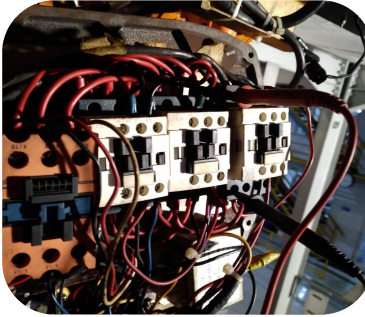
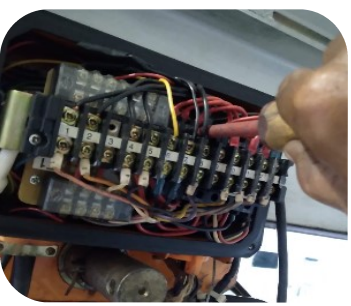
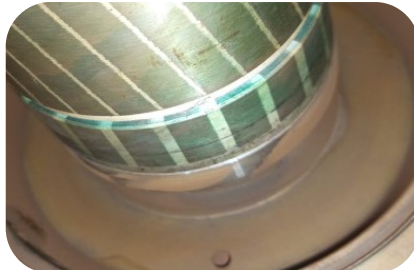
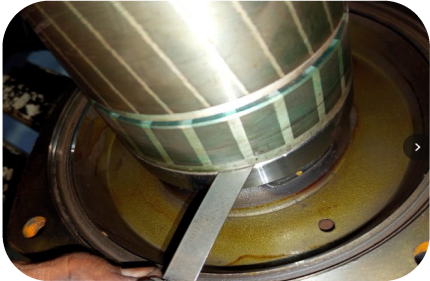
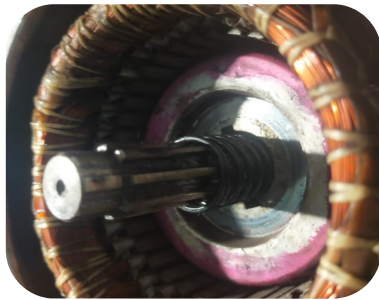
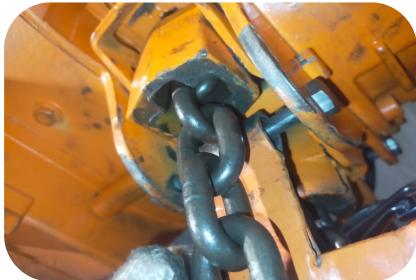
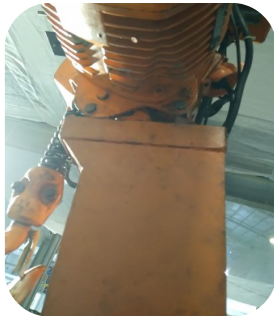
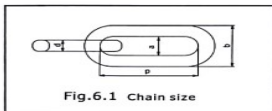
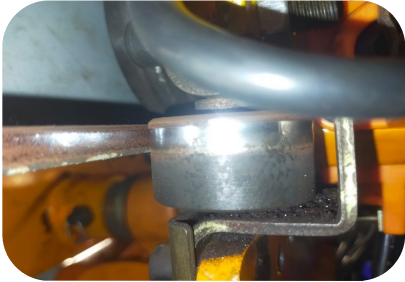


