## Amendment no. 1

$24^{\text {th }}$ September, 2014
Sub : Amendment to the tender for the Supply, Installation, Testing and Commissioning
of Automatic Three Line Square Packing Machines in pair with bowl feed for foil sealing of condoms at HLL Lifecare Limited Peroorkada Factory, Thiruvananthapuram

## Ref : IFB No :HLL/CED/SITC/3LINE PACKING/MACHINE/2014 Dtd.05-09-2014

With reference to the above, we here by incorporate the following amendment to the tender documents as detailed below :

## Amendment no. 1

(a) Last date and time of receipt of tender: 01-10-2014,15.00Hrs
(b) Date and time of opening tender :01-10-2014, 15.30Hrs
(c) User requirements page no.14,15,16,17,18 \& 19

## Existing

14.1.6 Operational acceptance: operational acceptance shall occur in respect of the system when the performance test has been successfully completed and the functional performances are met.
14.1.7 Period of warranty shall be 12 months from the date of installation and commissioning as certified jointly by the supplier and the purchaser.
14.1.8 The bidder shall attend the pre-bid conference arranged by HLL before submitting the offer.
14.1.9 Three copies of instruction/operational manual (especially for brough out items) and maintenance manual should be supplied along with the machine.
14.1.10 A list of spare parts should be proviided. a minimum set of spare parts should be provided for each machine.
14.1.11 Brought out items such as electrical/electronic items, electric heat banks etc should be as per relevant indian standards approved certifications.

### 15.0 Level of automation

15.1 The equipment should operate with mimum operator involvement. The equipment control panel must be provided with a Human machine interface based on English language with appropriate number (a minimum of 20 programs) of recipe of all process parameters

HOME SCREEN



| SI <br> No | Item | Specifications | Qty | Make | Description |
| :---: | :--- | :--- | :---: | :---: | :--- |


|  |  | RATE $=1.7 \mathrm{~m}^{3} / \mathrm{min}$, $X=19.5 \mathrm{~mm}$. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | UP MOULD <br> TEMPERATUR <br> E <br> CONTROLLER/ <br> UNDER <br> MOULD <br> CONTROLLER | $\begin{aligned} & \text { RANGE-5O- } \\ & 1300^{\circ} \mathrm{C}, \\ & \text { NUMBER OF } \\ & \text { PORTS- 8NOS } \\ & \text { FREE PORT- } \\ & \text { 2NOS, } \\ & \text { CONNECTED } \\ & \text { LINES-6NOS } \end{aligned}$ | 1 | AUTONIC S/OMRON |  |
| 5 | HEATER CATRIDDGE | 600W/700W, HIGH DENSITY CATERIDGE HEATER IN STAINLESS STEEL HOUSING LENGTH 230mmØ18.75mm 2 LEAD WIRES (EACH 300mm LONG, Fibre Glass Insulated 1.5 sq mm , $240 \mathrm{~V}, 700 \mathrm{~W}$ ) with suitable heat resistant washers ment for continous Operation | 2 |  | Heater \& washer should be made for continous operation ,Heater Body should be made of inconel with proper body insulation as per IS |
| 6 | SOLINOID <br> VALVE FOR <br> PUMP WITH PU TUBE | a) Solinoid Coil made-ypc, SGIA2, AC-220V, $3.4 \mathrm{VA}, \mathrm{l}=16 \mathrm{~mA}$ b) 5PORTS IN VALVE (TWO SIDE CONNECTEION) one touch connectors-3, inlet connection-1 Inlet-8MM (One touch) outlet connections-2 Outlet -6MM (One touch) One | 1 | FESTO/JA NATICS |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |


