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1	r. No.: 0.00 Effective date: 24.08.22	
	GOLIATH CRANE ELECTRICAL & MECHANICAL MAINTENANCE REPORT	SOP/Checklist no. KIM/Gollath Crane/Checklist-01
Crane Name.: Crolinth Crow	location: HEMM Care Centre	Date of Inspection:
Crane: Gollath Crane	Capacity: 20T+5T (MH+AH)	Last pending point Job done list:
Team Name:	Murat construction	· · · · · · · · · · · · · · · · · · ·

	MECHANICAL ASPECTS									
SL Na.	Eqpt to be checked	Inspection Items	Method	Criteria	Action to be taken when out of standard	Status/ Remarks				
201		lean of the second		Smooth functioning	Examine the root cause	oK .				
2 .		Operation	Visual Checking	No knocking operation during opening and closing	Adjust brake	ck				
3 -					Check for any worn-out parts	;cK				
4 5		(ining anadilian	Visual Checking	Lining should not be less than 2mm	Replace	.0K				
5		Lining condition	Visual Checking	No breakage in the lining	Replace	.oK				
6	Brake		Visual	No damage	Plan for replacement	.oK				
7	,	Disc / Drum	by spanner	No loose fixing bolts	Re-tighten	ok '				
8			Visual	No oil leakage	Plan for replacement	OK				
9		Thruster	By screwdriver/spanner	No loose Electrical connection	Re-tighten	05				
10		Mounting boits	by spanner	No loose mounting bolts	Re-tighten	οĶ				
11		Overall cleanliness	Visual changing	No grease, oil, dust	Clean	oK.				
12			Visual checking	Not worn out more than its limit (50%)	Replace	σκ				
13	Power Collector	Collector shoe	By spanner	No loose fixing boits	Re-tighten	OK.				
14		Connection	by spanner	No loose connection	Re-tighten	oh				

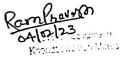
RamPharosh 04/02/23

No red spot or any Hot spot Re-tighten / repair ox 16 Repair No damage cable Visual Checking OL Cables No loose cable clamp Re-lighten ak 18 No cracks Replace HO Coach. Visual Checking Insulator 19 No dust on the insulator Clean Dust cleaned

20			Visual Checking	No heating or dis-colorization of any cables	Check socket condition and if necessary re-socket and tighten	OK						
21	Power Collector	Junction box	by spanner	No loose connection	Re-tighten	or						
22			Visual Checking	Door/cover shall be closed and locked	Closed	OF.						
23		Oil Level	Visual Inspection	Between high and low limits	Add oil if required (Take care not to stain oil gauge)	٥K						
24		Body Temperature	Touch inspection	Max 50 Deg C	Add oil if required,	No meed oil.						
25		Bearing Temperature	By Hand touch / Thermal imaging / Temperature gun	As per design value	Add oil if required,	Normal Temp.						
26	Gear Box	Oil leakage	Visual inspection	No oil leakage	Retighten loose parts, plan for replacement of seals and pickings	Tightness done.						
27		Casing bolts, foundation bolts,	By spanner	No loose bolts	Retighten loose bolts	оқ						
28		Shaft/bearing Revolving sound	Hearing inspection	No metallic sound, howling sound or impact sound	Check oil level, Retighten bolts, Plan for replacement	Notural DERNDE.						
29		coupling operation	Visual Inspection	No movement in thrust direction; no backlash	Check key fixing condition and grease condition	oK.						
30				There shall not be any loose bracket fixing botts	D. Nobber	Tighted						
31			By spanner	There shall not be any loose roller fixing bolts	Re-tighten							
32	Bewa Trolley	Bews trolley		All rollers shall rotates freely		Tightened . Checked . Found ac.						
33	arrange ment		Visual checking	Visual checking No visible rubbing mark on the rollers Replace	Replace	No rubby man.						
34	1									All the bracket shall free from any damage		No danese.

