Structure
of Gate
Results
Survey

Gate No.	W19	(Main Weir Gate)	sir Gate)	ł					
Survey	Survey ilem		Survey Result	Judge	Survey Item	v Item	Survey Result	20	Judge
Cate Leaf				Ť	Hoisting Device				
Plate	Thickness-Avg	Top 10.0 M	Top 10.0 Mid 10.0 Low 9.8 Bim 9.2 (9.5ml	IJ	Wire Rope	Main-Left	y - Distartion: - Corrosion;	_ I	
	Corresion	U/S-Bottom	r w S	1		Main-Right	y: - Distortion: - Corrosion		<u>ح</u>
	Ivet	Corner-4	. Corner-R -	1		Roller Train-L	y: - Distortion: - Corrosion:	r = 0it-	
Truss		Bottom Flange	Bottom Flange 18.9, Bottom Web 18.3 (19.1mm)	0		Roller Train-R	y: - Distortion: - Corrosion:	r – <i>Oit-</i>	
	Distortion			Īī	Drem	Left	Damage: – Function:		RS
End Guder	Thickness-Avg	2-Bollom 5	9.9, R-Bollom 10.4 (11.1mm)	U		Right	Damage: - Function:	1	
		Left No	Aught No	«	Bearing	Drum	Damage: Oil:		
	Oistoriion	Lett -	- Mon			Counter Shaft	Damage: - Oil; -		RS
Battom	Thickness-Avg	Flange 14.6	Flange 14.6 mm (16.3), Web 9.5 mm (9.4)			Reduction Gear Damage:	Damage: Oii: -		
Girder	Corrosion		r 🕲 s		Gear	Drum Gear-L	Damage: – Fitting: – Backlash:	- 01: -	ß
Rocker	Remodeling	Left No	Right No	-		Drum Pinion-L	Damage: -		
Assembly	Distortion	- <i>tet</i> -	Right –			Drum Gear-R	Damage: – Filling: – Backlash;	ish; - Oil; -	
	Others		No Function			Orum Pumon-R Damage:	Damage: ~		
Boller Train		- 101	Aight -			Gear-Middle	Damage: – Finng: – Backlash:	18h: - Oil: -	
	Ousmeter-Roller Average		- mm	F		Pinion-Middle	Demage:		
	Distortion	Left -	Hight -		Basement	Drum-L	Damage: - Corrosion:	© M J	
	-		1			Drum-A	Damage: - Corrosion:	O W 7	
	Bottom					Drive Davice	Damage: - Corrosion:	s 🛞 7	HS SH
	Roh		-	-	Drive Chain		Damage; – Looseness:	- 01:-	
Inclination		Top Level L	Top Level Difference 0 mm	→	Chain Sprocket	cket	Damage: – Corrosion:	r 🕅 S	
aakana			- W ()	0	Reduction Gear	Sear	Damage: - Corrosion:	r 🕲 s	
E.					Cover	Drum-L	Damage: - Corrosion:	с м ©	
Side Seal	Abrasion-Max	reft: -	mm, Right: – mm	ВS		Drum-R	Damage: - Corrosion:	г м ©	
Roller Truck	Roller Truck Abrasion-Max	Loft: -	mm, Aıghi: – mm	륟		Gear-Middle	Damege: - Corrosion:	s 🛞 7	
Roller Guard Missing	d Missing	1.611 0	Right 0	z	Counter Shaft	aft	Damage: - Corrosion:	7 M S	
	Delect	184 0	Rigni 0	z	Counter Weight	sight	Damage: – Corrosion:	r M S	BS
Sill Beam	Abrasion		© w 7	RS SH	Hoisting	Wet Condition	52.5 kg·m		E Contraction of the second seco
Concrete	Damaga·Left		s (29) 7	ÅS	Torque	Dry Condition	9.9 kg-т		
	Damage-Right		s @ 7	ЯS	Superstructure	-	Damage: - Corrosion:	() () () () () () () () () () () () () (Rs States and States
·····	Damage-Bottom		r 🕲 S	RS					

shows design dimension.

Remarks: Judgement = N: Totaty Replace, C: Parity Replace, RL: Large Repar, RM: Medium Repair, RS: Small Repar, G: No Repair, -: No Data.

(27/96)

e Structure
s of Gate
Results
Survey

(Main Weir Gate)	
W20	
Gate No.	

Journey Intenti Journey Intention	0410100	7711							ŀ	
Lut Lut <thlut< th=""> <thlut< th=""> <thlut< th=""></thlut<></thlut<></thlut<>	Sur	rey item		Judge	Surve	y (tern	Sur	ey Result	Judge	Photograph
Am Plane Three meansing Three meansind Three meansing Three meansi	Gate Leaf			r	oisting Device					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Skin Plate		Top - Mid - Low - Bim 8.8 (9.5mm)	U	Wire Ropa	Main-Left	- Distortion:		U	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Corrosion	н г	1		Main-Right	- Distortion:	- 1	J	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Damage-Rivet	- Corner-R	I		Roller Train-L	1		0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Truss	Thickness-Avg	T			Roter Train-R	- Distortion:	1	υ	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distorion		1	Que W	Left	Damage: -	Function: +	SF	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	End Groge		1			Richt			ج-	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Remodeling	Left No	←	Bearing	Dvum	ι	Oii: -	->	
Better Tractonessary Parget 50 mm (16.1), Web 51 mm (16.1), We		Distortion	,			Counter Shaft	Damage: –	Oii: -	ßS	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Bottom	Thickness-Avg	Flange 15.0 mm (16.3), Web 9.1 mm (9.4)			Reduction Gear	1		<u>ں</u>	
Ruceur Randominy Left No Rayth Dum Pronon.L Damage: Fring: Bacutabr: Oli Pring: Bacutabr: Oli Pring: Bacutabr: Oli Pring: Bacutabr: Oli Pring: Bacutabr: Oli Prind: All Prind: Prind: All Prind: All Prind: Prind: All Prind: All Prind: P	Girder	Corrosion	€		Gear	Drum Gear-L	- (- Backlash: - Oil:	В, S	
Assention Left In Ritroin Left Ritroin	Rocker	Remodeling				Drum Pinion-L	Damage:		<-	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Assamoly		t m Broken			Drum Gear-R	÷	- Backlash: - Oil:		
Role Train Massop Left Rop: - Rop:		Others	No Function			Drum Pinion-R	Damage: -			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Roller Tra	in Missing	1			Gear-Middle	Т	- Backlash: - Oil:		
Total Left - Right Lumb, R Dumber - Conson L M <thm< td=""><td></td><td>Diameter-Rotler</td><td>- agerave</td><td></td><td></td><td>Pinion-Middle</td><td></td><td></td><td></td><td></td></thm<>		Diameter-Rotler	- agerave			Pinion-Middle				
Seal Left - - N Damage: - Conceon: L \bigcirc \checkmark Reiton - - - - - Dive Dewos Damage: - Conceon: L \bigcirc \checkmark Reiton - - - - D Demosen: L \bigcirc R Inclination Top Lowel Difference 0 M S C Demage: - Concerns: L \bigcirc R Inclination 1 Top Lowel Difference M S D Demage: - Concerns: L \bigcirc R Anasion-Max Left: - m R D		Distortion	100 - Hight	<u> </u>	Basement	טיישיי	1	мŢ		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Seal	tett	1	<u> </u>		Drum-R	1	r M	->	
		Bottom				Drive Device	1	۲ ®	SA	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Aight	à		Drive Chain		1	٦ ۲	ა	
kage Image Image <th< td=""><td>Inclination</td><td></td><td>Top Level Difference 20 mm</td><td>-></td><td>Chain Sproc</td><td>ket</td><td>1</td><td>S ''</td><td>←</td><td></td></th<>	Inclination		Top Level Difference 20 mm	->	Chain Sproc	ket	1	S ''	←	
Side SealAvrauon-MaxLeft: $-$ mm.Right: $-$ mm.Right: $ mm$ Right: $ mm$ Right: $ mm$ $Right:$ $ Right:$ $ Right:$ $ Right:$ $ Right:$ $ -$ <	Leakage		z	v	Reduction G	ear		® 7		
Advasion-MaxLeft: $ mn$. Right: $ mn$. $Right:$ $ mn$ $Right:$ $ Conceson:$ L M S MissingLeft l $Right:$ $ mn$ $Right:$ $ mn$ $Right:$ $ Missing:$ $ Conceson:$ L M S DefectLeft l $Right:$ N N Counter Neight $Damage:$ $ Conceson:$ L M S AbrasionLeft l $Right:$ N N Counter Neight $Damage:$ $ Conceson:$ L M S AbrasionL M S N N Counter Weight $Damage:$ $ Conceson:$ L M S AbrasionL M S N N N N N N N N AbrasionL M S N N N N N N N N N AbrasionL M N <td>Set</td> <td></td> <td></td> <td></td> <td>Cover</td> <td>Drum-L</td> <td>1</td> <td>W 7</td> <td></td> <td></td>	Set				Cover	Drum-L	1	W 7		
k Left: m.n. Right: n.m. Ru Ru Ru Cear.Modile Damage: Controlor L (\mathcal{M}) S S rd Massing Left 0 Right N Counter Shaft Damage: Contosion: L (\mathcal{M}) S S rd Massing Left 0 Right N Counter Shaft Damage: Contosion: L (\mathcal{M}) S S Abrasion Left 1 Right N N Counter Shaft Damage: Contosion: L (\mathcal{M}) S S Abrasion L M S M Counter Shaft Damage: Contosion: L (\mathcal{M}) S S Damage-Left L M S M Contosion L (\mathcal{M}) S M Contosion: L (\mathcal{M}) S M Contosion: L (\mathcal{M}) S D D D D D D D D D D D D D D D D D D D<	Side Seal		- mm, Right; -	ßS		Drum-R	1	W 7	->	
and MissingLeft 0Right 1NCounter ShaftDamage: -Controsion: LMSDefectLeft 1Right 0NCounter WeightDDCounter WeightDNSNSNSNSNSNSNNSNNSNNSNSNNSNNSNNSNNN <td>Roller True</td> <td>ck Abrasion-Max</td> <td>- mm, Right: -</td> <td>ž</td> <td></td> <td>Gear-Middle</td> <td>1</td> <td>3</td> <td>o</td> <td></td>	Roller True	ck Abrasion-Max	- mm, Right: -	ž		Gear-Middle	1	3	o	
Defect Left 1 Right 0 N Counter Weight Damage: - Conston: L M S Abrason L M S - Hoisting Wet Condition 61.2 kg-m Damage-Left L M S RS Ver Condition 61.2 kg-m Damage-Left L M S RS Torque Dry Condition 3.9 kg-m Damage-Left L M S RS Superstructure 0.3.9 kg-m Damage-Left L M S RS Superstructure 0.3.9 kg-m	Roller Gua	Vid Missing	0	z	Counter Sha	ħ	ı	W 7	U	
Abreasion L M S — Housting Wet Condition 61.2 Ng·m Damage-Left L M S RS Torque Dry Condition 3.9 Ng·m Damage-Right L (M) S RS Superstructure Damage: - Corrosion: L M Damage-Bottom L (M) S RS Superstructure Damage: - Corrosion: L M		Defect	-	z	Counter Wei	ght	ł	т м Т	RS	
Damage-Lett L M M RS Torque Dry Condition 3.9 Ng· m Damage-Right L M S RS Superstructure Damage: - Corrosion: L M Damage-Bottom L M S RS Rs Restructure Damage: - Corrosion: L M	Sill Beam	Abrasión	W	1	Hoisting	Wet Condition	61.2	kg.m	Ъ	
L C S RS Superstructure Damage: - Corrosion: L M S	Concrete	Damage-Left	W	RS	Torque	Dry Condition	3.9	kg·m	ŝ	
5 🛞 7		Damage-Right	۲		uperstructure		1	¥ ۲	ß	
		Damage-Bottom	کی ا	S ^R						

Remarks: Judgement = N: Totally Replace, C: Party Replace, RL: Large Repar, RM: Medium Ropar, RS: Small Repart, G: No Repair, -: No Data.

shows design dimension.

