



# Xtreme Engineering Equipment Private Limited

Factory / Of : Xtreme House, S. No. 37/2, Ashtavhayak  
Industrial Estate, Parvati Nagar, Next to Parl Robotics,  
Dhayari-Narhe Road, Narhe, Pune - 411 041  
Maharashtra, INDIA



XEEPL®

Enriching Technical Education.  
(An ISO 9001 : 2015 Certified Co.)

Ref. No.: XEEPL / MSBCOE / 2022-23 / 304

Date: 30<sup>th</sup> January 2023

To,  
The Principal,  
Mahatma Basweshwar Education Society's,  
MS Bidve Engineering College,  
Pakarsangvi, Latur, Maharashtra - 413 512  
Phone: 02382 - 221 846  
Mail: principal@msbecl.ac.in ayazoddin@gmail.com

## Sub: Quotation for Fluid Mechanics Equipment for Civil Engineering

Dear Sir,

This is with reference to your Enquiry regarding **Quotation for Fluid Mechanics Equipment for Civil Engineering / Instruments / Kits**. We are pleased to enclose here with our competitive offer with relevant technical specifications and terms & Conditions for your Ready reference. Please go through it, and if you require any more information, communicate us, it is our pleasure to furnish the same to you.

We hope that you would find our offer most suitable and favor us with your valued order at an earliest. In case of any further information / clarification, please feel free to contact the undersigned.

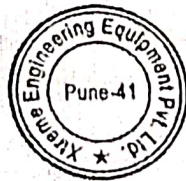
Thanking you & assuring you the best of our services at all times.

Yours Faithfully,

For Xtreme Engineering Equipment (P) Ltd.,

Authorized Signatory

+91 98900 50905



## QUOTATION

### Fluid Mechanics/Hydraulics

Sr No	Description	Qty	Rate / Unit in ₹	Total Amount
1	<p><b>Measurement of Viscosity of various fluids:</b>  <b>Redwood viscometer No1,</b>  <b>Introduction:</b> Redwood viscometer apparatus are widely used in Petroleum Laboratories, Industries, Oil Refineries, Educational Institutions, Research Organizations for standardization and determines the Viscosity of Petroleum products, which flows in a newtonian liquid except cut back Bitumen's and road oils at the set temperature, They confirm to requirement of IP 70. Redwood Viscometers No. I for liquids having Redwood Flow 20 seconds to 2000 Seconds.</p> <p><b>General Description &amp; Specifications:</b> The complete outfit comprises hemmer tone finish, copper/Stainless steel bath with drain plug, electrical heating arrangement, Suitable to operate at 220V, 50Hz AC mains Or gas heating arrangement with silver plated oil cup with precision stainless steel jet, ball value, cover, thermometer clip, stirrer and suitable stand with leveling screws. The sample required to be tested, is to fill in to the required level as indicated by the gauge in a cup having a Stainless Steel jet fixed in the bottom. The temperature is maintained during the test by heating the liquid in a bath surrounding the cup, and the flow time for 50 ml of the sample is measured. The model comes with Electric Heated Model by Voltage variac control and digital temperature indicator. (with all basic requirements for conducting viscosity experiments).</p>	01	25,500/-	25,500.00
2	<p><b>Demonstration of working of different types of valves and pipe fittings:</b>  <b>DETERMINATION OF MINOR LOSSES IN PIPING SYSTEMS: Make: XEEPL, Model: FM008</b>  <b>A) RANGE OF EXPERIMENTS:</b></p> <ul style="list-style-type: none"> <li>• Measurement of pressure losses across different kinds of bends, fitting &amp; gate value at varies water flow rate.</li> <li>• Calculation of pressure loss coefficient at varies flow rates.</li> <li>• Determination of pressure drop vs flow characteristics curves for different fittings.</li> </ul> <p><b>B) SPECIFICATIONS:</b></p> <ul style="list-style-type: none"> <li>• Sump tank: Made up of PVC resist corrosion, Capacity: 100 Litres (Approx.), Make: Sintex.</li> <li>• Mono-block pump: 1-Φ, 1/2 HP, Make: Crompton Greaves.</li> <li>• Measuring Tank: 25 Litres, Material: Rota mould, Make: Aristo.</li> <li>• Differential manometer.</li> <li>• PIPE ARRANGEMENT: -               <ul style="list-style-type: none"> <li>➤ Supporting stand structure,</li> <li>➤ Circuit of Two pipes of 25mm &amp; 12.5 mm,</li> <li>➤ Sudden enlargement from 12.5 mm to 25 mm dia.,</li> <li>➤ Sudden contraction from 25 mm to 12.5 mm dia.,</li> <li>➤ Bend &amp; elbow of 12.5mm dia each.</li> <li>➤ Gate value &amp; Ball value.</li> </ul> </li> <li>• Piping: PVC piping with valves.</li> </ul>	01	115,000/-	115,000.00





	Indicators. Mercury not in our scope of supply			
4	<p><b>Measurement of discharge - Calibration of measuring tank, Use of hook or point gauge:</b>  <b>Orifice and Mouthpiece Apparatus: Make: XEEPL, MODEL: FM-04</b></p> <p><b>A) RANGE OF EXPERIMENTS</b></p> <ul style="list-style-type: none"> <li>• To determine the hydraulic coefficients such as;</li> <li>• Coefficient of discharge, Cd.</li> <li>• Coefficient of velocity, Cv.</li> <li>• Coefficient of contraction, Cc of given orifice &amp; mouthpiece.</li> <li>• Determination of hydraulic coefficients at different heads.</li> </ul> <p><b>B) SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>• All Piping Should be in PPR Plumbing material</li> <li>• Storage tank: Made up of 100% virgin, FDA grade material, resist corrosion, Capacity: 100 Liters.</li> <li>• Mono-block pump: Brass Impeller, 1-Φ, 1/2 HP, ISI Marked.</li> <li>• Measuring Tank: 29 Liters, Made up of Rotamoulded Material.</li> <li>• Constant Head Tank: 25 Liters, Material: PVC</li> <li>• Set of Orifice: material: Aluminium</li> <li>• Convergent Divergent Mouthpieces: material: Aluminium.</li> <li>• X-Y- Arrangement: Range: 0-500 mm, Chromium Plated.</li> <li>• Piping: PPR piping with valves.</li> <li>• Digital stop watch.</li> <li>• MS Structure Frame: Made of M.S. square tubes &amp; sheets, welded &amp; Duly powder coated.</li> </ul> <p>Necessary electrical wiring with on / off switch &amp; indicators.</p>	01	48,000/-	48,000.00
5	<p><b>Study of factors affecting coefficient of friction for pipe flow:</b>  <b>COEFFICIENT OF FRICTION FOR PIPE FLOW: Make: XEEPL, Model: FM006</b></p> <p><b>A) RANGE OF EXPERIMENTS:</b></p> <ul style="list-style-type: none"> <li>• Determination of coefficient of friction of             <ul style="list-style-type: none"> <li>&gt; GI pipe: 1 Inch.</li> <li>&gt; GI pipe: 3/4 Inch.</li> <li>&gt; GI pipe: 1/2 Inch.</li> </ul> </li> <li>• To plot relation between pressure loss &amp; flow rates for a particular pipe diameter.</li> </ul> <p><b>B) SPECIFICATIONS:</b></p> <ul style="list-style-type: none"> <li>• Sump tank: Made up of PVC resist corrosion. Capacity: 100 Litres (Approx.), Make: Sintex.</li> <li>• Mono-block pump: 1-Φ, 1/2 HP, Make: Crompton Greaves.</li> <li>• Measuring Tank: 25 Litres, Material: Rota mould, Make: Aristo.</li> <li>• <b>Pipes:</b> <ul style="list-style-type: none"> <li>&gt; GI : 1" x 1000 mm.</li> <li>&gt; GI: 3/4" x 1000 mm.</li> <li>&gt; GI : 1/2" x 1000 mm.</li> </ul> </li> <li>• Piping: PVC piping with valves &amp; QRC couplings.</li> <li>• Digital stop watch.</li> <li>• Differential manometer.</li> <li>• Frame: Made of M.S square tubes &amp; sheets, welded &amp; powder coated.</li> </ul>	01	48,000/-	48,000.00

