

SCHEDULE – I
SPECIFICATION NO. : COFMOW/IR/EOTC/ 2020, Rev-0
(SEE CLAUSE 1.1.5 OF SPECIFICATION)

NOTE : 1. READ APPENDED NOTE BEFORE FILLING UP THE PROFORMA

2. ITEMS 5, 6, 7, 8, 10.3, 10.11, 10.12, 12, AND 13 ARE MAJOR PARAMETERS IN RESPECT OF WHICH NO DEVIATIONS ARE ACCEPTABLE

LEADING PARAMETERS of Goliath Crane 5T

NO.	ITEM	DETAILS						
1.	Consignee	: SSE/Wheel/WRS/R						
2.	(a) No. of Cranes required	: 01 no.						
	(b) Additional/Replacement account : ('✓' one option)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">Additional Account</th> <th style="text-align: center;">Replacement Account</th> </tr> <tr> <td style="text-align: center;">Additional</td> <td></td> </tr> </table>	Additional Account	Replacement Account	Additional			
Additional Account	Replacement Account							
Additional								
	(c) If on Replacement account, whether replacement crane asked of lower, same or higher capacity vis-à-vis existing crane ('✓' one option)	: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">Lower</th> <th style="text-align: center;">Same</th> <th style="text-align: center;">Higher</th> </tr> <tr> <td style="text-align: center;">NA</td> <td></td> <td></td> </tr> </table>	Lower	Same	Higher	NA		
Lower	Same	Higher						
NA								
	(d) If answer to 2(c) is 'Higher' than existing crane, please enclose certificate that existing structure shall be able to take higher load (due to higher capacity crane) ('✓' one option)	: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Certificate of ability of existing structure to bear higher load enclosed</td> </tr> <tr> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> </tr> <tr> <td style="text-align: center;">NA</td> <td></td> </tr> </table>	Certificate of ability of existing structure to bear higher load enclosed		Yes	No	NA	
Certificate of ability of existing structure to bear higher load enclosed								
Yes	No							
NA								
	(e) If answer to 2 (d) above is 'No', crane procurement can not be processed further	:						
	(f) If on Additional account, gantry columns erected or not ('✓' one option)	: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Gantry columns erected</td> </tr> <tr> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> </tr> <tr> <td colspan="2" style="text-align: center;">Not Applicable</td> </tr> </table>	Gantry columns erected		Yes	No	Not Applicable	
Gantry columns erected								
Yes	No							
Not Applicable								
	(g) If answer to 2(f) is 'Yes', then gantry rails laid or not ('✓' one option)	: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Gantry rails laid down</td> </tr> <tr> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> </tr> <tr> <td style="text-align: center;">Not Applicable</td> <td></td> </tr> </table>	Gantry rails laid down		Yes	No	Not Applicable	
Gantry rails laid down								
Yes	No							
Not Applicable								
	(h) If answer to 2(g) is 'No', then	:						
	(i) Likely date of laying of gantry rails	: Not Applicable						
	(ii) How has 'Span' in S.No.10.3 : below been arrived at as gantry rails have not been laid down (please explain)							
3.	Crane Nos. (To be filled by COFMOW)	: 01 no.						
4.	Location (Sub Shop name with bay no.)	: Wheel park of Wheel Shop						

5. Type ('✓' one option)
- | | | |
|----------------------------|---------------|--------------------------|
| Conventional Double Girder | Single Girder | Underslung Single Girder |
| ✓ | | |
6. Capacity 05 Ton EOT
- 6.1 Main Hoist (Tons) : 5 T
- 6.2 Auxiliary Hoist (Tons) : Note required.
7. Class of Duty ('✓' one option)
- | | | | |
|---|----|-----|--|
| I | II | III | IV |
| | | | ✓ (Min 8 hr. average running time per day) |
- (Ref appended notes item iii)
8. Crane controls from ('✓' one option)
- | | | | | | | |
|-------|---------|--------|-----------------|----------------|------------------|-------------------------|
| Cabin | Pendent | Remote | Cabin & Pendent | Cabin & Remote | Pendant & Remote | Cabin, Pendent & Remote |
| | | | | | | ✓ |
9. Speeds (metres/minute) ('✓' one option each for MF, AH, LT & CT)

9.1	Main Hoist (MH)	2.0	3.15 ✓	4.0	5.0	6.3	Any other speed requirement may be indicated as per R 10 series. 1.0, 1.25, 1.6, 2.0, 3.15, 4.0, 5.0, 6.3, 8.0 and 10.0 for Main Hoist & Auxiliary Hoist (for MH, normally limited to 6.3 m/min & for AH, normally limited to 8 m/min 10, 12.5, 16, 31.5, 40, 50, 63, 80, 100 for Long Travel & Cross Travel (for LT, normally limited to 63 m/min & for CT, normally limited to 31.5 m/min)
9.2	Auxiliary Hoist (AH)	5.0	6.3	8.0			
9.3	Long Travel (LT)	40.0 ✓	50.0	63.0			
9.4	Cross Travel (CT)	16.0 ✓	20.0	31.5			

9.5	VVVF drive (step less speed for all motions) (✓ one option)	YES ✓	NO
	Advantages of VVVF drive v/s Non VVVF drive	If VVVF drive is specified, then creep speed not required in 9.6 below.	Please give detailed justification for Non-VVVF drive despite clear-cut advantages of VVVF drive especially being energy efficient.
1.	Energy efficient		
2.	Improved load control i.e. no shock loading and load swing, no jerking load		
3.	Multiple speed adjustments for all movements i.e. stepless speeds (creep speed control is not required)		
4.	Smooth start and stop		
5.	Enhanced motor life		
6.	Less electrical maintenance		

