

**Amendment No: 1 Issued on dated 03/09/2014****Ref: Tender Enquiry No: HLL/PCD/IMPCL-07/14-15 dtd.11/08/2014 issued on 11/08/2014****Following amendments are issued to the above Tender Enquiry Document****In Section I: Notice Inviting Tenders (NIT)****For Clause:**

1. Procurement & Consultancy Services Division of HLL Lifecare Limited, for and on behalf of The Indian Medicines Pharmaceutical Corporation Ltd. ( IMPCL), invites sealed tenders, from eligible and qualified manufactures for supply/ work under this tender covers design, fabrication, manufacture, assembly, testing and supply at consignee site, erection/ commissioning, all documentation & testing for cGMP compliance of following equipment & machineries for Indian Medicines Pharmaceutical Corporation Ltd (IMPCL) :

Sl. No.	Description of Item	Qty./ Set	EMD (Rs.)
1	Amla Pulping and Chyawanprash processing equipment (Capacity 650kg per 8 hr. shift)	1	2,85,000

**Read As:**

2. Procurement & Consultancy Services Division of HLL Lifecare Limited, for and on behalf of The Indian Medicines Pharmaceutical Corporation Ltd. ( IMPCL), Ministry of Health & Family Welfare, Govt. of India, invites sealed tenders, from eligible and qualified Tenderer for supply/ work under this tender covers design, fabrication, manufacture, assembly, testing and supply at consignee site, erection / commissioning , all documentation & testing for cGMP compliance of following equipment & machineries for Indian Medicines Pharmaceutical Corporation Ltd (IMPCL) :

Sch. No.	Description of Item	Qty./ Set	EMD (Rs.)
1	Amla Pulping and Avaleha & Chyawanprash processing equipment (Capacity: 650kg per 8 hrs. Shift)	1	2,60,000
2	Avaleha & Chyawanprash filling, capping, labelling, ink batch coding system (Capacity :1000 Kgs /8 hrs Shift )	1	80,000

**For Clause:****1. Tender No.: HLL/PCD/IMPCL-07/14-15**

SI No.	Description	Schedule
vi.	Closing date & time for receipt of Tender	11.09.2014, 02.00 PM
vii.	Time and date of opening of Techno-Commercial tenders	11.09.2014, 02.30 PM

**Read As:****2. Tender No.: HLL/PCD/IMPCL-07/14-15**

SI No.	Description	Schedule
vi.	Closing date & time for receipt of Tender	18.09.2014, 02.00 PM
vii.	Time and date of opening of Techno-Commercial tenders	18.09.2014, 02.30 PM

**Clause Added:**

11. Tenderer may quote for any or both the schedules (as specified under sl.1 above). Tenderer quoting both the schedules, shall submit Earnest Money Deposit (EMD) on cumulative basis.

<b>In Section II: General Instruction to Tenderers (GIT)</b>
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**For Clause**

- 13.4. b) any sales or other taxes and any duties including excise duty, which will be payable on the finished goods if the contract is awarded :

**Read As:**

- 13.4. b) any sales or other taxes and any duties including excise duty, which will be payable on the finished goods if the contract is awarded (**Purchaser will provide concessional “Form-C” wherever applicable**) ;

**For Clause**

- 19.1 Pursuant to GIT clauses 8.1 and 11.1(B) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer’s unwarranted conduct as amplified under sub-clause 19.7 below.

**Read As:**

- 19.1 Pursuant to GIT clauses 8.1 and 11.1(A) the tenderer shall furnish along with its tender, earnest money for amount as shown in the NIT / List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer’s unwarranted conduct as amplified under sub-clause 19.7 below.

**For Clause**

- 19.3 The earnest money shall be as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:

**Read As:**

- 19.3 The earnest money shall be as per GIT clause 12. The earnest money shall be furnished in one of the following forms:

**For Clause**

- 27.5 The following are some of the important aspects, for which a tender shall be declared non-responsive and will be summarily ignored;
- (i) Deleted
  - (xi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.

**Read As:**

27.5 The following are some of the important aspects, for which a tender shall be declared non-responsive and will be summarily ignored;

- (i) Tender Form
- (xi) Tenderer is not eligible as per GIT Clauses 5 & 17.1.

**For Clause**

35.2 The purchaser's evaluation of tender will also take into account the price quoted for essential spares for comparison purpose.

