

Sl. No	Specification of the items	Unit	Quantity	FOB value per unit	Freight Air & Sea per unit	Commission per unit Including FOB(In amount & %)	C&F(C) Chittagong value per unit	Total C&F(C) Chittagong value
1.	2	3	4	5	6	7	8	9
1.0	Supply, Installation & Commissioning of Boiler Feed Water Pump Complete with Motor, Base Plate and Switch Gear on Lum Sum Turn Key (LSTK) Basis. Details Specification as per Annexure 'A'	Lot	01(One)					

Karnaphuli Paper Mills Limited
Chandraghona.

ANNEXURE-"A"

Tender Enq.No. KPM/PUR (F) -26/ OS-2122(A)

Date: 22.06.2019

Technical Schedule for Supply, Installation, Commissioning and Test run for **Boiler Feed Water Pump complete with Motor, Common Base Plate, Switch gear and other accessories on LSTK Basis.**

Sl No	Description	Quantity
01.	Supply, Installation and Commissioning of Boiler Feed Water Pump complete with Motor, Base Plate & Switch gear on Lump Sum Turn Key Basis. <u>Pump's Specification:</u> Type: Multistage, Centrifugal, Horizontal Shaft, Radial top Suction and Discharge Nozzles With ANSI/ASTM Flanges mounted on the Steel Base Plate including Coupling, Coupling Gland, Anchor Bolts, Rpm Meter, Pressure Gauges at Suction and discharge Side, Lubricating oil Pot, audio alarm for trip Etc. Pump Manufacturing Code: API 610 or equivalent. Stuffing Boxes: Preferred gland pack with lantern ring & heat proof special asbestos packing & provided with external cooling system or Mechanical Seal System. <u>Working Condition:</u> Service: Continuous Fluid to be handle: Boiler feed water Temperature: 150°C Specific gravity: 0.916 Kg/dm³ Positive Suction Head: 5.3Kg/cm² Discharge Pressure: 45 Kg/cm² Quantity Discharged: 47 liter/ sec. Speed: 2960 RPM Break Horsepower: To be mentioned by the bidder <u>Material of Construction:</u> a) Casing with inlet & outlet nozzles, casing segments, cover at the inlet & outlet, Diffusers, Expansion plate, balancing Disc, Wearing Ring, stuffing boxes etc.: Cast steel b) Shaft, Shaft sleeve & Impeller: Stainless Steel-316 <u>Motor's specification:</u> Totally enclosed fan cooled, Squirrel cage induction motor. Power source : 440V AC 3 Phase 50Hz. Insulation class: F Protection: IP-55 Output power: 300KW. Speed : 2960 RPM Switch Gear: motor control plane consisting of soft touched starter protection device such as Earth Fault relay and short circuit protection. Measuring device such as CT, PT, Ammeter & Voltmeter with selector switch. Energy meter, Audio alarm signal lamp, Incoming circuit breaker etc.	01(One) lot

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2.	Accessories: a) Hand wheel operated Cast steel Gate Valve at the discharge side <u>Specification:</u> As per pump discharge flange size and rating according to ANSI standard. <u>Materials Construction:</u> Body & Bonnet: Cast steel/ SCPH-2 Stem : 13% Cr (SUS-403)+ Satellite Seat & Disc: SUS 403+ Satellite Faced Working pressure: 45 Kg/cm ² Working Temperature: 150°C	01(one) no
	b) Swing check valve at the discharge line with minimum by pass line arrangement. <u>Specification:</u> As per pump discharge flange size and rating according to ANSI standard. <u>Materials Construction:</u> Body & Bonnet: Cast steel/ SCPH-2 Stem : 13% Cr (SUS-403)+ Satellite Seat & Disc: SUS 403+ Satellite Faced Working pressure: 45 Kg/cm ² Working Temperature: 150°C	01(one) no
	c) Hand wheel operated by pass gate valve at discharge line <u>Specification:</u> As per by pass line flange size and rating according to ANSI standard. <u>Materials Construction:</u> Body & Bonnet: Cast steel/ SCPH-2 Stem : 13% Cr (SUS-403)+ Satellite Seat & Disc: SUS 403+ Satellite Faced Working pressure: 45 Kg/cm ² Working Temperature: 150°C	01(one) no
	d) Hand wheel operated by pass gate valve at suction line <u>Specification:</u> As per pump suction flange size and rating according to ANSI standard. <u>Materials Construction:</u> Body & Bonnet: Cast steel/ SCPH-2 Stem : 13% Cr (SUS-403)+ Satellite Seat & Disc: SUS 403+ Satellite Faced Working pressure: 45 Kg/cm ² Working Temperature: 150°C	1(one) no
	e) Swing check valve for by pass line <u>Specification:</u> As per by pass line flange size and rating according to ANSI standard. <u>Materials Construction:</u> Body & Bonnet: Cast steel/ SCPH-2 Stem : 13% Cr (SUS-403)+ Satellite Seat & Disc: SUS 403+ Satellite Faced Working pressure: 45 Kg/cm ² Working Temperature: 150°C	1(one) no
	f) Mating flanges (2 no's, for each)for item no 2 (a) ,2(b), 2 (c), 2 (d) & 2 (e)	10(Ten) no's
	g) Pressure Gauges for suction & discharge end (1 no for each).	2(two) no's

