

परियोजना इंजीनियरिंग
प्रबंधन
Project Engineering
Management

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
(भारत सरकार का उपक्रम)
Bharat Heavy Electricals Limited
(A Govt. of India Undertaking)



PROJECT: - 2x660 MW ENNORE SEZ STPP
PACKAGE:- SINGLE GIRDER EOT/HOT MISC. CRANES
ENQUIRY NO.: E-5637/2017 Dtd. 01.06.2017

Date: 28/07/2017

Ref: 1. BHEL Tender Enquiry No.:E-5637/2017 Dtd. 01.06.2017

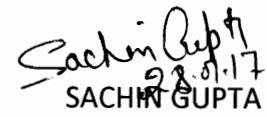
1. Corrigenda no. 01 dated 27.06.2017
2. Corrigenda no. 02 dated 04.07.2017
3. Corrigenda no. 03 dated 12.07.2017

CORRIGENDUM-04

1. Technical corrigendum -1 is enclosed along with this corrigendum.
2. Price schedule of subject tender is revised in view of implementation of GST. Revised price schedule having updated GST structure is enclosed along with this corrigendum.
3. Bidders have to note that the due date of submission is extended from existing date 28/07/2017, 02:00 PM(IST) to 10/08/2017,10:00 AM(IST).Part-I bids shall be opened on 10/08/2017,10:00 AM(IST).

Bidders have to submit/re-submit their offers within extended due date & time.

Regards


SACHIN GUPTA

Sr. Engineer (PG-IV-1)

कृपया प्रेषित करें :	Please reply to :	फ़ोन Phone No:
बीएचईएल, पीएस-पीईएम	BHEL, PS-PEM,	91-120 – 436 8624
पीपीआई भवन	PPEI Building,	
प्लॉट नं २५, सेक्टर १६ ए	Plot No.25, Sector 16A,	
नोएडा - २०१ ३०१ उप्र	Noida-201301 (U.P.)	
भारत	INDIA	

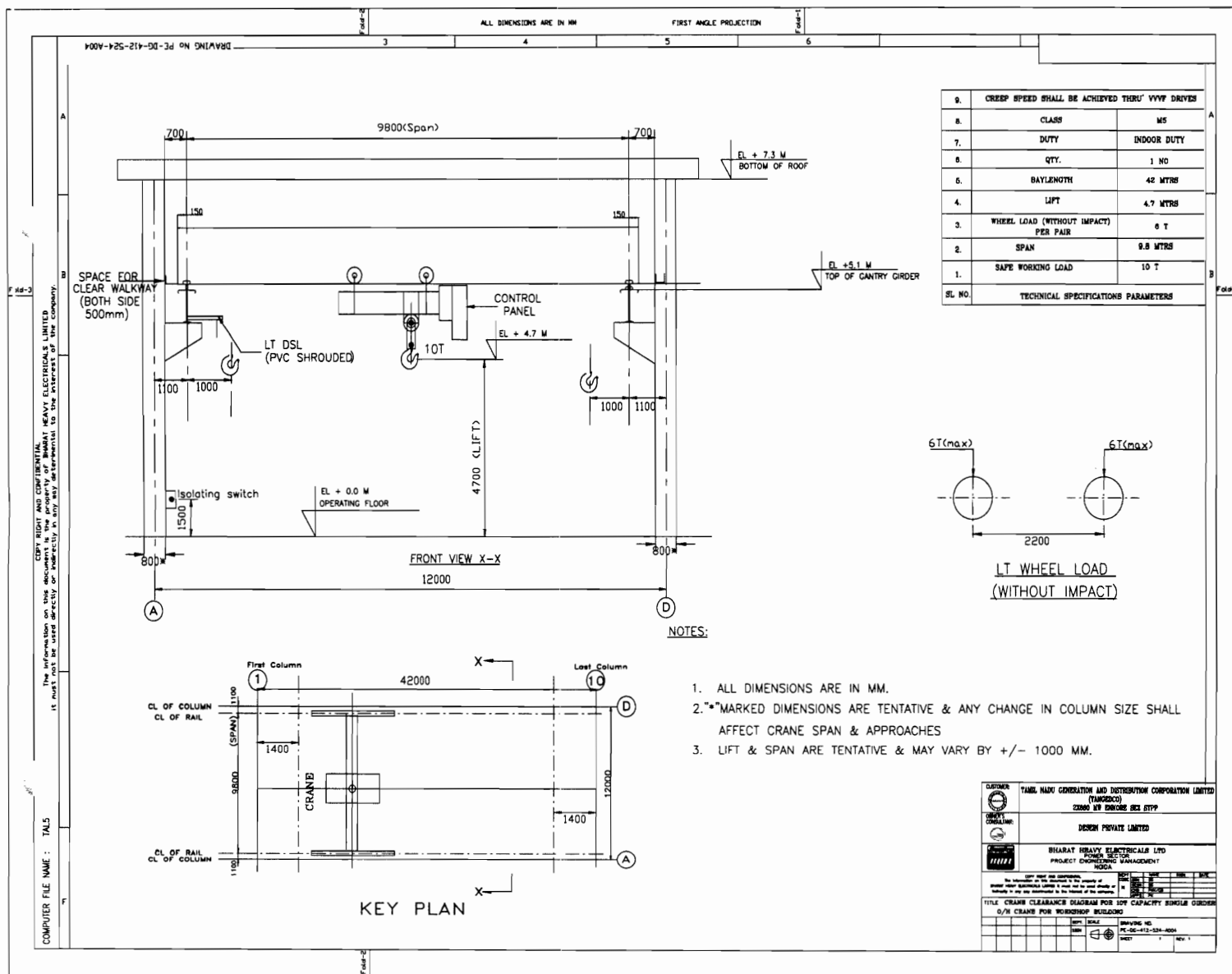
पंजीकृत कार्यालय	Registered Office :
बीएचईएल हाउस	BHEL House,
सीरी फोर्ट	Siri Fort,
नयी दिल्ली - ११० ०४९	New Delhi-110049
भारत	INDIA

