

Amendment no.1

26<sup>th</sup> December 2014

Sub : Amendment to the tender for the Supply ,Installation, Testing and Commissioning Of Electrical Panel Board with Controls for Online Powder Finishing System as per specifications at our factory at Kanagala,Belgaum.

Ref : IFB NO. HLL/CED/CON-AUG/SITC/PB/OPFS/HLL CDM/KFB/2014  
DATE : 17-12-2014

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

**Amendment no.1**

The last date of date for receipt and opening of bid of the above referred tender has been amended as follows.

- (a) Last date and time of receipt of tender : 02-01-2015,15.00Hrs
- (b) Date and time of opening tender : 02-01-2015, 15.30Hrs
- (c) Schedule IV Schedule of items

Existing

<b><u>SCHEDULE FOR THE SUPPLY,INSTALLATION,,TESTING &amp; COMMISSIONING OF PANEL BOARD WITH CONTROLS FOR ONLINE POWDER FINISHING EQUIPMENTS AT KFB</u></b>						
SI No	Item Description	Make	Unit	Quantity	Rate	Amount
<b>I</b>	<b>Supply ,Installation ,Testing and Commissioning of</b>					
<b>1</b>	<b>Panel board</b> having size 1x1x0.4 Mtr 1.6 mm Powder Coated CRCA Sheet panel(The item should confirm IS & IEC standards with Test Certificates )	Rishab , L&T	Nos.	<b>1</b>		
<b>2</b>	<b>Supply and Installation of MCCB</b>		Nos.			

a	MCCB 200 A , 3 Pole ,450Volts ,CAT -B.(It should confirm IS 13032 & IEC standards with Test Certificates and Calibration certificates)	L&T,Siemens, Schneider,ABB	Nos.	1		
<b>2</b>	<b>Supply and Installation of Trivector Meter</b>		Nos.			
	Capable of Measuring KW,KVA,KVAR,V,A,PF and related Electrical parameters with appropriate CTs and PTs.(It should confirm IS 722 & IEC Standards (Part 1 to 9) with Test Certificates and Calibration certificates)	Rishab,Schneider, Omron	Nos.	1		
<b>3</b>	<b>Supply of MCB</b>		Nos.			
a	20 A ,3pole ,415 V MCB (It should confirm IS 13032 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,ABB	Nos.	6		
b	63 A , 3 Pole , 415 V MCB (It should confirm IS 13032 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,ABB	Nos.	2		
C	6A ,3 Pole ,415 V MCB (It should confirm IS 13032 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,ABB	Nos.	7		
d	2A , 2pole , 230 V MCB( It should confirm IS 13032 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,ABB	Nos.	1		
<b>4</b>	<b>Supply of Contactors</b>	L&T ,Siemens, Schneider,ABB	Nos.			
a	40 A , 3 Pole , 415 Volts, 230 V Coil (PID Controller)( It should confirm IS 6875 (Part -1) & IS- 2959 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,ABB	Nos.	2		
b	25 A , 3 Pole ,415 Volts ,230 V Coil ( It should confirm IS 6875 (Part -1) & IS- 2959 & IEC Standardswith Test Certificates)	L&T ,Siemens, Schneider,ABB	Nos.	6		
c	6 A , 3 Pole ,415 Volts ,230 V Coil ( It should confirm IS 6875 (Part -1) & IS- 2959 & IEC Standardswith Test	L&T ,Siemens, Schneider,ABB	Nos.	7		