	<ul style="list-style-type: none"> <li>• Digital stop watch.</li> <li>• Frame: Made of MS square tubes &amp; sheets, welded &amp; powder coated.</li> <li>• Mercury in Manometer (optional).</li> </ul> <p>Necessary electrical wiring with on / off switch &amp; indicators.</p> <p><b>With Different Valves:</b></p> <p><b>Display board with valve cut sections</b> - Ball valve, plug valve, gate valve, NRV, globe valve, needle valve.</p> <p>VALVE CUT SECTION DISPLAY BOARD FOR TRAINING PURPOSE. DISPLAY BOARD WITH 6 DIFFERENT TYPES OF VALVE CUT SECTIONS, PICTURE AND MARKING VALVE SIZES - 1 INCH TO 2 INCH VALVE TYPES - BALL VALVE, GLOBE VALVE, NRV, PLUG VALVE, NEEDLE VALVE, GATE VALVE BOARD DIMENSIONS 60 X 22 X 48 INCH</p> <p><b>Make: XEEPL, Model: ATE301</b></p>			
3	<p><b>Measurement of pressure Piezometer, Manometer and pressure gauges:</b></p> <p><b>PRESSURE AND FLOW MEASUREMENT APPARATUS:</b></p> <p><b>Make: XEEPL, Model: FM002</b></p> <p><b>A) RANGE OF EXPERIMENTS</b></p> <p><b>1. Hydraulic setup</b></p> <ul style="list-style-type: none"> <li>• To measure pressure through different types of manometer's.</li> <li>• Comparison of pressure from different pressure measuring devices.</li> <li>• Flow measurement through rotameter &amp; water-meter.</li> <li>• Comparison of discharge from different flow measurement devices.</li> </ul> <p><b>2. Pneumatic (Air) setup</b></p> <ul style="list-style-type: none"> <li>• To measure pressure through different types of manometer's.</li> <li>• Comparison of pressure from different manometer.</li> </ul> <p><b>B) SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>• Storage tank: Made up of PVC resist corrosion.</li> <li>• Capacity: 100 Ltr. (Approx.), Make: Sintex.</li> <li>• Measuring Tank: 29 Litres, Material: Rota mould, Make: Aristo.</li> <li>• U- tube manometer: made in acrylic, to measure the pressure along the orifice meter.</li> <li>• Single limb manometer : made in acrylic, to measure the pressure along the orifice meter.</li> <li>• Inclined tube manometer: made in acrylic, to measure the pressure along the orifice meter.</li> <li>• Inverted tube manometer: made in acrylic, to measure the pressure along the orifice meter.</li> <li>• Simple manometer: made in acrylic, to measure the pressure along the orifice meter.</li> <li>• Air blower : Model no.25</li> <li>• Pressure gauge : Make-Wika</li> <li>• Orifice meter : Material : PVC</li> <li>• Control valve : Material : UPVC</li> <li>• Rotameter: Material: Acrylic: range: 0-2500 LPH</li> <li>• Air bulb valve: For air removing</li> <li>• Water meter: Type: Magnetic</li> <li>• Necessary electrical wiring with on / off switch &amp;</li> </ul>	01	68,000/-	68,000.00





	<p><b>XEEPL, Model FM009</b></p> <p><b>A) RANGE OF EXPERIMENTS</b></p> <ul style="list-style-type: none"> <li>• Calibration of Venturi meter and Orifice meter.</li> <li>• Determination of coefficient of discharge. (Cd)</li> <li>• Study of flow measurement through venturi meter and Orifice meter.</li> <li>• Determination of actual &amp; theoretical flow rate through venturi meter and Orifice meter.</li> </ul> <p><b>B) SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>• Sump tank: Made up of PVC resist corrosion,</li> <li>• Capacity: 100 Liters (Approx.), Make: Sintex.</li> <li>• Mono-block pump: 1- Φ, 1/2 HP, Make: Crompton Greaves.</li> <li>• Measuring Tank: 29 Liters, Material: Rota mould, Make: Aristo.</li> <li>• Differential manometer.</li> <li>• Venturi meter and Orifice meter made in acrylic with pressure point.</li> <li>• Piping: PVC piping with valves.</li> <li>• Digital stop watch.</li> <li>• MS Structure Frame: Made of M.S. square tubes &amp; sheets, welded &amp; powder coated.</li> <li>• Mercury in Manometer. <b>(optional Extra)</b></li> </ul> <p>Necessary electrical wiring with on / off switch &amp; indicators.</p>			
9	<p><b>Single Stage Centrifugal Pump Test Rig (VARIABLE SPEED): Make: XEEPL, Model FM019</b></p> <ol style="list-style-type: none"> <li>1. Centrifugal pump suction 1" X discharge 1"/2880 rpm/ 12 mtr head. With swining field type</li> <li>2. Variable speed motor with control of capacity 1 H.P.</li> <li>3. Sump tank: 130 Ltrs.</li> <li>4. Measuring tank: 90 Ltrs With piezo-meter or Rota meter 250-2500 for water flow measurements</li> <li>5. Pressure gauges for discharge / suction Head Measurement.</li> <li>6. Digital voltmeter/Ammeter for motor power measurement.</li> <li>7. Control valve for flow control.</li> </ol> <p><b>Motor speed controller by electronic drive</b></p>	01	75,000/-	75,000.00
10	<b>Mercury</b>	200gm	5,000/-	5,000.00