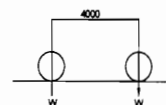
Name of project: 2 X 660 MW Ennore SEZ STPP
Package Name: Single Girder EOT/ HOT Misc. Cranes
Enquiry ref no.: PE/PG/EN1/E-5637/2017, dtd-01.06.17
Technical Specification no: PE-TS-412-524-A001

Date: 19/07/2017

CORRIGENDUM-1

Sl. No.	Section/Clause/ Page No.	Existing								Amended as on 19/07/2017							
1	Section-IA/Annexure-VII-Input Drawings/Page-67 of 148	Drg No-PE-DG-412-524-A004, Crane clearance diagram for 10T Capacity Single girder O/H crane for Workshop Building-Rev 0.								Drg No-PE-DG-412-524-A004, Crane clearance diagram for 10T Capacity Single girder O/H crane for Workshop Building-Rev 1 attached along with Corrigendum-01.							
2	Sl no-4, Annexure-A, SCOPE OF SINGLE GIRDER CRANES, Section-IA, Page-5 of 148	5	Area/equipment description	Type	Qty	Capacity (T)	Lift (m)	Travel (m)	Span (m)	5	Area/equipment description	Type	Qty	Capacity (T)	Lift (m)	Travel (m)	Span (m)
		4	Workshop building (Indoor)	Overhead electric operated	1	10T	5	42	11	4	Workshop building (Indoor)	Overhead electric operated	1	10T	4.7	42	9.8
3	Section-IA/Annexure-VII-Input Drawings/Page-68 of 148	Drg No-PE-DG-412-524-A005, R0 Crane clearance diagram for 10T Capacity Single Girder Gantry crane for Sea water pump house screen & gate handling, which is superseded by Drg No-PE-DG-412-524-A005, Rev-1 issued vide pre-bid clarification dated-04.07.17.								Drg No-PE-DG-412-524-A005, Crane clearance diagram for 10T Capacity Single girder Gantry crane for Sea water pump house screen & gate handling – Rev 2, attached along with Corrigendum-01.							
4	Sl no-5, Annexure-A, SCOPE OF SINGLE GIRDER CRANES, Section-IA, Page-5 of 148	5	Area/equipment description	Type	Qty	Capacity (T)	Lift (m)	Travel (m)	Span (m)	5	Area/equipment description	Type	Qty	Capacity (T)	Lift (m)	Travel (m)	Span (m)
		5	Sea water intake pump house TWS screen & gates handling (Outdoor)	Gantry crane (electric operated)	1	10T	18.85	20	12.5	5	Sea water intake pump house TWS screen & gates handling (Outdoor)	Gantry crane (electric operated)	1	10T	16.85	20	12.5