| 12 | LIMIT SWITCH | $\begin{aligned} & \text { 16A, 1/2 HP, } \\ & \text { 125OR, } 250 \mathrm{VAC}, \\ & 0.6 \mathrm{~A}, 125 \mathrm{VDC}, \\ & 0.3 \mathrm{~A}, 250 \mathrm{VDC}, \\ & 16(3) \mathrm{A}, 250 \mathrm{~V} \end{aligned}$ | 3 | SCHNEID <br> ER/L\&T/H AVELS | It should be as per IS 6875. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | INVERTOR | $\begin{aligned} & \text { FR-S520E-0.1K } \\ & \text { TO } 3.7 \mathrm{~K}(-\mathrm{C}) \end{aligned}$ | 1 | MITSUBU SHI ELECTRIC /SIEMENS |  |
| 14 | DIGITAL <br> PRESSURE <br> SWITCH | DUAL DISPLAY TO CHECK (CURRENT VALUE AND SET VALUE), 3 COLOUR DISPLAY, COPY FUNCTION OF SETTING DETAILS, 3MODE SETTINGS, SIZE 30X25.5 MM | 1 | FESTO/JA NATICS | It should be as per IS 6875. |
| 15 | DIGITAL <br> TEMPERATUR E <br> CONTROLLER INDICATOR(PI D). | PID CONTROLLER , MULTI RANGERTD , THERMO COUPLE, OUTPUT SSR 100/240 V AC | 1 | AUTONIC S/OMRON | It should be as per IS 6875. |
| 16 | UPMOULD/ UNDER MOULD HEATER SENSOR | FLAT SENSOR(BUTTO N TYPE) | 2 | AUTONIC S/OMRON | It should be as per IS 6875. |
| 17 | MCB 20 A | $450 \mathrm{~V}, 50 \mathrm{~Hz}$ | 1 | SCHNEID <br> ER/L\&T/H <br> AVELS | It should be as per IS 2516 |
| 18 | $\begin{array}{\|l\|} \hline \text { PROXIMITY } \\ \text { SWITCH } \\ \text { (SENSOR) } 3 \\ \text { PIECED FOR } \\ \text { PUMP } \\ \text { (SILICON OIL) } \end{array}$ | 10-30V DC , 8 MM PNP, MAX LOAD-300 MA | 3 | AUTONIC S/OMRON |  |


|  | FILTER <br> REGULATOR <br> WITH DIAL <br> GAUGE (2NOS) <br> WITH PU TUBE | MAX PRESSURE <br> 10 BAR, SET <br> PRESSURE 0.5 <br> TO 10 BAR |  | FESTO/JA <br> NATICS | 2 CONNECTIONS 1- IN AND 1- OUT, 8 <br> MM DIA TUBE CONNECTION |
| :---: | :--- | :--- | :--- | :--- | :--- |
| 20 | SLIP <br> RING(4NOS) |  | 4 |  |  |
| 21 | ROTAY <br> SWITCHES <br> (ON/OFF) | 440 V AC ,15A |  |  |  |


|  |  |  |  | FINOLEX/ <br> HAVELS/G <br> LOSTER |
| :--- | :--- | :--- | :--- | :--- |

## READ AS

14.1.12 Operational acceptance: operational acceptance shall occur in respect of the system when the performance test has been successfully completed and the functional performances are met.
14.1.13 Period of warranty shall be 12 months from the date of installation and commissioning as certified jointly by the supplier and the purchaser.
14.1.14 The bidder shall attend the pre-bid conference arranged by HLL before submitting the offer.
14.1.15 Three copies of instruction/operational manual (especially for brough out items) and maintenance manual should be supplied along with the machine.
14.1.16 A list of spare parts should be proviided. a minimum set of spare parts should be provided for each machine.
14.1.17 Brought out items such as electrical/electronic items, electric heat banks etc should be as per relevant indian standards approved certifications.

### 15.0 Level of automation

15.1 The equipment should operate with minime operator involvement. The equipment control panel must be provided with a Human machine interface based on English language with appropriate number (a minimum of 20 programs) of recipe of all process parameters



Sample screens are shown above. Further more development may be incorporated like " pass word protection, average speed for a particular period , etc...

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This can be further developed / modified based on our perception and the capacity of the devices.

## ( PLC \& HMI)

The PLC / HMI should have the capability to configure with existing Allen Bradley make VFD. (Powerflex-40/4M)