	<ul style="list-style-type: none"> <li>Mercury in Manometer ( optional ).</li> </ul> Necessary electrical wiring with on / off switch & indicators.			
6	<b>Determination of loss of head due to pipe fittings:</b> Can be done in item No. 02] <b>DETERMINATION OF MINOR LOSSES IN PIPING SYSTEMS: Make: XEEPL, Model: FM008</b>	01	0	0.00
7	Calibration of V notch and rectangular notch:	01	325,000/-	325,000.00
	Calibration of Ogee weir:			
	Study of Hydraulic jump:			
	<b>TILTING FLUME APPARATUS: 5 Meters Long (CC Type):</b> Total 6Mt. (Including S.S. Tank) <b>Make: XEEPL, Model FM017</b> <b>A) RANGE OF EXPERIMENTS:</b> <ul style="list-style-type: none"> <li>✓ To study flow through open channel.</li> <li>✓ To study Hydraulic Jump.</li> <li>✓ To study flow over weirs.</li> <li>✓ To study flow through Venturi-flume.</li> <li>✓ To find out chezy's &amp; mannings constant.</li> <li>✓ Determination of froudes numbers &amp; study subcritical, critical &amp; super critical flow in open channel.</li> <li>✓ Determination of velocity in open channel.</li> <li>✓ Study of flow through standing wave flume.</li> <li>✓ To draw velocity profile curve in open channel.</li> </ul> <b>B) SPECIFICATIONS:</b> <ul style="list-style-type: none"> <li>• A 100mm wide, 300mm high &amp; 5mtr Length open channel.</li> <li>• Clear acrylic sides to give visibility of the working section.</li> <li>• Hand jacking system permits the slope of the channel bed to be adjusted between -1% and +3%.</li> <li>• Service module: Made from Acrylic</li> <li>• Sump tank capacity: 250 liters (Stainless Steel)</li> <li>• Volumetric tank capacity: 60 liters (PVC)</li> <li>• Include a Venturi flume,</li> <li>• Pump: Submersible type 0.5 HP</li> <li>• Motor: 0.37kW split capacitor start with built in overload protection, Speed 2800rpm, Class B insulation, Continuous duty.</li> <li>• Flow meter: Shunt orifice type range 0.5 to 2.5 liters/sec</li> <li>• Vernier level: - 1 x 300mm resolution 0.1mm (digital)</li> <li>• Comprehensive instruction manual.</li> <li>• Overall dimensions 5.4m (L) x 0.62m (W) x 1.46m(H)</li> <li>• Pitot tube ASME Standard having correction factor -1</li> <li>• Necessary electrical wiring with on / off switch &amp; indicators.</li> <li>• MS Structure Frame: Made of M.S. square tubes &amp; sheets, welded &amp; Duly powder coated</li> </ul> <b>MODELS: Ogee weir, V Notch and Rectangular Notch.</b>			
8	Calibration of orifice, venturi meter, Mouthpiece, Orifice meter: <b>NOTE: Orifice and Mouth Piece can be done in Sr. No: 04]</b> <b>Orifice and Mouthpiece Apparatus: Make: XEEPL, MODEL: FM-04</b>  <b>VENTURI AND ORIFICE METER APPARATUS: Make:</b>	01	42,000/-	42,000.00



### Terms & Conditions

1	<b>PRICES</b>	Our Prices are quoted F.O.R. Ex- Works. .
2	<b>FREIGHT</b>	On Actuals, will be extra on your account
3	<b>GST</b>	@18% will extra on your account
4	<b>PKNG &amp; FORWARDING</b>	On Actuals, will be extra on your account
5	<b>ADDITIONAL LEVIES</b>	Octroi & other Govt. levies will be charged extra as and if applicable at the time of delivery
6	<b>PAYMENT TERMS</b>	50 % Advance Along with Confirmed technical specifications & Purchase Order & 50% against Delivery of Goods before dispatch.
7	<b>DELIVERY PERIOD</b>	In approximately <b>04-06 week</b> from the date of receipt of your firm order Along with Advance Payment.
8	<b>VALIDITY</b>	90 Days
9	<b>WARRANTEE</b>	12 months from date of supply of the Equipment. It covers manufacturing Faults, defects. Except All the heating Elements, Electrical, Plastic Parts which are not warranted.
10	<b>AFTER SALES SERVICE</b>	We Assure you the best service after sales to you
11	<b>JURISDICTION</b>	In case of legal, the matter will be subject to Pune Jurisdiction only.
12	<b>FORCE MAJOR</b>	We shall not be liable for any delay in delivery by Govt. legislation, War, National Defence Activity, Fire, Strikes, Work stoppage, Transportation delays, Material Scarcity, Act of God or any other reason beyond our control.
13	<b>MODE OF DISPATCH</b>	By Rail / By Road
14	<b>ROAD PERMIT</b>	If Required, will be Supplied by you with purchase order
15	<b>MODE OF PAYMENT</b>	Strictly by DD/RTGS/NEFT/ECS Only.
16	<b>NOTE</b>	<ul style="list-style-type: none"> <li>• Goods once sold will not be taken back in any circumstances.</li> <li>• The Government / RTCC / MSME / NABL Certified calibration certificates can be provided at extra cost the same should be mentioned clearly in PO.</li> <li>• Unloading, placement of machine, civil work if any shall be arranged by the buyer. .</li> </ul>
17	<b>GST TIN:</b>	<b>27AAACX1658E1ZD</b>
18	<b>CIN</b>	<b>U29130PN2014PTC152672</b>
19	<b>TAN</b>	<b>PNEX00128C</b>
20	<b>IEC No.</b>	<b>3114025731</b>
21	<b>PAN NO</b>	<b>AAACX1658E</b>
22	<b>BANK NAME &amp; BRANCH</b>	<b>STATE BANK OF INDIA, Dhayarl, Pune-411041</b>
23	<b>ACCOUNT NO.</b>	<b>36571844992</b>
24	<b>IFSC CODE</b>	<b>SBIN0017878</b>

# J.B.ENGINEERING

PLOT NO- 10 TUKAI NAGAR, MIDC, BAMNOLI. DIST- SANGLI.  
EMAIL ID – jbenineeing11@gmail.com. WEB-www.jbenineering.com