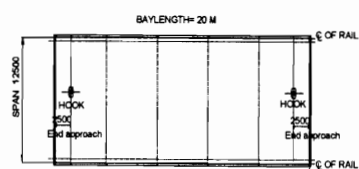




LT WHEEL LOAD WITH OUT IMPACT (W=5 T Max)

NOTE-

1. ALL DIMENSIONS ARE IN MM
2. DSL(LT) => SHROUDED BUS BAR CONDUCTOR
3. - " SUBJECT TO FINALISATION OF STRUCTURE
4. DIMENSION MARKED AS(*) IS TO BE GIVEN BY THE VENDOR
5. CRANE SHALL BE OUTDOOR TYPE
6. SOLE PLATE FOR FIXING OF RAILS SHALL BE IN BHEL SCOPE



PLAN

COMPUTER FILE NAME : TAL5

COPY RIGHT AND CONFIDENTIAL



PARAGANA STATE POWER GENERATION CORPORATION LTD.
PARAGANA STATE, INDIA
LEADS IN SUPPLYING OF STATE UTILITY POLARISER

DEVELOPMENT CONSULTANTS PVT. LTD.

CONSULTING ENGINEERS

KULAKH NARAYAN CHOWDHURY NEW DELHI

IMPERIAL HYDRO-ELECTRICITY LTD

POWER SECTOR

PROJECT ENGINEERING MANAGEMENT

INDIA

WE OFFER QUALITY AND SERVICE TO THE FOLLOWING:

- 1. POWER SUPPLY TO THE STATE UTILITY
- 2. POWER SUPPLY TO THE STATE UTILITY
- 3. POWER SUPPLY TO THE STATE UTILITY

ORIGIN CHAIRMANSHIP PROGRAM FOR IPE CAPACITY SURVEY GROUP

CAPACITY CHAIR FOR SOLI POWER PUMP IMPROVE SCIENCE & GATE SURVEY

NAME: _____

DESIGNATION: _____

COMPANY: _____

ADDRESS: _____

PHONE: _____

TELEFAX: _____

EMAIL: _____

PROJECT-2 X 660 MW ENHORE SE2 STPP
TENDER ENQUIRY REF. NO-PE/PC/EN/1/E-5637/2017 Dated:01-06-2017
PACKAGE-SINGLE GIRDER EQT / HOT MISC. CRANE