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3.	Spare Parts: A. Impeller – 1(one) set B. Shaft – 1 (one) no C. Shaft sleeve – 2 (two) No's D. Wearing ring – 1(one) Set E. Coupling, Coupling Spacer with bolt and Nut – 1(one) set F. Mechanical Seal-3 (Three) Sets (If pump offer mechanical Seal System).	01(One) Lot
4.	Installation, Commissioning and Test Run	01(One) Lot

Special Terms & Conditions:

- 1) **Preferable Country of origin:** USA / Japan / EU countries / Germany
- 2)
 - a) Manufacture's original catalogue for pump, motor, switch gear & Valves.
 - b) Catalogue of pump must contain characteristics curves/ performance data of the quoted model.
 - c) Pump, Motor & Switch gear must be of the same country of origin.
 - d) Port of shipment and country of origin must be same.
- 3) For fitting with base plate, casing of the pump should be supports attached with bolts and space sleeve which will permit expansion of the in all direction under influence of heat.
- 4) The pump should have provision for cooling water supply and discharge pipes to the bearing, cooling ring, stuffing boxes and passages in the bed pate together with regulating valve/ cocks, flow indicators gland seepage drain pipes etc.
- 5) The stuffing boxes should have external cooling system, cooling sleeve of which shall be able to expand freely under the influence to temperature.
- 6) Manufacturing must have proven records of supplying Boiler Feed Water Pump along with accessories outside home country and documentary evidence such as purchase order, provenance certificates from 3 buyers in original letter head pad containing logo or monogram of the company with seal and signature and contact address such as fax no., e-mail, person to contact etc. must be furnished along with the bid.
- 7) Manufacture's authorization letter in favor of export house/ supplier, supplier's authorization letter in favour of local agent and manufacturer's warranty certificates must have to be furnished along with the bid.
- 8) Manufacturers of pump and motor must have up to date ISO certificate for quality assurance and copies of such certificates must be furnished.
- 9) Detailed specification (Pump, Motor, Switch Gear and Valves) and pro-forma invoice, in original from the Manufacturer or authorized export house must be furnished with the bid.
- 10) Commercial evaluation will be made on the basis of total lowest for item no 1-4, subject to technical acceptance.
- 11) Conformation letter from the Manufacturer that performance test will be carried out in closed loop at the factory and test data, will be sent to buyer for approval before shipment, must be given with bid.
- 12) Conformation letter from the Manufacturer that 3 copies operation and maintenance manual and spare parts list will be supplied to buyer before or during shipment must be given. In maintenance manual must be contain details parts dimension of the pump, Material of Construction etc.
- 13) Offer without above documents or non-fulfillment of the above term and condition will be tender as non-responsive and therefore shall not be entertained during technical evaluation.

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- 14) Supply, Installation, Commissioning and Test Run at Karnaphuli Paper Mills Limited, Chandraghona, Rangamati Hill District.
- 15) Installation, Commissioning & Test Run work must be completed within 30 (Thirty) days after supplied materials. Party should have experience installation, commissioning and test run of Boiler feed water pump.
- 16) Warranty condition to " 24 Months from the date of supply or 18 months from the date of commissioning whichever is earlier. In warranty period any problem arisen party should be rectify the work within 05 (Five) days after confirmation from MTS division their own cost. If party fail to rectify the work in schedule time PG will be confiscated.
- 17) Bidder should be given the undertaking/confirmation for supply spare parts and sales service for next 20 (Twenty) years.

18) TERMS OF PAYMENT:

a) Supply Portion:-

- I. Value equal to 90% of the total CIF price shall be paid to the bidder/contractor after Supply of materials through at site Letter of credit.
- II. 10% of the rest CIF price shall be paid to the bidder/contractor after issuance of work completion certificate by MTS department of KPM through at site Letter of credit.

Service Portion: -

- I. Service Value shall be paid by Accounts Division of KPML through A/C payee Cheque after successful completion of installation, commissioning work followed by issuance of work completion certificate by MTS department of KPM.
- II. VAT, levies & Income Tax etc to deducted from your service portion bill as per existing Govt. rule & regulation.

19) RETURN OF PERFORMANCE GUARANTEE:

Value equal to 10 % performance guarantee shall be return to the bidder /contractor after expiry of warrantee period.