(28 / 66)

Y.T. -

(Main Weir Gate)
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W21 (
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Gate No.	W21	(Main Weir Gate)						(qg / g7)
Surve	Survey Item	tesult	judge	Survey Item	Item	Survey Result	Judge	Photograph
Gale Leal			T.	Hoisting Device				
Skin Plate	Thickness-Avg	Top - Mid - Low - Bim 9.3 (9.5mm)	o	Wire Rope	Main-Left	y, – Distortion; – Corrosion; – Dil; –	U	
	Corrosion	U/S-Battom L. M S			Main-Right	y: - Distortion: - Corrosion: - Oil: -	<u>ु</u> ः ७	
	Damage-Rivet	Corner-L - Corner-R -	1		Haller Train-L	y: - Distortion: - Corrosion: - Oil: -	v	
Truss	Thickness-Avg	Bottom Flange 18.2 , Borrom Web 18.3 (19.1mm)	υ		Roter Train-R	y: - Distortion: - Corrosion: - Oit-	υ	
	Distortion		1	0cm	Left	Damage: – Function: –	S.	
End Groer	Thickness-Avg	L-Bottom 10.2, R-Bottom 11.3 (11.1mm)	υ		Right	Damage: - Function: -	<u></u>	
	Remodeling	Left No Right No	<u>ڊ</u>	Bearing	Drum	Damage: – Oil: –	->	
	Distortion	Left - Right -			Counter Shaft	Damage: – Oil: –	AS	
Bottom	Thickness-Avg	Flange 15.0 mm (16.3), Web 10.0 mm (9.4)			Reduction Gear Damage:	Damage: – Oil: –	0	
Girder	Corrosión	© w 7		Gear	Drum Gear-L	Damage: – Fiting: – Backlash: – Oil: –	RS	
Rocker	Remodeling	Left No Right No			Orum Pinion-L	Damage:	<	
Assembly	Distortion	Lett - Right -			Drum Gear-R	Damage: - Pitting: - Backlash: - Oll: -		
	Others	No Function			Drum Pinion-R Damage:	Damage: -		
Roller Train Missing	Missing	Left 2 Right 1	-		Gear-Middle	Damage: - Fiting: - Backlash: - Oil: -		
	Diameter-Roller	Averaça – mim			Pinion-Middle	Damage: –		
	Distortion			Basement	Orum L	Damage: – Corrosion, L M 🕥		
Seal	Left				Orm-R	Damage: – Corrosiori: L M 🕥	->	
	Bottorn		-		Drive Device	Damage: Corrosion: L 🕅 S	ÅS	
	Right	l		Drive Chain		Damage: – Loosoness: – Ôil: –	v	
Inclination		Top Level Difference 115 mm	→	Chain Sprocket	ket	Damage: - Corrosion: L (B) S	<	
Leakage		s w O	o	Reduction Gear	iear	Damage: - Corrosion: L 🕑 S		
Sul				Cover	Drum·L	Damage: - Corrosion: L M 🕥		
Side Seal	Abrasion-Max	Lett: - mm, Right: - mm	RS		Drum-R	Damage: 🛥 Corrosion: L M 🕥	→	
Roller Truch	Roller Truck Abrasion-Max	Lett: - mm, Right: - mm	ά		Gear-Middle	Damage: Corrosion: L 🕑 S	0	
Roller Guard Missing	rd Missing	Lett O Right 1	z	Counter Shaft	aft.	Damage: - Corrosion: L M S	<u>ں</u>	
	Defect	Left 1 Right 1	z	Counter Weight	ight	Damage: – Corrosion: L M S	RS	
Sill Beam	Abrasion	5 🕢 7	z	Hoising	Wet Condition	28 kg-m	0	
Concrete	Damage-Left	S w Q	RS	Torque	Dry Condition	5.9 kg.m	SE	
	Damage-Right	s w O	RS	Superstructure		Damage: – Corrosion; L M 🕥	SR S	
	Damage-Bottom	2 2 1	ß					

Remarks: Judgement = N; Totally Replace, C: Partly Replace, RL: Large Repar, RM: Medium Repar, RS: Small Repar, G: No Repar, -: No Data.

) shows design dimension.

(29 / 96)

Structure	
of Gate	
Results o	
Survey	

Gate No. W22 (Main Weir Gate)

Jame Jame <th< th=""><th>Gate No.</th><th>W22</th><th>(Main Weir Gate)</th><th>Ì</th><th></th><th></th><th></th><th></th><th></th></th<>	Gate No.	W22	(Main Weir Gate)	Ì					
The constraint The constraint Contrast Contras Contrast Contrast<	N.	rvey Item		Judge	Survey	ltem	Survey Result	Sudge	- notograph
and Thereases, No Top is the control of the contr					oisting Device				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Skin Plate		- 101 -	U	Wire Rope	Main-Left	- Distortion: - Corrosion: -		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Corrosion	L M	I		Main-Right	– Distortion: – Carrosion: +		
Theorems Ang Report Townson Control Control </td <td></td> <td>Damage-Rivet</td> <td></td> <td>1</td> <td></td> <td>Roller Train-L</td> <td>- Distortion: Corrosion:</td> <td>•</td> <td></td>		Damage-Rivet		1		Roller Train-L	- Distortion: Corrosion:	•	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Truss	Thickness-Avg	Bortom Flange 18.5 , Bottom Wab 18.6 (19 1mm)	1			- Distortion: - Corrosian: -	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distorion		1	Drum	Left	- Function:	RS	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	End Grde		L-Boliom 10.3, R-Boliom 9.7 (11.1mm)				1	< ←	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				<	Bearing	Drum		/ _ →	
Bittom Traconstaction Random care Low Damage - Oit - Grade Carresion La \emptyset S Down Carresion Left Beaduach Damage - Oit - Oit - Oit - Oit - - Oit - Oit - Oit - - -		Distortion	6			Counter Shaft	1	RS	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Bartam	Thickness-Avg	Flange 14.5 mm (16.3), Web 9.2 mm (9.4)			Reduction Gear	- OH	0	
Rundom Loft No Right No Lond Prinoni, Loft - Right - Our Bandor Loft - Right - Our Caser R Damage: Filling: - Sectisity: OL Assentity Description Left - Right - Right - OL Dimage: Filling: - Sectisity: - OL Assentity Description Left - Right - Right - Right - Dimage: Filling: - OL - OL - OL - OL - Dimage: - OL - Dimage: - OL Dimage: - OL - Dimage: - OL Dimage: - Dimage: - Dim Dimage: Dim Dimage: Dim<	Gerder	Corrosion	8		Gear	Drum Gear-L	– Fitting: – Baoklash: – Oil:	RS	
Asservely Description Left Right Demoge Fitting: Labolast: $O(L)$ Kolers No Kurcion Left No Kurcion Left Right: $O(L)$ Kolers No Kurcion Left Right: $O(L)$ Demoge Fitting: Elsectuant: $O(L)$ Solid Left Right: $O(L)$ Demoge Fitting: Elsectuant: $O(L)$ Discontin Left Right: $D(L)$ Demoge Elsectuant: $O(L)$ Solid Lot $D(L)$ $D(L)$ Demoge Elsectuant: $O(L)$ Solid Left Right: $D(L)$ Demoge Elsectuant: $O(L)$ Right: D $D(L)$ Demoge Elsectuant: $D(L)$ $D(L)$ $D(L)$ $D(L)$ $D(L)$ Solid Elsectuant D(L) Demoge Elsectuant: $D(L)$ $D(L)$ $D(L)$ $D(L)$ $D(L)$ $D(L)$ $D(L)$ $D(L)$ $D(L)$ <	Rocker	Remodeting	No			Drum Pinion-L	Damage: –	~	
Cines No Function Count Printion R Demage: - Fining: - Bookuarit: - Ok - Right - Roler Train Nutsting Left - Right -	Assembly					Drum Gear-R	– Fining: – Backlash: – Oil:		
Rolier Train Loft Raph Clear-Madelie Demager Frittor: Backmann Out L Polocian L M Soli Distortion L R Distortion L M Soli Soli Distortion L M Distortion L M <t< td=""><td></td><td></td><td>Na Function</td><td></td><td></td><td>Orum Pinion-R</td><td>Овтаде:</td><td></td><td></td></t<>			Na Function			Orum Pinion-R	Овтаде:		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Roller Tra	UN MISSING				Gear-Middle	– Fining: – Backlash: – Oil:		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Dameter-Roller	Average -			Pinion-Middla			
		Distorion	Latt - Right		Basement	Drum-L	- Corrosion: L M		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Seal	Left			-	Drum-R	- Corrosion: L M	→	
Reprise Incluration Reprise Incluration Damage: Locentes: Oit Incluration Incluration Top Level Difference 20 mm V Participant Damage: Locentes: - Oit - Oit - Oit S Kage Incluration V V Coan Spooter Damage: Locentes: Locentes: - Oit<-		Bottom				Drive Device	- Corrosion: L 🕅	RS	
		Right			Drive Chain		- Loosaness; - Oil:	o	
kage Image Image <th< td=""><td>Inclimation</td><td></td><td>Top Level Difference 90 mm</td><td>-></td><td>Chain Sproch</td><td>et</td><td>- Corrosian: L 🕲</td><td>•</td><td></td></th<>	Inclimation		Top Level Difference 90 mm	->	Chain Sproch	et	- Corrosian: L 🕲	•	
Side SealAcrasion-MaxLeft: $ mm$ RSCover $Drum-R$ $Damage:$ $-$ Conston: L M \odot Roller TruckAbrasion-MaxLeft: $ mm$, Right: $ mm$ RS $Dum-R$ $Damage:$ $ Conston:$ L M \odot Roller TruckAbrasion-MaxLeft: $ mm$, Right: $ mm$ RL $ Conston:$ L M \odot Roller TruckAbrasion-MaxLeft 0 Right $ mm$ RL $ Conston:$ L M \odot Roller CuerdMissingLeft 0 Right $ mm$ RL $ Conston:$ L M \odot Roller CuerdMissingLeft 0 Right N N Counter Yanght $Damage:$ $ Conston:$ L M \odot Roller CuerdMassionLeft 0 Right N N Counter Waipht $Damage:$ $ Conston:$ L M \odot Sill BeamAbrasionL M S N N N O O M N $ O$ O M $ Conston:$ L M S Sill BeamAbrasionLL M S N N $ O$ O N $ O$ O N $ O$ N $ O$ N $-$ <td>Leakage</td> <td></td> <td>W</td> <td>U</td> <td>Reduction G</td> <td>ar</td> <td>– Corrosian: L 🕅</td> <td></td> <td></td>	Leakage		W	U	Reduction G	ar	– Corrosian: L 🕅		
Acrasson-MaxLeft: $ mn$, $Right:$ $ mn$ $Right:$ $ mn$ $Right:$ $ mn$ $Right:$ $ mn$ $Right:$ $ M$ M	Siși				Cover	Drum-L	- Corrosian: L M		
x Abrasion-Max Left $ mn$, $Right$: $ mn$ HL $Counter Shaft$ $Damage: Conscion:$ L () S S rid Missing Left 0 $Right$ N Counter Shaft $Damage: -$ Concosion: L () S S Detect Left 0 $Right$ N Counter Shaft $Damage: -$ Corrosion: L () S S Detect Left 0 $Right$ 0 N Counter Waipn Damage: - Corrosion: L () S S Abrasion L M S I Met Condition 21.5 $Kg·m$ N Damage-left L M S Provide Damage: - Corrosion: L M S Damage-left L M S Net Condition 3.1 $Kg·m$ S Damage-left L () S RS Superstructure Damage: - Corrosion: L M S Damage: L L () S S Damage: -<	Side Seal	•	– mm, Right: –	å		Drum-A	Carasian: L M		
Ind Left 0 Right 1 N Counter Shaft Damage: - Corrosion: L M S Detect Left 0 Right N Counter Waight Damage: - Corrosion: L M S Detect Left 0 Right N Counter Waight Damage: - Corrosion: L M S Abrasion L M S - Housting Wet Condition 31.5 Kg·m N Damage-Right L M S RS Aprestructure Damage: - Corrosion: L M S Damage-Right L W S RS Superstructure Damage: - Corrosion: L M S	Roller Tru	ick Abrasion-Max	– mm, Right: 🐭	Ъ	-	Gear-Middle	- Corrosian: L	U	
Detect Left 0 Rght N Counter Weight Damage: - Constont L M S Abrasion L M S - Photisting Wet Condition 31.5 Kg·m -	Roller Gu	ard Missing	0	z	Counter Sha	t.	- Carrosian: L M	<u>ی</u>	
Abrasion L M S - Moising Wet Condition 31.5 Kg·m Damage-Left L M S RS Torque Dry Condition 3.1 Kg·m Damage-Right L (i) S RS Superstructure Damage: - Contrainsin: L M (i) Damage-Bottom L (i) S RS Apprenticutive Damage: - Contrainsin: L M (i)		Detect	0	z	Counter Wei	ht	- Corrosion: L M	RS	
Damage-Left L M S RS Torque Dry Condition 3.1 Ng·m Damage-Right L (M) S RS Superstructure Damage: - Corrosion: L M S Damage-Bottom L (M) S RS Superstructure Damage: - Corrosion: L M S	Sill Beam			Ι	Hoisting	wet Condition		FL	
Damage-Right L 🛞 S RS Supersitucture Damage: - Corrosion: L M 🕥 Damage-Bottom L 🕲 S RS	Concrete		W	RS	Torque	Dry Condition	wō-w	RS	
s 🛞 7			۲	RS	superstructure		Corrosion: L M	RS	
		Damage-Bottom	8) 7	βS					

Remarks: Judgement = N. Totally Replace, C: Parly Replace, RL: Large Repar, RM: Meourn Repar, RS: Small Repair, G: No Repar, -: No Data. () shows dosign dimension.

