender. Deviations, if any, should be clearly indicated by the supplier in their tender.
- 7. The bidders can quote the price item wise for a single Annexure but they have no option to quote the price of the annexed list of the particular annexure partially. A bidder can quote the prices item wise for more than one annexure or for all the annexure. But no partial bidding of any annexure will be accepted.**
8. Installation and commissioning of machinery is in scope of supplier.
9. Installation and commissioning includes actual grouting in the ready pedestal, dynamic balancing of machines, testing and training of staff regarding specialized machines like honing m/c, plc controlled screw turning lathe, cylindrical grinder, gas nitriding plant, hard chrome plating plant, rubberizing unit etc..
10. Electrical cabling, machine control panel and switch board up to installation and commissioning will be in the scope of supplier.
11. Crane facility for erection of plant & machinery is in the scope of supplier.
12. Cost of installation and commissioning of machines should be included in the cost of machinery.
13. Operation and maintenance Manual (Mechanical, Electrical, Electronics and if software) should be provided with delivery of each machinery.

Tender Submission

The tender papers can be submitted on all working days (except holidays) during office hours or by Speed Post/Registered Post addressed to:

Gross Total Cost: Rs. (in words:)

(N.B.- If there is no deviation in the specifications, write “as mentioned in annexure” in the specification column. In case of deviation in specification, mention it clearly.)

We agree to supply the above goods in accordance with the technical specifications for the contract price of as mentioned in the above table within the period specified in the Invitation for tender.

We also confirm that the normal commercial warrantee/guarantee of months shall apply to the offered goods.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Both the envelope – A & B are to be put together in a bigger envelope and to be super-scribed with “TENDER FOR PLANT & MACHINERY/ TESTING MACHINES/ MEASURING & HAND TOOLS/ DG SET FOR THE COMMON FACILITY CENTRE of The Jalpaiguri Siliguri Plastic Engineering Centre. No other form will be accepted.

Validity of tender:

The tender shall remain valid for a period **not less than 60 days** after the deadline date specified for submission.

Earnest Money Deposit (EMD) –

Along with their bids the Bidders are to submit an EMD @ 2% of the quoted price in the form of a Demand draft/ Bankers cheque/ Bank guarantee, drawn in favour of **Jalpaiguri Siliguri Plastic Engineering Centre** and payable at any nationalized bank at Siliguri. Any tender without demand draft for EMD will be **DISQUALIFIED** and **REJECTED** and **price bid will not be** considered. Photo/Fax copies of the demand draft will not be accepted.

Return of EMD

- The earnest money of the successful bidder will be deposited as a part of the security money and returned to them without any interest after completing the successful contract.
- The earnest money of unsuccessful bidders will be returned to them without any interest within thirty (30) days after awarding the contract on receipt of written request from the bidders.

Forfeiture of EMD

After receiving the Purchase Order, if the Manufacturer/vendor/dealer is unable to execute it satisfactorily, the EMD will be forfeited and Jalpaiguri Siliguri Plastic Engineering Centre will be constrained to take necessary action against the agency.

The EMD have to be submitted with the Technical Bid. Bid without EMD shall be disqualified and summarily rejected.

Security Deposit

The successful bidder of the contract will have to deposit a security amount @ 5% of the price of the PLANT & MACHINERY/ TESTING MACHINES/ MEASURING & HAND TOOLS/ DG SET. In case of his EMD is retained as part of the security deposit, balance amount has to be deposited by DD drawn in favour of **Jalpaiguri Siliguri Plastic Engineering Centre** on or before the day of allotment of purchase order.

The security deposit will be refunded without interest after twelve months of receiving the machines and satisfactory functioning of the same.

Opening of the Tender

The offer/bid will be opened by a Committee as would be constituted by the competent authority of the Directorate of MSSE & T, Govt. of West Bengal for the purpose at the pre-defined place, time and date in the presence of such Bidder(s) and/or their authorized representatives. The bigger envelope (containing the Technical Bid and Price Bid) will be opened first.

Then the **envelope no. A**, containing technical bid and EMD will be opened.

In the event of the following, the Technical Bids will summarily be rejected.

- a) EMD is found invalid and unacceptable; and /or

b) EMD is presumably kept inside the covers containing Price Bid.

On verifying the EMD, the Technical Bids will be verified. The Committee will examine the Technical Bids and decide the suitability as per the requirements and also fulfillment of qualification criteria.