GST NO- 27AJGPG9140A1ZL CONTACT NO: 9823269098

		stop watch. 5) Measuring tank – 400 x 300 x 300mm 6) sump tank – 900 x 400 x400 mm. 7) ½ HP MONOBLOCK PUMP	
5	Losses In pipe fitting apparatus	1) Basic piping.- 1" GI piping with brass valve 2)Pipe fitting. a) Pipe elbow b) Pipe bends c) Sudden expansion1/2"to 1"d) Sudden contraction-1" to 1/2" 3)Differential manometer. 4)Flow control valve. 5)Measuring tank – 400 x 300 x 300mm 6) sump tank – 900 x 400 x400 mm. 7) ½ HP MONOBLOCK PUMP	68000/-
6	Impact of jet Apparatus .	Circular box one leak proof of transparent side. 2) Differential lever mechanism & dead weight to measure the force. 3) Measuring tank.- 400x300x300mm 4) Nozzle diameter- 8.5mm 5) Plates of shape. a) 600 inclined. b) Curved plate. c) FLATE 6) Measuring tank – 400 x 300 x 300mm 7) sump tank – 900 x 400 x400 mm.	74,000/-
7	Metacentric height of ship model	Water tank 700 mm. x 700 mm x 300 mm. heights with fibre lining inside. 2) Ship model 300 mm. x 150 mm. with a horizontal guide bar for sliding weight & pointer hung from a hook. 3) Scales for measuring displacement of sliding weight & pointer	28000/-
8	Pressure measurement Apparatus	Single well Manometer. ii) Differential Manometer. iii) Sensitive Manometer. iv) Pressure Gauge. v) Vacuum Gauge Measuring tank – 400 x 300 x 300mm sump tank – 900 x 400 x400 mm	78000/-
9	Red wood viscometer		38000/-
10	Calibration of measuring tank using hook gauge or pointer gauge		48000/-



# J.B. ENGINEERING

PLOT NO- 10 TUKAI NAGAR, MIDC, BAMNOLI. DIST- SANGLI.  
EMAIL ID – jbengeeing11@gmail.com. WEB-www.jbengeeing.com

GST NO- 27AJGPG9140A1ZL CONTACT NO: 9823269098

Ref: JBE/Q1/145/2022-23

DATE: 03/02/2023

To,

Principal,  
M.S.Bidave Engineering College  
Latur,  
Maharashtra

## Sub: Quotation for Fluid Mechanics Lab

Sr No	Particular's	Specification	Price
1	Heleshaw Apparatus	1. Visual observation of the flow patterns about: 1. Square Model. 2. Triangular Model. 3. Circular Model. 4. Aerofoil Model. 5. Oval/Eye Shaped Model. Many more such models can be made	24000/-
2	Bernoulli's Theorem Apparatus	Flow channel 750mm long, transparent acrylic. 2) Supply with flow control valve Brass material. And GI 1 inch Piping. 3) Manometric tubes fixed over the flow channel. 4) Measuring tank. =400x300x300mm MS FRP. 5) Sump tank. = 900x400x400mm. MS FRP 6) 1/2 H.P. pump's marked 7) Supply tank is fitted on heavy pipe frame. 8) Stop watch.	64000/-
3	Reynolds Apparatus	1) Acrylic tube (transparent) 25 mm OD of suitable length. 2) Sump tank of 400X400X700 mm size & die tank with die needle. 3) Flow control valve. 4) Measuring Flask & stop watch for flow measurement	42,000/-
4	Pipe Friction Apparatus	a) 29 mm, 22 mm. & 17mm. diameter G.I. Pipe. Length of pipe 1 m. 2) Flow control valve. 3) Differential manometer. 4) Measuring tank and	64,000/-

# J.B. ENGINEERING

PLOT NO- 10 TUKAI NAGAR, MIDC, BAMNOLI. DIST- SANGLI.  
EMAIL ID – jbenigneing11@gmail.com. WEB-www.jbenigneing.com

GST NO- 27AJGPG9140A1ZL CONTACT NO: 9823269098

		scale. 4) Measuring tank- 300 x 400 x400mm FRP coating or SS 5) sump tank – 900x 400x 400mm- FRP coating OR SS 5) Stop watch. 6) ½ HP Pump	
15	Centrifugal Pump test rig	1"x1" size,(Kirloskar make ) with variable speed D. C. motor & speed controller. Sump tank: 900X400X400MM FRP coating Measuring Tank: 400X400X400MM. FRP coating Energymeter- for motor input measurement. Pressure & vaccum gauge- for measurement of head. Stop watch. On/Off Switch	88,000/-

## TERMS AND CONDITIONS:

- 1) PRICES: INCLUDING ALL SERVICES AND TRANSPORTS
- 2) TAXES : 18 % GST CHARGE ADDITIONAL.
- 3) VALIDITY OF QUOTATION : 60 DAYS
- 4) PAYMENT : 100% AGAINST PERFROMA INVOICE
- 5) DELIVERY PERIOD – 2 MONTH

THANK YOU

J.B. ENGINEERING.



# J.B. ENGINEERING

PLOT NO- 10 TUKAI NAGAR, MIDC, BAMNOLI. DIST- SANGLI.  
 EMAIL ID – jbenigneing11@gmail.com. WEB-www.jbenigneering.com