(30/96)

Structure
of Gate
Results c
Survey

Top - Mid - Low - Bim 9.0 (9.5mm) U/S-Bottorn L M S U/S-Bottorn L M S Conner-L Conner-R Conner-R Bolton Flange 18.7, Bottorn web 18.7 (19.1mm) Left Conner-R Left Agent No Left Right Left Right

Damage-Bottom L (M) S AS Remarks: Judgement = N: Totally Replace, C: Partly Replace, RL: Large Repar, RM: Medium Repair, RS: Smatt Repar, C: No Repair, -: No Data.

shows design dimension.

(31/96)

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(Main Weir Gato) W24 Gate No.

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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Skin Plat		- 707 -	U	Wire Rope	Main-Left	– Distortion: – Carrosion: –	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Corrosian	L M	1		Main-Right	- Distortion: - Corrosion: -	
Increases Ang Decominance Decomposition 2		Damage-Rivet	 .	1		Roller Train-L	- Distortion: - Corrosion: -	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Truss	Thickness-Avg	Bottom Flange 18.3 , Bottom Web 18.5 (19.1mm)				– Distartion: – Corrosion: –	
Grant Thermosery Landsong		Distorion			e Dr	Left	,	R
	End Gird			U		Right	,	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Left No	e	Веапор	Drum	1	
m TrachessAng Fland of Fland of Targe 157 mm (16.2), Web 8.3 mm (19.4) coloresise Aug Dum Precise Loan of Fland of Targe 157 mm (16.2), Web 8.3 mm (1		Distortion	1			Counter Shaft		RS
v Carrange Landon Landon Landon Landon Landon Landon Landon Landon Landon Contrast	Bottom	Thickness-Avg				Reduction Gear	1	U
er itemager Connectering Latr No Agyr No Dum Prinon-L Damager Filmsy: Connecter Diring = Filmsy: Diring = Filmsy: Diring = Diring = <thdiring =<="" th=""> Diring = <t< td=""><td>Girder</td><td>Corrosion</td><td>2</td><td></td><td>Geär</td><td>Orum Gear-L</td><td>– Fitting: – Backlash: – Oll:</td><td>ß</td></t<></thdiring>	Girder	Corrosion	2		Geär	Orum Gear-L	– Fitting: – Backlash: – Oll:	ß
mutuality Damage: Failung: Damage: Failung: Discussion: O/It r/Tan Missing Loft 0 Right 1 Example: - Chinage: Chinage: - Chinage:	Acker	Remodeling	N			Drum Pinion-L	Damage: -	
	Assembl		0.2 m Broken				- Fiting: - Backlash: - Oit:	
Tran Maserg Left Right i Certa-Modile Damage: Filting: Backelsh: Oli: Discrete Filting: Backelsh: Oli: Oli: Oli: Discrete Filting: Backelsh: Oli: Oli: Oli: Oli: Oli: Contoson: L M S Left - Right - - Right - Contoson: L M S Dimage: - Contoson: L M D			No Function			Drum Pinion-R		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Roller Tr	an Missing				Gear-Middle	– Fining: – Backlash; – Oil:	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		D.ameter-Roller	Average -			Pinion-Middle	Damage: -	
Len Len Chrun. R Damage: - Corroson: L M S Boltom - - - - - Corroson: L M S Boltom - - - - - Corroson: L M S Boltom 700 Level Diffuence 35 mm V Chan Spocket Damage: - Loorson: L M S Anon - - - M S C Corroson: L M S C C Corroson: L M S C C Corroson: L M S C Corroson: L M S C Corroson: L		Distortion	Lett – Right		Basement	Drum-L	- Corrosion: L M	
Bottom - - - - Consider L S Right - - - - - - - Oit- - Oi	Seal	teh				Drum-R	- Corrosion: L M	
Anght - Investore - Investore - Onvestore - Ori - Ori< Ori Ori Ori Ori Ori Ori Ori Ori Ori< Ori< Ori< Ori< Ori Ori< Ori< <th< td=""><td></td><td>Bottom</td><td>1</td><td></td><td> <i>.</i>.</td><td>Drive Device</td><td>- Corrosion: L 🕲</td><td>2</td></th<>		Bottom	1		<i>.</i> .	Drive Device	- Corrosion: L 🕲	2
auton Top Lovel Difference 35 mm Image: - Constant: Left: - Constant: L M S routed Mission-Max Left: - mm. Agnt: - mm. Agnt: - mm. Agnt: - mm. Agnt: - Constant: L M S		Rigni			Drive Chain		- "coseness"	
Image:	Incinate		Top Level Difference 35 mm	→	Chain Sproc	ket	– Corrosian: L 🕅	
SealImage: -Corroston:LMCorroston:	Leakage		W	v	Reduction G	ear	– Corrasion: L 🕅	
Side Seel Abrasion-Max Left: $ mn$. $Right:$ $ -$ <	II.S				Cover	Drum-L	- Corrosion: L M	
A brasson-Max Leff: $ mn$, $Right$ $ mn$ $Right$ $ mn$, $Right$ $ mn$ $Right$ $ Consion:$ L M S Obliciti Left 0 $Right$ N Counter Shaft $Damage:$ $ Consion:$ L M S S M S M S M S S S M S S S M S S S M S M S S M	Side Set		– mm. Aight: –	RS		Drum-R	Corrosion: L M	
Left 0 Right 0 N Counter Shaft Damage: - Consider: L M Left 0 Right 0 N Counter Weight Damage: - Consider: L M Left 0 Right 0 N Vet Condition 38.5 Kg·m L M S Torque DY Condition 36.5 Kg·m L M S RS Superstructure Bringe: - Consider: L M	Hotler Tr		– mm, Right: –	ъ		Gear-Middle	- Corrosion: L 🕅	
Left 0 Right 0 N Counter Weight Damage: - Corrosion: L M S 1 L M S Hoisting Wet Condition 38.5 Kg·m 1-left L M S RS Torque 2N. Condition 38.5 Kg·m -Left L M S RS Torque 2N. Condition 8.6 Kg·m -Rught L M S RS Superstructure Damage: - Contosion: L M S	Rolter G	uard Missing	0	z	Counter Sha	Ħ	- Corrosion: L M	Ū
Abrasion L M S — Hoisting Weit Condition 38.5 <i>kg·m</i> Damage-Left L M S RS Torque Dny Condition 8.6 <i>kg·m</i> Damage-Right L M Superstructure Demage: - Connosion: L M Damage-Bottom L M S RS Superstructure Demage: - Connosion: L M	·····	Defect	0	z	Counter Wei	ght	- Corrosion: L M	S
Damage-Left L M M I Orque Dry Condition 8.6 kg·m Damage-Right L M S RS Superstructure Damage: - Corrosion: L M S Damage-Bottom L W S RS Superstructure Damage: - Corrosion: L M S	Sul Bear		W	1	Hoisting	Wet Condition	1	Å.
Damage-Ruphi L M S Superstructure Demage: - Corrosion: L M S Damage-Boitom L @ S RS	Concrete		¥	RS	Torque	Dry Condition	1	ŝ
s 🛞 1		Oamage-Right	Μ	ß	Superstructure		Corrosian: L M	RS
		Damage-Bottom	8	RS				

Aemarks: Judgement • N: Totally Replace, C: Party Replace, RL: Large Repar, RM: Medum Repar, RS: Small Repar, G: No Repar, -: No Oata.

) snows design dimension.

(32/96)

Structure
of Gate
Results -
Survey

n Weir Gate)
(Main
No. W25
- 27

Gate No	W25	(Main Weir Gate)						(96/2 <u>5</u>)
Surv	Survey Item	tesult	Judge	Survey Item	r Item	Survey Result	Judge	Photograph
Gate Leaf				Hoisting Device				
Skin Plate	Thickness-Avg	Top - Mid - Low - Bim 8.8 (9.5mm)	J	Wire Rope	Main-Left	x - Distortion: - Corrosion: + Oil: -		
		U/S-Bottom L M S	1		Main-Right	y: - Distortion; - Corrosion: - Oil: -	0	
	Damage-Rivet	Comer-L - Coner-R -	I		Rotter Train-L	y: - Distortion: - Carrosion: - Oit-	0	
Truss	Thickness-Avg	Bottom Flange 19.0. Bottom Web 18.7 (19.1mm)	0		Roller Train-R	y: - Distortion: - Corrosion: - Oil: -	U	
	Distortion		1	ш _{ло}	Leit	Damage: - Function; Miss Alignment	RS	
End Girder		L-Boitom 9.4, R-Bottom 9.1 (11.1mm)	v		Right	Damage: - Function: -		
		Lett No Right No	<i>«</i>	Bearing	Drum	Damage: - Oil: -	->	
	Distortion	Lett - Aign -			Counter Shaft	Damage: - Oil: -	RS	
Bottorn	Thickness-Avg	Flange13.2 mm (16.3). Web 8.7 mm (9.4)			Reduction Cear, Damage:	- <i>Oit:</i> -	U	
Grider	Corrosion	s w O		Gear	Drum Gear-L	Damage: - Fitting: - Backlash: - Oil: -	RS	
Flocker	Remodeling	Left No Right No			Drum Pinion-L	Damage: -	<	
Assembly	Distortion	Lett - Right 0.3 m Broken			Drum Gear-R	Damage: - Fitting: - Backlash: - Oil: -		
	Others	No Function			Orum Pinion-R	Damage:		
Roller Train Missing	1 Missing	Lett No.3 Broken Right 2			Gear-Middle	Damage: – Fitting: – Backlash: – Oil: –		
	Diameter-Roller	Average - mm			Pinion-Middle	Damage:		
	Distortion			ີ່ມີລະຍາກເຂົ້າເ	Drum-L	Damage: – Corrosion: L M 🕥		
Seal	Len	\$			Drum-R	Damage: - Corrosion: L M 🕥	>	
	Bottom				Drive Device	Damage: - Corrosion: L 🕅 S	RS	
	Right	*		Orve Chain		Damage: - Looseness: - Oil: -	v	
Incination		Top Level Difference 80 mm	- >	Chain Sprocket	tket	Damage: - Corrosion: L (M) S	ج-	
Loakage		s w	υ	Reduction Gear	.ear	Damage: – Corrosion: 4 🕅 S		
Sit				Cover	Orum-L	Damage: Corrosion: L M 🕥		
Side Seal	Abrasion-Max	Lett: – mm, Rught: – mm	RS		Drum-R	Damago: - Corrosion: L M 🕥	>	
Rotter Truc	1 3	Left: - mm, Right: - mm	ਸ਼		Gear-Middle	Damage: Corrosion: L 🕲 S	v	いたようというと
Rotter Gua	Rotter Guard Missing	Left 1 Right O	z	Counter Shaft	aft	Damage: ~ Corrosion: L M S	IJ	ないとうないであるというというという
	Defect	Let 0 Right 0	z	Counter Weight	ught	Damage: - Corrosion: L M S	RS	
Sill Beam		S W 7	1	BuijsioH	Wet Consiston	40 KG·M	æ	
Concrete	DamagerLeft	S (S) 7	RS	Torque	Dry Condition		RS	
	Damage-Righ	r @ s	AS	Superstructure		Damage: Corrosion: L M (S)	RS	
	Damage-Bottom	т L 🕲 S	RS					

Remarks: Judgement = N. Totally Replace, C. Party Replace, RU: Large Repar, RM: Medium Repar, RS: Smail Repar, G. No Repar, -: No Osta.

shows design dimension.