	Certificates)					
<b>5</b>	<b>Supply and Installation of MPCB(It should confirm IS 13032 &amp; IEC Standardswith Test Certificates)</b>		Nos.			
a	0-4 A , 3 Pole 415 V	Omron,Siemens, Schneider	Nos.	6		
b	0-1.5 A , 3 Pole 415 V	Omron,Siemens, Schneider	Nos.	2		
c	0-12 A , 3 Pole 415 V	Omron,Siemens, Schneider	Nos.	2		
d	0-10 A , 3 Pole 415 V	Omron,Siemens, Schneider	Nos.	2		
<b>6</b>	<b>Supply and installation of ESSR Relay</b>		Nos.			
	ESSR Relay for Preheater 25 Kw( It should confirm IS 6875 (Part -1) & IEC Standards with Test Certificates and Calibration certificates)	Omron ,Rishab	Nos.	2		
<b>7</b>	<b>Supply and Installation of Temperature Controller (PID) with display</b>		Nos.			
a	Programable Temperature Controller (PID) with LED Display( It should confirm IS 6875 (Part -1) & IEC Standards with Test Certificates and Calibration certificates)	Omron, Fuji,Rishab	Nos.	2		
<b>8</b>	<b>Supply and Installation of Variable Frequency Drives(VFD)</b>		Nos.			
a	1 HP VFD( With Test Certificates and Calibration certificates)	Mistubushi,Fuji,Siemens	Nos.	6		
<b>9</b>	<b>Supply and Installation of illuminated Selector switch</b>		Nos.			
a	illuminated Selector switch( It should confirm IS 6875 (Part -2) & IEC Standards)	Schneider, Siemens	Nos.	16		
<b>10</b>	<b>Supply and Installation of illuminated Push Switches</b>		Nos.			
	illuminated push button switches(Red,Green) 230 V (It should	Schneider,	Set	1		

	confirm IS 6875 (Part -2) & IEC Standards)	Siemens				
<b>11</b>	<b>Supply and installation of Emergency Push Button</b>		Nos.			
	Emergency Push Button 450 V,5A( It should confirm IS 6875 (Part -2) & IEC Standards)	Schneider, Siemens	Nos.	1		
<b>12</b>	<b>Supply and installation of CT</b>		Nos.			
	CT(It should confirm IS 2705 (Part -1&2) & IEC Standards with Test Certificates and Calibration certificates)	Schneider, ABB	Nos.	3		
<b>13</b>	<b>Supply and installation of cooling fan,filter,plug &amp;socket ,Panel light</b>		Nos.			
	Cooling Fan , Filter, Plug & Socket ,Panel Light( It should confirm IS 1293 & IEC Standards with test certificate)	Havels/CGL	Set	1		
<b>14</b>	<b>Supply and Installation of RTD</b>		Nos.			
	RTD , PT 100 Type with extended type of Sensor Tube( With Test Certificates and Calibration certificates)		Nos.	2		
	Basic price					
	Packing&Finishing					
	CST/VAT					
	Other charges if any					
	Gross Amount Rs					

**(In words)**

I agree to supply all the items as per schedule at the rates quoted by me as above and the terms and conditions of the tender document.

SIGNATURE OF THE SUPPLIER

Note : Panel should be earthed with Cu Strippes on both sides it should be as per IS 3043 and door eathing to be provided ,

Ferruling is Mandatory for panel internal wiring and for the all Incoming and out going cables , Tagging of all components in the panel is also mandatory ,

All the VFD should be mounted on the panel Naming board should be provided for all MCB and Control switches, incoming and out going cables

should be dressed properly with suitable cable ties, All the cables should confirm IS 1554 & IS 694 ,All wiring should be as per IS 732,

All safety measures should be taken at site as per IS 5216 ( Part 1&2)

Read as

<b>SCEDULEFOR THE SUPPLY,INSTALLATION,,TESTING &amp; COMMISSIONING OF PANEL FOR ONLINE POWDER FINISHING EQUIPMENTS AT KFB</b>						
SI No	Item Description	Make	Unit	Quantity	Rate	Amount
<b>I</b>	<b>Supply ,Installation ,Testing and Commissioning of</b>					
<b>1</b>	<b>Panel board</b> having size 1x1x0.4 Mtr 1.6 mm Powder Coated CRCA Sheet panel(The item should confirm IS & IEC standards with Test Certificates )	Rishab , L&T	Nos.	<b>1</b>		
<b>2</b>	<b>Supply and Installation of MCCB</b>		Nos.			
a	MCCB 200 A , 3 Pole ,450Volts ,CAT -B.(It should confirm IS 13032 & IEC standards with Test Certificates and Calibration certificates)	L&T,Siemens, Schneider,ABB	Nos.	1		
<b>2</b>	<b>Supply and Installation of Trivector Meter</b>		Nos.			
	Capable of Measuring KW,KVA,KVAR,V,A,PF and related Electrical parameters with appropriate CTs and PTs.(It should confirm IS 722 & IEC Standards (Part 1 to 9) with Test Certificates and Calibration	Rishab,Schneider,Omron	Nos.	1		