**Read As:**

35.2 Deleted

<b>In Section IV: General Conditions of Contract (GCC)</b>
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**For Clause**

**13. Incidental services**

13.1 i) Installation & commissioning, trial run, supervision and demonstration of performance test run of the goods

**Read As:**

**13. Incidental services**

13.1 i) Installation, testing, commissioning, trial run, supervision and demonstration of performance test run

<b>In Section VI: List of Requirements</b>
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**For Clause**

**Part I:**

Sl. No.	Description of Item	Qty./ Set
1	Amla Pulping and Chyawanprash processing equipment (Capacity 650kg per 8 hr. shift) The plant shall be in compliances to cGMP	1

**Read As:**

**Part I:**

Sch. No.	Description of Item	Qty./ Set	EMD (Rs.)
1	Amla Pulping and Avaleha & Chyawanprash processing equipment (Capacity: 650kg per 8 hrs. Shift). The plant shall be in compliances to cGMP	1	2,60,000
2	Avaleha & Chyawanprash filling, capping, labelling, ink batch coding system (Capacity: 1000 Kgs /8 hrs Shift). The plant shall be in compliances to cGMP	1	80,000

**For Clause**

**Part III: Scope of Incidental Services:**

**Added:**

Supplier shall comply with all statutory requirements related to incidental services work to be carried out at IMPCL site, including all applicable safety regulations.

**Clause Added:**

**Part VII:**

The following utilities shall be provided by the owner at the IMPCL site for installation, testing, commissioning, trial run and performance test run.

1. Power
2. Water ( raw and DM)
3. Steam
4. Compressed air

<b>In Section IX: Qualification Criteria</b>
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**For Clauses:**

- (2) Tenderers must have successfully executed (supplied and commissioned), under their company /firm's own name at least 1 (One) order for same or higher capacity plant of Amla pulping & Chyawanprash processing line in compliances to cGMP meeting major specification parameters. Documentary evidence (duly signed and stamped) must be enclosed. The performance report from end users/clients in this regard should also be submitted along with the bid, failing which the tender is liable to be ignored.
- (3) Average annual turnover of the tenderer must be at least **Rs 150 Lakh in Last three financial years** prior to date of tender opening. Documentary evidence duly certified by CA must be enclosed.

**Read As:**

- (2) A: For Schedule No.-1: Amla Pulping and Avaleha & Avaleha & Chyawanprash processing equipment (Capacity: 650kg per 8 hrs. Shift

During the last five years from the date of this tender opening, tenderers must have successfully supplied, installed and commissioned items similar to all the major components of Sch.1( i.e item sl.nos. 2,4,7,10,12 and 14), meeting major specification parameters, and integrated them for a similar or higher capacity Amla pulping and Avaleha & chyawanprash process line, in compliances to cGMP. Documentary evidence (duly signed and stamped) must be enclosed. The performance report from end users/clients in this regard should also be submitted along with the bid, failing which the tender is liable to be ignored.

- B: For Schedule No.-2: Avaleha & Chyawanprash filling, capping, labeling, ink batch coding system (Capacity: 1000 Kgs /8 hrs Shift)

During the last five years from the date of this tender opening, tenderers must have successfully supplied, installed and commissioned items similar to all the major components of Sch.2( i.e item sl.nos.1,2,4 and 5), meeting major specification parameters, and integrated them for a similar or higher capacity Avaleha & Chyawanprash filling, capping, labelling, ink batch coding system process line, in compliances to cGMP. Documentary evidence (duly signed and stamped) must be enclosed. The performance report from end users/clients in this regard should also be submitted along with the bid, failing which the tender is liable to be ignored.

- (3) **During the last three financial years**, prior to date of tender opening, the average annual turnover of the tenderer must be at least **Rs 150 Lakh for Item Schedule no-1 and Rs. 50 Lakh for Item Schedule no-2**. For tenderer quoting for both the Schedules the financial turnover criteria shall be on cumulative basis. Documentary evidence duly certified by CA must be enclosed.

**In Section VII:  
Technical Specification**

**The Technical Specification is rewritten as below:**

**Schedule No.1:**

**Item Name: Amla Pulping and Avaleha & Chyawanprash processing equipment  
(Capacity: 650kg per 8 hrs. Shift).**

**The plant shall be in compliances to cGMP**

**1. VERTICAL ELEVATOR (Capacity 1000 kg/hr) – 1 No.**

The equipment removes stones and mud normally adhered to amla surface to make a safer blanching operation. Amlas are received in turbulent water bath and are conveyed by a screw for further operation. All stainless steel (**AISI 316**) construction except standard components viz. drive motor & bearings.

