

<b>SUGGESTED PRICE FORMAT</b>		<b>Doc No:</b>	PE-PF-445-524-A001
		<b>Rev No:</b>	0
		<b>Date of issue</b>	13.04.22
<b>NAME OF PROJECT:</b>		SAGARDIGHI THERMAL POWER PROJECT, 1 X 660 MW UNIT NO 5, STAGE III.	
<b>NAME OF PACKAGE:</b>		SINGLE GIRDER CRANE	
<b>TECHNICAL SPECIFICATION:</b>		PE-TS-445-524-A001	
<b>S. No.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>
<b>1.0</b>	Total lump sum firm price inclusive of all prevailing taxes, duties and other levies for <b>SUPPLY PART, SERVICE PART (SUPERVISION) &amp; MANDATORY SPARES</b> comprising of design (i.e. preparation and submission of drawing /documents including "As Built" drawings and O&M manuals), engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor's works, painting, maintenance tools & tackles (as applicable), fill of lubricants & consumables, mandatory spares alongwith spares for erection, startup and commissioning as required, forwarding, proper packing, shipment and delivery at site for project and package specified above complete with all accessories for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.		
<b>2.0</b>	<b>MAJOR BREAK-UP OF PRICES GIVEN IN 1.0 ABOVE</b>		
<b>2.1</b>	Prices inclusive of all prevailing taxes, duties and other levies for <b>SUPPLY</b> part comprising of design (i.e.preparation and submission of drawing /documents including "As Built" drawings and O&M manuals), engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor's works, painting, maintenance tools & tackles (as applicable), fill of lubricants & consumables, alongwith spares for erection, startup and commissioning spares as required, forwarding, proper packing, shipment and delivery at site for project and package specified above complete with all accessories for following items for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order. <b>(Break-up of prices as per Annexure I)</b>	Lot	1
<b>2.2</b>	Total lump sum firm price for <b>SERVICE</b> part comprising of <b>Supervision of erection and commissioning</b> of cranes for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order. <b>(Break-up of prices as per Annexure II).</b>	Lot	1
<b>2.4</b>	Total lumpsum firm price inclusive of all prevailing taxes, duties and other levies for <b>Mandatory spares</b> comprising of manufacture, fabrication, assembly, inspection / testing (as applicable) at vendor's & sub-vendor's works, painting, forwarding, proper packing, shipment, delivery at site & guarantee as per tender technical specification above, amendment & agreements till placement of order. <b>(Break-up of prices as per Annexure III &amp; Annexure VI).</b>	Lot	1

SUGGESTED PRICE FORMAT MAIN SUPPLY PART : ANNEXURE-I		Doc No:	PE-PF-445-524-A001	
		Rev No:	0	
		Date of issue	13.04.22	
NAME OF PROJECT:		SAGARDIGHI THERMAL POWER PROJECT, 1 X 660 MW UNIT NO 5, STAGE III.		
NAME OF PACKAGE:		SINGLE GIRDER CRANE		
TECHNICAL SPECIFICATION:		PE-TS-445-524-A001		
S. No.	DESCRIPTION	UNIT	QTY	AMOUNT (Ex-Works)
<b>BREAK-UP OF SUPPLY PRICES GIVEN IN 2.1 OF MAIN SHEET.</b>				
2.1	Break up of Prices inclusive of all prevailing taxes, duties and other levies for <b>SUPPLY</b> part comprising of design (i.e.preparation and submission of drawing /documents including "As Built" drawings and O&M manuals), engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor's works, painting, maintenance tools & tackles (as applicable), fill of lubricants & consumables, alongwith spares for erection, startup and commissioning spares as required, forwarding, proper packing, shipment and delivery at site for project and package specified above complete with all accessories for following items for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.	Lot	1	
2.1.1(a)	For: <b>CWPH (outside area for screens and gates) (OUTDOOR)</b> Type: Single Girder Semi-Gantry Crane Capacity: 5 T Span: 5.55 m Lift: 14.146 m Baylength: 34 m	No.	1	
2.1.1 (b)	Cable Reeling Drum (CRD) complete with all accessories for complete baylength.	Lot	1	
2.1.1 (c)	Rail complete with all accessories for complete baylength.	Lot	1	
2.1.1 (d)	VVVF Drives for all motions.	Set	1	
2.1.2 (a)	For: <b>ACW &amp; Fire Water Pump House (INDOOR)</b> Type: Single Girder underslung Crane Capacity: 8 T Span: 5.5 m Lift: 13.7 m Baylength: 30m	No.	1	
2.1.2 (b)	PVC Shrouded bus bar type Cu DSL complete with all accessories for complete baylength.	Lot	1	
2.1.2 (c)	VVVF Drives for all motions.	Set	1	
2.1.3 (a)	For: <b>DG BUILDING (INDOOR)</b> Type: Single Girder EOT Crane Capacity: 8T Span: 13.5 m Lift: 6.2 m Baylength: 23 m	No.	1	
2.1.3 (b)	PVC Shrouded bus bar type Cu DSL complete with all accessories for complete baylength.	Lot	1	
2.1.3 (c)	Rail complete with all accessories for complete baylength.	Lot	1	
2.1.3 (d)	VVVF Drives for all motions.	Set	1	
2.1.4 (a)	For: <b>MRS Compressor House (INDOOR)</b> Type: Single Girder EOT Crane Capacity: 3T Span: 4.5 m Lift: 5 m Baylength: 19 m	No.	1	
2.1.4 (b)	PVC Shrouded bus bar type Cu DSL complete with all accessories for complete baylength.	Lot	1	
2.1.4 (c)	Rail complete with all accessories for complete baylength.	Lot	1	
2.1.4 (d)	VVVF Drives for all motions.	Set	1	
2.1.5	COMMISSIONING SPARES			
2.1.5 (a)	COMMISSIONING SPARES for 3T crane	Set	1	
2.1.5 (b)	COMMISSIONING SPARES for 5T crane	Set	1	
2.1.5 (c)	COMMISSIONING SPARES for 8T cranes	Set	2	
2.1.6	MAINTENANCE TOOLS AND TACKLES			
2.1.6 (a)	Maintenance tools and tackles for 3T crane	Set	1	
2.1.6 (b)	Maintenance tools and tackles for 5T crane	Set	1	
2.1.6 (c)	Maintenance tools and tackles for 8T cranes	Set	2	
2.1.7	MANDATORY SPARES			
2.1.7 (a)	Mandatory Spares for 5T SEMI GANTRY CRANE FOR CWPH (outside area for screens and gates) (OUTDOOR) as per Annexure III	Set	1	
2.1.7 (b)	Mandatory Spares for 8T UNDERSLUNG CRANE FOR ACW & Fire Water Pump House (INDOOR) as per Annexure IV	Set	1	
2.1.7 (c)	Mandatory Spares for 8T EOT CRANE FOR DG BUILDING (INDOOR) as per Annexure V	Set	1	
2.1.7 (d)	Mandatory Spares for 3T EOT CRANE FOR MRS Compressor House (INDOOR) as per Annexure VI	Set	1	
Note: 1) Prices mentioned against clause no. 2.1.1 (b), 2.1.1 (c), 2.1.2 (b), 2.1.3 (b), 2.1.3 (c), 2.1.4 (b), 2.1.4 (c), above will be taken for price adjustment due to change in baylength, if any, during detailed engineering. 2) There shall be no implication for change in span upto +/-1000mm and/or change in lift upto +/-1000mm.				