	certificates)					
<b>3</b>	<b>Supply of MCB</b>		Nos.			
a	20 A ,3pole ,415 V MCB (It should confirm IS 13032 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,A BB	Nos.	6		
b	63 A , 3 Pole , 415 V MCB (It should confirm IS 13032 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,A BB	Nos.	2		
C	6A ,3 Pole ,415 V MCB (It should confirm IS 13032 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,A BB	Nos.	7		
d	2A , 2pole , 230 V MCB( It should confirm IS 13032 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,A BB	Nos.	1		
<b>4</b>	<b>Supply of Contactors</b>	L&T ,Siemens, Schneider,A BB	Nos.			
a	40 A , 3 Pole , 415 Volts, 230 V Coil (PID Controller)( It should confirm IS 6875 (Part -1) & IS-2959 & IEC Standards with Test Certificates)	L&T ,Siemens, Schneider,A BB	Nos.	2		
b	25 A , 3 Pole ,415 Volts ,230 V Coil ( It should confirm IS 6875 (Part -1) & IS- 2959 & IEC Standardswith Test Certificates)	L&T ,Siemens, Schneider,A BB	Nos.	6		
c	6 A , 3 Pole ,415 Volts ,230 V Coil ( It should confirm IS 6875 (Part -1) & IS- 2959 & IEC Standardswith Test Certificates)	L&T ,Siemens, Schneider,A BB	Nos.	7		
<b>5</b>	<b>Supply and Installation of MPCB(It should confirm IS 13032 &amp; IEC Standardswith Test Certificates)</b>		Nos.			
a	0-4 A , 3 Pole 415 V	Omron,Siemens, Schneider	Nos.	6		
b	0-1.5 A , 3 Pole 415 V	Omron,Siemens, Schneider	Nos.	2		
c	0-12 A , 3 Pole 415 V	Omron,Siemens,	Nos.	2		

		Schneider				
d	0-10 A, 3 Pole 415 V	Omron,Siemens, Schneider	Nos.	2		
<b>6</b>	<b>Supply and installation of ESSR Relay</b>		Nos.			
	ESSR Relay for Preheater 25 Kw( It should confirm IS 6875 (Part -1) & IEC Standards with Test Certificates and Calibration certificates)	Omron ,Rishab	Nos.	2		
<b>7</b>	<b>Supply and Installation of Temperature Controller (PID) with display</b>		Nos.			
a	Programable Temperature Controller (PID) with LED Display( It should confirm IS 6875 (Part -1) & IEC Standards with Test Certificates and Calibration certificates)	Omron, Fuji,Rishab	Nos.	2		
<b>8</b>	<b>Supply and Installation of Variable Frequency Drives(VFD)</b>		Nos.			
a	1 HP VFD( With Test Certificates and Calibration certificates)	Mistubishi, Fuji,Siemens	Nos.	6		
<b>9</b>	<b>Supply and Installation of illuminated Selector switch</b>		Nos.			
a	illuminated Selector switch( It should confirm IS 6875 (Part -2) & IEC Standards)	Schneider, Siemens	Nos.	16		
<b>10</b>	<b>Supply and Installation of illuminated Push button Switches</b>		Nos.			
	illuminated push button switches(Red,Green) 230 V (It should confirm IS 6875 (Part -2) & IEC Standards)	Schneider, Siemens	Set	1		
<b>11</b>	<b>Supply and installation of Emergency Push Button</b>		Nos.			
	Emergency Push Button 450 V,5A( It should confirm IS 6875 (Part -2) & IEC Standards)	Schneider, Siemens	Nos.	1		
<b>12</b>	<b>Supply and installation of CT</b>		Nos.			
	CT(It should confirm IS 2705 (Part -1&2) & IEC Standards with Test Certificates and Calibration certificates)	Schneider, ABB	Nos.	3		
<b>13</b>	<b>Supply and installation of cooling fan,filter,plug &amp;socket ,Panel light</b>		Nos.			
	Cooling Fan , Filter, Plug & Socket ,Panel Light( It should	Havels/CGL	Set	1		