Specifications and dimensional details are as under:-

<i>Item</i>	<i>Specifications</i>
Dimensions of Hopper	1200 (L) x 1200 (W) x 1000 (Ht) mm ( $\pm$ 5%)
Material of construction of Hopper & sheet thickness	<b>SS-316</b> ; 3 mm thick
Perforated False bottom	3 mm thick with bottom stiffeners
Accessories	Water inlet with Ball valve 15 mm;
	Inspection cover 300x 150 mm with hinged cover and eye bolt
	Overflow connection with screen
	Drain nipple with Ball valve size 25 mm
Dia. of Vertical elevator Outer pipe body	350 mm x 5 mm thick
Discharge height	3200 mm
Screw dia. x thickness	340 mm; 5 mm thick/vendor to specify
Inner screw shaft	115 mm dia.
Drive motor	5 H.P. x 1400 RPM; Crompton Greaves/ABB make or equivalent
Bearings	SKF/NTN/FAG make or equivalent
Material of construction	All parts in <b>SS 316</b> except, motor, bearings, pulleys.
Electrical control panel	DOL Starter, L&T/Schneider or equivalent, Panel box MS powder coated

**2. AMLA COOKER WITH LOAD CELLS – 1 No.**

<i><b>Item</b></i>	<i><b>Specifications</b></i>
Dimensions of Cooker	800 mm dia. x 1500 mm length <b>to match with the capacity</b>
Material of construction of Cooker & sheet thickness	<b>SS-316</b> ; 4 mm thick
Inner Screw and shaft	150 NB Pipe shaft with gland sealing at both ends
Insulation	50 mm thick Mineral wool
Cladding	2 mm thick, SS 304
Mounting/Load Cells	4 nos. mounting lugs with Load cells, Syscon make or equivalent
<b>Sensor: Photo Sensor</b>	<b>To be provided with the cooker</b>
Accessories	Steam inlet with Pneumatically operated valve size 40 mm (Spirax make or equivalent)
	Condensate trap with bye pass valves size: 20 mm (Spirax make or equivalent)
	Overflow connection with screen
	Drain nipple with Ball valve size 25 mm
Drive geared motor	0.5 H.P. x 1400 RPM; Gear box Planetary type Kavitsu/Sumiko/Bonfig make or equivalent
Bearings	SKF/NTN/FAG make or equivalent
Material of construction	All parts in <b>SS 316</b> except, motor, bearings, pulleys.

**3. COOKED AMLA TAKE OUT CONVEYOR FROM COOKER – 1No.**

It will be closed pipe screw conveyor which will be connected to the outlet of Cooker and discharge the cooked Amla in Pulper. It will create a buffer of cooked amlas which will prevent escape of live steam. The drive geared motor will be provided with VFD to adjust the output feed rate.

<i><b>Item</b></i>	<i><b>Specifications</b></i>
Dimensions of Conveyor	300 mm dia. x 1500 mm length ( $\pm 5\%$ )
Material of construction of Conveyor & sheet thickness	<b>SS-316</b> ; 3 mm thick
Inner Screw and shaft	100 NB Pipe shaft with gland sealing at both ends
Mounting	Self-supported on <b>SS 304</b> pipe legs.
Accessories	Condensate trap assembly for draining of condensate collected at bottom
Drive geared motor	0.5 H.P. x 1400 RPM; Gear box Kavitsu/Sumiko/Bonfig make or equivalent
Bearings	SKF/NTN/FAG make or equivalent
Material of construction	All parts in <b>SS 316</b> except, motor, bearings, pulleys.

**4. AMLA PULPER – 1 No.**

The equipment removes the amla pulp from its seed. It would be a horizontal cylindrical unit having a feed hopper, beater blades, pulp outlet, discharge of seeds and fitted with a perforated screen for separation of pulp and seeds.

The other specifications and scope of supply will be as under:-

- Complete Perforated Screen of **SS 316** having 4 mm dia. Perforation, and inter-spacing of perforations shall be 10-15 mm.
- **SS-316** shaft with 2 nos. beater blades.
- The Amla Pulper will be self supported on **SS 304** pipe legs.
- The drive to the beater blades will be through 10 H.P. motor, CG/ABB/Bharat Bijlee make or equivalent
- All contact parts will be in **SS-316** construction.
- **Working Platform for Amla Pulper- MOC- SS 304, Dimension- 1000 mm x 1000 mm x 1200 mm.**
- **Sensor: Photo Sensor- To be provided with the pulper**

#### **5. HORIZONTAL 'U' TROUGH SCREW CONVEYOR FOR WASTE SEEDS.**

It will be horizontal screw conveyor for discharge of waste seeds from Amla Pulper.