<b>Particulars of bidder / authorised representative</b>				
Name	Designation	Signature	Date	Company Seal

<b>SUGGESTED PRICE FORMAT</b> <b>SERVICE PART: ANNEXURE-II</b>		Doc No:		PE-PF-445-524-A001	
		Rev No:		0	
		Date of issue		13.04.22	
NAME OF PROJECT:		SAGARDIGHI THERMAL POWER PROJECT, 1 X 660 MW UNIT NO 5, STAGE III.			
NAME OF PACKAGE:		SINGLE GIRDER CRANES			
TECHNICAL SPECIFICATION:		PE-TS-445-524-A001			
S. No.	DESCRIPTION	UNIT	QTY		
	<b>BREAK-UP OF SUPPLY PRICES GIVEN IN 2.2 OF MAIN SHEET.</b>				
2.2	Total lump sum firm price for <b>SERVICE</b> part comprising of <b>Supervision of erection and commissioning</b> of cranes for crane for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.				
2.2.1	Total lump sum prices for visits (should include travel expenses to/ fro site, insurance (if applicable), intermediary stay etc for Supervision of erection and commissioning for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.	No of visits	3		
2.2.2	Total lump sum prices for Supervision of erection and commissioning (in days) for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.	No of days	9		
2.2.3	Total of 2.2 (2.2.2. to 2.2.3)				
Note: 1. No. of days at site defined at S.N. 2.2.2 above shall be calculated on the basis of presence at site (travel time is excluded). 2. No. of Visits and days for supervision of E & C shall depends upon site requirement. Any variation in no. of visits & no. of days shall be exercised based on unit rate arrived from S.N. 2.2.2 & 2.2.3 above respectively. 3. Bidder to quote the Prices in 'figures' along with corresponding 'words'.					
<b>Particulars of bidder / authorised representative</b>					
Nam	Designation	Signature		Date	Company Seal

<b>SUGGESTIVE PRICE FORMAT MANDATORY SPARES: ANNEXURE-III</b>		<b>Doc No:</b>	PE-PF-445-524-A001
		<b>Rev No:</b>	0
		<b>Date of issue</b>	4/13/2022
<b>NAME OF PROJECT:</b>		<b>SAGARDIGHI THERMAL POWER PROJECT, 1 X 660 MW UNIT NO 5, STAGE III.</b>	
<b>NAME OF PACKAGE:</b>		<b>SINGLE GIRDER CRANES</b>	
<b>TECHNICAL SPECIFICATION:</b>		<b>PE-TS-445-524-A001</b>	
The bidder shall include in their offer, on basis of technical specification, the mandatory spares as applicable for their design.			
SI No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 5T SEMI GANTRY CRANE FOR CWPH (outside area for screens and gates) (OUTDOOR) Price <del>(Ex-Works)</del>
6.01.00	EOT Cranes		
6.01.01	Long Travel Unit		
(i)	Set of Bearings of Wheels	1Set for each type & capacity of EOT	
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT	
(iii)	Long Travel end Shaft Bearings	1Set for each type & capacity of EOT	
(iv)	Seals for Travel Gear Box	1Set for each type & capacity of EOT	
(v)	Long Travel Brake Shoes Liners	2Sets for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Brake Spring	1Set for each type & capacity of EOT	
(viii)	Brake Coil	2Sets for each type & capacity of EOT	
(ix)	Motor	1 No. for each type & capacity of EOT	
6.01.02	Cross Travel Unit		
(i)	Axle Bearings	1Set for each type & capacity of EOT	
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT	
(iii)	Set of seals for Gearbox	1Set for each type & capacity of EOT	
(iv)	Cross Travel end Shaft Bearing	1Set for each type & capacity of EOT	
(v)	Cross travel Brake Shoes Liners	2Sets for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Brake Spring	1Set for each type & capacity of EOT	
(viii)	Brake Coil	2Sets for each type & capacity of EOT	
(ix)	Motor	1 No. for each type & capacity of EOT	
6.01.03	Hoist		
(i)	Main Hoist Pulley Bearings [All Bearings of Each Type and size used in all Gear Assemblies, Lifting Hook, Trolley wheels etc.]	1 Set for each type & capacity of EOT	
(ii)	Set of Bearings for Gear box	1 Set for each type & capacity of EOT	
(iii)	Set of seals for Gearbox	1 Set for each type & capacity of EOT	
(iv)	Aux. Hoist Gearbox Bearings	1 Set for each type & capacity of EOT	
(v)	Aux. Hoist Gearbox Seals	1 Set for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Main & Aux. Hoist Brake Shoes [Brake shoes with lining for each size of brake (Pair of each size)]	2 Sets for each type & capacity of EOT	
(viii)	Main & Aux. Hoist Brake Springs	2 Sets for each type & capacity of EOT	
(ix)	Main & Aux. Hoist Brake shoe liners	2 Sets for each type & capacity of EOT	
(x)	Motor for Main Hoist & Auxiliary Hoist	1 No. for each type & capacity of EOT	
(xi)	Brake Coil	2 Sets for each type & capacity of EOT	
(xii)	Wire Rope for Aux. Hook	100% of one crane for each type & capacity of EOT	
6.01.04	Electrical		
(i)	Other Electrical Spares as applicable as per the Electrical List	Applicable Item & Quantity same as indicated in Electrical list 'B' Sl. no.7.08.00, 7.21.00	
(ii)	Limit Switches for:		
(a)	Main Hoist	1 Set for each type & capacity of EOT	
(b)	Aux. Hoist	1 Set for each type & capacity of EOT	
(c)	Cross Travel	1 Set for each type & capacity of EOT	
(d)	Long Travel	1 Set for each type & capacity of EOT	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 5T SEMI GANTRY CRANE FOR CWPH (outside area for screens and gates) (OUTDOOR) Price (Ex-Works)
(iii)	Master Controller for :		
(a)	Aux. Hoist	1 No. for each type & capacity of EOT	
(b)	Cross Travel	1 No. for each type & capacity of EOT	
(c)	Long Travel	1 No. for each type & capacity of EOT	
(iv)	VVVF Drive Complete Set for:		
(a)	Main Hoist	1 No. for each type & capacity of EOT	
(b)	Aux. Hoist	1 No. for each type & capacity of EOT	
(c)	Cross Travel	1 No. for each type & capacity of EOT	
(d)	Long Travel	1 No. for each type & capacity of EOT	
7.00.00	Electrical Items		
7.08.00	415V System		
7.08.01	11/0.415KV Transformer ( for Each make,type and rating of Transformer)		
(i)	Door Limit Switch complete set	1 set (1 set means total requirement for one Transformer)	
(ii)	Neutral CT	1 no of each type and rating	
(iii)	Temperature scanner	1 no.	