20m Bareth

1	1			All rubber buffer shall be free from damage	Г	OL.
7			By spanner	All the cable guide fixing bolts shall not loose	Re-tighten	- ox
7		Bewa Chain	Visual Checking	Length of the Bewa Chain shall be smaller in length than Bewa cable	Adjust property	ok
8	Bewa Trolley		Visual Checking	I-beam should be straight and no physical damage	Plan for rectification	No dance
9	arrange ment	l-Beam	By spanner	All the fixing bolts of I-Beam support post shall not loose	Re-tighten	ok
9		Park to a	-	No physical damage	Repair / replace	No danate
11	1	1	1	Not stretched	Adjust length	ok
42	Bewa Trolley	Cables	Visual checking	Wooden clamps are properly fix up	Re-tighten	or.
43	аптапде тиет	ता		All the cable loops are of equal length	No. 17	er
44				Cable shall not touch or rub any fix platform or object	Adjust length and provide guard	or
45		1		safety chain provided	Repair / Replace	conletion is ex
46	End Buffer	Mounting	By spanners	No loose mounting bolts	Retighten	đ.
47			Hearing	No abnormal sound	Investigate and take counter measure	NA
48	7			shall be free from any crack	Replace	,οK
49	7	Wheel	Visual	No rubbing mark on the tread	A	:ok
50		, .		Collar thickness with In limit (not less than 66%)	Plan for replacement	1 22
51	Bogie	1	By spanner	No loose axie bolts	D. Caldan	· ok
52	٦		By spanner	No loose bolts	Re-tighten	OK,
53	7	Bogie Pir		No broken bolts	Replace	χσ
54	7		Visual	Rotation locking stopper in position	Plan for greasing and repositioning	of 1
55	Hoist Med	h. Rope	Visual checking	There should not be any visible damage	Replace	-ok

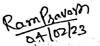


/					(A)								
				Shall be free from kinks, cuts, breaks, corrosion, bird cage, or any other defects .Max allowable reduction in rope dia is 7% Broken strands -14 in 6d length and 29 in 30d length (d=rope dia).		•							
	Ī	rum	Visual checking	Smooth play out of wire rope to and from the drum	Investigate and take counter measure	οκ							
7			By spanner	Rope clamp on drum shall not loose	Re-tighten	6K							
٦	١.	Orum	Visual checking	Clamp bolt shall be locked by wire	Locked by GI wire	σK							
7	ľ	John	Visual checking	No abnormal vibration	Investigate and take counter	OK							
П			Hearing	No abnormal noise	measure	OK.							
2										Visual checking	SHEAVES shall rotate freely WITHOUT JERKING AS ROPE PASSES OVER THEM	Plan for replacement	OK
5	Ì	Top Sheave	By spanner	Mounting bolts shall not be loose	RE-tighten	0K \							
П			Visual checking	No rubbing mark on the pulley	Investigate and take counter measure	: OK							
5	Hoist Mech.	Barrel coupling	By torque wrench	No loose or broken flange bolts	Replace and re-tighten as per the	oK							
6			By Allen key fitted in torque wrench	No loose or broken Allen screw	designed torque	10 K							
7			coupling		Center line of the indicator should be middle of the wear notches	Keep the trend. If the distance is increasing plan for replacement	٥٢ `						
8					Visual checking	No axial play	Check alignment	οK.					
9		Plummer	By touch	No abnormal temperature	Check after greasing/ plan for replacement of bearing	OK							
70	Hoist Mech.	block	By spanner	No loose fixing bolts	Re-tighten	ok)							
71	1	Pedestal	By spanner	No loose mounting bolts	Re-tighten	.aK							
72		2	Visual Checking	No damage Hook	Repair / Replace	'ak'.							
73		Hook	By spanner	No loose Hook nut locking	Retighten	oK.							
74	Hook Block			C-hook should rotate freely. Safety latch spring should be of proper tension	Lubricate	ok.							
75	1	-	,	No loose Sheaver cover/ side cover bolts	Repair	. ok							
76	1	Sheave	Visual Checking	No loose or damage Sheave pin locking	Retighten	0K.							

Parn Prayorh 04/12/23

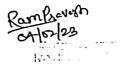
No damage of Striker for counterweight limit switch	Repair / Replace	, ox
No damage Rope guard	Repair / Replace	COX
Free movement of all pulley	Plan for replacement	ok
No loose Trunnion locking	Retighten	ok.

4	ELECTRICAL ASPECT								
SL No.	Egpt. to be checked	Inspection Items	Method	Criteria	Action to be taken when out of standard				
1			By hand / hearing		A) check for any loose foundation bolts	Notward sound DEQUIDE			
2		Veration	rod	Make judgment based on experience	B) take measurement if difficult to determine				
3					Examine the loading condition and current correlation				
1	1	Temperature	By hand touch / thermal amaging /	Generally desirable 70 deg c or below. The frame shall be capable of being touched with a hand for more than 5 seconds.	Check the brake operation				
5	1		temperature gun	being touched with a hand for more than 5 seconds.	Check for any abnormal loading / jamming				
6		Nose	Hearing	Find the source of noise, mechanical, electromagnetic, ventilation	Remove the source of mechanical noise. Analyze the electromagnetic noise and take counter measure	Normal.			
7	Motor	Motor Crack in the Visual checking Abnormal smell Smell Mounting By spanner bolts Bearing sound		No crack	Make a repair plan	٥۲.			
8	1			There shall be no smell of burning	Make an investigation at once in case of any abnormal smell.				
9	1			No loose bolts	Re-tighten	ok			
10	1			Make judgment based on experience					
11	1				A) take trend control				
12	1		By hand touch /		B) add grease and check the temperature	+ u)			
13	1		thermal imaging / temperature gun		C) check the alignment of coupling				
14	1				D) plan for changing the motor				



