Amendment no.1 26th 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

SCHEDULE FOR THE SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF PANEL BOARD WITH CONTROLS FOR ONLINE POWDER FINISHING EQUIPMENTS AT KFB

SI No	Item Description	Make	Unit	Quantity	Rate	Amount
	Supply ,Installation ,Testing and Commi	ssioning of				
	Panel board 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.	1		
2	Supply and Installation of MCCB		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	
2	Supply and Installation of Trivector Meter		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	
3	Supply of MCB		Nos.		
а	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	
С	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	
4	Supply of Contactors	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	
С	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)				
5	Supply and Installation of MPCB(It shou 13032 & IEC Standardswith Test Certific		Nos.		
а	0-4 A , 3 Pole 415 V	Omron,Siemens,	Nos.	6	
		Schneider			
b	0-1.5 A , 3 Pole 415 V	Omron,Siemens, Schneider	Nos.	2	
С	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	
6	Supply and installation of ESSR Relay		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	
7	Supply and Installation of Temperature with display	Controller (PID)	Nos.		
а	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	
8	Supply and Installation of Variable Freq Drives(VFD)	uency	Nos.		
а	1 HP VFD(With Test Certificates and Calibration certificates)	Mistubushi,Fuji,Si emens	Nos.	6	
9	Supply and Installation of illuminated Se	elector switch	Nos.		
а	illuminated Selector switch(It should confirm IS 6875 (Part -2) & IEC Standards)	Schneider, Siemens	Nos.	16	
10	Supply and Installation of illuminated P Switches	ush button	Nos.		
	illuminated push button switches(Red,Green) 230 V (It should	Schneider,	Set	1	

and from IS (075 (Dent. 2) & IEC	C:	T T			
	Siemens				
Standards)					
Supply and installation of Emergency Pu	ish Button	Nos.			
Emergency Push Button 450 V,5A(It	Schneider,	Nos.	1		
should confirm IS 6875 (Part -2) & IEC Standards)	Siemens				
Supply and installation of CT		Nos.			
CT(It should confirm IS 2705 (Part -1&2) & IEC Standards with Test Certificates and Calibration certificates)	Schneider, ABB	Nos.	3		
Supply and installation of cooling fan,fil ,Panel light	ter,plug &socket	Nos.			
Cooling Fan , Filter, Plug & Socket ,Panel Light(It should confirm IS 1293 & IEC Standards with test certificate)	Havels/CGL	Set	1		
Supply and Installation of RTD		Nos.			
	-	Nos.	2		
Basic price					
Packing&Finishing					
CST/VAT					
Other charges if any					
Gross Amount Rs					
	Emergency Push Button 450 V,5A(It should confirm IS 6875 (Part -2) & IEC Standards) Supply and installation of CT CT(It should confirm IS 2705 (Part -1&2) & IEC Standards with Test Certificates and Calibration certificates) Supply and installation of cooling fan,fil ,Panel light Cooling Fan , Filter, Plug & Socket ,Panel Light(It should confirm IS 1293 & IEC Standards with test certificate) Supply and Installation of RTD RTD , PT 100 Type with extended type of S Test Certificates and Calibration certificate Basic price Packing&Finishing CST/VAT	Standards)Supply and installation of Emergency Push ButtonEmergency Push Button 450 V,5A(It should