Qualification Criteria

- The participant i.e. manufacturers/ vendor/ dealers should have completed the works of similar nature. Supporting documents must be attached with the Technical Bid.
- The bidder must not be blacklisted anywhere in India or abroad by any organization.

Price bid of only those tenderer shall be opened whose technical bids are found qualified.

Late Offer

The Bids/Tenders received after the pre-defined date and time will not be considered.

Completion Period

Supply of all the PLANT & MACHINERY/ TESTING MACHINES/ MEASURING & HAND TOOLS/ DG SET (as per tender document) and subsequent installation and commissioning of the same is to be done at the address of the concerned CFC within 60 days from the date of issue of the Purchase Order.

Price: Should be in Indian Rupees only, including taxes and duties.

Freight & Insurance: No freight and insurance charges will be provided and the materials are to be delivered at the address of the CFC of the cluster at the cost and risk of the vendor.

Failure of Order Execution:

If a successful bidder after receiving the order fails to execute the order within the stipulated period or does not fulfill any of the terms and conditions in any respect, the SPV reserves the right to cancel the order unilaterally and assign the order to the next eligible bidder. The SPV also reserves the right to go for procurement of any/all of the annex listed to the tender notice on **parallel rate contract** without thereby incurring any liability or any obligation to inform the bidder.

It will be the prerogative of the Purchase Committee to make negotiation if required any and to work out splitting of the job amongst the successful interested Bidder on parallel rate contract with a view to get the complement consignment within the time limit.

Warranty Declaration:

- Bidders must give the comprehensive on-site **two years** warranty from the date of installation of all items against any manufacturing defects and also give the warranty declaration that everything to be supplied by them hereunder shall be free from all defects and faults in materials, workmanship and shall be of the highest quality and materials of the type ordered, shall be in full conformity with the specification.
- Any deviation in the material and the specifications from the accepted terms may liable to be rejected and the bidders need to supply all the goods in the specified form to the satisfaction/specifications specified in the order/contract and demonstrate at their own cost. The payments shall be made only after receiving the materials in the required format and quality to the satisfaction of the concerned authority.

Payment terms

Payment will be made maximum within 30 days from the date of successful installation/commissioning of the machinery and related items as quoted in tenders.

Disputes and Jurisdiction

Any legal disputes arising out of any breach of contract pertaining to the whole process of this Tender shall be settled in the Court of Competent Jurisdiction in the District of Jalpaiguri in the State of West Bengal.

The following Acknowledgement is to be given by the Bidder duly signed on the Letter head along with the Technical Bid:

It is hereby acknowledged that we have gone through all the Schedules as well as the Terms and Conditions laid down in the NIT No. Jspec/Tender/P & M/02 Dated 26-02-2014 for procurement of various items for the COMMON FACILITY CENTRE of Jalpaiguri Siliguri Plastic Engineering Centre.

Director
Jalpaiguri Siliguri Plastic Engineering Centre

ANNEXURE – I

Sl. No. 1. Name of plant & machinery - CENTRE LATHE 4000 MM ABC: Quantity - 1

Specification: Extra heavy duty all geared precision lathe machine having bed length 5750 mm , centre height 430 mm, bed width 560 mm, swing over bed 840 mm, swing over saddle 600 mm, swing over cross slide 510 mm, swing in gap 1250 mm, length of gap in front of face plate 365 mm, no. of spindle speed 8, spindle speed range 20 to 275 RPM, taper in spindle sleeve MT-5, spindle hollow 104 mm, spindle nose detail- Bayonet size 11, no. of British threads 28, range of British threads 1.5 to 22 TPI, no. of Metric threads 22, range of Metric threads 0.75 to 16 mm, no. of feeds 28, range of longitudinal feeds 0.2 to 3.0 mm/rev., range of transverse feeds 0.033 to 0.50, lead screw 50.8 mm X 2 TPI, tail stock spindle diameter 95 mm, taper in tail stock spindle MT-5, cross slide travel 430 mm, compound slide travel 230 mm, tail stock travel 220 mm, tool shank size 38X38 mm, tool post square 200X200 and admit between centre 4000 mm, complete with standard accessories like electric motor, V-belts, 2 MT centre, centre bush, oil can, screw driver, set of fixed spanner, set of allen keys, tool post spanner, carrier plate, instruction & spare parts manual and fitted with 3 jaw self centering chuck and electrical control panel.