(iv)	bhy	3 No	
(v)	LV Bushing with metal parts, connectors and gaskets	3 No	
(vi)	LV neutral Bushing with metal parts, connectors and gaskets	1 No	
(vii)	Post Insulator	1 set (1 set means total requirement for one Transformer)	
(viii)	Limb of complete LT & HT of temperature sensing devices	1 Set (1 set means total requirement for one Transformer)	
7.08.02	415V Air Circuit Breaker (for Each make, type and rating of ACB)		
(i)	Trip Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(ii)	Closing Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(iii)	Spring Charging Motor	2 nos.	
(iv)	Spring Charging Motor with complete Mechanism	2 nos.	
(v)	Spring Charged Limit Switch	5 nos.	
(vi)	Thermal Overload for Spring Charging Motor	2 nos.	
(vii)	Main Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(viii)	Arcing Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(ix)	Breaker Jaw Contact ( Bus-end & Breaker-end) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(x)	Sliding Contact (Fixed & Moving)	3 sets.	
(xi)	Breaker Auxiliary Contact Block	5 nos.	
(xii)	Arcing Chute	2 sets (1 set consists of 3 nos.) for each type and rating	
(xiii)	Plug Socket with Prefab cable	3 nos	
(xiv)	Position Limit Switch	5 sets	
7.08.03	415V PCC, PMCC, MCC, ACDB, DCDB, Elect. Control Panel (For each PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel ) ( applicable items of PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel shall be considered)		
(i)	Indicating Lamps complete assembly		
(a)	Red	3 nos of each make and type.	
(b)	Blue	3 nos of each make and type.	
(c)	Green	3 nos of each make and type.	
(d)	White	3 nos of each make and type.	
(e)	Amber	3 nos of each make and type.	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 5T SEMI GANTRY CRANE FOR CWPH (outside area for screens and gates) (OUTDOOR) Price (Ex-Works)
(ii)	CT	2 nos. for each make, type and Rating	
(iii)	Transducer	2 no for each make, type and Rating	
(iv)	Trip / Neutral / close Control Switch	2 nos. for each make, type and Rating	
(v)	Switch gear or MCC / Trial / Normal selector switch	2 nos. for each make, type and Rating	
(vi)	Local/Remote selector switch	2 nos. for each make, type and Rating	
(vii)	AC Supply On / Off Switch	1 no. for each make, type and Rating	
(viii)	DC Supply On / Off Switch	1 no. for each make, type and Rating	
(ix)	Motor Heater On /Off Switch	1 no. for each make, type and Rating	
(x)	DC Supply Source Selector Switch (3- position)	1 no. for each make, type and Rating	
(xi)	Ammeter Selector Switch	1 no. for each make, type and Rating	
(xii)	Voltmeter Selector Switch	1 no. for each make, type and Rating	
(xiii)	Voltmeter	2 no. for each make, type and Rating	
(xiv)	Ammeter	2 no. for each make, type and Rating	
(xv)	Auxiliary Control Contactor		
(a)	Auxiliary Control Contactor complete assembly	10% of total nos for each make, type and Rating.	
(b)	Auxiliary Control Contactor spare kits	10% of total nos. for each make, type and Rating.	
(c)	Auxiliary Control Contactor Coils	10% of total nos for each make, type and Rating.	
(xvi)	Power Contactor		
(a)	Power Contactor Complete Assembly	10% of total nos for each make, type and rating	
(b)	Power Contactor spare kits	10% of total nos for each make, type and Rating.	
(c)	Power Contactor Coils	10% of total nos for each make, type and Rating.	
(xvii)	MCCB	5% of total nos. for each make, type and rating.	
(xviii)	MCB	5% of total nos. for each make, type and rating.	
(xix)	Switch Fuse Unit (DC)	10% of total nos. for each make, type and rating.	
(xx)	Power Fuse	5% of total nos. for each make, type and rating.	
(xxi)	Control Fuse	5% of total nos. for each make, type and rating.	
(xxii)	Thermal Overload Relay	5% of total nos. for each make, type and rating.	
(xxii)	Sliding contact (Fixed and moving) Complete assembly	2 sets of each make, type and rating	
(xxiii)	Busbar to module Lira Contact assembly	2 sets of each make, type and rating (1 set means all 3 ph+ neutral)	
(xxiv)	Control and Aux. Transformer	1 no of each make, type and rating	
(xxv)	Delay Timer	2 no of each make, type and rating	
(xxvi)	Power Terminal Block	2 sets for each make, type and rating	
(xxvii)	Control Terminal Block	2 sets for each make, type and rating	
(xxviii)	End plate for Power and Control terminal block	2 sets for each make, type and rating	
(xxix)	Energy meter	1 no for each make, type and rating	
(xxx)	Relays (Other than numerical relay):		
(a)	Conventional (Electromagnetic/Static type) Relay	2 no for each make, type and rating	
(b)	Aux. relays & Lock out relays & TIMERS	2 nos for each make, type and rating	
(xxxi)	MCCB Status (On/off) Monitoring Switch/Contact	2 nos for each make, type and rating	
(xxxii)	Push Button (On/Off) Complete Assembly	2 nos for each make, type and rating	
(xxxiii)	Annunciation Facia with lamps complete	1 set for each make, type and rating	
7.21.00	Motor		
7.21.02	415 Volt Motor		
(i)	End Shield Cover Driving & Non-Driving End	1 set for each type and rating of Motor	
(ii)	Heaters	2 sets for each type and rating of motor	
(iii)	Bearings (DE and NDE) for each type and rating of motor	2 sets	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 5T SEMI GANTRY CRANE FOR CWPH (outside area for screens and gates) (OUTDOOR) Price ( <del>Ex-Works</del> )
(iv)	Cooling Fan for all type and rating of LT motors	One (1) set	
(v)	Dust seals and gaskets for each type of motors	1 Set	
(vi)	Motor Terminal Block	1 no. for each type and rating of Motor	
(vii)	Complete Set of Coupling	1 set for each type and rating	
<b>NOTES:</b>			
1	Bidder to refer Notes in Annexure-II of Technical Specification.		
2	*Refer Volume IIA, Reference clause of the "Customer Specification".		