Survey Results of Gate Structure

Gate No. W26 (Main Weir Gate)

Tatoliti Jano partiti	Gate No.	MZ0	(Main Weir Gate)						
Andering for the constraint of the constrated the constraint of the constraint of the constraint	Su S	iey Item		Judge	Survey	Item	Survey Result	a6pnr	
and Theorems And Contaction The American State The American Sta	1			Ť	sisting Device				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Skin Plate		- 10M -	o	Wire Rope		+ Distortion: - Cortosion: -		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			r.	1			– Distortion; – Corrosion; –	-	
True True Dotom Lit Dotom Lit Dotom Dotom <thdotom< th=""> <thdotom< th=""> <thdotom< <="" td=""><td></td><td>Damage-Rivet</td><td></td><td>1</td><td></td><td></td><td>- Distortion: - Corrosión: -</td><td>_</td><td></td></thdotom<></thdotom<></thdotom<>		Damage-Rivet		1			- Distortion: - Corrosión: -	_	
Function Image Twoonsing Image Image <thimage< th=""> <thimage< th=""> Image<td>TAURS</td><td>Thickness-Ava</td><td>Bollom Flange 18.0 , Bollom Web 18.2 (19.1mm)</td><td></td><td></td><td>Roller Train-R</td><td>Broken</td><td>U </td><td></td></thimage<></thimage<>	TAURS	Thickness-Ava	Bollom Flange 18.0 , Bollom Web 18.2 (19.1mm)			Roller Train-R	Broken	U 	
Exa Curder Theoresearcy Curder Amonger Fanction Content Stant Other Ot		Distortion		Í	E SQ		- Function:	RS	
Rannobiling Left Mayri No. Description Demage: O.t. Distortion Left Algori No. Left Algori No. Demage: O.t. Distortion Left Algori No. Left Algori No. Demage: O.t. Distortion Left Algori No. Left Algori No. Demage: O.t. Assembly Locretion Left Algori No. Low No. Demage: O.t. Assembly Lorin House Left Royn Domage: D.t. O.t. Assembly Lorin House Left Royn Domage: D.t. O.t. Assembly Lorin House Left Royn Domage: D.t. D.t. Assembly Lorin House Left Royn Domage: D.t. D.t. Assembly Lorin House Left Royn Domage: D.t. D.t. Assembly Lorin House Left Royn Domage: D.t.	Eno Girder		L-Bottom 9.9, A+Bottom 10.6 (11.1mm)	U			- Function:	<	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Let No Right No	<	Bearing		1	→ 	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion					Damage:	RS	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Bottom	Thickness-Avg	Flange 13.8 mm (16.3), Web 9.1 mm (9.4)			Reduction Gear	t	0	
Rocker Inmodeling Left Right Dimmetrie Fitting: - Bactrait Other Assention Left - Right - Right - Dimmetrie Bactrait - Dim Resention Left - Right - Right - Dim - Dimetrie Dimetrie Dimetrie Dimetrie Dim - Dimetrie Dimetr	Girder	Corrosion	S (2) 7		Gear		– Fiming: – Backlasn;	- :;;;	
Assentity Description Distriction Left Ingn Comm Rank, R Demage: - fitting: - Bacinastr: - Olt- Route Tan Left Right Comm Princins, Damage: - fitting: - Bacinastr: - Olt- Route Left - Right Cear.Middle Damage: - fitting: - Bacinastr: - Olt- Route Left - Right - Cear.Middle Damage: - fitting: - Bacinastr: - Olt- Route Left - Right - Cear.Middle Damage: - fitting: - Bacinastr: - Olt- Rout Left - - Right - Correshor: L M (S) Rout Top Lovel Difference S fitt - - Correshor: L M (S) S Rout Top Lovel Difference S fitt L M (S) Correshor: L M (S) S Rout Top Lovel Difference S fitt L M (S) Correshor: L M (S) S Rout Top Lovel Difference S fitt L M (S) Correshor: L M (S) S Correshor: L M (S)	Rocker	Remodeling	NO N				Damage: –	<	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Assembly	Distortion					- Fitting: - Backlash:	ð	
Role Train Nasing Left Right Damage: Finng: Basement Durnd: Damage: Contason: O (M Daneter:Roller Average m		Others							
	Rotter Train	n Missing	1			Gear-Middle	- Fitting: - Backlash:	ö	
Seal Left - Right Dum.R Damage - Corresion: L M <th< td=""><td></td><td>Diameter-Rotler</td><td>Average - mr</td><td></td><td></td><td></td><td>Damage:</td><td></td><td></td></th<>		Diameter-Rotler	Average - mr				Damage:		
Real Left - - Correson: L M Sourceson: L M Sourceson: <th< td=""><td></td><td>Distortion</td><td>Lett - Right</td><td></td><td>Basement</td><td>Drum-t</td><td>- Corrosion: L</td><td></td><td></td></th<>		Distortion	Lett - Right		Basement	Drum-t	- Corrosion: L		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Seal	Left		 		Drum-R	- Corrosion: L	୭	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Bottom				Drive Device	- Corrosion; L	s	
Incination Top Level Difference 5 mm Image: - Consolor: L Consolor: L Consolor: L C S kappet L M C <td< td=""><td></td><td>Ron</td><td></td><td></td><td>Drive Chain</td><td></td><td>- Looseness: L</td><td>1</td><td></td></td<>		Ron			Drive Chain		- Looseness: L	1	
kage L M C Reduction Camage: Corrosion: L M S Sub Seai Abrasion-Max Left: - mm, Right: - mm. Cover Dum-L Camage: - Corrosion: L M S Sub Seai Abrasion-Max Left: - mm, Right: - mm R Cover Dum-L Camage: - Corrosion: L M S R S </td <td>Inclination</td> <td></td> <td>S S</td> <td> -></td> <td>Chain Sproc</td> <td>ket</td> <td>+ Corrosion: L</td> <td>s</td> <td></td>	Inclination		S S	 ->	Chain Sproc	ket	+ Corrosion: L	s	
Side SealAbrasion-MaxLeft: $ mn$, $Right:$ $ mn$, $Right:$ $ mn$, $Right:$ $ 0$ 0 1 M 0 Roller TruckAbrasion-MaxLeft: $ mn$, $Right:$ $ mn$, $Right:$ $ mn$, $Right:$ $ M$ 0 Roller TruckAbrasion-MaxLeft: $ mn$, $Right:$ $ mn$, $Right:$ $ mn$ $Righti M0Roller TruckAbrasion-MaxLeft: mn, Right: mnRighti M0Roller TruckAbrasion-MaxLeft: mn, Right: mnRighti M0Roller TruckAbrasion-MaxLeft: mn, Righti mnRighti M0Roller TruckAbrasion-MaxLeft:1Righti mnRighti M0Roller TruckLeft:1Righti mnRighti 0000Suit BeamAbrasionLeft:1M0N0000000000000000000000000000000000$	Leakago		Σ	0	Reduction G	ear	- Corrosion: L		
Sude Seai Abresion-Max Left: mm, Right: mm RS Roller Truck Abresion-Max Left: mm, Right: Mm, Righ	Sit				Cover	Drum-L	- Corrosion: L		
k Abrascon-Max Left: mm, Right: nm Rt Cease-Middle Damage: Corrosion: L(\bigcirc S S rd Missing Left Right 0 N N Counter Shaft Damage: Corrosion: L(\circlearrowright S S Oelect Left Right 0 N N Counter Shaft Damage: Corrosion: L(\circlearrowright S S Oelect Left Right 0 N N Counter Wagn Damage: Corrosion: L(\circlearrowright S S Abrasion L M S RS Housing Wet Condition 36 Kg·m S Damage: Left L (\bigcirc S RS Torque DY Condition 3.9 Kg·m S Damage: Left L (\bigcirc S RS Superstructure Damage: - Corrosion: L M S Damage: Left L (\circlearrowright S RS Superstructure Damage: - Corrosion: L M S Damage: Left L (\circlearrowright S RS Superstructure Damage:		1	- mm, Right: -	RS		Drum-R	- Corrosion: 4		
Left I Right N Counter Shaft Damage: $-$ Corrosion: I M Left 0 Right N Counter Weight Damage: $-$ Corrosion: L M Left L M N Counter Weight Damage: $-$ Corrosion: L M N L M N N Counter Weight Damage: $-$ Corrosion: L M N L M S RS Hoisting Vet Condition 3.5 Ng·m Ploint L M S PS Dyrocudition 3.9 Ng·m Ploint L M S N Superstructure Demage: - Corrosion: L M	Roller Truc	k Abrasion-Max	- mm, Right:	ē.		l.	Corrosion: L	ŝ	
Left 0 Right 0 N Counter Weight Damage: - Corrosion: L M S 1 L M Mestange Mestange 36 Kg-m 1 1 L M S RS House Dry Condition 3.9 Kg-m Indeft L M S RS Torque Dry Condition 3.9 Kg-m Flight L M S RS Superstructure Damage: - Corrosion: L M Flight L M S RS Superstructure Damage: - Corrosion: L M S	Rotter Gua	rrd Missing	~	z	Counter Sha	it .	- Corrosion: L	S	
Abrasion L M M Mosting Wer Condition 35 <i>Ng-m</i> Abrage-Left L M S PS Toque Dy Condition 3.9 <i>Ng-m</i> Damage-Right L M S PS Superstructure Demage: - Contrasion: L M Damage-Boitom L M S PS Network Demage: - Contrasion: L M		Delect	0	z	Counter We	ont	- Corrosion: L	s	
Damage-Left L M S Roque Dry Condition 3.9 Kg·m Damage-Right L M S RS Superstructure Damage: - Controsion: L M Damage-Blottom L M S RS Superstructure Damage: - Controsion: L M	Sul Beam		X	RS	Hoisting	Wet Condition		墙	
it L & S RS Superstructure Damage: - Corroson: L M © om L @ S RS	Concrete	Damage-Left		RS	Torque	Dry Condition			
s @ 7		Damage-Right	۲		uperstructure		- Corrasion: L	୭	
		Damage-Bottor	۲ - ا	ЯS					

Remarks: Judgement • N: Yotally Replace, C: Partly Replace, RL: Large Repart, RM: Medium Repart, RS: Smatt Repart, G: No Repart, -: No Data.

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Gate No.	W27	(Main Weir Gate)					06/07)
Surve	Survey Itom	tesult	Judge	Surve	Survey Item	Survey Result	Judge Photograph
Gale Leàf				Hoisting Device			
Skin Plate	Thickness-Avg	Top - Mid - Low - Bim 8.6 (9.5mm)	U	Wire Rope	Main-Left	y: – Distortion: – Corrosion: – Oil: –	
	Corrosion	U/S-Bonom L M S	1		Main-Right	y: - Distortion: - Corrosion: - Ott -	
	Damage-Rivet	Corner-L - Corner-A -	1		Roller Train-L	y: - Distorion: - Corrosion: - Oil: -	
Truss	Thickness-Avg	Bottom Flange 18.4 , Dottom Web 18.4 (19.1mm)	G		Roller Train-R	y: - Distorion: - Corrosion: - Oil: -	
	Distortion		1	Drem	Left	Damage: – Function: –	RS
End Girder	· · · · ·	L-Bottom 10.4 . A-Bottom 10.3 (11.1mm)	o		Right	Damage: – Function: –	
		Lett No Right No	<	Bearing	Orum	Damage: – Ou: –	
	Distortion	Lett - Right -			Counter Shaft	Damage: – Oil; –	RS
Bottom	Thickness-Avg	Flange 15.2 mm (16.3), Web 8.4 mm (9.4)			Reduction Gear Damage:	Damage: – Oii: –	
Girder	Carrosión	S 🕲 7		Gear	Drum Gear-L	Damage: + Fitting: - Backlash: - Oit: -	8
Rocker	Remodeling	Lett No Right No			Drum Pinion-L	Damage:	
Assembly	Distortion	Leit – Right –			Drum Gear-R	Damage: – Fitting: – Backlash: – Oil: –	
	Others	No Function		_ .	Drum Pinon-R	Damage: ~	
Roller Train Missing	MHSSING	Left - Right -			Gear-Middle	Damage: - Fitting: - Backlash: - Oil: -	
	r-Roller	Average - mm			Pinion-Middle	Damage:	
	Distortion	Lett – Right –		Basement	Drum-L	Damage: Corrosion: L M 🕥	
Seal	Lett	1			Drum-R	Damage: Corrosion: L M 🕥	
	Bottom	ų			Drive Device	Damage: - Corrosion: L 🕅 S	RS
	Right			Drive Chain	e	Damage: - Looseness; I. Oil: -	
Inclination		Top Level Difference 0 mm	>	Chain Sprocket	ocket	Damage: - Corrosion: L 🕅 S	
Leakage		с М С	0	Reduction Gear	Gear	Damage: – Corrosion: L 🕲 S	
Sili				Cover	Drum-L	Damage: Corrosion: L M 🕥	
Side Seal	Abrasion-Max	Left: – mm, Righi: – mm	RS		Orum-R	Damage: – Corrosion: L M 🕥	
Roller Truck	Roller Truck Abrasion-Max	Lett: - mm, Right: - min	ВĽ		Gear-Mode	Damage: – Conosion: L 🕲 S	
Roller Guard Missing	d Missing	Left 0 Right 0	z	Counter Shaft	haft	Damage: - Corrosion: L M S	9
	Defect	Lett 2 Right 0	z	Counter Weight	reight	Damage: – Corrosion: L M S	RS
Sill Beam	Abrasion	S M 7	1	Hoisting	Wet Condition	ш-бх 0 1	Hr.
Concrete	Damage-Left	s @ 1	RS	Torque	Dry Condition	7.4 kg·m	RS
	Damage-Right	С м Э	RS	Superstructure	a	Damage: - Corrosion: L M S	- Se
	Damage-Bottom	S 🛞 7	AS				

Remarks: Judgement = N: Totally Replace, C: Purly Replace, RL: Large Repar, RM: Medrum Repar, RS: Small Repar, G: No Repart, -: No Data.

shows design dimension.