confirm IS 6875 (Part -2) & IEC Standards)Schneider, SiemensSupply and installation of CTIt CT(It should confirm IS 2705 (Part -1&2) & IEC Standards with Test Certificates and Calibration certificates)Schneider, ABBSupply and installation of cooling fan,filter,plug & socket ,Panel lightSchneider, ABBCooling Fan , Filter, Plug & Socket ,Panel Light(It should confirm IS 1293 & IEC Standards with test certificate)Havels/CGLSupply and Installation of RTDRTD , PT 100 Type with extended type of Sensor Tube(With Test Certificates and Calibration certificates)Basic pricePacking&FinishingCST/VATIt	Standards)Image: standards installation of Emergency Push Button 450 V,5A(It should confirm IS 6875 (Part -2) & IEC Standards)Schneider, SiemensNos.Supply and installation of CTNos.Nos.Schneider, ABBNos.CT(It should confirm IS 2705 (Part -1&2)) & IEC Standards with Test Certificates and Calibration certificates)Schneider, ABBNos.Supply and installation of cooling fan,filter,plug & socket ,Panel lightNos.Nos.Cooling Fan , Filter, Plug & Socket ,Panel Light(It should confirm IS 1293 & IEC Standards with test certificate)Havels/CGLSetSupply and Installation of RTDNos.Nos.Nos.RTD , PT 100 Type with extended type of Sensor Tube(With Test Certificates and Calibration certificates)Nos.Nos.Basic priceImage: standards in the standard set of the the standard set	Standards)Nos.Supply and installation of Emergency Push ButtonNos.Emergency Push Button 450 V,5A(It should confirm IS 6875 (Part -2) & IEC Standards)Schneider, SiemensNos.Supply and installation of CTNos.ICT(It should confirm IS 2705 (Part -1&2) & IEC Standards with Test Certificates and Calibration certificates)Schneider, ABB Nos.Nos.Supply and installation of cooling fan,filter,plug & socket ,Panel lightNos.3Cooling Fan , Filter, Plug & Socket ,Panel Light (It should confirm IS 1293 & IEC Standards with test certificate)Havels/CGLSet1Supply and Installation of RTD Supply and Installation of RTDNos.22Supply and Installation of RTD (Standards with test certificates)Nos.22Supply and Installation of RTD (Standards with test certificates)Nos.1Supply and Installation of RTD (Standards with test certificates)Nos.2Supply and Installation of RTD (Standards with test certificates)Nos.2Supply and Installation of RTD (Standards with test certificates)Nos.2RTD , PT 100 Type with extended type of Sensor Tube(With Test Certificates and Calibration certificates)IIBasic price Packing&FinishingIIICST/VATIIII	Standards)Nos.Supply and installation of Emergency Push ButtonNos.Emergency Push Button 450 V,5A(It should confirm IS 6875 (Part -2) & IEC Standards)Schneider, SiemensNos.Supply and installation of CTNos.CT(It should confirm IS 2705 (Part -1&2) & IEC Standards with Test Certificates and Calibration certificates)Nos.3Supply and installation of cooling fan,filter,plug & socket , Panel lightNos.3Cooling Fan , Filter, Plug & Socket , Panel Light (It should confirm IS 1293 & IEC Standards with test certificate)Havels/CGLSet1Supply and Installation of RTDNos.2Set1Supply and Installation of RTDNos.2SetSetSupply and Installation of RTDNos.2SetSetSupply and Installation of RTDNos.2SetSetSupply and Installation of RTDNos.SetSetSetSupply and Installation of RTDNos.SetSetSetSupply and Installation of RTDNos.SetSetSetSupply and