S. No.		Description	HSN CODE (TO BE FILLED BY THE BIDDER) FOR EACH ITEM (3)	UOM (4)	ORDER ED QUANTITY (5)	UNIT EX-WORKS PRICE (DULY PACKED) (INR) (6)	TOTAL EX-WORKS PRICE (DULY PACKED) (INR) (7)	FOR INDIAN BIDDER		FOR FOREIGN BIDDER			
								FREIGHT CHARGES	TOTAL PRICES (ex works + freight) (INR) (8)	APPLICABLE GST RATE IN % ON TOTAL EX WORKS + FREIGHT BOTH (INR) (10)	TOTAL PRICE F.O.B. Price with taxes (INR) (11)	UNIT C&F AT INDIAN PORT PRICE(CURRENCY)	TOTAL C&F AT INDIAN PORT PRICE(CURRENCY)
								% OF TOTAL EX WORKS (8A)	AMOUNT IN (INR) (8B) = (7*8A)	(7+8B)	GST RATE IN % ON TOTAL EX WORKS + FREIGHT (10A)	TOTAL AMOUNT IN (INR) (10B) (8A10A)	(8+10B)
2.2 BREAK-UP OF SUPPLY PRICES GIVEN IN 2.2 OF MAIN SHEET.													
2.2.1 MANDATORY SPARES FOR SINGLE GIRDER EQT CRANE (AIR COMPRESSOR BULK UNIT)													
1 SPARE FOR LONG TRAVEL UNIT													
A SET OF AXLE BEARINGS													
B SET OF GEARBOX BEARINGS WITH BLADES													
C LONG TRAVEL END SHAFT BEARINGS													
D COVERLID													
E BEAL FOR TRAVEL GEAR BOX													
F LONG TRAVEL BRAKE SHOCK													
G LONG TRAVEL BRAKE SPRINGS													
H LONG TRAVEL BRAKE SHOCK LINDS													
I SPARE FOR CROSS TRAVEL UNIT													
A AXLE BEARINGS													
B SET OF GEARBOX BEARINGS WITH BLADES													
C SET OF BEAL FOR GEARBOX													
D CROSS TRAVEL END SHAFT BEARING													
E COVERLID													
F CROSS TRAVEL BRAKE SHOCK													
G CROSS TRAVEL BRAKE SPRINGS													
H CROSS TRAVEL BRAKE SHOCK LINDS													
J SPARE FOR MAIN HOIST													
A MAIN HOIST PLATE BEARINGS													
B SET OF BEARINGS FOR RODE DRUM													
C SET OF BEARINGS FOR GEAR BOX													
D SET OF BEAL FOR MAIN HOIST													
E MAIN HOIST BRAKE SHOCK													
F MAIN HOIST BRAKE SPRINGS													
G MAIN HOIST BRAKE SHOCK LINDS													
H DISC PAD													
I ELECTRICAL CONTROL PANEL/MOTOR													
POWER CONTACTOR OF EACH RATING													
OVER LOAD RELAYS OF EACH RATING													
MCCB/MPCB OF EACH RATING													
PLC/RELAY OF EACH TYPE													
SPARE FOR VOLT SENS OF EACH RATING													
SET OF BEARINGS FOR MAIN HOIST MOTOR													
SET OF BEARINGS FOR CROSS TRAVEL MOTOR													
SET OF BEARINGS FOR LONG TRAVEL MOTOR													
2.2.2 MANDATORY SPARES FOR SINGLE GIRDER UNDERLUNG CRANE (DS BUILDING)													
1 SPARE FOR LONG TRAVEL UNIT													
A SET OF AXLE BEARINGS													
B SET OF GEARBOX BEARINGS WITH BLADES													
C LONG TRAVEL END SHAFT BEARINGS													
D COVERLID													
E BEAL FOR TRAVEL GEAR BOX													
F TRAVEL BRAKE SHOCK													
G TRAVEL BRAKE SPRINGS													
H TRAVEL BRAKE SHOCK LINDS													
I SPARE FOR CROSS TRAVEL UNIT													
A AXLE BEARINGS													
B SET OF GEARBOX BEARINGS WITH BLADES													
C SET OF BEAL FOR GEARBOX													
D CROSS TRAVEL END SHAFT BEARING													
E COVERLID													
F CROSS TRAVEL BRAKE SHOCK													
G CROSS TRAVEL BRAKE SPRINGS													
H CROSS TRAVEL BRAKE SHOCK LINDS													
J SPARE FOR MAIN HOIST													
A MAIN HOIST PLATE BEARINGS													
B SET OF BEARINGS FOR RODE DRUM													
C SET OF BEARINGS FOR GEAR BOX													
D SET OF BEAL FOR MAIN HOIST													
E MAIN HOIST BRAKE SHOCK													
F MAIN HOIST BRAKE SPRINGS													
G MAIN HOIST BRAKE SHOCK LINDS													
H DISC PAD													
I ELECTRICAL CONTROL PANEL/MOTOR													