<b>Particulars of bidder / authorised representative</b>			
<b>Name</b>	<b>Designation</b>	<b>Signature &amp; company seal</b>	

<b>SUGGESTIVE PRICE FORMAT MANDATORY SPARES: ANNEXURE-IV</b>		<b>Doc No:</b>	PE-PF-445-524-A001
		<b>Rev No:</b>	0
		<b>Date of issue</b>	4/13/2022
<b>NAME OF PROJECT:</b>		<b>SAGARDIGHI THERMAL POWER PROJECT, 1 X 660 MW UNIT NO 5, STAGE III.</b>	
<b>NAME OF PACKAGE:</b>		<b>SINGLE GIRDER CRANES</b>	
<b>TECHNICAL SPECIFICATION:</b>		<b>PE-TS-445-524-A001</b>	
The bidder shall include in their offer, on basis of technical specification, the mandatory spares as applicable for their design.			
SI No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 8T UNDERSLUNG CRANE FOR ACW & Fire Water Pump House (INDOOR) Price ( <del>Ex-Works</del> )
6.01.00	EOT Cranes		
6.01.01	Long Travel Unit		
(i)	Set of Bearings of Wheels	1Set for each type & capacity of EOT	
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT	
(iii)	Long Travel end Shaft Bearings	1Set for each type & capacity of EOT	
(iv)	Seals for Travel Gear Box	1Set for each type & capacity of EOT	
(v)	Long Travel Brake Shoes Liners	2Sets for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Brake Spring	1Set for each type & capacity of EOT	
(viii)	Brake Coil	2Sets for each type & capacity of EOT	
(ix)	Motor	1 No. for each type & capacity of EOT	
6.01.02	Cross Travel Unit		
(i)	Axle Bearings	1Set for each type & capacity of EOT	
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT	
(iii)	Set of seals for Gearbox	1Set for each type & capacity of EOT	
(iv)	Cross Travel end Shaft Bearing	1Set for each type & capacity of EOT	
(v)	Cross travel Brake Shoes Liners	2Sets for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Brake Spring	1Set for each type & capacity of EOT	
(viii)	Brake Coil	2Sets for each type & capacity of EOT	
(ix)	Motor	1 No. for each type & capacity of EOT	
6.01.03	Hoist		
(i)	Main Hoist Pulley Bearings [All Bearings of Each Type and size used in all Gear Assemblies, Lifting Hook, Trolley wheels etc.]	1 Set for each type & capacity of EOT	
(ii)	Set of Bearings for Gear box	1 Set for each type & capacity of EOT	
(iii)	Set of seals for Gearbox	1 Set for each type & capacity of EOT	
(iv)	Aux. Hoist Gearbox Bearings	1 Set for each type & capacity of EOT	
(v)	Aux. Hoist Gearbox Seals	1 Set for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Main & Aux. Hoist Brake Shoes [Brake shoes with lining for each size of brake (Pair of each size)]	2 Sets for each type & capacity of EOT	
(viii)	Main & Aux. Hoist Brake Springs	2 Sets for each type & capacity of EOT	
(ix)	Main & Aux. Hoist Brake shoe liners	2 Sets for each type & capacity of EOT	
(x)	Motor for Main Hoist & Auxiliary Hoist	1 No. for each type & capacity of EOT	
(xi)	Brake Coil	2 Sets for each type & capacity of EOT	
(xii)	Wire Rope for Aux. Hook	100% of one crane for each type & capacity of EOT	
6.01.04	Electrical		
(i)	Other Electrical Spares as applicable as per the Electrical List	Applicable Item & Quantity same as indicated in Electrical list 'B' Sl. no.7.08.00, 7.21.00	
(ii)	Limit Switches for:		
(a)	Main Hoist	1 Set for each type & capacity of EOT	
(b)	Aux. Hoist	1 Set for each type & capacity of EOT	
(c)	Cross Travel	1 Set for each type & capacity of EOT	
(d)	Long Travel	1 Set for each type & capacity of EOT	



Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 8T UNDERSLUNG CRANE FOR ACW & Fire Water Pump House (INDOOR) Price (EX-Works)-
(iii)	Master Controller for :		
(a)	Aux. Hoist	1 No. for each type & capacity of EOT	
(b)	Cross Travel	1 No. for each type & capacity of EOT	
(c)	Long Travel	1 No. for each type & capacity of EOT	
(iv)	VVVF Drive Complete Set for:		
(a)	Main Hoist	1 No. for each type & capacity of EOT	
(b)	Aux. Hoist	1 No. for each type & capacity of EOT	
(c)	Cross Travel	1 No. for each type & capacity of EOT	
(d)	Long Travel	1 No. for each type & capacity of EOT	
7.00.00	Electrical Items		
7.08.00	415V System		
7.08.01	11/0.415KV Transformer ( for Each make,type and rating of Transformer)		
(i)	Door Limit Switch complete set	1 set (1 set means total requirement for one Transformer)	
(ii)	Neutral CT	1 no of each type and rating	
(iii)	Temperature scanner	1 no.	
(iv)	bhy	3 No	
(v)	LV Bushing with metal parts, connectors and gaskets	3 No	
(vi)	LV neutral Bushing with metal parts, connectors and gaskets	1 No	
(vii)	Post Insulator	1 set (1 set means total requirement for one Transformer)	
(viii)	Limb of complete LT & HT of temperature sensing devices	1 Set (1 set means total requirement for one Transformer)	
7.08.02	415V Air Circuit Breaker (for Each make, type and rating of ACB)		
(i)	Trip Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(ii)	Closing Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(iii)	Spring Charging Motor	2 nos.	
(iv)	Spring Charging Motor with complete Mechanism	2 nos.	
(v)	Spring Charged Limit Switch	5 nos.	
(vi)	Thermal Overload for Spring Charging Motor	2 nos.	
(vii)	Main Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(viii)	Arcing Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(ix)	Breaker Jaw Contact ( Bus-end & Breaker-end) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(x)	Sliding Contact (Fixed & Moving)	3 sets.	
(xi)	Breaker Auxiliary Contact Block	5 nos.	
(xii)	Arcing Chute	2 sets (1 set consists of 3 nos.) for each type and rating	
(xiii)	Plug Socket with Prefab cable	3 nos	
(xiv)	Position Limit Switch	5 sets	
7.08.03	415V PCC, PMCC, MCC, ACDB, DCDB, Elect. Control Panel (For each PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel ) ( applicable items of PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel shall be considered)		
(i)	Indicating Lamps complete assembly		
(a)	Red	3 nos of each make and type.	
(b)	Blue	3 nos of each make and type.	