| $\begin{aligned} & \text { SI } \\ & \text { No } \end{aligned}$ | Item | Specifications | Qty | Make | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | PLC <br> Programmable( with Digital modules) with Touch Screen | 32 Bit Input/Output | 1 | SIEMENS/ ALENBAR DLEY/ABB | Fully PLC Based system with all operations through PLC Programme and it should be expandable type with Compatable to SCADA system as per IEC61131-3. |
| 2 | MAIN MOTOR (GEARED TYPE) DIRECT DRIVE. | $\mathrm{P}=400$ WATTS, <br> $0.4 \mathrm{KW}, 1 / 2 \mathrm{HP}$, <br> $415 \mathrm{~V}, \mathrm{AC}, 50 \mathrm{HZ}$ <br> GEAR <br> RATIO $=1: 20$, <br> RPM $=1700$ | 1 | NORD/RO SSI/BONFI <br> GOLI/FUJI | 1. GEAR RATIO :- $20: 1$ <br> 2. SUPPLY VOLTAGE (VAC/HZ) :- 1 X 230/ 50 <br> 3. SPEED :- 1700 rpm <br> 4. TORQUE :- 5.3 Ncm <br> 8. THIS MOTOR SHOULD BE <br> THERMALLY PROTECTED. 9.COOLING <br> TYPE : F1 <br> 10.ENCLOSURE : IP 55 <br> It should be as per IS 12615 |
| 3 | TRANSFORME RS | $\begin{aligned} & 250 \mathrm{~K}, 240 \mathrm{VAC}, \\ & 50 \mathrm{~Hz} \end{aligned}$ | 3 |  | It should as per IS 2026 |
| 3 | COOLING FAN BLOWER | V- <br> 220V,FREQUEN <br> CY-50Hz, P=28 <br> W, FLOW <br> RATE $=1.7 \mathrm{~m}^{3} / \mathrm{min}$, $X=19.5 \mathrm{~mm}$. | 3 |  | It should be as per IS 4894. |
| 4 | UP MOULD <br> TEMPERATUR <br> E <br> CONTROLLER/ <br> UNDER <br> MOULD <br> CONTROLLER | $\begin{aligned} & \text { RANGE-5Oo- } \\ & 1300^{\circ} \mathrm{C}, \\ & \text { NUMBER OF } \\ & \text { PORTS- 8NOS } \\ & \text { FREE PORT- } \\ & \text { 2NOS, } \\ & \text { CONNECTED } \\ & \text { LINES-6NOS } \end{aligned}$ | 1 | AUTONIC S/OMRON |  |


| 5 | HEATER CATRIDDGE | 600W/700W, HIGH DENSITY CATERIDGE HEATER IN STAINLESS STEEL HOUSING LENGTH 230mm$\varnothing 18.75 \mathrm{~mm} 2$ LEAD WIRES (EACH 300mm LONG, Fibre Glass Insulated 1.5 sq mm , $240 \mathrm{~V}, 700 \mathrm{~W}$ ) with suitable heat resistant washers ment for continous Operation | 2 |  | Heater \& washer should be made for continous operation ,Heater Body should be made of inconel with proper body insulation as per IS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | SOLINOID <br> VALVE FOR <br> PUMP WITH PU <br> TUBE | a) Solinoid Coil made-ypc, SGIA2, AC-220V, $3.4 \mathrm{VA}, \mathrm{l}=16 \mathrm{~mA} \mathrm{~b})$ 5PORTS IN VALVE (TWO SIDE CONNECTEION) one touch connectors-3, inlet connection-1 Inlet-8MM (One touch) outlet connections-2 Outlet -6MM (One touch) One connection is air regulator type. | 1 | FESTO/JA NATICS |  |
| 7 | AUTO CUTTER SOLINOID VALVE (2NOS), CONNECTED TO COMMON WITH PU TUBE |  | 3 | FESTO/JA NATICS |  |


| 8 | PNEUMATIC DISPENSER | PRESSURE3BAR, CAPACITY-200$100 \mathrm{ml} / \mathrm{SHOT}$, STROKE RATE 0-60 STOKE/min, connections/ point-6NOS | 1 | FESTO/JA NATICS |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | COUNTER | 100-240V AC, 4.5 <br> VA, <br> FREQUENCY- $50 \mathrm{~Hz},$ <br> TERMINAL-6, USED <br> TERMINALS-4 (USED PORT1,4,5,6) | 1 | AUTONIC S/OMRON |  |
| 10 | FUSE | $\begin{aligned} & 5 \mathrm{~A}-2 \mathrm{NOS}, 2 \mathrm{~A}- \\ & 2 \mathrm{NOS} \end{aligned}$ | 4 | SCHNEID <br> ER/L\&T/H AVELS | It should be as per IS 13703. |
| 11 | PROXIMITY <br> SWITCH <br> (SENSOR) | FREQUENCY RESPONSE $M A X=500 \mathrm{HZ}$, SENSING RANGE MAX= 4mm, SENSOR INPUT=INDUCTI VE, SUPPLY OF VOLTAGE DC= 30 V, SUPPLY OF VOLTAGE DC MIN $=10 \mathrm{~V}$ | 3 | AUTOMIC S/OMRON | It should be as per IS 6875. |
| 12 | LIMIT SWITCH | $\begin{aligned} & \text { 16A, } 1 / 2 \mathrm{HP}, \\ & 125 \mathrm{OR}, 250 \mathrm{VAC}, \\ & 0.6 \mathrm{~A}, 125 \mathrm{VDC}, \\ & 0.3 \mathrm{~A}, 250 \mathrm{VDC}, \\ & 16(3) \mathrm{A}, 250 \mathrm{~V} \end{aligned}$ | 3 | SCHNEID <br> ER/L\&T/H AVELS | It should be as per IS 6875. |
| 13 | DIGITAL <br> PRESSURE <br> SWITCH | DUAL DISPLAY TO CHECK (CURRENT VALUE AND SET VALUE), 3 COLOUR DISPLAY , COPY | 1 | FESTO/JA NATICS | It should be as per IS 6875. |