Special Attachment:

Boring/deep drilling attachment for range of boring 25 to 100 mm dia. and boring length 1750 mm.

Additional Accessories:

Face plate, steady rest, follow rest, rapid traverse of main saddle, chuck flange, independent dog chuck, elec. Coolant pump with tank & fittings, taper turning attachment, machine lamp with control transformer.

**Sl. No. 2. Name of plant & machinery -CENTRE LATHE 2500 MM ABC WITH GRINDING
ATTACHMENT: Quantity - 1**

Specification:

14' FEET BELT AND PULLEY TYPE HEAVY DUTY LATHE MACHINE

WIDTH OF BED :- 375 MM

CENTRE HEIGHT :- 375 MM

ADMIN CENTRE :- 3100 MM

MAXIMUM SWINGING OVER BED :- 750 MM

SWINGING OVER CROSS SLIDE :- 550 MM

SWINGING IN GAPE :- 1050 MM

NO. OF SPINDLE SPEED :- 8 (30 to 475 RPM)

LEAD SCREW TPI :- 2

METRIC THREAD PITCH :- 0.5 MM TO 6 MM PITCH

SPINDLE BORE :- 100 MM

TAPPER IN CENTRE :- MT4

ELECTRIC MOTOR :- 5 HP, 960 RPM (ABB)

DOG CHUCK (4 JAW – 16" (D/S)

TOOL POST MOTORISED GRINDING ATTACHMENT FITTED WITH 1 HP ELECTRIC MOTOR

ATTACHMENT FOR SCREW POLISHING/BUFFING ARRANGEMENT WITH SUITABLE ELECTRICAL MOTOR

CHUCK PLATE

FACE PLATE

MOTOR PULLEY

STEADY REST, FOLLOW REST

TAPPER ROLLER BEARING TYPE

FLAME HARDENED BAD

HEAVY DUTY

R/F SWITCH

DEAD CENTRE, SLEEVE

CHAIN GEAR SET

TOOL POST KEY

DIAL INDICATOR

SQUARE TOOL POST

TOOL POST KEY

REAR TOOL POST

MACHINE LAMP

R/F SWITCH, 4M CABLE (ISI)

COOLANT PUMP WITH TANK & FITTINGS

ELECTRICAL CONTROL PANEL

Sl. No. 3. Name of plant & machinery -CENTRE LATHE 2500 MM ABC, HEAVY DUTY: Quantity - 1

Specification:

12 FEET BELT AND PULLEY TYPE EXTRA HEAVY DUTY LATHE MACHINE

WIDTH OF BED :- 375 MM

CENTRE HEIGHT :- 375 MM

ADMIN CENTRE :- 2500 MM

MAXIMUM SWINGING OVER BED :- 750 MM

SWINGING OVER CROSS SLIDE :- 550 MM

SWINGING IN GAP :- 1050 MM

NO. OF SPINDLE SPEED :- 8

LEAD SCREW TPI :- 2

METRIC THREAD PITCH :- 0.5 MM TO 6 MM PITCH

SPINDLE BORE :- 100 MM

TAPPER IN CENTRE :- MT4

ELECTRIC MOTOR :- 5 HP, 960 RPM (ABB)

DOG CHUCK (4 JAW – 16" (D/S)

TOOL POST GRINDER

KEY WAY MILLING ATTACHMENT

TAPPER TURNING ATTACHMENT

CHUCK PLATE

FACE PLATE

MOTOR PULLEY

STEADY REST, FOLLOW REST

TAPPER ROLLER BEARING TYPE

FLAME HARDENED BAD

HEAVY DUTY

REAR TOOL POST

MACHINE LAMP

R/F SWITCH

DEAD CENTRE, SLEEVE

CHAIN GEAR SET

TOOL POST KEY

R/F SWITCH, 4M CABLE (ISI)

COOLANT PUMP WITH TANK & FITTINGS

ELECTRICAL CONTROL PANEL

Sl. No. 4. **Name of plant & machinery -PRECISION LATHE 2000 MM ABC:** **quantity - 1**

Specification:

ALL GEARED HEAVY DUTY LATHE MACHINE:

Special Features:

- Lathe bed is of grade 20 casting, duly flame hardened and ground with brinell hardness of over 300 BHN
- Head stock gears of special alloy case hardening steel and are duly hardened and profile ground
- Head stock spindle is ground and runs in one anti friction taper roller bearings in front wall of head stock and one taper roller bearing in rear side wall of head stock
- Norton gear box and apron gear box are oil bath and gears are splash lubricated
- Quick change Norton type gear box provides wide range of INCH/MM threads
- Accuracy is tested as per IS : 1878 (PART I) 1971
- Lead screw, starting shafts are different
- Control panel for on/off the machine, reverse/off/forward start handle is given along with apron gear box for easy control.