		LAPORAN PEKERJAAN		No. Formulir		HI-F-11-01	
				Revisi		R 1	
				Tanggal Revisi		01/02/2024	
Customer	PT. MULTI SPUNINDO JAYA			☒		Preventive Maintenance	
	Address	Ds. Jabaran RT.008 RW.003 Jabaran, Balongbendo		☒		Pengecekan	
	User	Pak Nurwahid		☒		Pemasangan/Pembongkaran	
Technician	Electrical	Choirul		☒		Perbaikan	
	Mechanical	JUKI - Febri		No. Report		LP-MSJ-2604004-PM	
Waktu	Tanggal	23/04/2026		Surat Perintah Kerja			
	Jam	08.30 - 12.00 wib		No. Form Maintenance			
Info Pekerjaan	Pekerjaan Preventive Maintenance Monorail SWL 2 Ton			No PO		5100034266	
	Area :	Line 10		Tanggal Laporan		26/04/2026	
Note Unit :	Type Unit	Monorail	Wire rope / Chain	Chain	Note Unit :		
	Merk Hoist	BRIMA	Cross Travel	-		Nr. BM180703	
	Type Hoist	BM-02-01D	Long Travel	-			
	SWL	2 Ton	Garansi Info	-			
DETAIL SURVEY / PENGECEKAN / PERBAIKAN							
No.	URAIAN HASIL PEKERJAAN						COMMENT AND INSPECTION RESULT
A	Diskripsi						
	A.1. Informasi / Permintaan dari User atau Customer / Info Trouble :						
	1.	Pekerjaan Preventive Maintenance Monorail SWL 2 Ton					
B	Hasil Pekerjaan			Waktu Pekerjaan			
	1. Progress Pekerjaan			MULAI	FINISH		
	A	Pekerjaan Preventive Maintenance					
	1.1.	Proses pengurusan work permit / koordinasi area		08.30	08.40		
	1.2.	Proses persiapan, mobilisasi Alat kerja		08.40	09.00		
	1.3.	Proses Preventive Maintenance		09.00	11.30		
		» Detail Deskripsi :					
		- Cek kondisi fisik Unit.					
		- Cleaning box chain					
		- Cleaning chain					
		- Cek Gab brake hoist 0,8 mm					
		- Brake hoist ok					
		- Brake cross ok					
		- Lubrikasi gear roda cross					
		- Lubrikasi as brake motor cross travel					
		- Cek diameter chain (9,8 mm)					
		- Cek roda cross ok					
		- Limit up-down ok					
		- Safety lach ok					
		- Guide chain ok					
		- Ditemukan ketika roda cross membawa beban timbul suara kasar pada saat di operasikan cross travel bearing indikasi aus					
		- perbaikan support chain box					
		- cek fungsi limit up-down ok					
		- selesai dilakukan perbaikan chain bucket					
		- Trial					
	1.4.	Proses perapian alat kerja serta pembersihan area kerja		11.30	11.30		
	1.5.	Pembuatan Form laporan dan tanda tangan Laporan		11.30	11.45		
	1.6.	Pemindahan alat kerja kelokasi line 15		11.45	12.00		
	1.7.	SELESAI			12.00		
	2. Penggantian Part yang Sudah Dilakukan						
	NO	ITEM	SPESIFIKASI	QTY	SATUAN	Keterangan tambahan	
	1.						
	2.						
	3. Kesimpulan						
	3.1.	- Kondisi unit hoist dalam keadaan normal dan bisa digunakan kembali dengan baik.					
	3.2.	- Kondisi roda cross travel terlihat mulai aus analisa awal beban mendekati SWL diperlukan upgrade					
	3.3.	- Chain bucket sudah selesai dilakukan Perbaikan dan berfungsi dengan baik					
	4. Action Plan						
	4.1.	Next PM					
	4.2.	Pengecekan berkala kondisi roda cross dan rekomendasi untuk upgrade hoist					

5. Rekomendasi Part						
	NO	ITEM	SPEKIFIKASI	QTY	SATUAN	Keterangan tambahan
	1	UPGRADE HOIST (REK AGT 2025)	HOIST BRIMA ELECTRIC CHAIN HOIST SWL 3 TON + TROLLEY	1	SET	Beban yang diangkat mendekati SWL 2 ton
						
	2	Kampas brake cross travel (REK NOV 2025)	Brima 2T. BM 02 -01 D SINGLE SPEED DPC-02	1	PCS	kampas mulai aus rekomendasi untuk spare
						
	3	Bearing roda cross travel (REK JAN 2026)	BRIMA SWL 2TON	4	PCS	Beban yang diangkat mendekati SWL 2 ton roda bersuara kasar saat beban full
						
C	Dokumentasi Hasil Pekerjaan					Keterangan tambahan
	C1. PENGECEKAN ELECTRICAL MONORAIL					
	1.1. Cek komponen dan terminal electrical hoist OK		1.2. Cek komponen dan terminal electrical cross travel OK			
						
	C2. PENGECEKAN BRAKE					
	2.1. Pengecekan kondisi brake OK dan gap brake 0,8 mm OK					
						

	2.2. Pengecekan kondisi brake cross sudah aus / tipis dan cek shaft OK																											
																												
	C3. PENGECEKAN LOAD CHAIN DAN HOOK																											
	3.1. Kondisi guide chain dan limit switch OK	3.2. pengecekan dan lubrikasi load chain OK																										
																												