(c)	Green	3 nos of each make and type.	
(d)	White	3 nos of each make and type.	
(e)	Amber	3 nos of each make and type.	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 8T UNDERSLUNG CRANE FOR ACW & Fire Water Pump House (INDOOR) Price <del>(Ex-Works)</del>
(ii)	CT	2 nos. for each make, type and Rating	
(iii)	Transducer	2 no for each make, type and Rating	
(iv)	Trip / Neutral / close Control Switch	2 nos. for each make, type and Rating	
(v)	Switch gear or MCC / Trial / Normal selector switch	2 nos. for each make, type and Rating	
(vi)	Local/Remote selector switch	2 nos. for each make, type and Rating	
(vii)	AC Supply On / Off Switch	1 no. for each make, type and Rating	
(viii)	DC Supply On / Off Switch	1 no. for each make, type and Rating	
(ix)	Motor Heater On /Off Switch	1 no. for each make, type and Rating	
(x)	DC Supply Source Selector Switch (3- position)	1 no. for each make, type and Rating	
(xi)	Ammeter Selector Switch	1 no. for each make, type and Rating	
(xii)	Voltmeter Selector Switch	1 no. for each make, type and Rating	
(xiii)	Voltmeter	2 no. for each make, type and Rating	
(xiv)	Ammeter	2 no. for each make, type and Rating	
(xv)	Auxiliary Control Contactor		
(a)	Auxiliary Control Contactor complete assembly	10% of total nos for each make, type and Rating.	
(b)	Auxiliary Control Contactor spare kits	10% of total nos. for each make, type and Rating.	
(c)	Auxiliary Control Contactor Coils	10% of total nos for each make, type and Rating.	
(xvi)	Power Contactor		
(a)	Power Contactor Complete Assembly	10% of total nos for each make, type and rating	
(b)	Power Contactor spare kits	10% of total nos for each make, type and Rating.	
(c)	Power Contactor Coils	10% of total nos for each make, type and Rating.	
(xvii)	MCCB	5% of total nos. for each make, type and rating.	
(xviii)	MCB	5% of total nos. for each make, type and rating.	
(xix)	Switch Fuse Unit (DC)	10% of total nos. for each make, type and rating.	
(xx)	Power Fuse	5% of total nos. for each make, type and rating.	
(xxi)	Control Fuse	5% of total nos. for each make, type and rating.	
(xxii)	Thermal Overload Relay	5% of total nos. for each make, type and rating.	
(xxii)	Sliding contact (Fixed and moving) Complete assembly	2 sets of each make, type and rating	
(xxiii)	Busbar to module Lira Contact assembly	2 sets of each make, type and rating (1 set means all 3 ph+ neutral)	
(xxiv)	Control and Aux. Transformer	1 no of each make, type and rating	
(xxv)	Delay Timer	2 no of each make, type and rating	
(xxvi)	Power Terminal Block	2 sets for each make, type and rating	
(xxvii)	Control Terminal Block	2 sets for each make, type and rating	
(xxviii)	End plate for Power and Control terminal block	2 sets for each make, type and rating	
(xxix)	Energy meter	1 no for each make, type and rating	
(xxx)	Relays (Other than numerical relay):		
(a)	Conventional (Electromagnetic/Static type) Relay	2 no for each make, type and rating	
(b)	Aux. relays & Lock out relays & TIMERS	2 nos for each make, type and rating	
(xxxi)	MCCB Status (On/off) Monitoring Switch/Contact	2 nos for each make, type and rating	
(xxxii)	Push Button (On/Off) Complete Assembly	2 nos for each make, type and rating	
(xxxiii)	Annunciation Facia with lamps complete	1 set for each make, type and rating	
7.21.00	Motor		
7.21.02	415 Volt Motor		
(i)	End Shield Cover Driving & Non-Driving End	1 set for each type and rating of Motor	
(ii)	Heaters	2 sets for each type and rating of motor	
(iii)	Bearings (DE and NDE) for each type and rating of motor	2 sets	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 8T UNDERSLUNG CRANE FOR ACW & Fire Water Pump House (INDOOR) Price ( <del>Ex-Works</del> )
(iv)	Cooling Fan for all type and rating of LT motors	One (1) set	
(v)	Dust seals and gaskets for each type of motors	1 Set	
(vi)	Motor Terminal Block	1 no. for each type and rating of Motor	
(vii)	Complete Set of Coupling	1 set for each type and rating	
<b>NOTES:</b>			
1	Bidder to refer Notes in Annexure-II of Technical Specification.		
2	*Refer Volume IIA, Reference clause of the "Customer Specification".		
<b>Particulars of bidder / authorised representative</b>			
<b>Name</b>	<b>Designation</b>	<b>Signature &amp; company seal</b>	

<b>SUGGESTIVE PRICE FORMAT MANDATORY SPARES: ANNEXURE-V</b>		<b>Doc No:</b>	PE-PF-445-524-A001
		<b>Rev No:</b>	0
		<b>Date of issue</b>	4/13/2022
<b>NAME OF PROJECT:</b>		<b>SAGARDIGHI THERMAL POWER PROJECT, 1 X 660 MW UNIT NO 5, STAGE III.</b>	
<b>NAME OF PACKAGE:</b>		<b>SINGLE GIRDER CRANES</b>	
<b>TECHNICAL SPECIFICATION:</b>		<b>PE-TS-445-524-A001</b>	
The bidder shall include in their offer, on basis of technical specification, the mandatory spares as applicable for their design.			