POWER CONTACTOR OF EACH RATING													
OVER LOAD RELAYS OF EACH RATING													
MCCB/MPCB OF EACH RATING													
PLC/RELAY OF EACH TYPE													
SPARE FOR VOLT SENS OF EACH RATING													
SET OF BEARINGS FOR MAIN HOIST MOTOR													
SET OF BEARINGS FOR CROSS TRAVEL MOTOR													
SET OF BEARINGS FOR LONG TRAVEL MOTOR													
2.2.3 MANDATORY SPARES FOR SINGLE GIRDER UNDERLUNG CRANE (PETER WATTS) (PUMP HOUSE)													
1 SPARE FOR LONG TRAVEL UNIT													
A SET OF AXLE BEARINGS													
B SET OF GEARBOX BEARINGS WITH BLADES													
C LONG TRAVEL END SHAFT BEARINGS													
D COVERLID													
E BEAL FOR TRAVEL GEAR BOX													
F LONG TRAVEL BRAKE SHOCK													
G LONG TRAVEL BRAKE SPRINGS													
H LONG TRAVEL BRAKE SHOCK LINDS													
I SPARE FOR LONG TRAVEL UNIT													
A AXLE BEARINGS													
B SET OF GEARBOX BEARINGS WITH BLADES													
C SET OF BEAL FOR GEARBOX													
D CROSS TRAVEL END SHAFT BEARING													
E COVERLID													
F CROSS TRAVEL BRAKE SHOCK													
G CROSS TRAVEL BRAKE SPRINGS													
H CROSS TRAVEL BRAKE SHOCK LINDS													
J SPARE FOR MAIN HOIST													
A MAIN HOIST PLATE BEARINGS													
B SET OF BEARINGS FOR RODE DRUM													
C SET OF BEARINGS FOR GEAR BOX													
D SET OF BEAL FOR MAIN HOIST													
E MAIN HOIST BRAKE SHOCK													
F MAIN HOIST BRAKE SPRINGS													
G MAIN HOIST BRAKE SHOCK LINDS													
H DISC PAD													
I ELECTRICAL CONTROL PANEL/MOTOR													
POWER CONTACTOR OF EACH RATING													
OVER LOAD RELAYS OF EACH RATING													
MCCB/MPCB OF EACH RATING													
PLC/RELAY OF EACH TYPE													
SPARE FOR VOLT SENS OF EACH RATING													
SET OF BEARINGS FOR MAIN HOIST MOTOR													
SET OF BEARINGS FOR CROSS TRAVEL MOTOR													
SET OF BEARINGS FOR LONG TRAVEL MOTOR													
2.2.4 MANDATORY SPARES FOR SINGLE GIRDER EQT CRANE (WORKSHOP BUILDING)													
1 SPARE FOR LONG TRAVEL UNIT													
A SET OF AXLE BEARINGS													
B SET OF GEARBOX BEARINGS WITH BLADES													
C LONG TRAVEL END SHAFT BEARINGS													
D COVERLID													
E BEAL FOR TRAVEL GEAR BOX													
F LONG TRAVEL BRAKE SHOCK													
G LONG TRAVEL BRAKE SPRINGS													
H LONG TRAVEL BRAKE SHOCK LINDS													
I SPARE FOR CROSS TRAVEL UNIT													
A AXLE BEARINGS													
B SET OF GEARBOX BEARINGS WITH BLADES													
C SET OF BEAL FOR GEARBOX													
D CROSS TRAVEL END SHAFT BEARING													
E COVERLID													
F CROSS TRAVEL BRAKE SHOCK													
G CROSS TRAVEL BRAKE SPRINGS													
H CROSS TRAVEL BRAKE SHOCK LINDS													
J SPARE FOR MAIN HOIST													
A MAIN HOIST PLATE BEARINGS													
B SET OF BEARINGS FOR RODE DRUM													
C SET OF BEARINGS FOR GEAR BOX													
D SET OF BEAL FOR MAIN HOIST													
E MAIN HOIST BRAKE SHOCK													
F MAIN HOIST BRAKE SPRINGS													
G MAIN HOIST BRAKE SHOCK LINDS													
H DISC PAD													
I ELECTRICAL CONTROL PANEL/MOTOR													
POWER CONTACTOR OF EACH RATING													
OVER LOAD RELAYS OF EACH RATING													
MCCB/MPCB OF EACH RATING													
PLC/RELAY OF EACH TYPE													
SPARE FOR VOLT SENS OF EACH RATING													
SET OF BEARINGS FOR MAIN HOIST MOTOR													
SET OF BEARINGS FOR CROSS TRAVEL MOTOR													
SET OF BEARINGS FOR LONG TRAVEL MOTOR													