Complete with standard accessories including: Hardened & ground bed guide ways, electric motor, 'V' belts, catch plate, inch & mm gears, 2 MT dead centers with centre bush, oil can, screw driver, set of allen keys, set of fixed spanners, tool post spanners, carrier plate, instruction & spares parts manual.

Technical specifications in mm: All geared lathe machine having 8 no. of spindle speed, ranges 30 – 1235 rpm with bed length – 3095 mm, centre height – 254 mm, width of bed – 325 mm, admit between centers – 1910 mm, swing over bed – 484 mm, swing over cross slide – 292 mm, swing in gap - 800, spindle hollow – 52 mm.

Additional Equipment: Face plate, Steady rest, Follow rest, electric coolant pump with tank & fittings, 305 mm centre height in lieu of std. 254 mm, taper turning attachment, rear tool post with tool holder, key way milling attachment, machine lamp with control transformer & wiring with lamp, chuck flange, 12"x4 - jaw independent dog chuck, 14"x4 - jaw independent dog chuck, 16"x4 - jaw independent dog chuck, 8"x3 - jaw self centering chuck, 10"x3 - jaw self centering chuck, 12"x3 - jaw self centering chuck, quick change tool post with five tool holder,

Tool post Grinder:(external & internal combined (without electricals), only external, only internal, 1 HP-3 PH electricals for tool post grinder), MT-4 revolving centre, control panel with foot brake, set of anti vibration mounts, rear splash guard.

Sl. No. 5. **Name of plant & machinery -PLC Controlled Screw Turning Lathe:** **Quantity - 1**

Specification:

18 FEET THREAD MILLING MACHINE

WIDTH OF BED :- 450 MM

CENTRE HEIGHT :- 350 MM

ADMIN CENTRE :- 3500 MM

LEAD SCREW TPI :- 2

FULLY TAPPER ATTACHMENT

ELECTRIC VFD DRIVE 3Hp GEAR MOTOR FOR MAIN SPINDLE

SPINDLE BORE :- 100 MM

2 Hp MOTOR FOR CUTTER HEAD

COLLANT ATTACHMENT WITH PUMP, TANK, FITTINGS & MOTOR

PITCH 20mm TO 170mm

OIL DRAINAGE SYSTEM

TRUE CHUCK (3 JAW - 12")

CHUCK PLATE

TAPPER ROLLER BEARING TYPE

FLAME HARDEN BAD

SEMI PLC CONTROL PANNEL

V/A/Kwh METER, LIMIT SWITCH

HEAVY DUTY

DEAD CENTRE, SLEEVE

CHAIN GEAR SET

ELECTRICAL CONTROL PANEL

Sl. No. 6. Name of plant & machinery -Universal Milling Machine: Quantity - 1

Specification:

Universal horizontal milling machine, having table size 42"x 10", universal geared head with one feed auto complete with standard accessories and vertical attachment, no. of T-slots-3, size of T-slots – ½", Swivel either side of table – 45", cross traverse – 175 mm, vertical traverse – 450 mm, longitudinal traverse – 525 mm, arbour dia. – 25.4 mm, taper of spindle – ISO 40, no. of spindle speed – 9, range of spindle speed – 40 – 700 RPM, spindle dia. – 80 mm , no. of feed in longitudinal table long – 2, main motor power (HP) - 2 , 440V, 3 phase, 1440 RPM 50 Hz electric motor suitable starter, R/F switch, vee belts and fittings. Coolant pump & fittings, Vertical attachment, Universal Dividing head with three sets of index plate (15,20), (21,23,27,29,31,33), (37,39,41,43,47,49) (two side hole plate centre 110 mm), 12 change gears sets suitable for attachment & with three jaw chuck, adppter, arbor and collets.