GST NO- 27AJGPG9140A1ZL CONTACT NO: 9823269098

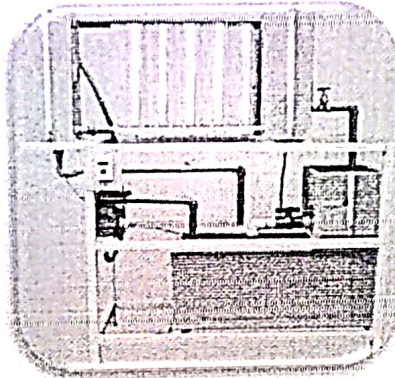
11	Notch Apparatus	Water storage tank 900X400X400MM FRP coating 2) Notches: 60° included angle 'V' notch/ trapezoidal / rectangular in brass material. 3) Notch interchanges arrangement. 4) Measuring tank -400x300x300 5) Pointer depth Gauge for H measurement 6) Supply with flow control valve. Brass material And GI 1 inch Piping. 7) ½ hp self priming monoblock pump ISI marked On/Off	67000/-
12	Hydraulic jump and calibration of ogee wear (tilting flume – 4 m / 6m )	Technical Details: A hydraulic flume of c/s 200x300 mm & 4000 mm or 6000 or (optional length) length with transparent window on either sides of 1000 mm length. Sliding gates one at upstream and other at the downstream side. Screw jack for change of the slope of the flume. A Sump tank of sufficient capacity. Supply tank with waves damping arrangement. A 2 H.P. or 3 hp centrifugal Monoblock pump	4meter – 4,10,000/- 6mter - 5,95,000/-
13	Calibration of venturi meter and orifice mete	SPECIFICATIONS:- 2) Basic piping-1" with brass valve 3) Ventruimeter inlet dia- 22mm throat- 12.5 mm 4) Differential manometer. 5) Flow control valve.-brass-made 6) Measuring tank – 400 x 300 x 300mm FRP coating 7) sump tank – 900 x 400 x400 mm. FRP coating 8) ½ HP MONOBLOCK PUMP	58,000/-
14	Orifice and Mouth Piece apparatus	Main supply tank FRP coating or SS with orifice & mouthpiece fitting arrangement. Diameter of Orifice 8.5mm, Diameter of mouthpiece 8.5mm. Nozzle-25mm. &50mm length. 3) Tracer pointer with	65,000/-

### Bernoulli's Theorem Apparatus

- 1) Flow channel 750mm long, transparent acrylic.
- 2) Supply with flow control valve Brass material.  
And GI 1 inch Piping .
- 3) Manometric tubes fixed over the flow channel.
- 4) Measuring tank.  
=400x300x300mm MS FRP.
- 5) Sump tank. =  
900x400x400mm. MS FRP
- 6) 1/2 H.P. pump. ISI marked
- 7) Supply tank is fitted on heavy pipe frame.
- 8) Stop watch.

**SERVICE REQUIRED:-**

- 1) Suitable Water supply.
- 2) Suitable floor space 2m.x2m.
- 3) On/Off Switch with LED Indicator.



1

38,000/-

48,000/-

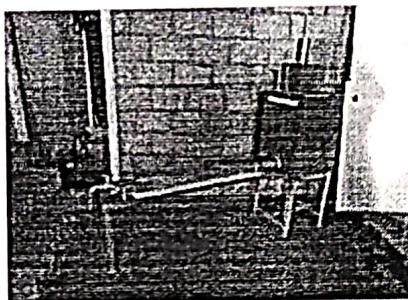
### Reynolds Apparatus

**RANGE OF EXPERIMENT:-**

- 1) To determine the Reynolds number & hence the type of flow either laminar or turbulent.
- 2) To determine upper & lower Reynolds number & velocities.

**SPECIFICATIONS:-**

- 1) Acrylic tube (transparent) 25 mm OD of suitable length.
- 2) Sump tank of 400X400X700 mm size & die tank with die needle.
- 3) Flow control valve.
- 4) Measuring Flask & stop watch for flow measurement.



1

21,000/-

31,000/-

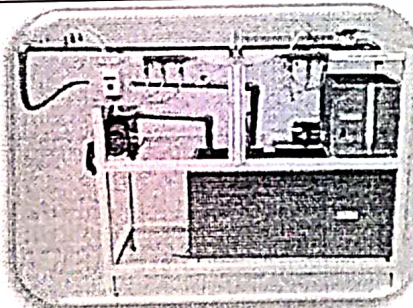
### Pipe Friction Apparatus

**RANGE OF EXPERIMENTS:-**

- A) To determine coefficient of friction for pipes.
- B) To plot relation between pressure loss and flow rates for a particular pipe diameter.

**SPECIFICATIONS:-**

- 1) Three pipes of



1

36,000/-

46,000/-





SUPER TECH

# SUPERTECH EQUIPMENTS

MANUFACTURER AND TRADERS OF ENGINEERING LAB EQUIPMENTS

OFFICE AND FACTORY: J-17/1/2 MIDC KUPWAD. TAL-MIRAJ.DIST-SANGLI. (M.S).

Email - [supertecheqp@gmail.com](mailto:supertecheqp@gmail.com) Web- [www.supertechequipments.com](http://www.supertechequipments.com)  
CONTACT - Mr. A.B.Ghatge 7620701314. GST NO- 27BBRPG1100L1ZR.

An 1  
9001  
Certifi  
compa

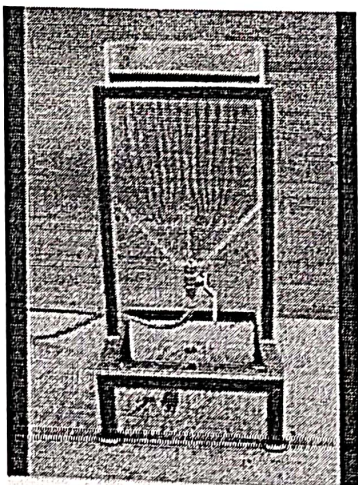


Quotated To,  
Principal,  
M.S.Bidave Engineering College  
PO Box No 112 Barshi Road  
Latur 413512 Maharashtra

REF No - STE/QT/114/2022/ 23	
Date	31/01/2023.
Expiry Date	31/03/2023.
Ref Of Enquiry	Email

## Quotation

FM lab

SR NO	NAME OF EQUIPMENTS	Image	QTY	PRICE MS Tanks Price	SS 304 tank
	<b>Heleshaw Apparatus</b> <b>SPECIFICATIONS:</b> Test Channel: White side acrylic plates, both smooth on test side, fixed in rigid framed structure. Nominal Dimensions: 600 mm Long x 250 mm wide app. Depth of Channel can be varied by using different thickness models of rubber to some extent.. Dye container with small series of holes to facilitate proper flow of the dye. <b>EXPERIMENTS:</b> 1. Visual observation of the flow patterns about: 1. Square Model. 2. Triangular Model. 3. Circular Model. 4. Aerofoil Model. 5. Oval/Eye Shaped Model. Many more such models can be made and tested		1	16,000/-	-



An ISO  
9001:2015  
Certified  
Company



**SUPER TECH**

# SUPERTECH EQUIPMENTS

MANUFACTURER AND TRADERS OF ENGINEERING LAB EQUIPMENTS

OFFICE AND FACTORY: J-17/1/2 MIDC KUPWAD, TAL-MIRAJ, DIST-SANGLI. (M.S).

Email - [supertechqp@gmail.com](mailto:supertechqp@gmail.com) Web- [www.supertechequipments.com](http://www.supertechequipments.com)

CONTACT - Mr. A.B.Ghatge 7620701314. GST NO- 27BBRPG1100L1ZR.