2.1.1	MANDATORY SPARES FOR SINGLE ORDER GANTRY CRANE (SEA WATER INTAKE PUMP HOUSE SCREEN & GATE HANDLING)									
1	SPARE FOR LONG TRAVEL UNIT									
A	SET OF AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	LONG TRAVEL END SHAFT BEARINGS	SET	1							
D	COUPLERS	SET	1							
E	SEALS FOR TRAVEL GEAR BOX	SET	1							
F	LONG TRAVEL BRAKE DISCS	SET	1							
G	LONG TRAVEL BRAKE SPRINGS	SET	1							
H	LONG TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR CROSS TRAVEL UNIT									
A	AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	SET OF SEALS FOR GEARBOX	SET	1							
D	CROSS TRAVEL END SHAFT BEARING	SET	1							
E	COUPLERS	SET	1							
F	CROSS TRAVEL BRAKE DISCS	SET	1							
G	CROSS TRAVEL BRAKE SPRINGS	SET	1							
H	CROSS TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR MAIN HOIST									
A	MAIN HOIST PULLEY BEARINGS	SET	1							
B	SET OF BEARINGS FOR ROPE DRUM	SET	1							
C	SET OF BEARINGS FOR GEAR BOX	SET	1							
D	SET OF SEALS FOR MAIN HOIST	SET	1							
E	MAIN HOIST BRAKE DISCS	SET	1							
F	MAIN HOIST BRAKE SPRINGS	SET	1							
G	MAIN HOIST BRAKE SHOE LINERS	SET	1							
H	DISC PAD	SET	1							
A	ELECTRICAL CONTROL PANEL & MOTORS									
1	POWER CONTACTOR OF EACH RATING	NOV	2							
2	OVER LOAD RELAYS OF EACH RATING	NOV	2							
3	MAGNETIC OF EACH RATING	NOV	2							
4	STOP BUTTON OF EACH TYPE	NOV	2							
5	SPARE FOR VVVF DRIVE OF EACH RATING	SET	1							
6	SET OF BEARINGS FOR MAIN HOIST MOTOR	SET	1							
7	SET OF BEARINGS FOR CROSS TRAVEL MOTOR	SET	1							
8	SET OF BEARINGS FOR LONG TRAVEL MOTOR	SET	1							
2.1.2	MANDATORY SPARES FOR SINGLE ORDER SEMI-GANTRY CRANE (CW PUMP HOUSE SCREEN & GATE HANDLING)									
1	SPARE FOR LONG TRAVEL UNIT									
A	SET OF AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	LONG TRAVEL END SHAFT BEARINGS	SET	1							
D	COUPLERS	SET	1							
E	SEALS FOR TRAVEL GEAR BOX	SET	1							
F	LONG TRAVEL BRAKE DISCS	SET	1							
G	LONG TRAVEL BRAKE SPRINGS	SET	1							
H	LONG TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR CROSS TRAVEL UNIT									
A	AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	SET OF SEALS FOR GEARBOX	SET	1							
D	CROSS TRAVEL END SHAFT BEARING	SET	1							
E	COUPLERS	SET	1							
F	CROSS TRAVEL BRAKE DISCS	SET	1							
G	CROSS TRAVEL BRAKE SPRINGS	SET	1							
H	CROSS TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR MAIN HOIST									
A	MAIN HOIST PULLEY BEARINGS	SET	1							
B	SET OF BEARINGS FOR ROPE DRUM	SET	1							
C	SET OF BEARINGS FOR GEAR BOX	SET	1							
D	SET OF SEALS FOR MAIN HOIST	SET	1							
E	MAIN HOIST BRAKE DISCS	SET	1							
F	MAIN HOIST BRAKE SPRINGS	SET	1							
G	MAIN HOIST BRAKE SHOE LINERS	SET	1							
H	DISC PAD	SET	1							
A	ELECTRICAL CONTROL PANEL & MOTORS									
1	POWER CONTACTOR OF EACH RATING	NOV	2							
2	OVER LOAD RELAYS OF EACH RATING	NOV	2							
3	MAGNETIC OF EACH RATING	NOV	2							
4	STOP BUTTON OF EACH TYPE	NOV	2							
5	SPARE FOR VVVF DRIVE OF EACH RATING	SET	1							
6	SET OF BEARINGS FOR MAIN HOIST MOTOR	SET	1							
7	SET OF BEARINGS FOR CROSS TRAVEL MOTOR	SET	1							
8	SET OF BEARINGS FOR LONG TRAVEL MOTOR	SET	1							
2.1.3	MANDATORY SPARES FOR SINGLE ORDER UNDERSLUNG CRANE (CLASSIFIED WATER PUMP HOUSE)									
1	SPARE FOR LONG TRAVEL UNIT									
A	SET OF AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	LONG TRAVEL END SHAFT BEARINGS	SET	1							
D	COUPLERS	SET	1							
E	SEALS FOR TRAVEL GEAR BOX	SET	1							
F	LONG TRAVEL BRAKE DISCS	SET	1							