The specifications of screw conveyor will be as under:-

- |                  |   |  |
|------------------|---|--|
| Body             | - | 165 mm dia. x 3000 mm long / <b>match with the capacity</b> , made from 3 mm thick <b>SS-316</b> sheet with end flanges. |
| Screw            | - | 150 mm dia. x 150 mm pitch in <b>SS-316</b> construction, and made from 40 NB Sch. 40 pipe with 3 mm thick flights.      |
| End bearings     | - | 40 mm dia. NTN or equivalent bearings with <b>SS-316</b> solid rod shaft supports.                                       |
| Drive gear motor | - | 1.0 H.P.   |
| Finish           | - | Weld joints ground smooth and SS surface polished to 150 grit matt polishes.   |
| Inlet & Outlet   | - | <b>SS 316</b> Hopper at inlet and discharge chute at outlet and loose covers on balance portion will be provided and     |
| Support legs     | - | The screw conveyor will be self-supporting with <b>SS 304</b> square pipe legs.  |

**All contact part will be SS-316.** The SS surface will be polished to 150 grit matt finish.

#### **6. PUMP FOR AMLA PULP – 1 No.**

It will be positive displacement pump (screw pump)

- |                                    |   |  |
|------------------------------------|---|--|
| Fluid                              | : | Amla pulp  |
| Flow rate                          | : | 0.4-1.00 m <sup>3</sup> /hr                      |
| Suction                            | : | Flooded  |
| Discharge                          | : | 2.0 kg/cm <sup>2</sup>                           |
| Connection                         | : | 2" SMSs  |
| Pump housing, Rotor, shaft, stator | : | <b>SS-316</b>                                    |
| Base Plate                         | : | MS Fabricated                                    |
| Geared motor                       | : | 0.75 H.P. geared motor x 137 RPM                 |
| Speed Variator                     | : | ABB or equivalent                                |
| Motor                              | : | Crompton Greaves/ABB/Bharat Bijlee or equivalent |

#### **7. DUPLEX FILTER – 1 No.**

It would be barrel type filter fixed in duplex arrangement.

It would be provided with dish end at rear and flat cover plate in front having swing type bolts and nuts for quick/easy opening of the cover for cleaning purpose.

The filtering medium would be through perforated barrel having 3 mm perforations in triangular pitch.

The filter would be provided with following accessories:-

- **SS 316** pipe line and 05 Nos. SS Ball valves 40 NB size at inlet and outlet for inter connecting barrels in duplex arrangement.
- **SS 316** cam lock coupling at inlet & outlet for connecting flexible hose pipes to the filter.
- Diaphragm type Pressure gauge.
- Test pressure 15 kg/cm<sup>2</sup>

The filter would be self-supporting type, each barrel mounted on 4 Nos. **SS 304** Pipe legs.

**8. WORKING PLATFORM – 1 No.**

It will be Stainless steel platform for Amla Cooker and Vertical elevator, with Stair case.

- Size: 1500 x 3000 mm
- SS 304 rectangular/box pipe structure.
- **SS 304** non-skid steps

**9. AMLA PULP STORAGE TANK (1000 liters) – 1 No.**

It will be plain storage tank

**Specifications:-**

- Capacity – 1000 Ltrs.
- Dia : 1050 mm
- Height : 1250 mm
- Bottom cone depth : 250 mm
- Top cover in 2 halves.
- Nozzles :           Inlet size 40 mm with no-foam inlet bend  
                          Outlet nozzle size 40 mm with Ball valve (Shenco make or equivalent)
- Sheet thickness 2 mm
- Surface finish <0.8 µm
- MOC : SS 316

**10. BATCH MIX COOKER – CAPACITY 750 LTRS. (BRIMFUL) Qty. – 2 Nos.**

The Mix Cooker would be in triple walled construction wherein the internal shell would be heated to the desired temperature by steam injection in outer jacket **with temperature controlling system.**

Inner Shell – It would be having hemispherical bottom 1200 mm dia. and straight shell of 300 mm height. The hemispherical bottom will be made from 6 mm thick **SS-316** sheet.

Steam Jacket – The bottom of inner vessel will be provided with hemispherical jacket made from 5 mm thick SS 304 sheet. The jacket will be suitable for max. steam pressure of 3.0 kg/cm<sup>2</sup>

Insulation – 65 mm thick mineral wool insulation.

Cladding – Outer cladding shall be done with 2 mm thick SS 304 set.

VFD- (Make ABB or equivalent)

Agitator (double direction) – The Mix Cooker shall be provided with double direction agitator, consisting of 2 sets of agitator blades revolving in opposite direction. The outer blades will be



provided with Teflon fingers for complete scrapping along walls of inner vessel and inner agitator will have mixing blades of different sweeps. The agitator will be driven through 5 H.P. Geared motor, which will be further coupled to double direction gear box having sturdy MS fabricated body. The agitator gear box & geared motor will be mounted through central bridge on top of Mix cooker.