	3.3. Kondisi chain box ditemukan pengait bagian belakang Patah dan sudah dilakukan perbaikan	3.4. Dimensi chain 9,7mm																										
																												
	C.3.5. Standart dimensi Chain																											
	(a) Chain Any distorted, extended, or worn chain will not be good locked with chain wheel, result in the breakdown or disengaging of the chains. To ensure the safe and normal operation, the internal length and width, external width of the chain must be checked monthly. If in the following situation, the chain must be replaced. 1)The internal length of the chain (p) is worn and extended 5% higher than the values as listed in Table 6.1 2) The wearing of the diameter of the chain link (d) is lower than the value listed in table 6.1 (The wearing of nominal diameter reaches 10% higher than the original one) ***** When the wearing of chain is high, be sure to confirm the wearing of the chain wheel and chain guide ***** <table><tr><th>Diameter (mm) (d)</th><th>Capacity (ton)</th><th>Internal length (mm) (p)</th><th>Internal width (mm) (a)</th><th>External width (mm) (b)</th></tr><tr><td>6.3</td><td>0.3, 0.5</td><td>19</td><td>7.5</td><td>20.5</td></tr><tr><td>7.1</td><td>1, 2, 3</td><td>21</td><td>8,9</td><td>23</td></tr><tr><td>10.0</td><td>1.5, 2, 3</td><td>30</td><td>12.5</td><td>33</td></tr><tr><td>11.2</td><td>2.5-7.5</td><td>34</td><td>14</td><td>37.2</td></tr></table> Table 6.1		Diameter (mm) (d)	Capacity (ton)	Internal length (mm) (p)	Internal width (mm) (a)	External width (mm) (b)	6.3	0.3, 0.5	19	7.5	20.5	7.1	1, 2, 3	21	8,9	23	10.0	1.5, 2, 3	30	12.5	33	11.2	2.5-7.5	34	14	37.2	berdasarkan standar di samping maka batas limit sbb : diameter 10,0mm-(10%$\times$10,0)=9,0 mm internal link 30mm+(5%$\times$30mm)=31,5 mm
Diameter (mm) (d)	Capacity (ton)	Internal length (mm) (p)	Internal width (mm) (a)	External width (mm) (b)																								
6.3	0.3, 0.5	19	7.5	20.5																								
7.1	1, 2, 3	21	8,9	23																								
10.0	1.5, 2, 3	30	12.5	33																								
11.2	2.5-7.5	34	14	37.2																								

C4. PENGECEKAN RODA DAN GUIDE ROLLER		
4.1. Kondisi roda non drive cross indikasi mulai ada keausan (masih dalam batas toleransi)	4. Kondisi roda drive cross dan lubrikasi roda drive OK	
		
5. Kondisi roller guide cross dan pin pengunci OK	6. Kondisi roller guide cross dan pin pengunci OK	
		
C6. PERBAIKAN CHAIN BUCKET		
1. Proses Perbaikan	2. Proses Pemasangan ulang	
		Proses repair support chain bucket

D	Keterangan		
	Hasil Pengecekan Hoist		
	Ampere Speed 1 / speed 2	Resistansi	
	R. 4,8/3,5 A	UV : 7,4 / 2,7 Ω	
	S. 4,9/3,6 A	UW: 7,3 / 2,7 Ω	
	T. 4,9/3,7 A	VW: 7,3 / 2,8 Ω	
	Hasil Pengecekan Cross		
	Ampere Speed 1 / speed 2	Resistansi	
	R. 1,4 A	UV : 38,0 Ω	
	S. 1,5 A	UW: 29,0 Ω	
	T. 1,6 A	VW: 38,0 Ω	
	Hasil Pengecekan Long		
	Ampere Speed 1 / speed 2	Resistansi	
	Note :		
	Proses pengecekan fleksibel dengan operator dikarenakan kondisi area sedang produksi agak padat		
E	Lampiran		
	E.1. Form Maintenance		
	Mengetahui		
	Teknisi	SPV	USER
	Choirul		P. Nurwahid

E.1. Form Maintenance



HELINDO tech Indonesia

Head Office : Jl. Industri I Ragam Jemundo Blok B1/B, Desa Jemundo, Kec. Taman, Kab. Sidoarjo
 Phone Office : (031) 7870217 Fax. : (031) 7887284
 Branch Office : Pergudangan BIZ Point 5 Cikupa, Jl. Queensland No. 05, Desa. Sukamulya, Kec. Cikupa, Kab. Tangerang, Banten
 Phone Office : (021) 7870217-8 Email : gthelindotech@gmail.com Website : www.helindotechindonesia.com



Customer : PT. MULTI SPUNINDO JAYA

Technician : CHOIRUL, JUKI

Problem info : MAINTENANCE HOIST

(.....)

FORM MAINTENANCE

☐ Double Hoist
☒ Chain Hoist
☐ Rope Hoist

☒ Crane
☐ Cargolift
☐ Others

Service report number :

Urgent / Monthly / Yearly / Commissioning

Date : 23 / 09 / 2026

Status Unit

OK

WARNING

URGENT

NOTE :

Model : Double Girder / Single Girder / Monorail

Serial No. : 1 RM-02-010 2 RM-0203

SWL : 1 2 TON 2

Area : LINE 10

Location : PRODUKSI

Working Condition : KETIDAKSIKAPAN

Brand Unit : BRIMA

Brand Hoist / Type : RM 02 - 01 D

Brand Cross / Type : DPC 02

Brand Long / Type :

Control Voltage : 48 VOLT

Brand Power Conductor / Type :