(35/96)

Survey Results of Gate Structure

Gate No. W28 (Main Weir Gate)

Surver latent Survery latenti Jacop Result Jacop Res	Calc NO.								Photocraph
The chore and the choice of the ch	Surv	ey kem	Survey Result	Judge		/ Item	Survey Result	añonr	
The functions of the form of t	ate Leaf				Hoisting Device				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Skin Plate	Thickness Avg	Top - Mid + Low - Bim 9.0 (9.5)		Wire Rope	Main-Left	- Carrosian: -	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Corrosion	L M				- Distortion: - Corrosion: -	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Damage-Rivet		1			- Distortion: - Corrosion: -	0 	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Three	Thickness-Avo					- Distortion: - Corrosion: -	U U	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$]	Distortion	_	I .	Drum		1		
	End Girder		L-Bottom 10.1, R-Bottom 10.7 (11.1	╂		Right	1	<	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Leh No Right No		Bearing			→ 	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distertion				Counter Shaft	- Ott:	RS	
Cuest Constant L \bigcirc S Constant Demage - Fring - Bachast - O(t- Receir Panocessing Left Pign Drum Prenord Drum Prenord Drum Prenord Drum Prenord Drum Prenord Drum Assembly Determine Left Pape Drum Prenord Drum Prenord Drum Prenord Drum	Bottom	Thickness-Avg	1	(9.4)		Reduction Gear	1	0	
	Girder	Corresion	1		Gear		– Fitting: – Backlash: – Oil:		
Accention become Left Right Demage: Filting: Demage: Filting: Demage: O/L Ruler Tran Moseno Left Ropri 1 Corrin< Financy:	Rocker	Remodeling					Damage:	<	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Assembly	Distortion	1				– Finng: – Backlash: – Oil:		
Rolie Train Left Raph 1 Coarning is interval in the control of the		Others	No Function				Damage:		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Roller Train	Missing		 		Gear-Middle	– Fitung: – Backlash: – Oit:		
1000 $Latf$ $Raght$ $Latt$ $Raght$ $Latt$ $Latt$ $Raght$ $Latt$ $Latt$ $Raght$ $Latt$ L		Diameter-Roller	1	 		Pinion-Middle	Damage: –		
Seal Left - - Num.R Damage: - Consister: L M<		Distortion	Right		Basement	J-m20	- Corrosion: L M		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Seal	Left				Drum-R	- Corrosion: L M	→	
Applied Applied Applied Applied Damage: - Locenes: Oit - Oit - Oit - Oit - - Oit - - - - Oit		Bottom		↓		Drive Device	- Corrosion: L 🕲	RS	
		Rigni			Drive Chain		- Fooseness: -	0 	
kage C Reduction Centron Left Concision Left M Concision Left M Concision Left M Concision Left M Concision L M Concosion L M	locination		8	-> 	Chain Sproc	ket	- Corrosion: L (M)	<	
Solde SealAvrasion-MaxLeft: $ mn$. Right: $ mn$.Right: $ mn$.Right: $ mn$. mn	6akage		×	0	Reduction C	ear	- Corrosion: L 🕑		
Sole Seal Avrasion-Max Left: $ mn$. $Right:$ $ -$	=		-		Cover	טש-ר	- Corrosion: L M		
k Abrasion-Max Loff: mm. Right: Low Solution Low Solution Low Solution Low Solution Low Solution Met Condition Met Condition Met Solution	Side Seal	Abrasion-Max	– mm. Right: –		 T	Drum-R	- Corrosion: L M); ->	
Left Rghi N Counter Shaft Damage: Councesion: L M S Left 0 Rghi N Counter Weight Damage: - Conosion: L M S Left 0 Rghi N Counter Weight Damage: - Conosion: L M S Left 0 RS RS Meisting Wei Condision 40 kg·m N L M S RS Torque Dry Condition 5.9 kg·m N M L M S RS Superstructure Damage: - Conosion: L M	Rotler Truck	(Abrasion-Max	– mm. Aigni: –				– Corrosion: L 🕐	ک ا ا	にいたのないない。
Delect Left O Right N Counter Weight Damage: - Consion: L M S Abrasion () () N Net Condison 40 kg·m 1 Abrasion () M S RS Hoisting Vet Condison 40 kg·m Damage-Left L () S RS Torque Dry Condition 5.9 kg·m Damage-Right L () S RS Superstructure Damage: - Conssion: L M	Roller Guari	o Missing	-	z	Counter Sha		- Corrosion: L M	0	
Abrasion L M S Rs Hoising Wei Condison 40 kg·m Damage-Left L M S Ps Torque Dry Condition 5.9 kg·m Damage-Right L M S Rs Superstructure Damage: - Conscion: L M S Damage-Bottom L M S AS Apresenter Damage: - Conscion: L M S		Defect	0	z	Counter We		- Corrosion: L M	RS	
Damage-Left L M S Forque Dry Condition 5.9 kg·m Damage-Right L Ø S RS Superstructure Damage: - Conosion: L M S Damage-Right L Ø S RS Superstructure Damage: - Conosion: L M S Damage-Bottom L M S AS	Sul Beam	Abrasion	W	RS		Wet Condition		2 2	
L @ S RS Superstructure Damage: - Corrosion: L M ③ L M S RS	Concrete	Damage-Left	W	RS		Dry Condition	kg-m	SP	
s w Đ		Damage-Right	8	ЯS	Superstru		- Corrosion: L M	SH SH	
		Damage-Bottom	2	PS					

Remarks: Judgement = N; Fotally Replace, C; Panty Replace, AL: Large Repar, RM: Medium Repert, RS: Small Repar, G; No Repar, -: No Osta.

shows design dimension.

(36/36)

Structure
of Gate
Results
Survey

Gate No.	W29	(Main Weir Gate)					ļ	
		Result	Judge	Survey Item	Item	Survey Result	Judge	Photograph
	47 ILUUT			Alasian Davian				
Gate Leaf			Ī					
Skin Plate	Thickness-Avg	Top - Mid - Low - Btm 9.0 (9.5mm)	υ	Wire Rope	Main-Left	y = Disionion: + Corrosion: - C#: +	2	
	Corrosion	U/S-Bottom L M S	1		Main-Right	y Distortion: - Corresion: - Off -	0	
	Damade, Rwet	Corner-L - Corner-R -	1		Roller Train-L	y: - Distorion: - Corrosion: - Oil:-	U	
		00 18.5. Bot	0		Roller Train-R	y - Distortion: - Corrosion: - Olit-	0	
sshut	Detremo		1	Drum	Left	Damage: - Function: -	RS	
Fod Curder		L-Boltom 9.3, R-Boltom 9.3 (11.1mm)	0		Right	Damage: – Function: Miss Alignment	<	
		Left No Right No	<	Bearing	Drum	Damage: - Oil; -	->	
	Distorion	Lett - Arght -			Counter Shaft	Damage: - Oil:	S.	
Rottom	Thickness-Avo	Flange 14.6 mm (16.3). WebB.4 mm (9.4)			Reduction Gear Damage:	Damage: - Oli:	0	
Cirder	Corrosion	5 🕲 7		Gear	Drum Gear-L	Damage: – Fitting: – Backlash: – Oil: –	- St	
Rocker	Hemodeling	Left No Right No			Drum Pinion-L	Damage:	<	
Assembly	Distortion	Left Small Right Small			Drum Gear-R	Damage: - Fitting: - Backlash: - Oit -		
	Others	No Function			Drum Pinion-R	Damage: -		
Roller Train Missing	Missing	Lett - Right -			Gear-Middle	Damage: - Fitting: - Backtash: - Olf		
	Diameter-Roller	Average - mm			Pirnon-Middle	Damage:		
	Distortion			Basement	Drum-L	Damage: – Corrosion: L M 🕥		
Seal	Left	1			Drum-R	Damage: – Corrosron: L M 🕥	->	
	Bottom				Drive Device	Damage: – Corrosion: L (M) S	З	
	Right		<u> </u>	Orive Chain		Damage: - Looseness; L Oil: -	0	
Incination		Top Level Difference 220 mm	->	Chain Sprocket	iket	Damage: – Corrosion; L 🖒 S	<	
Leakago		© w 3	v	Reduction Gear	lear	Damage: - Corrosion: L (M) S		
Sill				Cover	Drum-L	Damage: – Corrosion: L M 🕥		
Side Seal	Abrasion-Max	Lett: - mm, Right: - inm	RS	-	Drum-R	Damage: – Corrosion: L M 🕥	>	
Roller Truci	L X	Left: - mm, Right: - mm	ŭ		Gear-Middle	Damage: - Corrosion: L (M) S	<u>ں</u>	
Roller Guard Missing	rd Missing	reu i Bighi i	z	Counter Shaft	aft	Damage: – Corrosion: L. M. S	U	
	Defect	Lett 0 Right 0	z	Counter Weight	ыды	Damage: – Corrosion; L M S	S.	
Sill Beam	Abrasion	s @ 7	z	Poisting	Wet Condition	36	2	
Concrete	Damage-Left	s F W	RS	Torque	Dry Condition	17.2 kg-m		
	Damage-Right	s (9) 7	А S	Superstructure		Damage: – Corrosion: L M (S)	SH SH	
	Damage-Bottom	т L M S	S.					

Remarks: Uudgement • N: Totaity Replace, C: Party Replace, RL: Large Repair, RM: Modum Repair, RS. Small Repair, G: No Repair, -: No Data.) shows design dimension.

(37/36)

Structure
Gate
5
Results
Survey

Gate No.	W30	(Main Weir Gate)							ł	(06/06)
Surv	Survey Item	Survey Result		Judge	Survey Item	r Item	Survey Result		Judge	Photograph
Gale Leaf				Ť.	Hoisting Device				Ť	
Skin Plate	Thickness-Avg	Top - Mid - Low - Bit	Bim B.6 (9.5mm)	o	Wire Rope	Main-Left	y: - Distortion: - Co	Corrosion - Oil: -	0	
		U/S-Bottom L M	s	1		Main-Right	y: - Distortion: - Co	Corrosion: - Oil: -	0	
	Camage-Rivet	Corner-L - Corr	Corner-R -	1		Roller Train-L	y: - Distortion: - Co	Carrosion: - Oil: -	U	
Truss	Thickness-Avg	Bottom Flange 19. 1, flottom Web 18.7 [19.1mm]	Veb 18.7 [19.1mm]	U		Roller Train-R	y: - Distortion: - Co	Corrosion: - Oit: -	с	
	Distortion			1	uru Orau	Left	Damage: – Fu	Function: Miss Alignment	S.S.	
End Girder		L-Bottom 10.4 , R-Botto	10.4 , R-Boltom 9.6 (11.1mm)	0		Right	Damage: - Fu	Function: Over Lapping	<	
		Lett No Right No		←	Bearing	Drum	Damage: – Oik	ı	->	
	Distortion	Lett - Right -				Counter Shaft	Damage: - Ori	1	ŝ	
Bottom	Thickness-Avg	Flange 15.3 mm (16.3), Web 9.3 mm (9.4)	co 9.3 mm (9.4)	[Reduction Gear Damage:	Damage: - Oil:	1	o	
Girder	Corrosion	3	S		Gear	Drum Gear-L	Damage: – Firting: –	Backlash: - Oil: -	ß	
Rocker	Remodeling	Left No Right No	0			Drum Pinion-L	Damage:		<	
Assembly	Distortion	Lett – Right –				Drum Gear-R	Damage: – Fitting: –	Backlash: - Oil: -		
	Others	No Function				Drum Pinion-R Damage:	Damage: -			
Roter Train	Rotter Train Missing	Left - Right -		-		Gear-Middle	Damage: - Fitting: -	Backlash: - Oil: -		
	Diameter-Roller					Pinion-Middle	Damage: -			
	Distortion				Basement	Drum-L	Damáge: - Corrosion:	sion: L M 🕥		
Seal	tet			F		Drum-R	Damage: - Corrosion:	sion: L M S	->	
	Bottom			<u> </u>		Drive Device	Damage: - Corrosion:	sion: L 🕅 S	RS	
	Aight			r	Drive Chain		Damage: – 1.0050	Looseness: L Dii: -	υ	
Indination		Top Level Difference 85 mm	шm		Chain Sprocket	ket	Damage: Corrosion:	sion: L 🕅 S	€	
Leakago		× O	S	0	Reduction Gear	lear	Damage: - Corrosion:	sion: L 🕑 S		
Sil					Cover	Drum-L	Damage: - Corro	Corrosion: L M 🕤		
Side Seal	Abrasion-Max	Left: – mm, Right:	- 111	ßS		Drum-R	Damage: - Corro	Carrosian; L M 🕥	→	
Roller Truc	x	Left: - mm, Right:	. ww	Ъ		Gear-Middle	Damage: - Corrosion.	sion: L (B) S	o	
Roller Guard Missing	nd Missing	Lett 1 Right 1		z	Counter Shaft	łł.	Damage: - Corro	Corrosion: L M S	G	
	Defect	Lett 0 Right 0		z	Counter Weight	ight	Damage: - Corro	Corrosion: L M S	RS	
Sull Beam		r W	s	1	Hoising	Wet Condition	48	kg·m	ъ	
Concrete	Ł	® -	s	RS	Torque	Dry Condition	5.9	kg·m	RS	
	Damage-Right	(O) 7	S	AS S	AS Superstructure	1	Damage: - Corro	Corrosion; L M 🕥	RS	
	Damage-Bottom	r 🕲	s	ß						

Remarks: Judgement = N: Totally Replace, C: Parity Replace, RL: Large Repart, RM: Medium Repart, RS: Small Ropert, G: No Repart, -: No Data.