**Working Platform: MOC- SS 304, Dimension- 1000 mm x 1000 mm x 1200 mm.**

The Mix Cooker shall be provided with following accessories:-

- 2 Nos. semi-circular covers on top.
- Outlet nozzle at bottom with 80 NB Ball valve.
- Mounting on SS 304 pipe legs ending with foot plate.
- Steam inlet valve 40 NB in jacket.
- Condensate trap assembly with thermodynamic steam trap 20 NB.
- Safety valve 25 NB.
- Pressure gauge 4" dial, 0-7 kg/cm<sup>2</sup>.
- Air vent.
- Make of Gear box : Power Build Ltd/Elecon or equivalent
- Make of Motor : CG/ABB/Bharat Bijlee or equivalent
- Make of Steam accessories : Spirax/JN Marshall or equivalent

**11. Fumes/Vapors exhaust hood for Batch Mix Cookers with Blowers**

It will be consist of hoods placed above the BMC covering 2/3<sup>rd</sup> portion while the 1/3<sup>rd</sup> portion will be open hinged type. The exhaust hood will be connected to centrifugal blowers with ducting for suction of exhaust/water vapours outside the plant room.

<i>Item</i>	<i>Specifications</i>
Dimensions of Exhaust hood	Covering top opening of Batch Mix Cooker
Material of construction of Cooker & sheet thickness	<b>SS-316</b> ; 2 mm thick
Centrifugal blowers	SS blowers directly mounted to motor 3.7 KW x 1000 RPM for suction of vapours.
Duct	450 mm dia. x 3000 mm long including bends
Suction capacity of water vapours	800 kg/hr; air handling capacity of Blower 5000 CMH

**12. STEAM JACKETED STORAGE TANK WITH SS 316 STIRRERFOR AVALEHA & CHYAWANPRASH (1000 Ltrs.) QTY. – 1 No.**

It shall be **jacketed** storage tank with conical bottom.

**Specifications:-**

- Capacity – 1000 Ltrs.
- Dia : 1050 mm
- Height : 1250 mm
- Bottom cone depth : 500 mm
- Top cover in 2 halves.
- Nozzles :           Inlet size 40 mm with no-foam inlet bend  
                          Outlet nozzle size 40 mm with Ball valve (Shenco make or equivalent)
- Sheet thickness 2 mm
- Surface finish <0.8 µm
- MOC : SS 316

Stem jacketed storage tank with bottom shell portion dimple jacketed type  
Max. Steam pressure: 4 kg/ cm<sup>2</sup>

13. **STEAM JACKETED STORAGE TANK WITH SS 316 STIRRERFOR AVALEHA & CHYAWANPRASH (500 Liters) QTY. – 2 Nos.**

It shall be jacketed storage tank with conical bottom.

**Specifications:-**

- Capacity – 500 Ltrs.
- Dia : 800 mm
- Height : 1000 mm
- Bottom cone depth : 400 mm
- Top cover in 2 halves.
- Nozzles : Inlet size 40 mm with no-foam inlet bend Outlet nozzle size 40 mm with Ball valve (Shenco make or equivalent)
- Sheet thickness 2 mm
- Surface finish <0.8 μm
- MOC : SS 316

Stem jacketed storage tank with bottom shell portion dimple jacketed type  
Max. Steam pressure: 4 kg/ cm<sup>2</sup>

14. **PUMP FOR AMLA CHAWANPRASH – 1 No.**

It will be positive displacement pump (screw pump)

The other specifications and scope of supply will be as under:-

Fluid	:	AmlaChywanprash
Flow rate	:	0.4-1.00 m3/hr
Suction	:	Flooded
Discharge	:	2.0 kg/cm2
Connection	:	2” SMS
Pump housing, Rotor, shaft, stator	:	<b>SS-316</b>
Base Plate	:	MS Fabricated
Geared motor	:	0.75 H.P. geared motor x 137 RPM
Speed Variator	:	ABB or equivalent
Motor	:	Crompton Greaves/ABB/Bharat Bijlee or equivalent

15. **DUPLEX FILTER- 1 No.**

It would be barrel type filter fixed in duplex arrangement.

It would be provided with dish end at rear and flat cover plate in front having swing type bolts and nuts for quick/easy opening of the cover for cleaning purpose.

The filtering medium would be through barrel having 3 mm perforations in triangular pitch.