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15	ſ	Cleanliness		No accumulation grease or oil or dust on the fins of the motor	Clean	ok
16	F			No damage	Plan for replacement	
17					Plan for alignment	
	ļ.	Coupling	Visual checking	No noise	Plan for replacement	
18			D. speeds	No loose boits	Re-tighten	OK
19			By spanner		Repair	
20		Grounding connection	Visual checking	Connected and no breaks	Re-tighten	OK
21			By spanner	No loose bolts		
22				A) no loose connection	Re-tighten	
23			Visual checking	B) no loose bushings	Repair	
24		Cabling		C) no damage of cable sheath	Plan for repair	
25				D) no loose cable clamps	Re-tighten	
26				E) no missing cover boits	Provide	
27		IR value	By 500v megger	Should be >5mΩ	Plan for replacement	
28			1		A) check for any abnormal load	
W		Stator			B) check for any connection burning	~ - 1
29		current	Tong tester	test	C) plan for replacement of motor	
30	,				0, p.s 10. 10, 10, 11, 11, 11, 11, 11, 11, 11, 11,	

31	1	Cleanliness	Visual checking	Free of oil, Grease, dust	Clean	OK	
32	- 1			No damaged cable	Replace / Repair		
33		Wiring		proper routing of cable	Dress the cable	*	
34	End Limit	Striker mounting		Not loose and no change in the angle	Re-tighten in proper place	man of the same	
35	Switch		Visual checking	No damage or deformation	Replace		
36		Striker condition		Duran Con	adjust gap (as per limit switch type)		
~				Proper Gap	3.	1 to 1	
37		Girder light		All the light shall glow all safety protection system shall in place	Repair / replace	76 g	
38		Panel Lights				ok	
39		Operator's cabin Light	Visual Checking	•	repair / replace		
40		Pilot Lamp	1	Both lights shall work			
41		Panels Contactors, relays, He timers atc.	Hearing and visual	No humming sound	Plan for replacement		
42					checking	No loosening of mounting bolts	Re-tighten



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1						No b	uming smell	Inspect by opening the contactor and plan for replacement	ď-
44			l		Ī	No h	eating or dis-colorization of any parts	Re-tighten and repair	ok
45	1		1			Νο π	nissing arc chute	Provide Arc chute	
46	L					No s	tuck-up tips	Plan for replacement	
47	[9	Cooling	Fan filter V	/isual	checking	Free	from dust	Clean	ol<
48						a) N		Plan for replacement	
49		Resista capacit	ince and	√isua	l and Touching	b) N	o capacitor should swell	Plan for replacement	
50	1					c) Li	quid shall not leak from the capacitor	Plan for replacement	
51		Bus Ba main c	ars and other circuit	Visua	al checking	No I	neating or dis-colorization of any parts	Re-tighten and repair	ok
52					Touching No heating		neating	Investigate in detail	ok
53		Wiring		Visu	al checking	Prop	perly routed	Dressed property	ok
54		,		Screwdriver / spanners		No s	shall be no loose connection	Rø-tighten	Ok_
55		Overa	all cleanliness	Visual checking			al strong be tred trott east	Clean	ok_
56		Temp	perature			С	temperature sharrow with section to the section of	Check the Air conditioner for its functioning	
57			Safety switch		By operating		All the safety switch are in service	Rectify ad give it in service	
58	Safety	item	Anti-collision		moving the crane towards another cra in the same aisle	ine	crane should stop/Audio Visual system should work	Rectify	
59	1	Emergency S		Emergency Stop By pressi		sh	Main line contactor should drop.	Rectify	
60			Hoist limit	Visual Inspection			Hoist shall stop in its desired position	adjust the cam (It should operate between 300 to 500mm from the counterweight)	ok
61	Rotary Gear				Lower limit Visual Inspection		Hoist shall stop in its desired position	Adjust the cam (During adjustment operate the cam keeping the two-round rope in the drum)	ok
62		ar switch			By spanner		No loose flange bolts	retighten	ok
63	1		Coupling				No damage of elongated tyre	replace the tyre	* /* · /*
64	7				Visual Inspection		No axial play on the shaft	Check the key tightness	OK.
65	1		Connection		By spanners/screwdrive	er	No loose connection	Retighten	ok

Ramboworn 04/07/23