An ISO  
9001:2015  
Certified  
company

<p>transparent side. 2) Differential lever mechanism &amp; dead weight to measure the force. 3) Measuring tank.-400x300x300mm 4) Nozzle diameter-8.5mm 5) Plates of shape. a) 600 inclined. b) Curved plate. C) FLATE 6) Measuring tank – 400 x 300 x 300mm 7) sump tank – 900 x 400 x400 mm. 8) ½ HP MONOBLOCK PUMP</p>				
<p><b>Metacentric height of ship model SPECIFICATIONS: -</b> 1) Water tank 700 mm. x 700 mm x 300 mm. heights with fibre lining inside. 2) Ship model 300 mm. x 150 mm. with a horizontal guide bar for sliding weight &amp; pointer hung from a hook. 3) Scales for measuring displacement of sliding weight &amp; pointer.</p>		1	20,000/-	31,000/-
<p><b>Pressure measurement Apparatus</b> This is a board mounted model which demonstrates various types of pressure Measurement devices used in common practice. The devices incorporated are i) Single well Manometer. ii) Differential Manometer. iii) Sensitive Manometer. iv) Pressure Gauge. v) Vacuum Gauge Measuring tank – 400 x 300 x 300mm sump tank – 900 x 400 x400 mm. ½ HP MONOBLOCK PUMP</p>		1	42,000/-	54,000/-
<p><b>Viscosity of various fluids (Red wood viscometer)</b></p>		1	28000/-	-
<p><b>Calibration of measuring tank using hook gauge or pointer gauge</b></p>	<p>Flow control valve. Hook gauge Measuring tank – 400 x</p>	1	25000/-	35,000/-





SUPER TECH

# SUPERTECH EQUIPMENTS

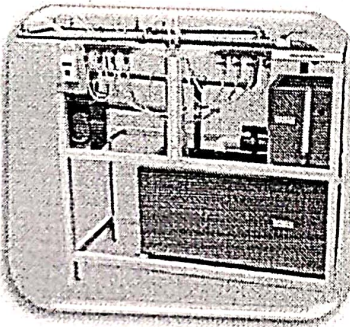
MANUFACTURER AND TRADERS OF ENGINEERING LAB EQUIPMENTS

OFFICE AND FACTORY: J-17/1/2 MIDC KUPWAD. TAL-MIRAJ.DIST-SANGLI. (M.S).

Email - [supertecheqp@gmail.com](mailto:supertecheqp@gmail.com) Web- [www.supertechequipments.com](http://www.supertechequipments.com)

CONTACT - Mr. A.B.Ghatge 7620701314. GST NO- 27BBRPG1100L1ZR.

An  
9001  
Certifi  
compa  
SUPER TE

<p>a) 29 mm, 22 mm.&amp; 17mm. diameter G.I. Pipe.Length of pipe 1 m. 2)Flow control valve. 3)Differential manometer. 4)Measuring tank and stop watch. 5) Measuring tank – 400 x 300 x 300mm 6) sump tank – 900 x 400 x400 mm. 7) ½ HP MONOBLOCK PUMP 8) On /Off switch with LED indicator</p>				
<p><b>Losses In pipe fitting apparatus</b> 1) To determine loss of head due to sudden contraction. 2) To determine loss of head due to sudden enlargement. 3) To determine loss of head in an elbow. 4) To determine loss of head in a bend. <b>SPECIFICATIONS:-</b> 1) Basic piping.- 1" GI piping with brass valve 2)Pipe fitting. a) Pipe elbow b) Pipe bends c) Sudden expansion1/2"to 1"d) Sudden contraction-1" to 1/2" 3)Differential manometer. 4)Flow control valve. 5)Measuring tank – 400 x 300 x 300mm 6) sump tank – 900 x 400 x400 mm. 7) ½ HP MONOBLOCK PUMP 8) On /Off switch with LED indicator</p>		1	37,000/-	47,000/-
<p><b>Impact of jet Apparatus .</b> <b>RANGE OF EXPERIMENTS:-</b> To study the impact of jet on various types of plates &amp; to measure impact Force <b>SPECIFICATIONS:-</b> 1) Circular box one leak proof of</p>		1	38,000/-	48,000/-

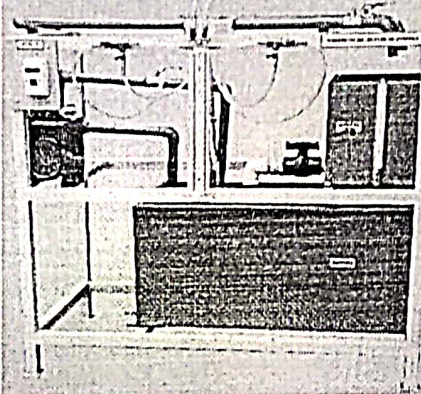
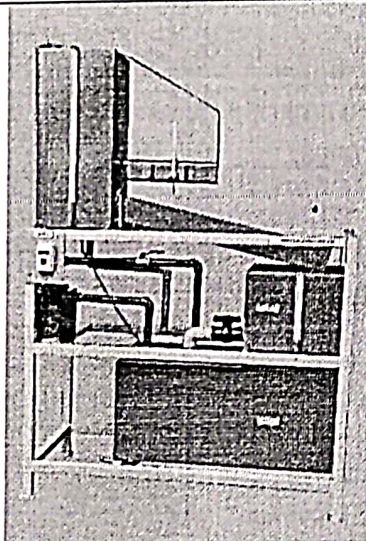
# SUPERTECH EQUIPMENTS

MANUFACTURER AND TRADERS OF ENGINEERING LAB EQUIPMENTS

OFFICE AND FACTORY: J-17/1/2 MIDC KUPWAD, TAL-MIRAJ, DIST-SANGLI, (M.S).

Email - [supertecheqp@gmail.com](mailto:supertecheqp@gmail.com) Web- [www.supertechequipments.com](http://www.supertechequipments.com)

CONTACT - Mr. A.B.Ghatge 7620701314. GST NO- 27BBRPG1100L1ZR.