<b>SI No.*</b>	<b>Description of the Equipment/Package Name</b>	<b>Quantity to be supplied for the Package</b>	<b>TOTAL EX - WORKS PRICE FOR 8T EOT CRANE FOR DG BUILDING (INDOOR) Price (<del>Ex-Works</del>).</b>
6.01.00	EOT Cranes		
6.01.01	Long Travel Unit		
(i)	Set of Bearings of Wheels	1Set for each type & capacity of EOT	
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT	
(iii)	Long Travel end Shaft Bearings	1Set for each type & capacity of EOT	
(iv)	Seals for Travel Gear Box	1Set for each type & capacity of EOT	
(v)	Long Travel Brake Shoes Liners	2Sets for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Brake Spring	1Set for each type & capacity of EOT	
(viii)	Brake Coil	2Sets for each type & capacity of EOT	
(ix)	Motor	1 No. for each type & capacity of EOT	
6.01.02	Cross Travel Unit		
(i)	Axle Bearings	1Set for each type & capacity of EOT	
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT	
(iii)	Set of seals for Gearbox	1Set for each type & capacity of EOT	
(iv)	Cross Travel end Shaft Bearing	1Set for each type & capacity of EOT	
(v)	Cross travel Brake Shoes Liners	2Sets for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Brake Spring	1Set for each type & capacity of EOT	
(viii)	Brake Coil	2Sets for each type & capacity of EOT	
(ix)	Motor	1 No. for each type & capacity of EOT	
6.01.03	Hoist		
(i)	Main Hoist Pulley Bearings [All Bearings of Each Type and size used in all Gear Assemblies, Lifting Hook, Trolley wheels etc.]	1 Set for each type & capacity of EOT	
(ii)	Set of Bearings for Gear box	1 Set for each type & capacity of EOT	
(iii)	Set of seals for Gearbox	1 Set for each type & capacity of EOT	
(iv)	Aux. Hoist Gearbox Bearings	1 Set for each type & capacity of EOT	
(v)	Aux. Hoist Gearbox Seals	1 Set for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Main & Aux. Hoist Brake Shoes [Brake shoes with lining for each size of brake (Pair of each size)]	2 Sets for each type & capacity of EOT	
(viii)	Main & Aux. Hoist Brake Springs	2 Sets for each type & capacity of EOT	
(ix)	Main & Aux. Hoist Brake shoe liners	2 Sets for each type & capacity of EOT	
(x)	Motor for Main Hoist & Auxiliary Hoist	1 No. for each type & capacity of EOT	
(xi)	Brake Coil	2 Sets for each type & capacity of EOT	
(xii)	Wire Rope for Aux. Hook	100% of one crane for each type & capacity of EOT	
6.01.04	Electrical		
(i)	Other Electrical Spares as applicable as per the Electrical List	Applicable Item & Quantity same as indicated in Electrical list 'B' Sl. no.7.08.00, 7.21.00	
(ii)	Limit Switches for:		
(a)	Main Hoist	1 Set for each type & capacity of EOT	
(b)	Aux. Hoist	1 Set for each type & capacity of EOT	
(c)	Cross Travel	1 Set for each type & capacity of EOT	
(d)	Long Travel	1 Set for each type & capacity of EOT	
(iii)	Master Controller for :		

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 8T EOT CRANE FOR DG BUILDING (INDOOR) Price ( <del>Ex-Works</del> )
(a)	Aux. Hoist	1 No. for each type & capacity of EOT	
(b)	Cross Travel	1 No. for each type & capacity of EOT	
(c)	Long Travel	1 No. for each type & capacity of EOT	
(iv)	VVVF Drive Complete Set for:		
(a)	Main Hoist	1 No. for each type & capacity of EOT	
(b)	Aux. Hoist	1 No. for each type & capacity of EOT	
(c)	Cross Travel	1 No. for each type & capacity of EOT	
(d)	Long Travel	1 No. for each type & capacity of EOT	
7.00.00	Electrical Items		
7.08.00	415V System		
7.08.01	11/0.415KV Transformer ( for Each make,type and rating of Transformer)		
(i)	Door Limit Switch complete set	1 set (1 set means total requirement for one Transformer)	
(ii)	Neutral CT	1 no of each type and rating	
(iii)	Temperature scanner	1 no.	
(iv)	bhy	3 No	
(v)	LV Bushing with metal parts, connectors and gaskets	3 No	
(vi)	LV neutral Bushing with metal parts, connectors and gaskets	1 No	
(vii)	Post Insulator	1 set (1 set means total requirement for one Transformer)	
(viii)	Limb of complete LT & HT of temperature sensing devices	1 Set (1 set means total requirement for one Transformer)	
7.08.02	415V Air Circuit Breaker (for Each make, type and rating of ACB)		
(i)	Trip Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(ii)	Closing Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(iii)	Spring Charging Motor	2 nos.	
(iv)	Spring Charging Motor with complete Mechanism	2 nos.	
(v)	Spring Charged Limit Switch	5 nos.	
(vi)	Thermal Overload for Spring Charging Motor	2 nos.	
(vii)	Main Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(viii)	Arcing Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(ix)	Breaker Jaw Contact ( Bus-end & Breaker-end) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(x)	Sliding Contact (Fixed & Moving)	3 sets.	
(xi)	Breaker Auxiliary Contact Block	5 nos.	
(xii)	Arcing Chute	2 sets (1 set consists of 3 nos.) for each type and rating	
(xiii)	Plug Socket with Prefab cable	3 nos	
(xiv)	Position Limit Switch	5 sets	
7.08.03	415V PCC, PMCC, MCC, ACDB, DCDB, Elect. Control Panel (For each PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel ) ( applicable items of PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel shall be considered)		
(i)	Indicating Lamps complete assembly		
(a)	Red	3 nos of each make and type.	
(b)	Blue	3 nos of each make and type.	
(c)	Green	3 nos of each make and type.	
(d)	White	3 nos of each make and type.	
(e)	Amber	3 nos of each make and type.	
(ii)	CT	2 nos. for each make, type and Rating	
(iii)	Transducer	2 no for each make, type and Rating	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 8T EOT CRANE FOR DG BUILDING (INDOOR) Price (Ex-Works)
(iv)	Trip / Neutral / close Control Switch	2 nos. for each make, type and Rating	
(v)	Switch gear or MCC / Trial / Normal selector switch	2 nos. for each make, type and Rating	
(vi)	Local/Remote selector switch	2 nos. for each make, type and Rating	
(vii)	AC Supply On / Off Switch	1 no. for each make, type and Rating	
(viii)	DC Supply On / Off Switch	1 no. for each make, type and Rating	
(ix)	Motor Heater On /Off Switch	1 no. for each make, type and Rating	
(x)	DC Supply Source Selector Switch (3- position)	1 no. for each make, type and Rating	
(xi)	Ammeter Selector Switch	1 no. for each make, type and Rating	
(xii)	Voltmeter Selector Switch	1 no. for each make, type and Rating	
(xiii)	Voltmeter	2 no. for each make, type and Rating	
(xiv)	Ammeter	2 no. for each make, type and Rating	
(xv)	Auxiliary Control Contactor		
(a)	Auxiliary Control Contactor complete assembly	10% of total nos for each make, type and Rating.	
(b)	Auxiliary Control Contactor spare kits	10% of total nos. for each make, type and Rating.	
(c)	Auxiliary Control Contactor Coils	10% of total nos for each make, type and Rating.	
(xvi)	Power Contactor		
(a)	Power Contactor Complete Assembly	10% of total nos for each make, type and rating	
(b)	Power Contactor spare kits	10% of total nos for each make, type and Rating.	
(c)	Power Contactor Coils	10% of total nos for each make, type and Rating.	
(xvii)	MCCB	5% of total nos. for each make, type and rating.	
(xviii)	MCB	5% of total nos. for each make, type and rating.	
(xix)	Switch Fuse Unit (DC)	10% of total nos. for each make, type and rating.	
(xx)	Power Fuse	5% of total nos. for each make, type and rating.	
