

SCHEDULE-I
SPECIFICATION NO. : COFMOW/IR/EOTC/ 2021, Rev-1
(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**NO.****ITEM****DETAILS**

1. Consignee

: SSE(IC)/D/M/SGUJ/N.F.Rly

: 02

2

a. No.of Cranes required

(b) Additional/Replacement account:
(✓ one option)

Additional Account	Replacement Account
✓	

(c) If on Replacement account, whether replacement crane asked of lower, same or higher capacity vis-à-vis existing crane (✓ one option)

Lower	Same	Higher

(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)

Certificate of ability of existing structure to bear higher load enclosed	
yes	No

(e) If answer to 2 (d) above is 'No,' crane procurement can not be processed further

(1) If on Additional account, gantry columns erected or not

: for crane 1 (no)
for crane 2(no)

(g) If answer to 2(f) is 'Yes', then gantry rails laid or not

: for crane 1 (no)
for crane 2 (no)

(h) If answer to 2(g) is 'No', then

(i) Likely date of laying of gantry rails

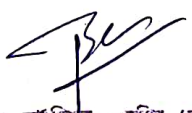
: likely by march, 2026

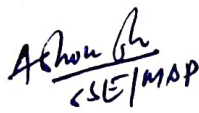
(ii) How has 'Span' in S.No.10.3 below been arrived at as gantry rails have not been laid down (please explain)

3. Crane Nos.

4. Location (Sub Shop name with bay no.)

DIESEL LOCOMOTIVE SHED
SILIGURI, N.F.RLY


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5. Type ('✓' one option)

Conventional Double Girder	Single Girder	Under slung Single Girder
✓		

6. Capacity

: 65/10 T

6.1 Main Hoist (Tons)

: 65T

6.2 Auxiliary Hoist (Tons)

: 10T

7. Class of Duty

('✓' one option)

I	II	III	IV
			✓

(Ref appended notes item iii)

8. Crane controls from ('✓' one option)

Cabin	Pendant	Remote	Cabin & Pendant	Cabin & Remote	Pendant & Remote	Cabin. Pendant & Remote
				✓		

9. Speeds (meters/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 10,12.5,16,31.5,40,50,63,80,100for 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) Advantages of VVVF drive v/s Non VVVF drive	YES ✓	NO
1.	Energy efficient	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
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		

96	It answer to 9.5 is 'No' 'Creep speed of MH (Normally kept as 10% of speed of MH) ('✓' one option)	0.20	0.315	0.40	0.50	0.63	Normally 8.0 & 10.0metres/minute speed are not Desirable for MH.
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(Ref item IV of Appended Note for creep speed)

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10. Structural details (Refer COFMOW Sketch : All dimensions in meters unless otherwise Indicated
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 (Under slung Single Girder)

- 10.1 Weight/unit length of Gantry Rails : 65.61 KG/Meter approx
(Note: Supply & laying of rails is not in scope of supplier)
- 10.2 Rail head width of Gantry Rails B : 60.325mm approx
(Ref: Appended Note item v)
- 10.3 a. Span (Centre to Centre of Gantry Rail) S : approx 18.95 meter(for crane 1)
approx 17.95 meter (for crane 2&3)

b. Gauge (Inner face to Inner face of Rail) $W = (S - B) : (18.9500 - 0.06032) = 18.889 \text{ meter (for crane 1) approx}$
 $(17.9500 - 0.06032) = 17.889 \text{ (for crane 2&3) approx}$

- 10.4 Top of Gantry Rail [or bottom flange of I-Beam C : approx 4260 mm
(in case of under slung crane) to lowest overhead obstruction]
- 10.5 Top of Gantry Rail (or bottom flange of I Beam D : approx 10500 mm
(in case of under slung crane) to floor level
- 10.6 Lift of hook above floor level (MH) H1(MH) : approx 9.0 meter
- 10.7 Drop of hook below floor (MH) H2(MH) : approx 2.0 meter
- 10.8 Lift of hook above floor level (AH) H1(AH) : approx 9.0 meter
- 10.9 Drop of hook below floor (AH) H2(AH) : approx 2.0 meter