	confirm IS 1293 & IEC Standards with test certificate)					
<b>14</b>	<b>Supply and Installation of RTD</b>	Nos.				
	RTD , PT 100 Type with extended type of Sensor Tube( With Test Certificates and Calibration certificates)	Nos.	2			
15	Supply and Installation of Cables and Accessories (As Per IS 649/ IEC 60227 ,IS 1255 , IS 10810 (Part 0 to 64) , IEC 60189 (1 to 3) , IEC 60304, IEC 60028 , IEC 60332-3,IEC 60227(1 to 5), IEC 60719 , IEC 60228.) with test certificates					
a	3x2.5 sq mm Cu cable					
b	4x2.5 sq mm Cu cable					
c	4X4 sq mm Cu cable					
d	1 x 2.5 sq mm Heat Resistant Armoured cable					
	Basic Price in Rs.					
	Packing & forwarding charges					
	Sub Total in Rs.					
	CST in Rs.					
	<b>Gross Amount Rs.</b>					
	<b>(In words)</b>					
I agree to supply all the items as per schedule at the rates quoted by me as above and the terms and conditions of the tender document.						
						<b>SIGNATURE OF THE SUPPLIER</b>
	<b>Note</b>					
Ferruling(As per IS/IEC 61754-5) with pried Ferrules is Mandatory for panel internal wiring and all Incoming and out going cables.						
Tagging of all components in the panel is also mandatory in the panel is also mandatory.						
All the VFD should be mounted on the panel , Earthing from VFD end should be get connected with the earthing of Machine.						
Naming and Control switches, board should be provided for all MCB , Incoming and out going cables should						
be dressed properly with suitable cable ties(As per IS/IEC 62275) , All the cables should confirm IS 1554 &						
IS 694 ,All wiring should beAs per IS 732,694 ,All wiring should be as per IS 732.All safety measures should						
be taken at site As per IS 5216 ( Part 1&2) , IS 9249/IEC 60414 ,IS 8437(Part 1&2)/IEC 60479-1&2,IS 9409						
IEC 61140 , IS 9676. Earthing is mandatory on all components it should be as per IS 3043/IEC 60364 and						
earthing should be provided for Panels,Motors , JB's , Dipping Tank - Leaching Tank and Entire Machine						
parts with double strand Cu Flat earthing.Earthing Connection with Machine has to be clamped with suitable						



SS clamps at each 750 mm Interval , The earthing continuity should be maintained by interconnection
between earthing flats with suitable Cu connectors.Cables Should be provided with Proper Lugs
(As per IS/IEC 61238) ,Ties&Tags ( As per IS/IEC 62275) ,Ferruling (As per IS/IEC 61754-5)..
During heater wiring cable should be covered with sleeves to withstand temperature upto 400 Degrees
andCable lugs(As per IS/IEC 61238) also should with stand temperature upto 400 degrees.
Proper Glanding(As per IS/IEC 60079) should be provided for all incoming/out going cables with Gland
EarthingSuitable heat resistant( up to 400 Degrees) /Flame proof ceramic connectors(As per IS/IEC 61754-7)
should be provided were ever it is necessary.Were ever necessary adequate Insulation should be provided
for both electrical and heat resistance by the contactorCable Tray has to be fixed on the panel by the
contactor with out any additional PayPanel erection is also included under the above work.Adequate
Tolls and Tackles has to be provided by the Contactor(Welding Machine ,Drilling set , Cutting Machine ,
Grinding Set , Ferruling machine , Tool set)Other than the above what ever small works which are coming
under the part of Commissioning has to attende by the Contractor-(small fabrication,welding , cutting
,drilling ,bending etc)During the above work all safety gadgets for the working personals at site as per
HLL Norms should be provided by the ContractorStrict Vigilance should be maintained for Safety during
entire project execution as per HLL NormsWorking personal in the project are strictly liable to follow all
rules and regulation under the HLL Norms.All Documents as per HLL Norms has to be provided by the
Contactor for processing the current bills.Alcohol consumption and smoking are strictly prohibited in
the HLL Premises.Gate pass should be maintained for eachbrought out item and counter sign should be
obtained from corresponding HLL personal for Processing the bill of the same.

**ASSOCIATE VICE PRESIDENT(CED)**