) shows design dimension.

(36/32)

Survey Results of Gate Structure

shows design dimension.

Remarks: Judgement * N: Totally Replace, C: Party Replace, RL: Large Repar, RM: Medum Repair, RS: Small Repar, G: No Repar, -: No Data.

(36/62)

A-53

Survey Results of Gate Structure

(Main Weir Gate)	
W32	
Gate No.	

Tennum Same finati Jame finati <t< th=""><th></th><th></th><th></th><th>, , , , , , , , , , , , , , , , , , ,</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>				, , , , , , , , , , , , , , , , , , ,							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2ns	·eγ ltern	ŝ	urvey Result	Judge	Surve	v Item	Survey		Judge	rhotograph
any low	Cate Leaf					Hoisting Device					
Gradion Life Life Distribution Life Distribution Life Distribution Constant	Skin Plate	Thickness-Avg	Top - Mid - L			Wire Rope	Main-Left	- Distortion: -	1	σ	
1040 Consolination Consolination<		Corrosion	U/S-Bortom		1		Main-Right	- Distortion: -		U	
Tube Tube <th< td=""><td></td><td>Damage-Rivet</td><td>Corner-L -</td><td>Corner-R</td><td></td><td></td><td></td><td>- Distortion: -</td><td></td><td>υ</td><td></td></th<>		Damage-Rivet	Corner-L -	Corner-R				- Distortion: -		υ	
Duotor Duotor Longer Longer <thloger< th=""> <thloger< th=""> Longer<td>Truss</td><td>Thickness-Avg</td><td>Boltom Flange 18.</td><td>4 , Borrom Web 18.5 (19.1m</td><td></td><td></td><td></td><td>- Distortion: -</td><td></td><td>U</td><td></td></thloger<></thloger<>	Truss	Thickness-Avg	Boltom Flange 18.	4 , Borrom Web 18.5 (19.1m				- Distortion: -		U	
End form Tennest weight of the first of th		Distortion			1	0.cm	Left	1		S.	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	End Guder			R-Bottom 10,1 (11.1m			Right	4		ج-	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Remodeling	Left No	Pignt No	<	ชิดลดกฐ	Drum	1	н –	→	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion	Left -	Arght –				1	r -	ß	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Bottom	Thickness-Avg	Flange 14.2 mm	(16.3) Web 8.7 mm (9.4)			Reduction Gear	ł		U	
Refer Remoting Carton Mage Durn Puropic Durn Puropuropic Dur	Girder	Corrosian	4	8		Gear	Drum Gear-t	– Fitting:	Backlesh: - Oil:	å	
Asterior Latrice Latrice Demonstructure Conner Lenger Annote Changer Chan Changer Changer	Accker	Remodeling	Left No	Aight No		·		Damage: –		۲	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Assembly	Distortion	Lett -	Right –			Drum Gear-R	- Fining:	Backlash: - Oil:		
Rute Train Let T_{ann} Let T_{ann} Let T_{ann} Let T_{ann} Denoment T_{annn} Denoment T_{ann} <		Others		Vo Function			Drum Pinion-R	Damege: –			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Roller Train	Missing	1	Right -			Gear-Middle	– Filling:	Backlash: + Oil:		
$ \begin{array}{ $		Diameter-Rollor	Average -	m.			Pinion-Middle				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion				Basement		1	W 7		
$ \begin{array}{ $	Seal	Left		4				ĩ	r w	\rightarrow	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Botiom		ŧ			Drive Device	1) ۲	R	
$ \begin{array}{ $		Rohi		1		Drive Chain		1	1 0	o	
Rope L M S Cover DumLL Damage: Conston: L M S Parage: Conston: L M Parage: Conston: L M Parage: Parage: Conston: L M Parage: Parage: Conston: L M Parage: Parage: Conston: L	Inclination		Top Level Differe	8	->	Chain Sproc	tet	í	ج ر	<	
Anason Max Left: mm, Right: mm RS Sore Soai Avrason Max Left: mm, Right: mm RS Founder Truck Left: mm, Right: mm RI Demage: Corrosion: L M M Roller Cuard Left: mm, Right: mm RI Demage: Corrosion: L M V Roller Cuard Left: mm, Right: nm RI Demage: Corrosion: L M V V Roller Cuard Left: Right: N N CounterShaft Demage: Corrosion: L M S Roller Cuard Left: Info Right: N CounterShaft Demage: Corrosion: L M S F <td< td=""><td>Leakage</td><td></td><td></td><td>¥</td><td>U</td><td>Reduction G</td><td>əar</td><td></td><td>8 ~</td><td></td><td></td></td<>	Leakage			¥	U	Reduction G	əar		8 ~		
Abrason-MaxLeft: -mm. Rgpt:mm.RSk Abrason-MaxLeft: -mm. Rgpt:-mmRk Abrason-MaxLeft: -mm. Rgpt:-mmRk Abrason-MaxLeft: 1Roght: -mmRCounter ShaftDemage: -Corrosion:LMd MissingLeft: 0Roght: 0NNCounter ShaftDemage: -Corrosion:LMSCDefect:Left: 0Roght: 0NNCounter ShaftDemage: -Corrosion:LMSRDefect:Left: 0Roght: 0NNCounter ShaftDemage: -Corrosion:LMSRAbrasonLLMSRPointer ShaftDemage: -Corrosion:LMRAbrasonLLMSRPointer ShaftDemage: -Corrosion:LMRAbrasonLLMSRPointer ShaftRRRRAbrasonLMSRSuperstructureDemage: -Corrosion:LMRDemage: RightLLMSRSuperstructureDamage: -Corrosion:LMRDemage: RightLLMSRSuperstructureDamage: -Corrosion:LMRDemage: RightLLMSRSuperstructure<	Siil					Cover	Drum-L	1	N 7		a on the
k left m. Right m. Right<	Side Soal	Abrasion-Max	1	1	AS		Drum-R	i	۲ W	→	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Roller Truck	< Abrasion-Max		ŀ	ਛੋ				8 -	U	
Defect Left <i>A</i> N Counter Weight Damage: - Corrosion: <i>L M N A</i>	Roller Guar	d Missing	-	Right 1	z	Counter Sha	Ŧ		T M	U	
Abrasion L M S Hoising Wat Condition 44 kg·m Damage-Left L (M) S PS Torque Dy Condition 7.8 kg·m Damage-Right L (M) S RS Superstructure Damage: - Corrosion: L M Damage-Bottom L (M) S RS Superstructure Damage: - Corrosion: L M		Defeci	0	Right O	z	Counter Wei	ועכ	1	r w	Rs	
Damage-left L M S RS Torque Dry Condition 7.8 kg·m Damage-Right L M S RS Superstructure Damage: - Corrosion: L M Damage-Bottom L M S RS RS R R	Sul Beam	Abrasion	-		1	Hoisting	Wet Condition		kg-m	ä	
L (G) S RS Superstructure Damage: - Corrosion: L M (S) L (G) S RS	Concrete	Damage-Left	٢		RS	Torque	Dry Condition		kg.m	ЯS	
r 🕲 s		Damage-Aight	ډ			Superstructure		1	r W	S.	
		Damage-Bottom			SA						

Romarus: Juogement = N: Totally Replace, C: Panty Replace, RL: Large Ropair, RM: Medium Repair, RS: Small Repair, G: No Repair, -: No Data.

shows design dimension.

(56 / 65)

Structure
ts of Gate
vey Resul
Sun S

Survey		Survey P	tesult	Judge	Survey Item	Item	Su	Survey Hesult		
Plate										
Plate				ен	Hoisting Device					
	Thickness-Avo	Top - Mid - LOW	- Bim B.8 (9.5mm)	0	Wire Rope	Main-Left	y: – Distortion: –	- Corrosion: - Oil: -	0	
		U/S-Battom L	N S	1		Main-Right	y - Distortion -	- Corrosion: - Oil: -	0	
	-	Carner-L -	Corner+R -	1		Rotter Train-L		Broken	υ	
			1	6		Botter Train-B	Y - Distortion: -	- Corrosion: - Oil: -	υ	
1/455	β.Υ.	Bottom Flange 18.7, B.	Bottom Flange 18.7, Bottom Web 18.6 (19.1000)	5	4 2		amage: -	1	RS SR	
Oist	Distortion			1				Eussian Mise Alianment	<	
End Girder This	Thickness-Avg	L-Bottom 10.5, A-	10.5, A-Bottom 9.7 (11.1mm)	v		Right	Damage: -	LINCIPAL SIN THE SIN T		
	Remodeling	Let No A	Right No	ج-	Beanng	Drum	Damage:	Oii: -	>	
			Right -			Counter Shaft	Damage: -	Oit -	RS BS	
Borrom	Avo	Fiange 15.2 mm (16	Flange 15.2 mm (15.3), Web 8.6 mm (9.4)			Reduction Gear	Damage; -	Oii: -	0	
		-	s S	[Gear	Drum Gear-L	Damage: - Fiting:	og: = Backlash: = Oli: =	ß	
		Left No A	Aight No			Drum Pinion-L	Damage: -		~	
2		Left 0.2 m Bend	Right 2			Drum Gear-A	Damage: – Fitting:	ng: – Backlash: – Oil: –		
	Others	NOF	No Function			Drum Pinion-R	Датада: –		-	
Roiler Train Missing	Duist	191 - Ha	Right -			Gear-Middle	Damage: – Fitting:	.g: – Васкіаsh: – Оіі; –		
<u>]</u> å	Dismater-Roller Average	Averada – mm				Pinion-Middle	Damage: -		-	
<u>[</u>	Distortion	orm	Right -		Basement	Drum-L	Damage. –	Corrosion: L M 🕥		
						Drum-R	Damage:	Corrosion: L M 🕥	->	
Seal Let	Leit.		8	F		Drive Device	Damage: –	Corrosion: L Co S	RS	
3] ð					Orive Chain		Damage:	rooseness; - Oil: -	v	
	- Hagin	Top Level Difference	ce 20 mm	 ,	Chain Sprocket	ket	Damage: -	Corrosion: L 🕅 S	<	
		G	E	. 0	Reduction Gear	ear	Damage: -	Carosion: L 🕅 S		
Acusa				<u> </u>	Cover	Drum-L	Damage: -	Corrosion: L M 🕥		
Cide Ceal	Abrasion-Max	Left: - mm, H	mm, Right: - mm	ЯS		Drum-R	Damage: -	Corresion: L M 🕥	→	
2	vrasion-Max		mm, Right: – mm	đ		Gear-Middle	Датадо. –	Corrosion: L 🕅 S	U	
Roller Guard Missing	ssing	-	Right 1	z	Counter Shaft	aft.	Damage: –	Corrosion: L M S	0	TOULD BROKE
<u> ŏ</u>	Defect	0	Right O	z	Counter Weight	HQ ^H	Damage:	Corrosion: L M S	Sa	<u>[14] E. IIV</u>
Sill Beam Ac	Abrasion	7	M S	1	bunsioH	Wet Condition	- 44	w-by	α̈́	
T	Damage-Laft	7	s E	å	Torque	Dry Condition	3.5	kg-m	S.	
	Damage-Right		s B	RS S	Superstructure		Damage: –	Corrosion: L M (S)	а С	
<u> </u>	Damage-Bottom	9	Damage-Bottom C M S RS	RS						

) shows design dimension.