- 10.10 Centre distance between hooks of MH & AH ('✓' one option) R :

0.800 M up to 20T cap	1.00 M above 20T cap
	✓

- 10.11 Side clearance from center line of gantry rail/I-beam to nearest side obstruction A1 : Approx 725 mm
- 10.12 Side clearance from center line of gantry Rail/I-beam to nearest side obstruction A2 : Approx 725 mm
- 10.13 Vertical clearance from floor level to lowest structural member of crane (Ref: Appended Note item vii) K :
- 10.14 Vertical clearance from floor level to bottom of cabin L
(Ref: Appended Note item vii)

- 10.15 Runway I-beam section Top Flange (mm) :
(For Understanding Single Bottom Flange (mm) :
Girder crane only) Web Height (mm) :

(Not required for other types of cranes)

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N. F. Railway, Siliguri Jn.

5. Type ('✓ one option)

Conventional Double Girder	Single Girder	Under slung Single Girder
✓		

6. Capacity

: 65/10 T

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: 65T

6.2 Auxiliary Hoist (Tons)

: 10T

7. Class of Duty

('✓ one option)

I	II	III	IV
			✓

(Ref appended notes item iii)

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				✓		

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	Advantages of VVVF drive v/s Non VVVF drive		
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(Ref item IV of Appended Note for creep speed)

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N. F. Railway, Siliguri Jn.

SR. DME/DSGUJ/KIR/NFR

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 TOTAL ITEM REQUIRED BY 2 NO OF CRANES

S.N.	Item Description	Qty.	Capacity in Tons	Length In meters	Drawing No.	Drawing enclosed or not	
a.	Lifting Tackle (Drugs.to be enclosed along with indent)	04 NOS	45 ton each		(RDSO SK DL-2671.2670&2766)	Yes	No
						✓	
b.	Four legged wire rope slings (Drugs. to be enclosed along with indent)	03 NOS	35 ton each	5.5 METER	DRG NO-MLDT/MISC-02/2023/CRANE	Yes	No
						✓	
c.	Four legged chain with hook (Drugs. To be enclosed along with indent)	03NOS	10 Ton each	5.5 meter	DWG No As/Sling/4L	Yes	No
						✓	
d	Two Legged chain/rope with hook (Drugs.to be enclosed along with indent)	03NOS	10 Ton each	3.5 meter	DRG NO.ELW/BSL/4/51.803	Yes	No
						✓	
e.	Trolley (long travel & cross travel) wheels with bearing.	01 set of each type	One set consists of 04 wheels			Yes	No
						✓	
f.	Dead man lever buttons	02 nos.of each type					
g.	Drive unit	One of each type					
h	Main hoist motor	01 no.					

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

C-Type	Rams horn Type
	✓

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

C-Type	Rams horn Type
✓	

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SR.DME/SGUJ/KIR/NFR

- 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
✓	

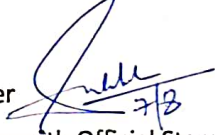
- 15.5 If 'Yes', then how will maximum:
Crane capacity of MH be checked
At consignee's premises at the
Time of commissioning
(Please explain alternatives
Available for this)

Signature of Indenter
(Name & Designation)
Mobile No.


PINTU KUMAR
JRI/01 M
8728829358

Approved by
(Not below JA Grade Officer)

(Name & Designation along with Official Stamp)


प्रवर मंडल यांत्रिक ऑफिस (डीजल)
Sr. Divl. Mech. Engineer (Diesel)
पु. सो. रेलवे / सिलीगुड़ी जं.
N.F. Rly., Siliguri Jn.

Place: Siliguri
Date: 07/08/15

NOTE:-

- (1) Supplier/manufacture advised to visit the shed before starting of manufacturing and design accordingly.
- (2) Dimensional measurements like span, rail to rail, lifting height, given are approximate and supplier/manufacture advised to measure again before manufacturing and fitting of 65/10TON EOT crane at DLS/MLDT.
- (3) Crane 1 should be supplied first and crane-2 & 3 should be supplied later after consultation.