G	LONG TRAVEL BRAKE SPRINGS	SET	1							
H	LONG TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR CROSS TRAVEL UNIT									
A	AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	SET OF SEALS FOR GEARBOX	SET	1							
D	CROSS TRAVEL END SHAFT BEARING	SET	1							
E	COUPLERS	SET	1							
F	CROSS TRAVEL BRAKE DISCS	SET	1							
G	CROSS TRAVEL BRAKE SPRINGS	SET	1							
H	CROSS TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR MAIN HOIST									
A	MAIN HOIST PULLEY BEARINGS	SET	1							
B	SET OF BEARINGS FOR ROPE DRUM	SET	1							
C	SET OF BEARINGS FOR GEAR BOX	SET	1							
D	SET OF SEALS FOR MAIN HOIST	SET	1							
E	MAIN HOIST BRAKE DISCS	SET	1							
F	MAIN HOIST BRAKE SPRINGS	SET	1							
G	MAIN HOIST BRAKE SHOE LINERS	SET	1							
H	DISC PAD	SET	1							
A	ELECTRICAL CONTROL PANEL & MOTORS									
1	POWER CONTACTOR OF EACH RATING	NOV	2							
2	OVER LOAD RELAYS OF EACH RATING	NOV	2							
3	MAGNETIC OF EACH RATING	NOV	2							
4	STOP BUTTON OF EACH TYPE	NOV	2							
5	SPARE FOR VVVF DRIVE OF EACH RATING	SET	1							
6	SET OF BEARINGS FOR MAIN HOIST MOTOR	SET	1							
7	SET OF BEARINGS FOR CROSS TRAVEL MOTOR	SET	1							
8	SET OF BEARINGS FOR LONG TRAVEL MOTOR	SET	1							
2.1.4	MANDATORY SPARES FOR SINGLE ORDER UNDERSLUNG CRANE (PERMANENT STORE HEAVY MATERIAL STORE)									
1	SPARE FOR LONG TRAVEL UNIT									
A	SET OF AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	LONG TRAVEL END SHAFT BEARINGS	SET	1							
D	COUPLERS	SET	1							
E	SEALS FOR TRAVEL GEAR BOX	SET	1							
F	LONG TRAVEL BRAKE DISCS	SET	1							
G	LONG TRAVEL BRAKE SPRINGS	SET	1							
H	LONG TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR CROSS TRAVEL UNIT									
A	AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	SET OF SEALS FOR GEARBOX	SET	1							
D	CROSS TRAVEL END SHAFT BEARING	SET	1							
E	COUPLERS	SET	1							
F	CROSS TRAVEL BRAKE DISCS	SET	1							
G	CROSS TRAVEL BRAKE SPRINGS	SET	1							
H	CROSS TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR MAIN HOIST									
A	MAIN HOIST PULLEY BEARINGS	SET	1							
B	SET OF BEARINGS FOR ROPE DRUM	SET	1							
C	SET OF BEARINGS FOR GEAR BOX	SET	1							
D	SET OF SEALS FOR MAIN HOIST	SET	1							
E	MAIN HOIST BRAKE DISCS	SET	1							
F	MAIN HOIST BRAKE SPRINGS	SET	1							
G	MAIN HOIST BRAKE SHOE LINERS	SET	1							
H	DISC PAD	SET	1							
A	ELECTRICAL CONTROL PANEL & MOTORS									
1	POWER CONTACTOR OF EACH RATING	NOV	2							
2	OVER LOAD RELAYS OF EACH RATING	NOV	2							
3	MAGNETIC OF EACH RATING	NOV	2							
4	STOP BUTTON OF EACH TYPE	NOV	2							
5	SPARE FOR VVVF DRIVE OF EACH RATING	SET	1							
6	SET OF BEARINGS FOR MAIN HOIST MOTOR	SET	1							
7	SET OF BEARINGS FOR CROSS TRAVEL MOTOR	SET	1							
8	SET OF BEARINGS FOR LONG TRAVEL MOTOR	SET	1							
2.2	MANDATORY SPARES FOR SINGLE ORDER UNDERSLUNG CRANE (PERMANENT STORE LIGHT MATERIAL STORE)									
1	SPARE FOR LONG TRAVEL UNIT									
A	SET OF AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	LONG TRAVEL END SHAFT BEARINGS	SET	1							
D	COUPLERS	SET	1							
E	SEALS FOR TRAVEL GEAR BOX	SET	1							
F	LONG TRAVEL BRAKE DISCS	SET	1							
G	LONG TRAVEL BRAKE SPRINGS	SET	1							
H	LONG TRAVEL BRAKE SHOE LINERS	SET	1							
J	SPARE FOR CROSS TRAVEL UNIT									
A	AXLE BEARINGS	SET	1							
B	SET OF GEARBOX BEARINGS WITH SLAVES	SET	1							
C	SET OF SEALS FOR GEARBOX	SET	1							
D	CROSS TRAVEL END SHAFT BEARING	SET	1							
E	COUPLERS	SET	1							
F	CROSS TRAVEL BRAKE DISCS	SET	1							