The filter would be provided with following accessories:-

- **SS 316** pipe line and 05 Nos. **SS-316** Ball valves 40 NB size at inlet and outlet for inter connecting barrels in duplex arrangement.

- **SS-316 cam lock coupling at inlet & outlet for connecting flexible hose pipes to the filter.**
- Diaphragm type Pressure gauge.
- Test pressure 15 kg/cm<sup>2</sup>

The filter would be self-supporting type, each barrel mounted on 4 Nos. SS-304 Pipe legs.

### **Schedule No.2 :**

**Item Name: Avaleha & Chyawanprash filling, capping, labelling, ink batch coding system**  
**(Capacity: 1000kg per 8 hrs. Shift)**

**The plant shall be in compliances to cGMP**

#### **1. AIR JET CLEANING SYSTEM FOR JARS / CONTAINERS**

An air Jet and Vacuum cleaning system is provided for cleaning of Avaleha & chyawanprash jars. The system consists of a conveyor belt on which Avaleha & chyawanprash jars / containers are placed manually or through turntable. There is a blower provided with suitable pipe connection such that the blower blows air into the containers as they move on the conveyor belts. After the air is blown into the containers there is a negative suction blower / pump provided which sucks the air from inside the containers. Hence the jars / containers are free from any dust / particles as they are double cleaned first by positive blowing and then by negative suction system. All contact parts are made out of SS 304. Blower motor will be 0.5 Hp and suction blower will also be 0.5 Hp

#### **2. ROTARY AVALEHA & CHYAWANPRASH FILLING MACHINE**

With change part 100gm/200gm/500gm/1000gm

**Rotary Filler shall be suitable for filling Avaleha & Chyawanprash Jars of different sizes with following detailed specifications:-**

1. CI Base plate MOC (M.S) clad with SS-304 & Top plate with Rolled Angle legs, 65 X 65 X 6 MOC (M.S) clad with SS-304
2. SS vertical shaft with Center and thrust bearings and Chain wheels, SS304 chain and studs.
3. SS316 Filling head Feed plate / PTFE Friction Plate thickness 6 mm with SS316 Drip Tray, Support bar of SS-304, locating sleeve ...etc.
4. Filling Head to be provided with an Air Nozzle for Tail Cutting.
5. Drive Assembly Complete with Electric Motor, Mechanical Variators/AC invertors drives, WRG Gearbox, and set of sprockets ...etc.
6. W 75 Bonvario Make Gear Box to be coupled with 1.0 H.P, rpm 1380, Bonvario Make Electric Motor / equivalent.
7. AC inverter drives Yaskawa/ Schneider Make / equivalent to be provided inside a control panel along with Digital Displays, MCBs, Push Buttons of Standard Make.
8. Twin Lobe Pump Assembly complete with main body and cover, **SS-316** Pump body and cover, Set of bearings, Drive shaft, driven shaft, set of spur gears, Mechanical Seals etc.
9. Pump Capacity shall be 60 LPM, 1.5 "suction and 1.5 "Discharge.
10. Main C.I. Gear on Pump and a Bakelite Pinion on Motor to reduce Noise.

11. Pump Assembly complete with main body and cover, **SS-316** Pump body and cover, Set of bearings, Drive shaft, driven shaft, set of spur gears etc.
12. S.S. 304 Side panels from all side of machine.
13. Pump & Filling Head to be covered properly with **S.S. 316** covers.
14. Automatic Discharge on discharge conveyor through a Diverter rod.
15. Weight setting by setting Pump RPM and Conveyor Speed.
16. Two Sets of Carriers for jar and One set of Nozzles.
17. Filling Accuracy Plus-Minus 0.5%

Capacity –: Up to 80 Containers per Minute of 125 grams and 8 containers per minute of 5 kg.

- 80 containers per min. 100 gms.
- 70 containers per min. 200 gms
- 60 containers per min. of 500 gms.
- 40 containers per min. of 1000 gms.

**3. DISCHARGE CONVEYER:**

Slat Chain Conveyor shall be suitable for receiving filled Polybottles /Jars from the Filling Machine. Conveyor shall have SS-304 side guides all along its length which shall be adjustable according to Jar size.