(xxi)	Control Fuse	5% of total nos. for each make, type and rating.	
(xxii)	Thermal Overload Relay	5% of total nos. for each make, type and rating.	
(xxii)	Sliding contact (Fixed and moving) Complete assembly	2 sets of each make, type and rating	
(xxiii)	Busbar to module Lira Contact assembly	2 sets of each make, type and rating (1 set means all 3 ph+ neutral)	
(xxiv)	Control and Aux. Transformer	1 no of each make, type and rating	
(xxv)	Delay Timer	2 no of each make, type and rating	
(xxvi)	Power Terminal Block	2 sets for each make, type and rating	
(xxvii)	Control Terminal Block	2 sets for each make, type and rating	
(xxviii)	End plate for Power and Control terminal block	2 sets for each make, type and rating	
(xxix)	Energy meter	1 no for each make, type and rating	
(xxx)	Relays (Other than numerical relay):		
(a)	Conventional (Electromagnetic/Static type) Relay	2 no for each make, type and rating	
(b)	Aux. relays & Lock out relays & TIMERS	2 nos for each make, type and rating	
(xxxi)	MCCB Status (On/off) Monitoring Switch/Contact	2 nos for each make, type and rating	
(xxxii)	Push Button (On/Off) Complete Assembly	2 nos for each make, type and rating	
(xxxiii)	Annunciation Facia with lamps complete	1 set for each make, type and rating	
7.21.00	Motor		
7.21.02	415 Volt Motor		
(i)	End Shield Cover Driving & Non-Driving End	1 set for each type and rating of Motor	
(ii)	Heaters	2 sets for each type and rating of motor	
(iii)	Bearings (DE and NDE) for each type and rating of motor	2 sets	
(iv)	Cooling Fan for all type and rating of LT motors	One (1) set	
(v)	Dust seals and gaskets for each type of motors	1 Set	
(vi)	Motor Terminal Block	1 no. for each type and rating of Motor	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 8T EOT CRANE FOR DG BUILDING (INDOOR) Price ( <del>Ex-Works</del> )
(vii)	Complete Set of Coupling	1 set for each type and rating	
NOTES:			
1	Bidder to refer Notes in Annexure-II of Technical Specification.		
2	*Refer Volume IIA, Reference clause of the "Customer Specification".		
Particulars of bidder / authorised representative			
Name	Designation	Signature & company seal	

<b>SUGGESTIVE PRICE FORMAT MANDATORY SPARES: ANNEXURE-VI</b>		<b>Doc No:</b>	PE-PF-445-524-A001
		<b>Rev No:</b>	0
		<b>Date of issue</b>	4/13/2022
<b>NAME OF PROJECT:</b>		<b>SAGARDIGHI THERMAL POWER PROJECT, 1 X 660 MW UNIT NO 5, STAGE III.</b>	
<b>NAME OF PACKAGE:</b>		<b>SINGLE GIRDER CRANES</b>	
<b>TECHNICAL SPECIFICATION:</b>		<b>PE-TS-445-524-A001</b>	
The bidder shall include in their offer, on basis of technical specification, the mandatory spares as applicable for their design.			
SI No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 3T EOT CRANE FOR MRS Compressor House (INDOOR) Price <del>(Ex-Works)</del> .
6.01.00	EOT Cranes		
6.01.01	Long Travel Unit		
(i)	Set of Bearings of Wheels	1Set for each type & capacity of EOT	
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT	
(iii)	Long Travel end Shaft Bearings	1Set for each type & capacity of EOT	
(iv)	Seals for Travel Gear Box	1Set for each type & capacity of EOT	
(v)	Long Travel Brake Shoes Liners	2Sets for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Brake Spring	1Set for each type & capacity of EOT	
(viii)	Brake Coil	2Sets for each type & capacity of EOT	
(ix)	Motor	1 No. for each type & capacity of EOT	
6.01.02	Cross Travel Unit		
(i)	Axle Bearings	1Set for each type & capacity of EOT	
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT	
(iii)	Set of seals for Gearbox	1Set for each type & capacity of EOT	
(iv)	Cross Travel end Shaft Bearing	1Set for each type & capacity of EOT	
(v)	Cross travel Brake Shoes Liners	2Sets for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Brake Spring	1Set for each type & capacity of EOT	
(viii)	Brake Coil	2Sets for each type & capacity of EOT	
(ix)	Motor	1 No. for each type & capacity of EOT	
6.01.03	Hoist		
(i)	Main Hoist Pulley Bearings [All Bearings of Each Type and size used in all Gear Assemblies, Lifting Hook, Trolley wheels etc.]	1 Set for each type & capacity of EOT	
(ii)	Set of Bearings for Gear box	1 Set for each type & capacity of EOT	
(iii)	Set of seals for Gearbox	1 Set for each type & capacity of EOT	
(iv)	Aux. Hoist Gearbox Bearings	1 Set for each type & capacity of EOT	
(v)	Aux. Hoist Gearbox Seals	1 Set for each type & capacity of EOT	
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT	
(vii)	Main & Aux. Hoist Brake Shoes [Brake shoes with lining for each size of brake (Pair of each size)]	2 Sets for each type & capacity of EOT	
(viii)	Main & Aux. Hoist Brake Springs	2 Sets for each type & capacity of EOT	
(ix)	Main & Aux. Hoist Brake shoe liners	2 Sets for each type & capacity of EOT	
(x)	Motor for Main Hoist & Auxiliary Hoist	1 No. for each type & capacity of EOT	
(xi)	Brake Coil	2 Sets for each type & capacity of EOT	
(xii)	Wire Rope for Aux. Hook	100% of one crane for each type & capacity of EOT	
6.01.04	Electrical		
(i)	Other Electrical Spares as applicable as per the Electrical List	Applicable Item & Quantity same as indicated in Electrical list 'B' Sl. no.7.08.00, 7.21.00	
(ii)	Limit Switches for:		
(a)	Main Hoist	1 Set for each type & capacity of EOT	
(b)	Aux. Hoist	1 Set for each type & capacity of EOT	
(c)	Cross Travel	1 Set for each type & capacity of EOT	
(d)	Long Travel	1 Set for each type & capacity of EOT	



Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 3T EOT CRANE FOR MRS Compressor House (INDOOR) Price (Ex-Works)
(iii)	Master Controller for :		
(a)	Aux. Hoist	1 No. for each type & capacity of EOT	
(b)	Cross Travel	1 No. for each type & capacity of EOT	
(c)	Long Travel	1 No. for each type & capacity of EOT	
(iv)	VVVF Drive Complete Set for:		
(a)	Main Hoist	1 No. for each type & capacity of EOT	
(b)	Aux. Hoist	1 No. for each type & capacity of EOT	
(c)	Cross Travel	1 No. for each type & capacity of EOT	
(d)	Long Travel	1 No. for each type & capacity of EOT	
7.00.00	Electrical Items		
7.08.00	415V System		
7.08.01	11/0.415KV Transformer ( for Each make,type and rating of Transformer)		
(i)	Door Limit Switch complete set	1 set (1 set means total requirement for one Transformer)	
(ii)	Neutral CT	1 no of each type and rating	
(iii)	Temperature scanner	1 no.	