BIDDING DATA		QUANTITY		UNIT		PRICE		AMOUNT		TOTAL	
NO.	DESCRIPTION	QTY	UNIT	PRICE	AMOUNT	QTY	UNIT	PRICE	AMOUNT	QTY	UNIT
1	CROSS TRAVEL BRAKE SPRINGS	1	SET								
2	CROSS TRAVEL BRAKE SHOULDER	1	SET								
3	SPARES FOR MAIN HOIST	1	SET								
4	MAIN HOIST POLSKY BEARINGS	1	SET								
5	SET OF BEARINGS FOR RIGID DRIVE	1	SET								
6	SET OF BEARINGS FOR CRANK	1	SET								
7	SET OF BEARINGS FOR MAIN HOIST	1	SET								
8	SHOCK MOUNT BRAKE SHOCKS	1	SET								
9	SHOCK MOUNT BRAKE SPRINGS	1	SET								
10	MAIN HOIST BRAKE SHOCKERS	1	SET								
11	DISC PAD	1	SET								
12	ELECTRICAL CONTROL PANEL/MOTOR	1	SET								
13	POWER CONTACTOR OF EACH RATING	2	NOV								
14	OVERLOAD RELAYS OF EACH RATING	2	NOV								
15	METER/RELAY OF EACH RATING	2	NOV								
16	PUSH BUTTON OF EACH TYPE	2	NOV								
17	SPARES FOR TYPIC DRIVE OF EACH RATING	3	SET								
18	SET OF BEARINGS FOR MAIN HOIST MOTOR	1	SET								
19	SET OF BEARINGS FOR CROSS TRAVEL MOTOR	1	SET								
20	SET OF BEARINGS FOR LONG TRAVEL MOTOR	1	SET								
Common Mandatory spares (Common for all RG cranes)											
21	ELECTRICAL ITEMS										
a	Motor of each type & rating	10% of the standard quantity or maximum 1 number whichever is higher									
22	TOOLS ITEMS										
a	Land tools	1 set of each type & size									
b	Indicators, recorder and meters offered from each model for the project. These instruments shall be supplied with three sets of blank order	10% of standard of each type/model or a minimum of one number for each model and type, whichever is more									
TOTAL (IN FIGURES)											
GRAND TOTAL											
GRAND TOTAL											
GRAND TOTAL											
GRAND TOTAL											