Sl. No. 7. Name of plant & machinery -Cylindrical Grinder: Quantity - 1

Specification:

MAX. GRINDING DIAMETER 200 MM

DISTANCE BETWEEN CENTRE 3500 MM

MAX. WEIGHT OF WORK PIECE 1000 KGS

WORK PIECE SPEEDS:

- CONTINUOUSLY:

- IN 9 STEPS

25 – 380 RPM

25 – 300 RPM

TABLE SPEED 0.3 – 3.5 M/MIN

ACCESSORIES:

- ALL STANDERED REQUIRED ACCESSORIES WITH INTERNAL GRINDING ATTACHMENT
- DIGITAL READ-OUT MITUTOYO ON 1 AXIS
- STEADIES
- TECHNICAL BOOK

COMPLETE CYLINDRICAL GRINDING MACHINE WITH ALL REQUIRED ELECTRICAL MOTOR, PANEL AND COOLANT SYSTEM WITH TANK & ALL FITTINGS.

Sl. No. 8. **Name of plant & machinery -Surface Grinder 36" X 16":** **Quantity - 1**

Specification:

Horizontal oil type surface grinder machine, table feed manual and grinding capacity 600 x 300 mm, complete with standard accessories and magnetic chuck – 250 X 500 mm, starter, wheel balancer, one diamond dresser with lubrication pump & Z axis micro feed, coolant equipment & fittings and machine lamp and fitted with suitable 440V, 3 Phase, 50 Hz electricals. Maximum height from table to grind. Wheel – 300 mm, vertical feed gradu. – 0.002, cross feed gradu. – 0.05, size of grinding wheel – 200X13X31.75 mm, spindle speed – 2800 RPM, main motor power – 2 HP.

Sl. No. 9. **Name of plant & machinery -Shaping Machine 24" strock:** **Quantity - 1**

Specification:

Extra heavy duty Cone pulley drive SHAPING Machine having 24" stroke length with vice, complete with standard accessories, motor pulley, crank handle, automatic oil lubrication pump, fine stroke adjustment wheel and fitted with 3 HP, 440V, 3 Phase, 1440 RPM, 50 Hz electric motor suitable starter and vee belts & fittings . Length of ram stroke – 610 mm, length of ram – 1232 mm, length of width ram bearing 867X300, table of ram – 450X76 mm, working surface of table – 610X370 mm, max. table travel horizontal – 635 mm, max. table travel-vertical – 380 mm, angular movement of table – 60 deg. L 60 deg. R, max. vertical travel of tool slide – 190 mm, max. swivel of tool head – 60 deg. L 60 deg. R, dia. of clutch pulley – 311 mm, no. of ram speed – 4, stroke/min. – 14,28,42,62, dia. of motor pulley – 70 mm, stroke of ram – 0.229, range of tool head feed – hand feed, main motor power – 3 HP, motor RPM – 1440.

Sl. No. 10. **Name of plant & machinery -Specialised Blade Sharpening machine:** **Quantity - 1**

Specification:

Traverse movement of working table – 1000 mm with Universal degree attachment for any degree from 0 deg. to 90 deg. With electrical motor and other electricals.

Sl. No. 11. **Name of plant & machinery -RADIAL DRILL:** **Quantity - 1**

Specification:

Heavy duty radial drill machine 38 mm cap. / 8 speed / 250 mm travel with fine feed attachment & box table

CAPACITY:

Drilling capacity : 38 mm

Column Dia. : 170 mm

Spindle nose : MT – 4

Dist. from spindle to pillar surface : 620 mm

Spindle travel : 250 mm

No. of spindle speed : 8

Spindle speed (RPM) : 100-2125

Dia. of ram : 78 mm

WORKING RANGE:

Dist. from spindle to base (Max/Min) : 950/240

Dist. from column to spindle : 825/385

Max. drilling radius : 910

Electricals:

Drilling head motor (1440 RPM) : 1.5

Lifting of arm motor (1440 RPM) : 0.5 HP

V-Belt section : B-47 & B-24

Other:

Size of box table : 300X300X385

Sl. No. 12. **Name of plant & machinery -BENCH DRILL 25 MM:** **Quantity - 1**

Sl. No. 13. **Name of plant & machinery -PILLER DRILL 40 MM:** **Quantity – 1**

Specification:

High precision Pillar type drilling machine, 38 mm drilling capacity/8 speed/225 travel with fine feed :