Survey Results of Gate Structure

virvey ftem virvey ftem Corrosson Corrosson Corrosson Distortion D	Gate No.	W34	(Main Weir Gate)						
Plue Molina Device Molina Device Molina Device Composition Use Plane Molina Propertion Composition	Suz	ey ttem	tesult	Judge	Surve	y Item	Survey Result		Photograph
Rue Transmission Transmission <thtransmission< th=""> Transmission</thtransmission<>	1 -			T.	oisting Device				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Skin Plate		70010.0 Mid9.9 Low9.6 Bim9.4 (9.5mm)	υ	Wire Rope	Main-Left	– Distortion: – Corrosion: –		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			L M	1		Main-Right	- Distortion: - Corrosion: -		
Turs Transmission Control is interval in the interval interval in the interval intery interval interval interval interval interval int		Damace-Rivel	,	1		Roller Train-L	Broken	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Truss	Thickness-Avg	- <u> </u>	1			- Distortion: - Corrosion: -		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion			۳2 G	Left	1	RS	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	End Girder	- I		v		Right	1		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Lett No	<-	Bearing	Drum	Ŀ		
Bittom Tractmess-App Fanger 14 Dmm [16.3], Weig 7.4 mm [8.4] Resource Damager: Out: Out: <thout:< th=""> Out: Out:</thout:<>		Distortion	1			Counter Shaft	,	AS	
Cueve Caresson L Case Drum Catacut. Dome Damager. Filting: Backlast: $- 0lr - 1$ Rocent Recent Lot Ropit. No Rot Romager. Primager. Filting: Backlast: $- 0lr - 1$ Asserticly Distortion Lot Ropit. No Romager. Ring: Backlast: $- 0lr - 1$ Asserticly Distortion Lot Ropit. No Romager. Ring: Backlast: $- 0lr - 1$ Route Train Wasper Ring: Damager. Ring: Backlast: $- 0lr - 1$ Route Left Right. Damager. Control Ring:	Bortom	Thickness-Avg	Flange 14.0 mm (16.3), Web 7.4 mm (9.4)			Reduction Gear	1	0	
Rocear Amodeina Loft No Range: Frinds: Commage: Frinds: Commage: Frinds: Contact Contact <thcontact< th=""> <thcontact< th=""> <thcont< t<="" td=""><td>Girder</td><td>Corresion</td><td>s 🛞 1</td><td></td><td>Gear</td><td>Drum Gear-L</td><td>– Fiturg: – Backlash: – Oli:</td><td>8</td><td></td></thcont<></thcontact<></thcontact<>	Girder	Corresion	s 🛞 1		Gear	Drum Gear-L	– Fiturg: – Backlash: – Oli:	8	
Assentioly busined Distribution Left Right Off Dimetries Fillings Backlasht Off Rouer Train Action Left No No No No Seconda Demage: Filling: Backlasht Off Rouer Train Action Left Right Caser.Middle Demage: Filling: Backlasht Off Soul Left Right Caser.Middle Demage: Filling: Backlasht Off Soul Left Caser.Middle Demage: Connoscin: L M S Soul Left Caser.Middle Demage: Connoscin: L M S Soul Left Caser.Middle Demage: Connoscin: L M S S D D D D D D D D D D D D D D D D D D D <td>Rocker</td> <td>Remodeling</td> <td></td> <td></td> <td></td> <td>Drum Pinion-L</td> <td></td> <td></td> <td></td>	Rocker	Remodeling				Drum Pinion-L			
	Assembly	Distorion				Drum Gear-R	- Fitting; - Backlash; -		
Role Tran Mussang Left Raphi Caranage Filting: Basement Caranage Filting: Basement Non- Connaster: Non- Filting: Basement Non- Connaster: Non- Non- Connaster: Non- Non- Connaster: N Non- Connaster: N		Others	No Function			Drum Pinion-R	Damage:		
	Roller Trait	n Missing	1			Gear-Middle	- Fining: - Backlash: - Oil:		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Diameter-Roller	Ачөгафа			Pinion-Middle	1		
Seat Left - - No Damage: - Consolor: L M		Distortion	Left - Right		Basement	Drum-L	– Corrosion: L M		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Seal	Let				Drum-R	Corrosion: L M		によっていた。
RightIncurationDamage: -Looseness: -Oit: -RightTop Level Ofference 5 mmUUDamage: -Looseness: -Oit: -AegeTop Level Ofference 5 mmUUDamage: -Conssion: L(*) SAegeAegeEDamage: -Conssion: L(*) SAegeArission-MaxLeft: -mm. Right: -mmRightL(*) SSole SeelArission-MaxLeft: -mm. Right: -mmRightDamage: -Conosion: L(*) SSole SeelArission-MaxLeft: -mm. Right: -mmRightCouverDamage: -Conosion: L(*) SSole SeelArission-MaxLeft: ORight: -mmRightCouverDamage: -Conosion: L(*) SRoller TruckArission-MaxLeft: ORight: -mmRight-MSRoller TruckArission-MaxLeft: ORight: -mmRight-Conosion: L(*) SRoller TruckArission-MaxLeft: ORight: -mmRight-Conosion: L(*) SRoller CurrelDefect:Left: ORight: -MS-Conosion: L(*) SSull BeamArissionLMSPConosion: LMSConceleDamage-LeftLLMSPConosion: LMSull BeamLLMSSPConosion: LM<		Bottom		-		Drive Device	– Corrosion: L 🕑	88	
		Right			Drive Chain		- 1,005eness: -		ないないであるというというない
kage Correl N S C Reduction Gear Damage: Corrosion: L M S Stoe Seal Abrasion-Max Left: - mm. Right: - mm. Right: - Corrosion: L M S Stoe Seal Abrasion-Max Left: - mm. Right: - mm Right: - mm M S Stole Staat Abrasion-Max Left: - mm. Right: - mm Right: - mm Right: - M S	Inclination		Top Level Difference 5 mm	>	Chain Spro	cket	- Corrosion: L 🕅		
Stole SealAbrason-MaxLeft: $ mm$ RISCoverDum-L $Demage:$ $-$ Consolon:LM \odot Stole SealAbrason-MaxLeft: $ mm$ RIS $Demage:$ $-$ Consolon:LM \odot Roller TruckAbrasion-MaxLeft: $ mm$ RI $Demage:$ $-$ Consolon:LM \odot Roller TruckAbrasion-MaxLeft: $ mm$ RI $Demage:$ $-$ Consolon:LM \odot Roller TruckAbrasion-MaxLeft: 0 Right: $ mm$ RI O O $Demage:$ $-$ Consolon:LM \odot Roller GuardMissingLeft: 0 Right: $ mm$ Right: $ mm$ O <td>Leakade</td> <td></td> <td>s w Q</td> <td>0</td> <td>Reduction (</td> <td>jear</td> <td>- Corrosion: L 🕑</td> <td></td> <td></td>	Leakade		s w Q	0	Reduction (jear	- Corrosion: L 🕑		
Side SeeiAvrasion-MaxLeft: $-$ mm. Right: $-$ mm. Right: $ -$ <td>Sit</td> <td></td> <td></td> <td></td> <td>Cover</td> <td>Drm.L</td> <td>- Corrosion: L M</td> <td></td> <td></td>	Sit				Cover	Drm.L	- Corrosion: L M		
A crassion-Max Left: $ mm$. Right: $ mm$. $Right:$ $ Consolor:$ L M S d Missing Left: 0 Right: 0 N Counter Shaft Damage: - Consion: L M S Detect: Left: 0 Right: 0 N Counter Weight Damage: - Consion: L M S Defect: Left: 0 Right: 0 N Counter Weight Damage: - Consion: L M S Defect: L M S N Counter Weight Met Condition 7:0 Mg -m N Met Condition 3:3 Mg -m Met Condition 3:4 M_{10} Met Condition 1:0 M_{10} Met Condition 1:0 M_{10} Met Condition 3:3 M_{10} -m			– mm, Aight: –	RS S		Drum-A	- Corrosion: L M		時にあっていた。
Left 0 Right 1 N Counter Shaft Damage: - Corrosion: L M S Left 0 Right 0 N Counter Weight Damage: - Corrosion: L M S Left 0 Right 0 N Veit Condition 7.0 kg-m S L M S RS Torque DY Condition 3.3 kg-m N M L M S RS Superstructure Damage: - Corrosion: L M S M L M S RS Superstructure Damage: - Corrosion: L M S	Roller Truc	ok Abrasion-Max	— тт, Right: —	å		Gear-Middle	- Corrosion: L 🕅		
Left 0 Right 0 N Counter Weight Damage: - Constan: L M S 1 L M S - Horsung Wet Condition 7.0 kg·m I-left L M S RS Program Dry Condition 7.0 kg·m I-left L M S RS Program 2.9 kg·m I-left L M S RS Superstructure 0.4 0.4 S M	Roller Gua	ird Missing	0	z	Counter Sh	aft	- Corrosion: L M		
Auresion L M S Hoisung Weit Condition 7.0 kg·m Damage-Lieft L M S RS Torque Dy, Condition 3.9 kg·m Damage-Right L (M) S RS Superstructure Damage: Consion: L M Damage-Right L (M) S RS Superstructure Damage: Consion: L M		Defect	0	z	Counter We	ight	- Corrosion: L M	RS	
Damage-Left L M S RS Torque Dry Condition 3.9 kg·m Damage-Right L M S RS Superstructure Damage: Corrosion: L M Damage-Bottom L M S RS Superstructure Damage: Corrosion: L M	Sui Beam	Abrasión	W	1	Hoisting	Wet Condition	0		
Damaga-Right L M S Amaga-Right L M S Amaga-Right L M S	Concrete	Damage-Left	N	RS	Torque	Dry Condition	w-bx	Se internet	
S @ 7		Damage-Right	× 1		uperstructure		- Corrosion: L M	RS	
		Damage-Botton	8	ß					

Remarks: Judgement = N: Totally Replace, C: Panty Replace, RL: Large Repar, RM: Medium Repair, RS: Small Repar, G: No Repair, -: No Data.

() snows design dimension.

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(42 / 96)

Structure
of Gate
Results
Survey

(Main Weir Gate) **W35** Gate No.

000 000	222		ŀ				Desporado
Survi	Survey Item	Survey Result	Judge	Survey Item	ltern	VURVey Result	
Gate Leaf			Ă	Hoisting Device			
Skin Plate	Thickness-Avg	Top - Mid - Low - Bim - (9.5mm)	1	Wire Rope	Main-Left	y: - Distortion: - Corrosion: - Oit-	
	Corrósión	U/S-Bottom L M S	1		Main-Right	'y: - Distortion: - Corrosion: - Oit-	
	Damage-Rivet	Corner-L - Comer-A -	I		Roller Train-L	y: - Distortion: - Corrosion: - Oil: -	
Truss	Thickness-Avg	Bottom Flange - , Bottom Web - (19.1mm)	1		Roller Train-R	y: - Distonion: - Carrosion: - Oil: -	
	Distortion		1	Orum	Loft	Damage: - Function: -	R.
End Girdor		L-Bottom 10.4, R-Bottom 10.3 (11.1mm)	0		Right	Damage: - Function: -	
		Lett No Right No	≪	Bearing	Dum	Damage: - Oit: -	
	Distortion	Left - Right -			Counter Shaft	Damage: - Oii: -	RS
Bottom	Thickness-Avg	Flange - mm (16.3), Web - mm (9.4)			Reduction Gear Damage:	Damage: - Oit, Brake Brokon	C
Girder	Corrosion	S W 7		Gear	Drum Gear-L	Damage; - Fitting: - Backtash: - Oil: -	RS
Rocker	Remodeling	Left No Right No	-		Drum Pinion-L Damage:	Damage:	€
Assembly	Distortion	Lett - Right -			Orum Gear-R	Damage; - Fitting; - Backlash; - Oil; -	
	Others	No Function			Drum Pinion-R Damage:	Damage: -	
Rater Train	Missing	Lett - Right -			Gear-Middle	Damage: - Fiting: - Backlash: - Oil: -	
		Average – mm	Ē	<u>-</u> ,	Pinion-Middle	Damage:	
	Distortion	Lett – Hight –		Basement	Drum-L	Damage: – Corrosion: L M 🕥	
Sear	Left				Drum-R	Damage: – Corrosion: L M 🕥	RS A
	Bottom				Drive Device	Damage: - Corrosion: 🔘 M S	v
	Aight			Drive Chain		Damage: - Looseness: L Oit -	
Inclination		Top Lavel Difference 25 mm	→	Chain Sprocket	ket.	Damage: - Corrosion: L (A) S	
Loakage		s * Q	v	Reduction G	ear	Damage: Corrosion: L 🕅 S	
Sill				Cover	Drum-L	Damage: – Corrosion: L M 🕥	
Side Seal	Abrasion-Max	Lett: - mm, flight: - mm	RS		Orum-R	Damage: – Corrosion: L M 🕥	
Rotler Truch	Roter Truck Abrasion-Max	Lett: - mm, Right: - mm	ЯГ		Gear-Middle	Damage; - Corrosion: L 🕲 S	7
Roter Guard Missing	rd Missing	ren o Right O	z	Counter Shaft	aft	Damage: Corrosion: L M S	
	Defect	Left 1 Right 1	z	Counter Weight	IUDI	Damage: - Corrosion: L M S	ß
Sill Beam	Abrasion	S W 7	1	Hoisting	Wet Condition	36 kg.m	THE STATE
Concrete	Damage-Left	© w 7	AS	Torque	Dry Condition	2.0 kg-m	RS
	Damage-Right	s 🛞 7	AS S	Superstructure		Damage: Corrosion; L M 🕥	RS.
·	Damage-Bottom	ч г 🛞 S	RS				

Remarks: Judgoment = N: Totally Replace, C: Party Replace, RL: Large Repart, RM: Medium Repair, RS: Small Repart, G: No Repair, -: No Data.

shows design dimension.