Detailed Technical Specifications shall be as follows:-

Conveyor Frame Thickness	2.2 mm
<b>Frame Width</b>	250 mm
<b>Slat Chain Width</b>	150 mm
<b>Conveyor Length</b>	1800 mm (± 5%)
<b>Conveyor Speed</b>	10 meter per minute (as per line requirement)
<b>Slat Chain Material</b>	SS 304
<b>Motor</b>	0.25 Hp 30 rpm make /Bonvario / Rotomoter / Moto vario or equivalent
<b>Wear Strips</b>	Made with 6 mm thk Nylon flat
<b>Conveyor Height</b>	As per line requirement

**4. FOUR HEAD ROTARY HEAT SEALER:**

Four Head Rotary Heat Sealing Machine shall be suitable for heat sealing of LDPE laminated Aluminum Taggers on Polybottles/Jars. Machine shall be supplied with Change-Over parts for different sizes of bottles with a change-over time of less than ten minutes. Machine is provided with Transformers to step-down to 50 volts to ensure workers' safety. Pneumatically operated cam is provided to avoid burning of bottles during idle time. Photo Sensor/Micro Sensor shall be mounted on In-feed conveyor to sense the incoming bottles and give signal to start the machine operation. Machine is capable of handling a height variation of 5.0 mm in bottles.

Detailed Technical Specifications shall be as follows:-

Material of construction	Mild Steel with SS 304 contact parts
<b>Top Cladding</b>	0.8 thk SS 304 sheets
<b>Side covers</b>	0.8 thk SS 304 sheets
<b>Control panel</b>	2 mm thk SS 304 sheets
<b>Capacity of machine</b>	30 to 80 bottles per minute (variable speed drive)
<b>Heating elements</b>	50 V, 500 watts each head (dovy make or equivalent)
<b>Simmer stat for temp control</b>	Sunvic make or equivalent
<b>Transformers</b>	220 volts to 50 volts 24 nos (2 nos)
<b>Pneumatic cylinder</b>	Festo make
<b>Solenoid valve</b>	Festo make
<b>Contactors</b>	Cutler hammer , BCH make or equivalent.
<b>Ball bearing</b>	SKF make or equivalent.
<b>Geared Motor</b>	1 Hp 50 rpm make Bonvario / Rotomotor / Moto vario or equivalent.
<b>Air pressure requirement</b>	30 psi

**5. AUTOMATIC 4 HEAD SCREW CAPPING MACHINE**

**4 Head Automatic Screw Capping Machine shall be suitable for Chyavanprash Jars of different sizes with following detailed specifications:-**

- 1 S.S.-304 .vertical shaft with Center and thrust bearings and Chain wheels, M.S. chain and studs.
- 2 S.S.-304 Capping Tools operated through Cam. Clutch with Torque adjustment., Support bar, locating sleeve ...etc.
- 3 Drive Assembly Complete with Electric Motor, WRG Gearbox, and set of sprockets ...etc.
- 4 Fully Automatic Cap Placement system with Rotary/Vibratory Cap Feeder and Chute in S.S.-304 construction.
- 5 S.S.-304, 1.0 mm thick Side panels from all side of machine.
- 6 One Set of Turret & Guides. (made with 12.0 mm thick hard nylon plate , two teeth.
- 7 Inbuilt Slat Chain Conveyor 2000 mm long, 225 mm width, 3 mm thickness with common drive with machine.
  - Capacity – Upto 80 Containers Per Minute .
  - Electric Power Requirement: -
  - 1.5 H.P. Drive, geared Motor Bonvario / Rotomotor Make or equivalent.

**6. PACKING CONVEYOR BELT 10 FT LONG**

**Technical Specification:**

- Machine with good finish
- Construction S.S. 304
- Belt width : 350mm
- Belt material : PVC coated polyester 2.0 mm thick (imported) foodgrade
- Frame type : Bed type with, made with 2.0 mm thick SS304 sheet & 32X32 SS 304 Square pipe legs
- Side planks : 275 wide on both side made with 1.5 mm thick SS 304 Sheet.
- Pulleys / Rollers : M S Zinc Plated
- Plank Supports : M S Zinc Plated
- Speed of conveyor : 10 mtr per min., variable with VFD Schenieder make or equivalent
- Geared Motor : 0.25 HP , 30rpm , banario make or equivalent
- Conveyor height : 800mm -900mm

- Take up : screw type at tail pulley
- Structure Pipe / angles etc
- 0.5 HP, 3 Phase, 1440 RPM Motor with Gear Box