(iv)	bhy	3 No	
(v)	LV Bushing with metal parts, connectors and gaskets	3 No	
(vi)	LV neutral Bushing with metal parts, connectors and gaskets	1 No	
(vii)	Post Insulator	1 set (1 set means total requirement for one Transformer)	
(viii)	Limb of complete LT & HT of temperature sensing devices	1 Set (1 set means total requirement for one Transformer)	
7.08.02	415V Air Circuit Breaker (for Each make, type and rating of ACB)		
(i)	Trip Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(ii)	Closing Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(iii)	Spring Charging Motor	2 nos.	
(iv)	Spring Charging Motor with complete Mechanism	2 nos.	
(v)	Spring Charged Limit Switch	5 nos.	
(vi)	Thermal Overload for Spring Charging Motor	2 nos.	
(vii)	Main Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(viii)	Arcing Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(ix)	Breaker Jaw Contact ( Bus-end & Breaker-end) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(x)	Sliding Contact (Fixed & Moving)	3 sets.	
(xi)	Breaker Auxiliary Contact Block	5 nos.	
(xii)	Arcing Chute	2 sets (1 set consists of 3 nos.) for each type and rating	
(xiii)	Plug Socket with Prefab cable	3 nos	
(xiv)	Position Limit Switch	5 sets	
7.08.03	415V PCC, PMCC, MCC, ACDB, DCDB, Elect. Control Panel (For each PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel ) ( applicable items of PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel shall be considered)		
(i)	Indicating Lamps complete assembly		
(a)	Red	3 nos of each make and type.	
(b)	Blue	3 nos of each make and type.	
(c)	Green	3 nos of each make and type.	
(d)	White	3 nos of each make and type.	
(e)	Amber	3 nos of each make and type.	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 3T EOT CRANE FOR MRS Compressor House (INDOOR) Price ( <del>Ex-Works</del> )
(ii)	CT	2 nos. for each make, type and Rating	
(iii)	Transducer	2 no for each make, type and Rating	
(iv)	Trip / Neutral / close Control Switch	2 nos. for each make, type and Rating	
(v)	Switch gear or MCC / Trial / Normal selector switch	2 nos. for each make, type and Rating	
(vi)	Local/Remote selector switch	2 nos. for each make, type and Rating	
(vii)	AC Supply On / Off Switch	1 no. for each make, type and Rating	
(viii)	DC Supply On / Off Switch	1 no. for each make, type and Rating	
(ix)	Motor Heater On /Off Switch	1 no. for each make, type and Rating	
(x)	DC Supply Source Selector Switch (3- position)	1 no. for each make, type and Rating	
(xi)	Ammeter Selector Switch	1 no. for each make, type and Rating	
(xii)	Voltmeter Selector Switch	1 no. for each make, type and Rating	
(xiii)	Voltmeter	2 no. for each make, type and Rating	
(xiv)	Ammeter	2 no. for each make, type and Rating	
(xv)	Auxiliary Control Contactor		
(a)	Auxiliary Control Contactor complete assembly	10% of total nos for each make, type and Rating.	
(b)	Auxiliary Control Contactor spare kits	10% of total nos. for each make, type and Rating.	
(c)	Auxiliary Control Contactor Coils	10% of total nos for each make, type and Rating.	
(xvi)	Power Contactor		
(a)	Power Contactor Complete Assembly	10% of total nos for each make, type and rating	
(b)	Power Contactor spare kits	10% of total nos for each make, type and Rating.	
(c)	Power Contactor Coils	10% of total nos for each make, type and Rating.	
(xvii)	MCCB	5% of total nos. for each make, type and rating.	
(xviii)	MCB	5% of total nos. for each make, type and rating.	
(xix)	Switch Fuse Unit (DC)	10% of total nos. for each make, type and rating.	
(xx)	Power Fuse	5% of total nos. for each make, type and rating.	
(xxi)	Control Fuse	5% of total nos. for each make, type and rating.	
(xxii)	Thermal Overload Relay	5% of total nos. for each make, type and rating.	
(xxii)	Sliding contact (Fixed and moving) Complete assembly	2 sets of each make, type and rating	
(xxiii)	Busbar to module Lira Contact assembly	2 sets of each make, type and rating (1 set means all 3 ph+ neutral)	
(xxiv)	Control and Aux. Transformer	1 no of each make, type and rating	
(xxv)	Delay Timer	2 no of each make, type and rating	
(xxvi)	Power Terminal Block	2 sets for each make, type and rating	
(xxvii)	Control Terminal Block	2 sets for each make, type and rating	
(xxviii)	End plate for Power and Control terminal block	2 sets for each make, type and rating	
(xxix)	Energy meter	1 no for each make, type and rating	
(xxx)	Relays (Other than numerical relay):		
(a)	Conventional (Electromagnetic/Static type) Relay	2 no for each make, type and rating	
(b)	Aux. relays & Lock out relays & TIMERS	2 nos for each make, type and rating	
(xxxi)	MCCB Status (On/off) Monitoring Switch/Contact	2 nos for each make, type and rating	
(xxxii)	Push Button (On/Off) Complete Assembly	2 nos for each make, type and rating	
(xxxiii)	Annunciation Facia with lamps complete	1 set for each make, type and rating	
7.21.00	Motor		
7.21.02	415 Volt Motor		
(i)	End Shield Cover Driving & Non-Driving End	1 set for each type and rating of Motor	
(ii)	Heaters	2 sets for each type and rating of motor	
(iii)	Bearings (DE and NDE) for each type and rating of motor	2 sets	

Sl No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	TOTAL EX - WORKS PRICE FOR 3T EOT CRANE FOR MRS Compressor House (INDOOR) Price ( <del>Ex-Works</del> )
(iv)	Cooling Fan for all type and rating of LT motors	One (1) set	
(v)	Dust seals and gaskets for each type of motors	1 Set	
(vi)	Motor Terminal Block	1 no. for each type and rating of Motor	
(vii)	Complete Set of Coupling	1 set for each type and rating	
<b>NOTES:</b>			
1	Bidder to refer Notes in Annexure-II of Technical Specification.		
2	*Refer Volume IIA, Reference clause of the "Customer Specification".		
<b>Particulars of bidder / authorised representative</b>			
<b>Name</b>	<b>Designation</b>	<b>Signature &amp; company seal</b>	