(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

С	SCEDULEFOR THE SUPPORT SUPPORT					
	<u>EQUIPM</u>	ENTS AT K	(FB			
SI	Item Description	Make	Unit	Quan	Rate	Amount
No				tity		
Ι	Supply ,Installation ,Testing an	d Commissio	oning	of		
1	Panel board having size	Rishab ,	Nos.	1		
	1x1x0.4 Mtr 1.6 mm Powder	L&T				
	Coated CRCA Sheet panel(The					
	item should confirm IS & IEC					
	standards with Test Certificates					
)					
2	Supply and Installation of		Nos.			
	МССВ					
а	MCCB 200 A , 3 Pole ,450Volts	L&T,Siemen	Nos.	1		
	,CAT -B.(It should confirm IS	S,				
	13032 & IEC standards with Test	-				
	Certificates and Calibration	BB				
	certificates)					
2	Supply and Installation of Trive		Nos.			
	Capable of Measuring	Rishab,Schn	Nos.	1		
	KW,KVA,KVAR,V,A,PF and	eider,Omro				
	related Electrical parameters	n				
	with appropriate CTs and PTs.(It					
	should confirm IS 722 & IEC					
	Standards (Part 1 to 9) with Test					
	Certificates and Calibration					

	aantificatea)				
	certificates)				
3	Supply of MCB		Nos.		
а	20 A ,3pole ,415 V MCB (It	L&T	Nos.	6	
	should confirm IS 13032 & IEC	,Siemens,			
	Standards with Test Certificates)	Schneider,A			
		BB			
b	63 A , 3 Pole , 415 V MCB (It	L&T	Nos.	2	
	should confirm IS 13032 & IEC	,Siemens,			
	Standards with Test Certificates)	Schneider,A			
	,	BB			
С	6A ,3 Pole ,415 V MCB ()It	L&T	Nos.	7	
	should confirm IS 13032 & IEC	,Siemens,			
	Standards with Test Certificates)	Schneider,A			
		BB			
d	2A, 2pole, 230 V MCB(It should		Nos.	1	
	confirm IS 13032 & IEC	,Siemens,			
	Standards with Test Certificates)				
	,	BB			
4	Supply of Contactors	L&T	Nos.		
		,Siemens,			
		Schneider,A			
		BB			
а	40 A , 3 Pole , 415 Volts, 230 V	L&T	Nos.	2	
	Coil (PID Controller)(It should	,Siemens,			
	confirm IS 6875 (Part -1) & IS-	Schneider,A			
	2959 & IEC Standards with Test	BB			
	Certificates)				
b	25 A , 3 Pole ,415 Volts ,230 V	L&T	Nos.	6	
	Coil (It should confirm IS 6875	,Siemens,			
	(Part -1) & IS- 2959 & IEC	Schneider,A			
	Standardswith Test Certificates)	BB			
С	6 A , 3 Pole ,415 Volts ,230 V Coil	L&T	Nos.	7	
	(It should confirm IS 6875 (Part	,Siemens,			
	-1) & IS- 2959 & IEC	Schneider,A			
	Standardswith Test Certificates)	BB			
5	Supply and Installation of MPC		Nos.		
	confirm IS 13032 & IEC Standar	rdswith			
	Test Certificates)				
а	0-4 A , 3 Pole 415 V	Omron,Sie	Nos.	6	
		mens,			
		Schneider			
b	0-1.5 A , 3 Pole 415 V	Omron,Sie	Nos.	2	
		mens,			
		Schneider			
С	0-12 A , 3 Pole 415 V	Omron,Sie	Nos.	2	
		mens,			

d		Schneider				
d						
	0-10 A, 3 Pole 415 V	Omron,Sie	Nos.	2		
		mens,				
		Schneider				
6	Supply and installation of ESSR	Relay	Nos.			
	ESSR Relay for Preheater 25 Kw(Omron	Nos.	2		
	It should confirm IS 6875 (Part -	,Rishab				
	1) & IEC Standards with Test					
	Certificates and Calibration					
	certificates)					
7	Supply and Installation of Tem	perature	Nos.			
	Controller (PID) with display					
а	Programable Temperature	Omron,	Nos.	2		
	Controller (PID) with LED	Fuji,Rishab				
	Display(It should confirm IS					
	6875 (Part -1) & IEC Standards					
	with Test Certificates and					
-	Calibration certificates)	l				
8	Supply and Installation of Varia	able	Nos.			
	Frequency Drives(VFD)					
а	1 HP VFD(With Test Certificates		Nos.	6		
	and Calibration certificates)	Fuji,Siemen				
0		S	N			
9	Supply and Installation of illum	inated	Nos.			
	Selector switch		N	1.0		
а	illuminated Selector switch(It	Schneider,	Nos.	16		
	should confirm IS 6875 (Part -2) & IEC Standards)	Siemens				
10	Supply and Installation of illum	vinatod	Nos.			
10	Push button Switches	innateu	NUS.			
	illuminated push button	Schneider,	Set	1		
	switches(Red,Green) 230 V (It	Siemens	Set	T		
	should confirm IS 6875 (Part -2)	Siemens				
	& IEC Standards)					
11	Supply and installation of Emer	rgency	Nos.			
	Push Button	Gj				
	Emergency Push Button 450	Schneider,	Nos.	1		
	V,5A(It should confirm IS 6875	Siemens				
	(Part -2) & IEC Standards)	-				
12	Supply and installation of CT		Nos.			
		Schneider,	Nos.	3		
		ABB				
	with Test Certificates and					
	Calibration certificates)					
13	Supply and installation of cooli	ng	Nos.			
	fan,filter,plug &socket ,Panel li					
	Cooling Fan , Filter, Plug &	Havels/CGL	Set	1		
	Socket ,Panel Light(It should					
	CT(It should confirm IS 2705 (Part -1&2) & IEC Standards with Test Certificates and Calibration certificates) Supply and installation of cooli fan,filter,plug &socket,Panel li	ng ght	Nos. Nos.			