<p>crested weir (crest length 200 mm) ii) Broad crested weir iii) ogee weir or spillway. iv) Venturi flume</p>				
<p><b>Calibration of venturi meter and orifice meter</b> RANGE OF EXPERIMENTS:- 1) Calibration of Ventruimeter and orifice meter SPECIFICATIONS:- 2) Basic piping-1" with brass valve 3) Ventruimeter inlet dia- 22mm throat- 12.5 mm 4) Differential manometer. 5) Flow control valve.-brass made 6) Measuring tank – 400 x 300 x 300mm FRP coating 7) sump tank – 900 x 400 x400 mm. FRP coating 8) ½ HP MONOBLOCK PUMP 9) On /Off switch with LED indicator</p>		1	34,000/-	44,000/-
<p><b>Orifice and Mouth Piece apparatus</b> Determination of coefficient of discharged (Cd) &amp; coefficient of velocity (CV) &amp; coefficient of contraction (Cc) for orifice. SPECIFICATION _ Main supply tank FRP coating or SS with orifice &amp; mouthpiece fitting arrangement. Diameter of Orifice- 8.5mm, Diameter of mouthpiece 8.5mm. Nozzle-25mm. &amp;50mm length. 3) Tracer pointer with scale. 4) Measuring tank- 300 x 400 x400mm FRP coating or SS 5) sump tank – 900x 400x 400mm- FRP coating OR SS 5) Stop watch. 6) ½ HP MONOBLOCK PUMP 7) On /Off switch with LED indicator</p>		1	37,000/-	47,000/-





SUPER TECH

# SUPERTECH EQUIPMENTS

MANUFACTURER AND TRADERS OF ENGINEERING LAB EQUIPMENTS

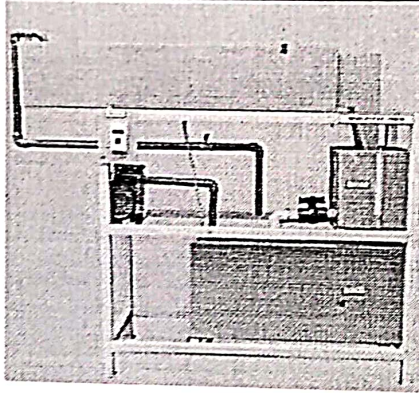
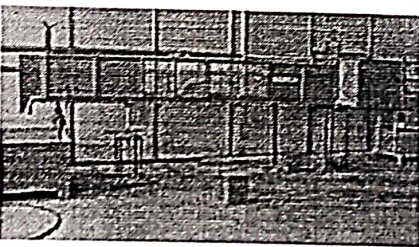
OFFICE AND FACTORY: J-17/1/2 MIDC KUPWAD, TAL-MIRAJ, DIST-SANGLI. (M.S).

Email - [supertechqp@gmail.com](mailto:supertechqp@gmail.com) Web- [www.supertechequipments.com](http://www.supertechequipments.com)

CONTACT - Mr. A.B.Ghatge 7620701314. GST NO- 27BBRPG1100L1ZR.

An ISO 9001:2008 Certified company



		300 x 300mm sump tank – 900 x 400 x 400 mm. ½ HP MONOBLOCK PUMP On /Off switch with LED indicator			
	<p><b>Notch Apparatus</b></p> <p>ANGE OF EXPERIMENTS:- To determine coefficient of discharge through 1)60° 'V' notch 2) Rectangular notch. 3) Trapezoidal notch SPECIFICATION:-</p> <p>1)Water storage tank – 900X400X400MM FRP coating</p> <p>2) Notches: 60° included angle 'V' notch/ trapezoidal / rectangular in brass material.</p> <p>3) Notch interchanges arrangement.</p> <p>4)Measuring tank -400x300x300</p> <p>5) Pointer depth Gauge for H measurement 6) Supply with flow control valve. Brass material And GI 1 inch Piping. 7) ½ hp self priming monoblock pump ISI marked On/Off Switch with LED Indicator</p>		1	36,000/-	46,000/-
	<p><b>Hydraulic jump and calibration of ogee wear (tilting flume – 4 m /6m/8m )</b></p> <p>Technical Details: A hydraulic flume of c/s 200x300 mm &amp; 4000 mm or 6000 or (optional length) length with transparent window on either sides of 1000 mm length. Sliding gates one at upstream and other at the downstream side. Screw jack for change of the slope of the flume. A Sump tank of sufficient capacity. Supply tank with waves damping arrangement. A 2 H.P. or 3 hp centrifugal Monoblock pump. A Orifice meter with manometer to measure the discharge. Inlet/throat dimensions: 50/25 mm respectively. Trolley with point gauge for level measurement. Models supplied: A) Weirs- i) Sharp</p>		1	4m – 2,35,000/- 6 m – 3,25,000/-	4m – 2,90,000/- 6m 3,95,000/-

# SUPERTECH EQUIPMENTS

MANUFACTURER AND TRADERS OF ENGINEERING LAB EQUIPMENTS

An ISO  
9001:2015  
Certified  
company

OFFICE AND FACTORY: J-17/1/2 MIDC KUPWAD, TAL-MIRAJ, DIST-SANGLI, (M.S).

Email - [supertechqp@gmail.com](mailto:supertechqp@gmail.com) Web- [www.supertechequipments.com](http://www.supertechequipments.com)

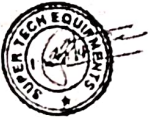
CONTACT - Mr. A.B.Ghatge 7620701314. GST NO- 27BBRPG1100L1ZR.

## TERMS AND CONDITIONS:

• Price	:	Price is FOR Institute
• TAXES	:	18% GST Extra Applicable Under HSN code – 9023.
• Payment terms	:	50% Advance 40% Before Delivery And remaining 10% After Satisfy Installation
• Delivery Timing	:	4 to 8 Weeks from The Date OF PO with Advance
• Warranty	:	12 month : apply Only manufacturing defect under working
• Transport	:	Including
• Installation and demo	:	Including
• Unloading	:	Unloading Of material Is and institute responsibility or customer side

With Regards

For- Supertech Equipments



Sangli (Maharashtra)





M.B. Education Society's  
**M.S. BIDVE ENGINEERING COLLEGE,**  
 LATUR-413 531 (Maharashtra)  
 CIVIL Engineering Department

Comparative Statement for Purchasing Fluid mechanics Lab Equipments in CIVIL Department.