9.6	If answer to 9.5 is 'No' Creep speed of MH (Normally kept as 10% of speed of MH) (✓ one option)	0.20 NA	0.315	0.40	0.50	0.63	Normally 8.0 & 10.0 metres/ minute speed are not desirable for MH.
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(Ref: Item iv of Appended Note for creep speed)

10.	Structural details (Refer COFMOW Sketch No. COFMOW/IR/EOTC/X/Y/Z/1-2020 (Double Girder), COFMOW/IR/EOTC/SG/91 (Single Girder), COFMOW/EOTC/X/Y/Z/92-1 (Underslung Single Girder)		:	All dimensions in metres unless otherwise indicated					
10.1	Weight/unit length of Gantry Rails (Note: Supply & laying of rails is not in scope of supplier)		:	60 Kg/m					
10.2	Rail head width of Gantry Rails (Ref: Appended Note item v)	B	:	0.074 mtrs					
10.3	a. Span (Centre to Centre of Gantry Rail)	S	:	15 mtrs.(Without overhanging)					
	b. Gauge (Inner face to Inner face of Rail)	W= (S-B):	:	14.926 mtrs					
10.4	Top of Gantry Rail (or bottom flange of I-Beam (in case of underslung crane) to lowest overhead obstruction		C	:	Not Applicable				
10.5	Top of Gantry Rail (or bottom flange of I Beam (in case of underslung crane) to floor level		D	:	Not Applicable				
10.6	Lift of hook above floor level (MH)	H1 (MH)	:	8.2 mtrs					
10.7	Drop of hook below floor (MH)	H2 (MH)	:	1.500 mtrs					
10.8	Lift of hook above floor level (AH)	H1 (AH)	:	NA					
10.9	Drop of hook below floor (AH)	H2 (AH)	:	NA					
10.10	Centre distance between hooks of MH & AH ('✓' one option)		R	:	<table><tr><td>0.800 M up to 20 T cap.</td><td>1.00 M above 20 T cap.</td></tr><tr><td>Not Applicable</td><td></td></tr></table>	0.800 M up to 20 T cap.	1.00 M above 20 T cap.	Not Applicable	
0.800 M up to 20 T cap.	1.00 M above 20 T cap.								
Not Applicable									
10.11	Side clearance from center line of gantry rail/I-beam to nearest side obstruction	A 1	:	1 mtr					
10.12	Side clearance from center line of gantry rail/I-beam to nearest side obstruction	A 2	:	1 mtr					
10.13	Vertical clearance from floor level to lowest structural member of crane (Ref: Appended Note item vii)		K	:	7.72 mtr				
10.14	Vertical clearance from floor level to bottom of cabin (Ref: Appended Note item viii)		L	:	6 mtrs				
10.15	Runway I-beam section (For Underslung Single Girder crane only) (Not required for other types of cranes)	Top Flange (mm) Bottom Flange (mm) Web Height (mm)	:	Not Applicable					

11. Bay length & Down Shop Leads (DSL)

210 mtrs

11.1 Length of gantry on which crane is to operate (metres)

: 210 mtrs

11.2 Is DSL required ?
(✓ one option)

:

Yes	No
✓	

a) If Yes, Type of DSL required
(✓ one option)

:

MS Angle Type	Shrouded Type
	Reel Drum type

Cable reeling drum type DSL with center feeding DSL

11.3 Length of DSL required (meters)

: 210

11.4 If No, type of existing DSL to be indicated
(✓ one option)

:

Not Applicable

11.5 Whether removal of existing DSL is to be included in scope of supply of firm
(✓ one option)

:

Yes	No
	✓

12. Operator's Cabin
(✓ one option)

:

Fixed and open	Fixed and closed (in case of outdoor)
	✓

13. Crane has to work in
(✓ one option)

:

Indoor	Outdoor	Both (Indoor as well as outdoor)
	✓	

14. Working environment
(✓ one option)

:

General Workshop	General Workshop Dusty	Hot Shop (in case of Hot Shop, please indicate maximum temperature of metal to be handled)
	✓	

15. Requirements of lifting tackles/ lifting chains/ lifting wire ropes (capacity asked for shall not exceed capacity of Main Hoist/Auxiliary Hoist) (Ref: Appended Note items xi & xii)

15.1

S.N.	Item Description	Qty.	Capacity in Tons	Length in meters	Drawing No.	Drawing enclosed or not	
a.	Lifting Tackle (Drgs. to be enclosed along with indent)					Yes	No
b.	Four legged wire rope slings (Drgs. to be enclosed alongwith indent)					Yes	No
c.	Two legged wire rope slings (Drgs to be enclosed alongwith indent)					Yes	No
d.	Four legged chain with hook (Drgs. to be enclosed alongwith indent)					Yes	No
e.	Two Legged chain with hook (Drgs. to be enclosed alongwith indent)	2 nos	10 T	2.15	SECR/Sk No. WRS/R-1432	Yes	No
f.	Any other (please specify)					Yes	No
g.	Any other (please specify)					Yes	No

- 15.2 Type of Hook required (MH) :
(✓ one option)
(Ref: Appended Note item xii)

C – Type	Ramshorn Type
✓	

- 15.3 Type of Hook required (AH) :
(✓ one option)
(Ref: Appended Note item xii)

C – Type	Ramshorn Type
Not Applicable	

- 15.4 Is lifting tackle/wire rope sling/ chain with hooks asked for above having less capacity than maximum capacity of MH :
(✓ one option)

Yes	No
Not Applicable	

[Signature]
SSE/Millwright

[Signature]
SSE/Electrical

[Signature]
SSE/PCO-I

[Signature]
SSE/Wheel

[Signature]
AWM-I/WRS/R