**7. STICKER LABELING MACHINE**

<b>Description</b>		
<p>The Automatic Vertical Sticker Labeling machine is used for full/partial wrap around labelling on different size of round containers. It is capable of labelling up to 150 containers per minutes depending on products and label size. The automatic model shall be equipped with roller spacing device resulting in a operation with “No change parts required”.</p>		
<b>Operation</b>		
<p>The round containers positioned on conveyor are released at equal distance by creating space between two containers with the help of roller spacing device. At the labelling point, an electronics product sensor senses container &amp; releases a label from self adhesive label roll. If machine is equipped with batch printing device, batch printing device prints the batch no. &amp; other matter on label while label is stationary between dispensing of two labels. The sensed round container moves on conveyor and picks the released label. Then the labelled container moves further through a rubber pressing belt &amp; stationary rubber pad which ensures neat &amp; perfect fixing of label on the container diameter.</p>		
<b>Technical Specifications</b>		
Direction of Movement	Left to Right	
Output/Hour*	3600 to 9000 Nos.	
Electrical Specification**	Conveyor Motor	0.50 HP, 415 Volts, 50 Hz
	Pressing device Motor	0.25 HP, 220 Volts, 50 Hz
	Sticker Roll Servo Motor	400 W
Height of Conveyor**	860 mm to 910 mm	
Machine Dimensions**	1835mm(L) x600 mm(W) x 1450mm(H) or vendor to specify	
<b>Input Specifications</b>		
Label Specification	Length**	30 mm to 180 mm or vendor to specify
	Width**	16 mm to 100 mm or vendor to specify
	Roll Diameter	Max. 300 mm X ID 75 mm or vendor to specify.
	Space between two label	Min. 3 mm in anti-clock wise
Container Size**	Round Shape	Ø 22 mm to Ø 100 mm or vendor to specify Respectively height 40 mm to 240 mm or or vendor to specify (Height option for other bottle height available)
* label size for container (100gms/ 200gms/ 500gms/ 1000gms)		
<b>Salient Features</b>		

<ul style="list-style-type: none"> <li>• High Production Speeds.</li> <li>• Mild steel structure clad with stainless steel 304 sheet to meet GMP norms.</li> <li>• PLC Based operation siemens or equivalent make.</li> <li>• Accurate label placement.</li> <li>• Product data storage facility.</li> <li>• No change parts requirements.</li> <li>• Very less time for change over.</li> <li>• Suitable for Glass, Plastic, Pet, Tin, Corrugated containers.</li> </ul>	
<b>Utility Requirement</b>	
Electrical supply	3 Phase + Neutral + Earthing
Electrical load	1 KW
Air Pressure: inimum	6 bar pressure 2 CFM for printing device

**8 .INK JET CODING DEVICE**

<b>Ink Jet Printer</b>
<ul style="list-style-type: none"> <li>• Windows based operating system</li> <li>• External USB port</li> <li>• Out of the box connectivity</li> <li>• More rugged combined power supply and HV PSU</li> <li>• Built in Ethernet &amp; Web server for network control</li> <li>• On board multiple raster selection</li> <li>• New design user interface</li> <li>• Context sensitive help feature &amp; intuitive icon drive</li> <li>• Simpler electronics (Separate PEB &amp; SBC &amp; UI)</li> <li>• Ink levels &amp; service levels on home screen</li> <li>• Installation wizards</li> <li>• Built in digital gear box (both multiplier and divider)</li> <li>• Remote message selection &amp; status monitoring</li> <li>• One touch power / jet button</li> </ul>

**NOTE: (Applicable for both the Schedule-1 & 2 items)**

- 1) Product containers sample, if required by the tenderer, the same to be requested for by the tenderer from IMPCL at least 10 days prior to the bid opening.
- 2) Where ever specific make (s)/ equivalent is specified, and in case supplier is supplying equivalent make, he shall obtain prior approval from the purchaser for such equivalent make.
- 3) All electrical wiring, connection and trial run are in scope of supplier.
- 4) Scope of Standard Documentation for complete line
  - Validation documents DQ, OQ, IQ, PQ etc.
  - Material Test certificate for contact parts
  - Installation & Maintenance Manual
  - Spare Part List
  - Certificates, Manual for Bought out items
  - Electrical Diagram
  - Schematic Diagram and GA Drawings of all machines showing dimensions should be approved from the purchaser before manufacturing.

- Inspection- By Client/Purchaser or by their nominated agency.
- Trial- No load and with load running for 1(One) Hr at vendor factory.
- Final Trial & validation with doc to be provided by supplier.
- Quarterly route inspection of machines in the defect liability period has to be done by the supplier that without any additional charge to purchaser.
- Packing- Wrapped in Plastic/ wooden box with Net wt and gross Wt –vendor to specify
- Installation and commissioning - At client site

**Others:**

**Where ever in the Tender Enquiry Document it is mentioned as “Chyawanprash” should be read as “Avaleha & Chyawanprash”**

**All other contents of the Tender Enquiry Document including terms and conditions of the tender enquiry remain unchanged.**

.....**End**.....