Sr.No.	Description of Required Items	Qty	Quoted Price			
			Xtreme Engineering Equipment Pvt. Ltd. Pune	Supertech Equipments, Sangali (SS 304 Tanks)	Supertech Equipments, Sangali (MS Tanks)	J.B. Engineering, Sangli
1	Measurement of Viscosity of Fluids	1	25,500.00	...	28,000.00	38,000.00
2	Determination of losses in pipes	1	1,15,000.00	47,000.00	37,000.00	68,000.00
3	Pressure and flow measurement apparatus	1	68,000.00	54,000.00	42,000.00	78,000.00
4	Orifice and Mouthpiece apparatus	1	48,000.00	47,000.00	37,000.00	65,000.00
5	Pipe Friction apparatus	1	48,000.00	46,000.00	36,000.00	64,000.00
6	Study of Hydraulic Jump (4m)	1	3,25,000.00	2,90,000.00	2,35,000.00	4,10,000.00
7	Venturimeter and Orificemeter apparatus	1	42,000.00	44,000.00	34,000.00	58,000.00
8	Centrifugal Pump Test Rig	1	75,000.00	57,000.00	48,000.00	88,000.00
9	Notch apparatus	1	..	46,000.00	36,000.00	67,000.00
<b>Total</b>			<b>7,46,500.00</b>	<b>6,31,000.00</b>	<b>5,33,000.00</b>	<b>9,36,000.00</b>

Terms & Conditions	18% Extra	18% Extra	18% Extra	18% extra
GST				
Octroi	Extra	Extra	Extra	Including
Packing & forwarding	Extra	Including	Including	Including
Transportation				
Payment Term	50% advance 50% against delivery	50% advance 40% before delivery 10 % after Installation	50% advance 40% before delivery 10 % after Installation	70% advance 30% at the time of delivery.
Delivery period	within 04 -06 weeks	04 to 08 week	04 to 08 week	02 Months
Warranty	01 Year	01 Year	01 Year	
Validity of Quotation	90 days	..	..	60 days

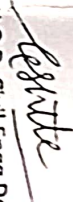
Note : The order can be issued to SUPERTECH EQUIPMENTS Sangli. on the basis of the quality, functionality and durability of the machine compared to the other supplier. After a telephonic discussion with SUPERTECH EQUIPMENTS Sangli, he is offered a 15 % extra discount on the basic price of the machine as given in the quotation with wooden packaging. Hence it is decided to purchase the same.


  
Lab In-charge

  
H.O.D. Mech Engrg Dept.


  
H.O.D. Electrical Engrg Dept.

  
H.O.D. Electronics Engrg Dept.

  
H.O.D. Civil Engrg Dept.

  
H.O.D. CSE Dept.

  
H.O.D. IX Dept.

  
Principal





Shri Mahatma Basweshwar Education Society's  
**M.S. BIDVE ENGINEERING COLLEGE**

(Approved by AICTE, New Delhi & DTE, Mumbai, Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere)  
P. O. Box No. 112, Barshi Road, Latur - 413 531 (Maharashtra)

'NAAC' Accredited

DTE Code : EN 2129

Ph.: (02382) EPBX 221255 (D) 221846 Fax: 221455 +919922050100 website: www.msbecl.ac.in e-mail: principal@msbecl.ac

Ref. No. MSBECL/Off. 2022-23/584

Prof. B.V. Dharne  
M.E.Mech.(Cad/cam)  
Principal

Date : 06.04.2023

To,  
SUPER TECH EQUIPMENTS,  
J-17/1/2 MIDC KUPWAD.  
TQ- MIRAJ DIST- SANGLI

Subject:- Purchase Order for Fluid Mechanics Lab Equipments  
Ref:- Quotation No. STE/QT/114/2022/ 23 Dated 31/01/2023  
Dear Sir,

With reference to your quotation dated 31/01/2023, you are requested to supply the following particulars to the college at the earliest.

Sr.No.	Description of Required Items	Qty	SUPER TECH EQUIPMENTS, Sangli With (SS 304 Tanks)	
			Quoted Price (In INR)	Discount Price (In INR) (15% discount on the basic price)
1	Determination of losses in pipes	1	47,000.00	39,950.00
2	Pressure and flow measurement apparatus	1	54,000.00	45,900.00
3	Orifice and Mouthpiece apparatus	1	47,000.00	39,950.00
4	Pipe Friction apparatus	1	46,000.00	39,100.00
5	Study of Hydraulic Jump (4m)	1	2,90,000.00	2,46,500.00
6	Venturimeter and Orificemeter apparatus	1	44,000.00	37,400.00
7	Centrifugal Pump Test Rig	1	57,000.00	48,450.00
8	Notch apparatus	1	46,000.00	39,100.00
Total cost (Without GST)			6,31,000.00	5,36,350.00
18% GST				96,543.00
Total cost With 18% GST				6,32,893.00
Amount In words : Six lakhs Thirty-two thousand Eight hundred Ninety three only.				

**Terms & Conditions**

Payment Term- 50% Advance 40% Before Delivery And remaining 10% After Satisfy  
Installation  
GST- 18 % Extra  
Transport - Nil  
Installation - Nil  
Demo - Nil  
Unloading - Unloading Of material Is and institute responsibility or customer side  
Delivery period- 4 to 8 Weeks from The Date OF PO with Advance  
Warranty - 12 month : apply Only manufacturing defect under working

  
Principal

Date : 17.04.2023

To  
Principal  
M.S. Bidve Engineering College,  
Latur

Subject : Regarding the transfer an advance payment to the supplier for Engineering Mechanics Lab equipments.

Respected Sir,

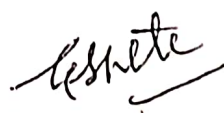
We have received the Invoice Performa and a request for an advance payment from the Supplier SUPERTECH EQUIPMENTS, Sangli. As per their quotation it requires to give 50% advance amount to them.

So please release the advance (i.e.50% of the total cost) to the above supplier.

Bank details are attached here with the application.

Yours Faithfully,

TO  
A/c seehan  
Shete  
17/4/2023

  
Prof. G.N.Shete  
Head, Civil Engg. Dept  
M.S. Bidve Engg. College, Latur  
Prof. G.N. SHETE  
H.O.D. Civil Engg. Dept.  
M.S. Bidve Engg. College, Latur





## e-Way Bill



E-Way Bill No:	2316 0964 8988
E-Way Bill Date:	25/06/2023 11:23 AM
Generated By:	27BBR PG110 0L1ZR - SUPERTECH EQUIPMENTS
Valid From:	25/06/2023 11:23 AM [302Kms]
Valid Until:	27/06/2023

### Part - A

GSTIN of Supplier	27BBRPG1100L1ZR,SUPERTECH EQUIPMENTS
Place of Dispatch	Sangli,MAHARASHTRA-416436
GSTIN of Recipient	URP ,MS BIDVE ENGINEERING COLLEGE
Place of Delivery	LATUR,MAHARASHTRA-413531
Document No.	11
Document Date	25/06/2023
Transaction Type:	Regular
Value of Goods	632893
HSN Code	9023 -
Reason for Transportation	Outward - Supply
Transporter	

### Part - B

Mode	Vehicle / Trans Doc No & Dt.	From	Entered Date	Entered By	CEWB No. (If any)	Multi Veh.Info (If any)
Road	MH46F5827	Sangli	25/06/2023 11:23 AM	27BBRPG1100L1ZR	-	-