

**Technical Specification of Supply, & commissioning of electrical motor driven high pressure jet pumps.**

1	<b>Major parameter</b> The high pressure pump should be electrically driven. The prime mover should conform broadly to the following specification and should be provided with common Electrical control panel.	
	Capacity	85 LPM (Minimum)
	Pump max design pressure	80 kg/cm <sup>2</sup>
	Motor HP	15 HP (Minimum)
	<b>Material of construction of pump</b>	
	Crank Shaft	Austempered ductile iron suitable for high fatigue strength & rotation torsion.
	Gland packing	Fabric reinforced chevron type
	Pressure relief valve cum regulator	Spring Loaded-externally mounted should be of SS 304 / 316.
	Pulsation Dampener	Std Air filled
	Features	Pump body made up of Aluminum casting and Liquid head in brass, 3 cylinder reciprocating pump with solid ceramic plungers.
	Pressure Gauge	Glycerin Filled 2" dia with monometer safety device
	Drive	V-Belt with V grooved Pulley & Safety Guard
	<b>Motor (Crompton or equal make)</b>	
	Type	Three phase Induction motor (Air Cooled)
	Capacity	15 HP (Minimum)
	RPM	1450 rpm
	Insulation	F- Class degree of protection IP 55
	Conductor	Standard
	Mounting	Whole unit mounted on a rugged base made up of MS C channels.
	<b>2 Minor parameters</b>	
	<b>Electrical control panel</b> (The panel should be design in such a manner that there should not be any water By-Pass whether the cleaning is done by one operator or Six operators when the pump is running in Auto mode.)	The electrical control panel should be equipped with the following- star / Delta Starter, Power ON-OFF indicator & start stop push button, Overload relay protection & under/over voltage relay protection, & Ammeter, Voltmeter, Single phase preventer, Pressure sensing device(AC variable frequency device), changeover switch from Auto to Manual mode. 5 meter long motor to panel cable.
	<b>3. Warranty Requirement</b>	The contractor shall provide warranty for a period of 24 months from the date of commissioning of the machine as per IRS condition.
	<b>4. Special requirement</b>	Machine to be delivered to SSE (C&W) Jabalpur (MP), West Central Railway.

For Controller of Stores