Drilling Cap. : 38 mm

Pillar Dia. : 106 mm

Spindle nose to table distance : 625 mm

Spindle nose to base distance : 1000 mm

Distance from spindle centre to pillar face : 285 mm

Tapper in spindle : MT-4

No. of spindle speed : 8
Range of speed (RPM) : 70-2000
Table size : 415 mm X 415 mm
Base size : 400 mm X 350 mm
Over all base size : 650 mm X 440 mm
Spindle travel : 225 mm
Main motor power : 1.5 HP

Sl. No. 14. **Name of plant & machinery -TOOL & CUTTER GRINDER:** **Quantity – 1**

Specification:

Universal TOOL & CUTTER GRINDER machine complete with all standard accessories & fitted with 440V, 3- Phase, 50 Hz electricals.

Sl. No. 15. **Name of plant & machinery -PORTABLE ANGLE GRINDER:** **Quantity – 1**

Specification:

180 mm Cap. High speed angle grinder

Sl. No. 16. **Name of plant & machinery -FLEXIBLE SHAFT GRINDER:** **Quantity – 1**

Specification:

1 HP, 3 PH, 12000 RPM flexible shaft machine with mounting

Sl. No. 17. **Name of plant & machinery -PORTABLE DRILL:** **Quantity – 1**

Specification:

13 mm Cap. Heavy duty drill m/c

Sl. No. 18. **Name of plant & machinery –BENCH GRINDER:** **Quantity – 1**

Specification:

0.75 HP, 3 PH, 2800 RPM bench grinder with grinding wheels size 8”X1”, 2 nos. wheel (one fine & one coarse) fitted with wheel guard, tool rest.

Sl. No. 19. **Name of plant & machinery -WELDING / GAS CUTTING SET:**

Specification:

- a) Welding transformer (ESAB), welding cables, electrode holder, earthing clamp, welding goggles, chipping hammer. **Quantity - 1 set**
- b) Portable Arc welding machine: specification Main supply, ph x V, Hz 1 x 230, 50, Fuse (slow), A 16; Open circuit voltage, VDC (Max) 60 – 75, Welding current range, A 4 – 150; Output at 60% duty cycle, A 110, Enclosure class IP 23C; Application class S, Standards of compliance IEC/EN 60974 – 1, Dimensions, l x w x h, mm 380 x 180 x 300, Weight, Kg 6.9. **Quantity - 1**
- c) Oxy-Acetylene Gas cutting set comprising of cutter, nozzle (3/64", 1/32", 1/16"), oxygen regulator, acetylene regulator, dura hose pipe 8 mm I/D red & blue (15 mtr. For each type), oxygen cylinder, acetylene cylinder, cylinder key, hose clamp **Quantity - 1 set**

Sl. No. 20. Name of plant & machinery -POWER SAW: **Quantity – 1**

Specification:

8" Capacity hydraulic control hacksaw machine having blade size 400 mm X 32 mm complete with vice, powerful coolant pump, motor pulley, adjustable stop rod & brackets and electrical such as 1 HP 1440 RPM 3 PH motor, R/F switch, V-Belt, fittings etc.

ANNEXUER – II

Sl. No. 1. Name of plant & machinery -Honing Machine 2500 mm X 150 mm: Quantity – 1.

Specification:

TECHNICAL SPECIFICATIONS OF HORIZONTAL HONING MACHINE 150X3000 (Hydraulic):

(A) Basic machine along with standard accessories:

- 1) Speed spindle range – 0-1000 RPM
- 2) Stroke speed range – 0-10 mtr./min
- 3) Spindle power – 3.75 KW (5 HP) with electric motor with gear box controlled by VFD
- 4) Stroke travel – up to 3000 mm
- 5) Feed-Electro Mechanical-Hydraulic Tool Expansion
- 6) Job Dia. – 25 to 150 mm
- 7) Stroking system power – 7.50 KW (10 HP) with hydraulic cylinder
- 8) Rigid MS weldment, fabricated base
- 9) Machine control – PLC with HMI
- 10) 460 VAC, 60 Hz, 3 PH or 400 V, 50 Hz, 3 Ph power
- 11) Electrical cabinet and operator control cabinet
- 12) Isolation Transformer
- 13) Manual, centralize oil system with firs fill
- 14) Steel guarding
- 15) Custom column risers