No.	ITEM	1	2	3	4	5	6	7
1	GIRDER							
1	1. Gider Construction							
2	2. Joint Plate Bolt							
3	3. Track Support Bolt							
4	4. Fastener Support Bolt							
5	5. Profile C-track							
6	6. Cable Trolley							
7	7. End Cable Clamp							
8	8. Towing Trolley							
9	9. Pendant Trolley							
10	10. End Stop							
2	ENDCARRIAGE							
1	1. Wheel							
2	2. Buffer 1,2,3,4							
3	3. Travel Drive Motor							
4	4. Travel Drive Brake							
5	5. Travel Drive Gear							
3	CABLE PENDANT							
1	1. Emergency Stop							
2	2. Cover							
3	3. Battery							
4	4. Switch on/off							
5	5. Rubber Bottom							
6	6. Legend							
7	7. Element Switch							
8	8. Receiver/Transmitter							
4	POWER RAIL							
1	1. Power Rail							
2	2. Bracket							
3	3. Current Collector							
4	4. Joinner							
5	5. Hanger							
6	6. Feed box							
7	7. Towing Long / Guide							

No.	ITEM	1	2	3	4	5	6	7
5	HOIST							
1	1. Wire Rope/CHAIN							
2	2. JAWBOK CHAIN							
3	3. Rope anchorage							
4	4. Rope Guide CHAIN							
5	5. Rope Guide Spring							
6	6. Holding Motor							
7	7. Holding Brake							
8	8. Holding Gears							
9	9. Holding Lubrication							
10	10. Holding Frame							
11	11. Gear Box							
12	12. Bottom Block							
13	13. Safety Latch							
14	14. Hour Meter							
15	15. Roller Counter Weight							
16	16. Towing Cross / Guide							
6	SAFETY DEVICE							
1	1. Hoist Upper Limit Switch							
2	2. Hoist Lower Limit Switch							
3	3. Hoist Overload Protection							
4	4. Hoist Overheat Protection							
5	5. Long Travel Limit Switch							
6	6. Cross Travel Limit Switch							
7	CABLES							
1	1. Hoist Power Cable							
2	2. Hoist Control Cable							
3	3. Hoist Pendant Control Cable							
4	4. Pendant Control Cable							
5	5. Travel Drive Power Cable							
8	CONTROL							
1	1. Hoist Control Panel							
2	2. Bridge Panel							

No.	ITEM	1	2	3	4	5	6	7
13	TROLLEY 1							
1	1. Trolley (crab) Motor							
2	2. Trolley (crab) Brake							
3	3. Trolley Gears							
4	4. Trolley Gears Lubrication							
5	5. Trolley (crab) Wheel							
6	6. Drive Shaft							
7	7. Trolley Buffer 1,2,3,4							
14	TROLLEY 2							
1	1. Trolley (crab) Motor							
2	2. Trolley (crab) Brake							
3	3. Trolley Gears							
4	4. Trolley Gears Lubrication							
5	5. Trolley (crab) Wheel							
6	6. Drive Shaft							
7	7. Trolley Buffer 1,2,3,4							
15	VOLTAGE TEST							
1	1. Voltage Control Bridge Panel							
2	2. Voltage Control Hoist							
16	RUN WAY							
1	1. Rail Dimension							
2	2. Rail Check							
3	3. Stopper Cross							
17	OTHER							
1	1. CH Wireless							
2	2. SN Wireless							
3	3. Type Wireless							
4	4. Junction Box							
OTHER INFORMATION								
REPORT								
1. OK 4. Repair 7. Adjust								
2. Warning 5. Replace								
3. Urgent 6. Lubricate								

Telah selesai dilakukan pengecekan :

1. CKE BRABOTER CHAIN	6. CKE FUNGSI LIMIT HOIST
2. LUBRIKASI CHAIN	7. CKE FUNGSI BRAKE CROSS
3. LUBRIKASI GEAR RODA CROSS	8. CKE FUNGSI BRAKE HOIST
4. LUBRIKASI AS GEAR RABOT HOIST	9. KAMPAS BRAKE CROSS MULAI AS
5. KAMPAS RODA CROSS MULAI AS	10. PERDAMIAN SUPPORT CHAIN BOX

Kondisi saat ini : HOIST DAPAT DI OPERASIKAN DENGAN NORMAL

NOTE : AMPERE HOIST CROSS

R = 9.8 / 3.5 A	R = 1.9 A
S = 4.9 / 3.6 A	S = 1.5 A
T = 4.8 / 3.7 A	T = 1.6 A

Spare parts are replaced

No.	Description	Part No	QTY
1			
2			
3			
4			
5			
6			

We Recommended you to Order

No.	Description	Part No	QTY
1	BEARING RDA CROSS 6304-205	4	per per
2	KAMPAS BRAKE CROSS DPC 02		
3			
4			
5			
6			

Service Technician

[Signature]

This client was informed about the found detected and the danger resulting there from

WORKING HOURS

[Signature]

Customer

[Signature]