|  |  | FUNCTION OF SETTING DETAILS, 3MODE SETTINGS, SIZE $30 \times 25.5 \mathrm{MM}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | DIGITAL <br> TEMPERATUR E <br> CONTROLLER <br> INDICATOR(PI <br> D). | PID CONTROLLER MULTI RANGERTD , THERMO COUPLE, OUTPUT SSR 100/240 V AC | 1 | AUTONIC <br> S/OMRON | It should be as per IS 6875. |
| 15 | UPMOULD/ <br> UNDER <br> MOULD <br> HEATER <br> SENSOR | FLAT SENSOR(BUTTO N TYPE) | 2 | AUTONIC <br> S/OMRON | It should be as per IS 6875. |
| 16 | MCB 20 A | $450 \mathrm{~V}, 50 \mathrm{~Hz}$ | 1 | SCHNEID <br> ER/L\&T/H AVELS | It should be as per IS 2516 |
| 17 | PROXIMITY SWITCH <br> (SENSOR) 3 <br> PIECED FOR <br> PUMP <br> (SILICON OIL) | $10-30 \mathrm{~V}$ DC, 8 MM PNP, MAX LOAD-300 MA | 3 | AUTONIC <br> S/OMRON |  |
| 18 | FILTER REGULATOR WITH DIAL GAUGE (2NOS) WITH PU TUBE | MAX PRESSURE <br> 10 BAR, SET <br> PRESSURE 0.5 <br> TO 10 BAR |  | FESTO/JA NATICS | 2 CONNECTIONS 1-IN AND 1- OUT, 8 MM DIA TUBE CONNECTION |
| 19 | $\begin{aligned} & \text { SLIP } \\ & \text { RING(4NOS) } \end{aligned}$ |  | 4 |  |  |
| 20 | ROTAY SWITCHES (ON/OFF) | 440 V AC , 15A | 10 | SCHNEID ER/L\&T/H AVELS | It should be as per IS 6875 |
| 21 | PUSH SWITCHES (ON/OFF) | 440 V AC ,5A | 2 | SCHNEID ER/L\&T/H AVELS | It should be as per IS 6875 |


| 22 | EMERGENCY STOP | 230 V AC ,5A | 1 | SCHNEID <br> ER/L\&T/H <br> AVELS | It should be as per IS 6875 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | POWER SUPPLY <br> SOURCE 24 V DC | 24 V DC | 1 | SCHNEID <br> ER/L\&T/H <br> AVELS | It should be as per IS 6875 |
| 24 | VFD DRIVE FOR MAIN MOTOR | $\begin{aligned} & 0.75 \mathrm{KW}, 415 \mathrm{~V} \\ & \text { 3PHASE AC }, 50 \\ & \text { HZ } \end{aligned}$ | 1 | SIEMENS/ ALENBAR DLEY/ABB IFUJI |  |
| 25 | MCB 10 A | 230 V AC , 50 Hz | 3 | SCHNEID ER/L\&T/H AVELS | It should be as per IS 2517 |
| 26 | 3 C X 4 Sq mm Heat Resisitant Cable | PVC Sheath(Fibre glass type with insulation) | 50 mtrs | FINOLEX/ HAVELS/G LOSTER | It should be as per IS 649 |
| 27 | 4 C X 4 Sq mm Heat Resistant Cable | PVC Sheath(Fibre glass type with insulation) | 50 mtrs | FINOLEX/ HAVELS/G LOSTER | It should be as per IS 649 |
| 28 | $\begin{aligned} & 5 \mathrm{C} \times 2.5 \mathrm{Sq} \\ & \mathrm{~mm} \text { Cable } \end{aligned}$ | PVC Sheath | 50 mtrs | FINOLEX/ HAVELS/G LOSTER | It should be as per IS 649 |
| 29 | $\begin{aligned} & 3 \mathrm{C} \times 2.5 \mathrm{Sq} \\ & \mathrm{~mm} \text { Cable } \end{aligned}$ | PVC Sheath | 50 mtrs | FINOLEX/ HAVELS/G LOSTER | It should be as per IS 649 |
| 30 | Sensor Cable | Fibre Glass Type | 50 mtrs | FINOLEX/ HAVELS/G LOSTER |  |

## ASSOCIATE VICE PRESIDENT