(B) Coolant system including magnetic separator over deep paper bed filter, chiller unit, swarf container, two pumps, fine filters with transfer pumps and all necessary piping

- 1) Magnetic separator mounted over deep bed paper filtration unit, rated for 75 lpm (20gpm) with honing oil
- 2) 2 rolls filter paper

(C) Fixturing

- 1) Chain type outer Dia. job clamping system
- 2) Tool guide supports at honing station
- 3) Tooling plate

(D) Honing Accessories

- 1) Tool Dia. 25 to 30
- 2) Tool Dia. 35 to 40
- 3) Tool Dia. 45 to 55
- 4) Tool Dia. 60 to 70
- 5) Tool Dia. 75 to 90

6) Tool Dia. 100 to 120

(E) Arbour

- 1) Tool arbour suitable for Dia. 25 to 30
- 2) Tool arbour suitable for Dia. 35 to 40
- 3) Tool arbour suitable for Dia. 45 to 70
- 4) Tool arbour suitable for Dia. 75 to 90
- 5) Tool arbour suitable for Dia. 100 to 120

(F) Hydraulic oil : Enklo N-68 – 400 lits.

(G) Coolant oil : Honilo-980 – 200 lits.

(H) Chilling unit for Hydraulic oil

ANNEXURE- III

Sl. No. 1. Name of plant & machinery -SALT BATH:

Quantity – 1

Specification:

For heat treatment of different type of spare parts used in plastic processing plant & machinery like cutters, blades, mendles, sizers etc.

Sl. No. 2. Name of plant & machinery -GAS NITRIDING PLANT:

Quantity – 1 plant

Specification:

- (1) Pit type environmental friendly gas nitriding furnace suitable for barrels and screws size 600 Dia. X 3500 height complete with electrical control panel, manual hydraulic cover lifting arrangement.
 - a) Useful Dia./Height, mm : 600/3500
 - b) Retort Dia., mm : 760
 - c) Gas guide cylinder, mm : 600
 - d) Heating load, KW : 70
 - e) No. of Zones : 3
 - f) Mode of Temperature control : Delta/star/off for each zone plus additional retort control
 - g) Max. working temp., deg. Centigrade : 650
 - h) Recirculation fan motor, KW : 2.2
 - i) Electrical supply : 415 plus/minus 5% volts, 3 PH, 50 C/S
- (2) Ammonia feeding and monitoring panel with dissociation meter and PLC based auto checking of dissociation percentage.
- (3) Cabling.
- (4) Erection & commissioning.

ANNEXURE-IV

Sl. No. 1. Name of plant & machinery -HARD CHROME PLATING & POLISHING:
Quantity - 1 complete unit comprises the following

- a) **Electroplating Tank (MS) – 2’X2’X13” 1 no.**
- b) **Electroplating Tank (MS) – 3.5’X3.5’X3.5’ 1 no.**
 - 1) Material will be M.S (Mild Steel).
 - 2) M.S Sheet will be 10 gauges (3mm) thick '
 - 3) Inside will be P.V.C lining of 3mm sheet.
 - 4) Suitable collars to all top side of the tank.
 - 5) Outside will be F.R.P lining.
 - 6) Outer structure will be made up of 2"x2" MS angles
- c) **Blower for air agitation – 1 HP 1 no.**
 - 1) Capacity 240 Am³/A4
 - 2) Pressure 175 Mbar
 - 3) Vacuum 160 Mbar
 - 4) Three phase 2800 rpm
 - 5) CFM- 150
- d) **Electroplating Magnetic Chemical Filter Unit – 100 lit./min 1 no.**
 - 1) Material will be P.P. (Polypropylene)
 - 2) Filter housing will be of 12"Ø
 - 3) Powered with sealless magnetic pump.
 - 4) Pump RPM will be 2800
 - 5) Electrical Power: 440 Volts 50 Hz three phase power
 - 6) Amount of circulation 100 Let/min
 - 7) With 18 pads size of pad will be 10"Ø.
 - 8) Filter unit will be mounted on a wheel trolley
 - 9) Magnetic pump will be connected to Filter housing by braided pipe 25mmØ x 6" long
 - 10) Filter unit will have inlet & outlet of 25mm ID x 3m pipes to connect plating tanks
- e) **Rectifier (Oil Cooled) – 12v 7000 Amp. 1 no.**
 - 1) Capacity 80 KW
 - 2) Input Voltage 380v, 3 PH, 50 HZ AC
 - 3) Output Volts 0-12 V step less control system
 - 4) Output current 7000 Amps
 - 5) Duty Cycle 100% cont.