1	confirm IS 1293 & IEC Standards					
	with test certificate)					
14	Supply and Installation of RTD		Nos.			
	RTD , PT 100 Type with extended	l type of	Nos.	2		
	Sensor Tube(With Test Certificat	es and				
	Calibration certificates)					
15	Supply and Installation of Cables					
	,IS 1255 , IS 10810 (Part 0 to 64)					
	IEC 60332-3,IEC 60227(1 to 5), II	EC 60719 , IE	C 6022	8.) wi	th test c	ertificates
а	3x2.5 sq mm Cu cable					
b	4x2.5 sq mm Cu cable					
С	4X4 sq mm Cu cable					
d	1 x 2.5 sq mm Heat Resistant Arn	noured cable				
	Basic Price in Rs.					
	Packing & forwarding charges					
	Sub Total in Rs.					
	CST in Rs.					
	Gross Amount Rs.					
(In v	words)					
I agr	ree to supply all the items as per so	chedule at the	e rates	quote	d by me	as above
and	the terms and conditions of the te	nder docume	ent.	r	1	1
						SIGNATU
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	Note					SUPPLIER
	uling(As per IS/IEC 61754-5) with			Manda	tory for	SUPPLIER
inte	ruling(As per IS/IEC 61754-5) with rnal wiring and all Incoming and o	out going cabl	les.		-	SUPPLIER
inter Tagg	ruling(As per IS/IEC 61754-5) with rnal wiring and all Incoming and c ging of all components in the pane	out going cabl	les.		-	SUPPLIER
inter Tagg man	ruling(As per IS/IEC 61754-5) with rnal wiring and all Incoming and c ging of all components in the pane datory.	out going cabl l is also mano	les. datory	in the	panel is	SUPPLIER r panel also
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inter Tagg man All t conr Narr and be c shou	ruling(As per IS/IEC 61754-5) with rnal wiring and all Incoming and or ging of all components in the pane datory. he VFD should be mounted on the nected with the earthing of Machir ning and Control switches, board s out going cables should dressed properly with suitable cal ald confirm IS 1554 &	put going cabl l is also mand panel , Earth ne. should be pro ple ties(As pe	les. datory ing fro ovided er IS/IE	in the m VFE for all C 622'	panel is) end sh MCB , Ir 75) , All	SUPPLIER panel also ould be get ncoming the cables
inter Tagg man All t com Nam and be c shou IS 69	ruling(As per IS/IEC 61754-5) with rnal wiring and all Incoming and o ging of all components in the pane idatory. he VFD should be mounted on the nected with the earthing of Machir ning and Control switches, board s out going cables should dressed properly with suitable cal ald confirm IS 1554 & 94 ,All wiring should beAs per IS 7	put going cabl l is also mand panel , Earth ne. should be pro ple ties(As pe	les. datory ing fro ovided er IS/IE	in the m VFE for all C 622'	panel is) end sh MCB , Ir 75) , All	SUPPLIER panel also ould be get ncoming the cables
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inter Tagg man All t conr Nam and be c shou IS 69 732. be ta 1&2 IEC 0 IS 30 eart	ruling(As per IS/IEC 61754-5) with rnal wiring and all Incoming and o ging of all components in the pane idatory. he VFD should be mounted on the nected with the earthing of Machin ning and Control switches, board s out going cables should dressed properly with suitable cal ild confirm IS 1554 & 94 ,All wiring should beAs per IS 7 .All safety measures should aken at site As per IS 5216 (Part 1)/IEC 60479-1&2,IS 9409 61140 , IS 9676. Earthing is mand 043/IEC 60364 and thing should be provided for Pane	out going cabl l is also mand panel , Earth ne. should be pro ole ties(As pe 32,694 ,All w &2) , IS 9249 atory on all c	les. datory ing fro ovided er IS/IE /iring s 0/IEC 6 ompon	in the m VFE for all C 622' hould 0414 , ents it	panel is) end sh MCB , Ir 75) , All be as pe IS 8437	SUPPLIER panel also ould be get ncoming the cables er IS (Part be as per
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inter Tagg man All t conr Nam and be c shou IS 69 732. be ta 1&2 IEC IS 30 eart Tanl par	ruling(As per IS/IEC 61754-5) with rnal wiring and all Incoming and o ging of all components in the pane idatory. he VFD should be mounted on the nected with the earthing of Machin ning and Control switches, board s out going cables should dressed properly with suitable cal ild confirm IS 1554 & 94 ,All wiring should beAs per IS 7 .All safety measures should aken at site As per IS 5216 (Part 1)/IEC 60479-1&2,IS 9409 61140 , IS 9676. Earthing is mand 043/IEC 60364 and thing should be provided for Pane	put going cabl l is also mand panel , Earth ne. should be pro ole ties(As pe 32,694 ,All w &2) , IS 9249 atory on all co ls,Motors , JB	les. datory ing fro ovided or IS/IE viring s 0/IEC 6 ompon 's , Dip	in the m VFE for all C 622' hould 0414 , ents it	panel is o end sh MCB , Ir 75) , All be as pe IS 8437 should ank - Le	SUPPLIER panel also ould be get ncoming the cables er IS (Part be as per eaching

SS clamps at each 750 mm Interval , The earthing continuity should be maintained by interconection

between eathing 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 necessory.Were ever necessory 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.Alchohol 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)