

	PRODUCT SPECIFICATION HYDRO PROJECTS ENGINEERING	241596076-B
		Rev. 00
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<u>PURCHASE SPECIFICATION OF</u> <u>LP AIR DRYER</u>		

1. DESCRIPTION:

Re-regenerative type compressed air dryer handle the rated flow rate and must be fully automatic with pre filter, oil filter & after filter, automatic drain valve, by pass valve, Purging valve, control panel, inter-connecting piping, valves and all items mounted on a robust base frame.

2. APPLICATION:

The air dryer shall be installed in between the LP air compressor and Air receiver. This will provide the dry air for using in auxiliary air system (For brake and Shaft seal system) in the hydropower house.

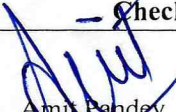
3. SCOPE OF SUPPLY:

Sr. No.	Item Description	Quantity	Remarks
1	Regenerative type LP air dryer	3 Nos.	For supplying dry air to auxiliary air system

4. SPECIFICATION:

4.1) TECHNICAL REQUIREMENTS:

Sr. No.	Parameters	Technical Data / Requirements
(i)	Inlet air temperature	45 Deg C (Maximum)
(ii)	Ambient temperature	(-) 10 °C to (+) 50 °C
(iii)	Normal working pressure	7 kg/cm ²
(iv)	Sound level	< 80 dB at distance of 1 Meter
(v)	Inlet / Outlet process connection	1-1/2 " BSP (F) (If required, suitable adaptor to be provided for final process connection as mentioned above)

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			 P K Bhatane DGM-HPE		
			Prepared by	Checked by	Date of
			 Vishal Namdeo Mgr.-HPE	 Amit Pandey DGM-HPE	 Manish Sahu DGM-HPE
					03.08.19



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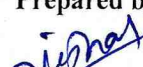
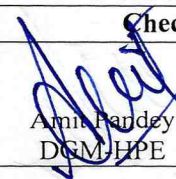
PURCHASE SPECIFICATION OF LP AIR DRYER

(vi)	Pressure drop across dryer	0.5 Bar
(vii)	Type of drying media	Activated alumina balls / As per manufacturer standard desiccant
(viii)	Change over valves	3 Way ball valve with Pneumatic actuator type / Solenoid operated change over valve
(ix)	Purge valve	As per manufacturer standard suitable valve should be provided
(x)	Pressure dew point temperature	(-)40 Deg C
(xi)	Power supply	230V AC $\pm 10\%$, 1Phase, 50 Hz.
(xii)	Control panel	Must have start/stop control switch, Indication of drying / regeneration / dew point indication, 5M long electrical cable & Powder coated sheet steel housing.
(xiii)	Protection Class	IP54

Any other feature necessary for the smooth operation of system may be considered in the offer.

4.2) GUARANTEED PARTICULARS :

Sr. No.	Parameters	Technical Data / Requirements
(i)	Flow at inlet of Air dryer	100 CFM [Losses for regeneration should not be more than 20%]
(ii)	Inlet air pressure (Normal working pressure)	7 kg/cm²
(iii)	Design pressure	110% of normal working pressure

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<u>PURCHASE SPECIFICATION OF</u> <u>LP AIR DRYER</u>		

4.3) DATA TO BE FURNISHED BY SUPPLIER:

Sr. No.	Parameters	Technical Data / Requirements
(i)	Power consumption in kW (At Full capacity air inlet)	
(ii)	Purge losses (In %)	
(iii)	Total weight of equipment	

5. DOCUMENTS TO BE FURNISHED:

Along with the offer:

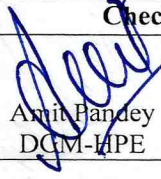
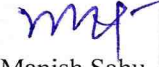
- Flow diagram of the offered system
- Guaranteed technical particulars
- Data as per our specification to be furnished by supplier
- Product leaflets\
- List of deviations, if any. Otherwise, it shall be understood that the vendor is meeting all the requirements specified by us.
Vendor to note that if above documents are not furnished along with the offer; the offer shall be liable for outright rejection.

After placement of order:

- Supplier has to submit the GA drawing along with BOM and QAP for approval
- Wiring diagram of Air dryer for approval

At the time of supply:

- 2 copies of test certificates and guarantee certificates to BHEL items. 1 copy of the above documents shall be put inside the case/ package.
- Shipping / packing lists of the Air dryer

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6. TESTING:

Following test shall be conducted on the equipment:

- (a) Visual inspection
- (b) Operational check
- (c) All other checks as per approved QAP.

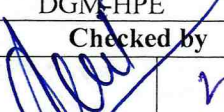
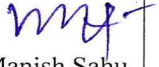
7. GUARANTEE / WARRANTEE:

The item must be guaranteed / warranted for trouble free operation, good workmanship for a period of 18 months from the date of dispatch.

8. PACKAGING:

Each Air dryer shall be packed in individual wooden box with silica gel, adequate cushioning material and waterproof cover to avoid the movement of the internals and ensure that the equipment is capable of withstanding the transit conditions without damages.

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			Prepared by  Vishal Namdeo Mgr.-HPE	Checked by  Amit Ranbey DGM-HPE	 Manish Sahu DGM-HPE	Date of 03.08.19