Effluent Treatment Plant:

- | | | |
|----------------------------------|-------------|-------|
| a) Main Tank | 59”X24”X30” | 1 no. |
| b) Acidic Solution Tank | 3’X2’X2’ | 1 no. |
| c) Neutralisation Tank | 3’X2’X2’ | 1 no. |
| d) Storage Tank (with partition) | 3’X2’X2’ | 1 no. |

- 4) End Fittings (locking plugs) for sizes -- (a) 16 mm (b) 20 mm (c) 25 mm (d) 32 mm (e) 40 mm (f) 50 mm (g) 63 mm (h) 75 mm (i) 90 mm (j) 110 mm (k) 125 mm (l) 140 mm (m) 160 mm (n) 180 mm (o) 200 mm.
- 5) Muffle Furnace (with digital temperature controller) - 1 No.
- 6) Pipe Wall thickness Gauge. - 1 No.
- 7) PI - Tapes -- (a) for 30 - 200 mm dia. (b) for 100 - 300 mm dia. (c) for 300 - 600 mm dia.
- 8) Revision tester - Hot air Oven (Universal Memmert type) (with digital temperature controller). 1 unit.
- 9) Specific Gravity Balances -- (a) Digital model (b) Analogue model (range 0.9 to 3.0). - 1 No each
- 10) Vicat Softening point teste (to test up to 120 degree centigrade). - 1 Unit.

FOR PLASTIC PIPES FOR AGRICULTURAL USE:

01. Apparatus for testing effect of sun light. - 1 set
02. Vaccum test apparatus. - 1 set

Sl. No. 2. MEASURING & OTHER HAND TOOLS: Quantity – 1 no. or 1 set for each item.

- (1) Micro meter outside 0-150 mm in steps
- (2) Micro meter outside 150-300 mm in steps
- (3) Inside micrometer
5-30 mm
25-50 mm
50-300 mm
- (4) Micro meter depth gauge
0-150 mm
0-300 mm
- (5) Vernier caliper 600 mm
- (6) Digital vernier caliper 300 mm
- (7) Vernier height gauge 250 mm
- (8) Bore Gauge with Dial Indicator
18-35 mm
35-60 mm
50-150 mm
- (9) Magnetic stand
- (10) Compound Dial gauge with stand (metric)
- (11) Dial test indicator with magnetic gauge type 1 grade A with magnetic base
- (12) Center gauge 60
- (13) Surface plate 600 mm X 600 mm
- (14) Screw pitch gauge for metric pitches
- (15) Radius gauge metric set (1-7 mm)
- (16) Feeler gauge, range- 0.05 to 1 mm
- (17) Taper gauge mt no. 1,2,3,4 & 5
- (18) Limit plug guages 5 mm to 25 mm by 2.5 mm range
- (19) Magnetic "V" block
100X95X75
150X95X75
- (20) Height master (manual) (Mitutoyo)

- (21) 1 set drill bits
 - 1 to 13 mm drill bit
 - 14 to 50 mm taper shank drill
- (22) HSS tap set- size- 1 mm to 52 mm
- (23) 1 set of cutter and tool bits
- (24) Steel rule - 300 mm
- (25) Steel rule - 1000 mm
- (26) Steel tape- 5 metre.
- (27) 1 set hole punch
- (28) 1 set centre punch
- (29) 1 set D-Spanner
- (30) 1 set Ring spanner
- (31) 1 set box spanner
- (32) 1 set Allen key (mm)
- (33) 1 set Allen key (inch)
- (34) 1 set Chisel
- (35) Hammer ½ lb., 1 lb., 2 lbs., 5 lbs., 10 lbs.
- (36) Flat file 12", 18"- fine & coarse
- (37) Round file 12", 18"- fine & coarse
- (38) Half round file 12", 18" – fine & coarse
- (39) Movable Chain pulley 2 MT, 3 MT, 5 MT. capacity

ANNEXURE - VIII

<u>Sl. No. -1.</u>	<u>125 KVA D.G. set for back up power supply complete with control panel, circuit Breakers, change over switch etc.</u>	Quantity - 1 No
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