

5. Type ('✓' one option)

Conventional Double Girder	Single Girder	Under slung Single Girder
✓		

6. Capacity

: 15/5 T

6.1 Main Hoist (Tons)

: 15T

6.2 Auxiliary Hoist (Tons)

: 5T

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 Trave1 & 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		
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.
----	--	------	-------	------	------	------	--

(Ref item IV of Appended Note for creep speed)

महल यानिक अभि (डीजल,
Divt. Mech. Engineer (Diesel)

पु. सी. रेलवे, सिलीगुड़ी

N F Rly Siliguri

प्रवर अनुभाग (डीजल)
Sr. Section Engineer (Diesel)

पु. सी. रेलवे, सिलीगुड़ी ज

N. F. Railway, Siliguri Jr.

Structural details (Refer COFMOW Sketch : All dimensions in meters unless
10. No.COFMOW/IR/EOTC/X/Y/Z/1-2020 (Double Girder). otherwise indicated
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 mm approx
(Ref: Appended Note item v)

10.3 a. Span (Centre to Centre of Gantry Rail) S : approx 18.930 meter (for crane 1)
approx 17.930 meter (for crane 2)

b. Gauge (Inner face to Inner face of Rail) $W = (S - B) : (18.9300 - 0.060) = 18.870$ meter (for crane 1) approx
 $(17.9300 - 0.060) = 17.87$ (for crane 2) approx

10.4 Top of Gantry Rail (or bottom flange of I-Beam C : approx 2.74 meter
(in case of under slung crane) to lowest
overhead obstruction]

10.5 Top of Gantry Rail (or bottom flange of I Beam D : approx 9.7 meter
(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 1.0 meter

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

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

10.11 Side clearance from center line A1 : Approx 0.310 meter
of gantry rail/I-beam to nearest side obstruction


10.12 Side clearance from center line of gantry A2 : Approx 0.310 meter
Rail/I-beam to nearest side obstruction


10.13 Vertical clearance from floor Level K: Approx 9.075 meter
to lowest structural member of crane
(Ref: Appended Note item vii)

10.14 Vertical clearance from floor level L: Approx 7500mm
to bottom of cabin
(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)


मंडल यांत्रिक अभियंता (डीजल)
Divl. Mech. Engineer (Diesel)
पू. री. रेलवे, सिलीगुड़ी
N F Rly, Siliguri Jn


प्रवर अनुभाग अभियंता (डीजल)
Sr. Section Engineer (Diesel)
पू. री. रेलवे, सिलीगुड़ी जं
N. F. Railway, Siliguri Jn.

SR. DME/D/SGUJ/KIR/NFR

11. Bay length & Down Shop Leads (DSL) : Approx 93 meter

11.1 Length of gantry on which crane : Approx 93 METER
is to operate (meters)

11.2 Is DSL required?

(✓ 'one option)

Yes	No
✓	

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

MS Angle Type	Shrouded Type
	✓

11.3 Length of DSL required (meters) : Approx 150 METER

11.4 If No, type of existing DSL to be indicated:

(✓ 'one option)

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)
✓		

मडल यात्रिक अभि (डीजल)
Divl. Mech. Engineer (Diesel)
पू. सी रेलवे, सिलीगुड़ी
N F Riv. Siliguri

प्रवर अनुभाग अभियन्ता (डीजल)
Section Engineer (Diesel)
पु. सी रेलवे, सिलीगुड़ी
N. F. Railway, Siliguri

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.	Four legged wire rope slings (Drgs. to be enclosed along with indent)	02 NOS	15 ton each	5.5 meter	DRG NO-MLDT/MISC-02/2023/CRANE	Yes	No
b.	Four legged chain with hook (Drgs. To be enclosed along with indent)	02 NOS	5 ton each	5.5 METER	DWG No As/Sling/4L	Yes	No
c.	Two Legged Chain/rope with hook (Drg to be enclosed along with indent)	02NOS	5 Ton each	3.5 meter	DRG NO. ELW/BSL/4/51. 803	Yes	No
d	Four leg wire rope sling for lifting of WAG-9 traction motor	02NOS	05 Ton each	1.52 meter	DRG NO ELS/VSKP/2017/30	Yes	No
e.	Trolley (long travel) wheels with bearing.	02 set	One set consisting of 04 wheels			Yes	No
f	Chain Sling for bolster/bogie turning	02 Nos	10 Ton	4.410 meter	DRG NO ELS/VSKP/2018/28	Yes	No
g	Dead man lever buttons	02 nos.of each type					
h.	Drive unit	One of each type					
h	Main hoist motor	02 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
✓	

मंडल यांत्रिक जामि (डीजल)
Divl. Mech. Engineer (Diesel)
पू. सी रेलवे, सिलीगुड़ी
N F Rly, Siliguri Jn.

page 5 of 6

प्रवर अनुभाग (डीजल)
Sr. Section Engineer (Diesel)
पू. सी. रेलवे, सिलीगुड़ी जं
N. F. Railway, Siliguri Jn.

SR. DME/DSGUJ/KIR/NFR

SR.DME/SGUJ/KIR/NFR

15.4 Is lifting tackle/wire rope sling/

Yes	No
✓	

Chain with hooks asked for
Above having less capacity than
Maximum capacity of MH
(✓ one option)

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. 871884128

[Signature]
31/01/25

(Name & Designation along with Official Stamp)

(Not below A Grade Official)

Sr. Divl. Mech. Engineer (Diesel)

पु० सी० रेलवे / सिलीगुड़ी जं०

N.F. Rly., Siliguri Jn.

Place: *Siliguri*
Date:

NOTE:-

- (1) Supplier/manufacturer 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 15/05TON EOT crane at DLS/SGUJ
- (3) Crane 1 should be supplied first and crane-2 & 3 should be supplied later after consultation.