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(43 / 96)

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Gate No.	W36	(Main Weir Gate)	r Gate)						(44 / 96)
Sur	Survey Itam		Survey Result	Judge		Survey Item	Survey Result	-agouL	Photograph
Gate Loaf					Hoisting Device	ce			
Skin Plate	Thickness-Avg	Top - Mid -	Low - Bim -	(9.5mm) —	Wire Rope	e Main-Left	ŧ	0	
	Corrosion	U/S-Bottom	L M S			Main-Right	$\chi = Distortion: - Corrosion: - Oit -$	0	
	Damage-Rivet	Corner-L -	Corner-A -	I		Roller Train-L	y - Distortion: + Corrosion: - Oit -	0	
Truss	Thickness-Avg	Bottom Flange -	Boltom Flange Boltom Web - (19.1mm)			Roller Train-R	y. – Distortion: – Corrosion: – Oil: –	υ	
	Distortion			1	۳۶Ö	Laft	Damage: – Function: –	RS	
End Graer	1	. – <i>Bottom</i> –	– , R-Bottam – (11.1mm)	mm) C		Right	Damage: - Function: -	<	
		Laft NO	Right No	<	Bearing	Drum	Damage: - Oil: -	-> 	
	Distortion	tett -	Right –			Counter Shaft	Damage: - Oil: -	S. S.	
Bottom	Thickness-Avg	Fiange – mi	тт – дем (16.3), тт	mm (9.4)		Reduction Gear Damage:	r Damage: Oit: -	0	
Girder	Corrosion		r w S		Gear	Drum Gear-L	Damage: – Filling: – Backlash: – Oil: -	RS P	
Rocker	Remodeling	Left No	Right No			Drum Pinion-L	Damage: -	«	
Assembly		- 101 -	Right –			Orum Cear-R	Damage: - Fiting: - Backlash: - Oil: -		
<u></u>	Others		No Function			Drum Pinion-R Damage:	Damsgo: -		
Roller Train	Roller Train Missing	Left -	Right –			Gear-Middle	Damage: - Fitting: - Backlash: - Oil: -		
	Diameter-Rollor	Average -	uu			Pinion-Middle	Damage: -		
	Distortion	Left -	Right –		Basement	or Drum-L	Damago: – Corrosion: L M 🕄		
Seal	Left		1			Doum-R	Damage: – Corrosion: L M 🕥	->	
	Bottom		1			Drive Device	Damage: - Corrosion: L 🙆 S	RS	
	Right		1		Drive Chain	ain	Damage: – Looseness: – Dii: –	0	
Inclination		Top Level Diff	Top Level Difference 20 mm	>	Chain Sprocket	rocket	Damage: – Corrosion: L 🕲 S	<	
Loakage			s w O		Reduction Gear	n Gear	Damage: - Corrosion: I. 🕅 S		
Sill				 	Cover	Drum-L	Damage: - Corrosion: L M 🛇		
Side Seal	Abrasion-Max	и — :µөт	mm, Right: — mm	e AS		Orum-R	Damage: Corrosion: L M 🕥	→	
Roller Truch	Roller Truck Abrasion-Max	1 - 1497; - U	mm, Right: – mm	R.		Gear-Middle	Damage: Corrosion: L 🕑 S	v	
Roller Guard Missing	rd Missing	Left 1	Right 1	z	Counter Shaft	Shaft	Damage: Corrosion: L M S	U	
	Defect	1 <i>ett</i> 0	Right 0	z	Counter Weight	Weight	Damage: - Corrosion: L M S	RS	
Sill Beam			s @0 7	z	guister.	Wet Condition	40 kg-m	ЪГ	
Concrete	Damage-Left		r 🕲 s	RS	Torque	Dry Condition	0.9 kg·m	SE SE	
	Damage-Right		r 🕲 s	SH .	Superstructure	Q.	Damago: – Corrosion: L M 🕃	RS	
	Damage-Bottom		s 100 s	R					

Remarks: Judgement = N: Yotaliy Replace, C: Partiy Replace, AL: Large Repair, RM: Medium Repair, RS: Small Repair, G: No Repair, -: No Data.

shows design dimension.

Structure
of Gate
Results
Survey

Survey Item Leaf Leaf Leaf Leaf Lun Piate Thuckness-Avg 7op – Mid Carroson U/S-Bortom Carroson U/S-Bortom Carroson U/S-Bortom Carroson U/S-Bortom End Carder Thuckness-Avg 80tem Flavg Distortion U-Botom Recker Remodeling Left No Assembly Distortion Left – Carroson Left – Seat Left Sand Router Train Missing Left Avonage Distortion Left – Seat Left Sand Routon Left – Distortion Left – Distortion Left – Distortion Left – Distortion Left –	Survey Result Judge	Moisting f	rvey Item Main-Left Main-Left Main-Alight Roller Train-L Roller Train-L Roller Train-L Roller Train-L Roller Train-L Roller Train-L Roller Train-L Roller Train-L Roller Train-L Roller Train-L Drum Gear-L Drum Gear-L Drum Gear-L Drum Rear-L Drum Rear-L	y: Distortion: Corrostor: Oit: Damage: - Oit: Distortion: Damage: - Fitting: Backlash: Oit:	
Plate Thekness-Avg Top – Mid Plate Thekness-Avg Top – Mid Carrosion U/S-Bortom Carrosion U/S-Bortom Thickness-Avg Botem Flang Distortion U-Bortom Carter Thickness-Avg Canton Remodeling Left ~ Distortion Left ~		Moissing Case Bea Case Bea	ee Man-Left Man-Left Man-Left Man-Left Man-Left Roller Train-L Left Roller Train-L Drum Counter Shaft Reduction Gear Drum Gear-L Drum Gear-R Drum Gear-R Drum Gear-R Drum Gear-R Gear-Middle Gear-Middle	Iortion: - Corrosion: - Oil:- Iortion: - Corrosion: - Oil:- Iortion: - Corrosion: - Oil:- Iortion: - Corrosion: - Oil:- - Function: - Oil: - - Oil: - - Oil: - - Fitting: - Backlash: - Oil: - Fitting: - Backlash: - Oil: - Fitting: - Backlash: - Oil:	
Plate Thuckness-Avg Top – Mid Corrosion U/S-Bortom Corrosion U/S-Bortom Distortion U/S-Bortom Distortion U/S-Bortom Distortion Left ~ Distortion Left ~ Distortion Left ~ Distortion Left ~ mbly Distortion Left ~ mbly Distortion Left ~ mbly Distortion Left ~ mbly Distortion Left ~ Corrosion Left ~ nation Left ~ Distortion Left ~ Distortion Left ~ nation Left ~			Main-Left Main-Aight Roller Train-L Roller Train-L Roller Train-L Right Drum Counter Shaft Counter Shaft Drum Gear-L Drum Gear-L Drum Cear-R Drum Cear-R	Ionion: - Corrosion: - Oii:- Ionion: - Corrosion: - Oii:- Iantion: - Corrosion: - Oii:- turnion: - Corrosion: - Oii:- - Function: - Oii:- - Oii: - 0ii: - - Fitting: - Backlash: - Oii: - Fitting: - Backlash: - Oii: - Fitting: - Backlash: - Oii:	
Render Left Corrosion US-Boftom Corrosion US-Boftom Curuss Thickness-Avg Distortion L-Boftom End Grider Thickness-Avg End Grider Thickness-Avg End Grider Thickness-Avg End Grider Thickness-Avg End Grider Left Bontom Left Assembly Distortion Assembly Distortion Rollor Train Left Saal Left Saal Left Assembly Distortion Rollor Train Left Assembly Distortion Rollor Train Left Saal Left Assembly Distortion Rollor Train Left Rollor Train Left Rollor Train Left Rollor Train Left			Main-Alght Roller Train-L Roller Train-B Left Drum Drum Drum Gear-L Drum Gear-L Drum Gear-L Drum Gear-R Drum Gear-R	tortion: - Corrosion: - Oit- tortion: - Corrosion: - Oit- turnion: - Corrosion: - Oit- - Function: - Oit- - Oit: - - Oit: - - Fitting: - Backlash: - Oit - Fitting: - Backlash: - Oit - Fitting: - Backlash: - Oit	
russ Thuckness-Avg Bottem Flang End Carder Thuckness-Avg Bottem Flang Distortion Laft ~ Bottom Thuckness-Avg Laft No Remodeling Laft No Assembly Distortion Laft ~ Bocker Remodeling Laft No Assembly Distortion Laft ~ Roker Remodeling Laft No Seati Left Corresion Laft ~ Roker Remodeling Laft ~ Roker Remodeling Laft ~ Roker Remodeling Laft ~ Roker Remodeling Laft ~			Roller Train-L Roller Train-H Left Prom Counter Shaft Counter Shaft Drum Gear-L Drum Gear-L Drum Gear-R Drum Gear-R Gear-Middle	Iortion: - Corrosion: - Olt- uartion: - Corrosion: - Olt- - Function: - - Olt: - - Olt: - - Olt: - - Fitting: - Backlash: - Olt - Fitting: - Backlash: - Olt - Fitting: - Backlash: - Olt	
Loanage-more Loanage-more Fruiss Thuckness-Avg 80xiom End Gurder Thuckness-Avg Left Distortion Left - Bottom Thuckness-Avg Flange Gurder Tostonnon Left - Gurder Corrosion Left - Gurder Corrosion Left - Assambly Distortion Left - Assambly Distortion Left - Rouler Train Missing Left - Saal Distortion Left - Saal Left Acsambly Left - Saal Left Acsamble - -			Roller Tran-R Left Prum Counter Shaft Counter Shaft Beduction Gear-L Drum Gear-L Drum Cear-R Drum Cear-R Drum Cear-R	 Kortion: - Corrosion: - Oi!- Function: - Function: - Oil: - Oil: - Oil: - Fitting: - Backlash: - Oil: Fitting: - Backlash: - Oil: Fitting: - Backlash: - Oil: 	
frucss Thuckness-Avg axiem Flerg Distortion Curler Thuckness-Avg Left No Distortion Left ~ 6 Distortion Left ~ Grader Thuckness-Avg Flange = Grader Thuckness-Avg Flange = Assembly Distortion Left ~ Saal Missing Left - Saal Left Average Distortion Left ~			Left Left Drum Counter Shaft Drum Gear-L Drum Pinnon-L Drum Pinnon-R Gear-Middle	 Function: - Function: - - Out: - - Out: - - Fitting: - Backlash: - Oit: - Fitting: - Backlash: - Oit: 	
End Gurder Thuckness-Avvg L-Bortom Remodating Left No Borrom Thuckness-Avvg Klange - Borrom Thuckness-Avvg Klange - Gurder Corrosion Left - Rocker Remodeling Left No Assembly Distortion Left - Roller Train Missing Left - Roller Train Missing Left - Seal Left Nissing Left - Seal Left Avorage Distortion Left - Seal Left Seal	- (11.1mm) - mm (3.4) S		Right Dorum Counter Shaft Counter Shaft Dorum Gear-L Drum Gear-L Drum Gear-R Drum Cear-R Gear-Middlo	 <i>Function: −</i> <i>Out: −</i> <i>Out: −</i> <i>Out: −</i> <i>Out: −</i> <i>Fitting: −</i> Backlash: − Out <i>Fitting: −</i> Backlash: − Out <i>Fitting: −</i> Backlash: − Out 	
End Gurder Thuckmess-Avvg L-Bottom Remodesing Left No Bostom Thuckness-Avvg Frange - Gurder Corrosion Left - Gurder Corrosion Left - Assembly Distontion Left - Roker Missing Left - Roker Train Missing Left - Roker Train Missing Left - Seal Left Diameter-Roker Avonage Distortion Left - Seal Left Diameter-Roker Avonage Distortion Left - fight Tay	- (11.1mm) - mm (3.4) S		Hight Drum Counter Shaft Broun Gear-L Drum Gear-L Drum Cear-R Drum Cear-R Gear-Middle	- Oit: - - Oit: - - Oit: - - Fitting: - Backlash: - Oit: - Fitting: - Backlash: - Oit: - Fitting: - Backlash: - Oit:	
Remodeling Left Left Right Distortion Left - Right Bottom Thickness-Avg Flange - Right Bottom Thickness-Avg Flange - M Carder Corrosion Left - M Rocker Remodeling Left - M Assamby Distortion Left - Right Roller Train Missing Left - Right Saai Left - Right - Saai Left - Right Saai Left - - Right Top Larvel Difference - Inclination Top Larvel Difference -	- WW (3 4)		Drum Counter Shaft Drum Gear-L Drum Pinion-L Drum Pinion-R Gear-Middle	 0:: - 0:: - 0:: - 6:: - 7:: - <	
Distortion Left Right Bortom Thuckness-Avg Flange = mm (16.3), W Bortom Corrosion Left No Rocker Remodeling Left Anght i Rocker Remodeling Left - Roller Train Missing Left - Roller Train Missing Left - Roller Train Missing Left - Roller Train Distortion Left - Roller Train Missing Left - Roller Train Missing Left - Roller Train Distortion Left - Roller Train Missing Left - Roller Train Missing Left - Roller Train Distortion Left - Roller Train Inclination Top Lartel Difference -	(m		a i a	- 0ii: - - Fitting: - Backtash: - 0ii: - Fitting: - Backtash: - 0ii - Fitting: - Backtash: - 0ii	
Bottom Theckness-Avg Flange - mm (16.3), W Grider Corrosion Left M Guder Corrosion Left No Rocker Remodeling Left Aight i Assembly Distortion Left Right i Assembly Distortion Left Right i Assembly Distortion Left Right i Roller Train Missing Left Right i Roller Train Missing Left - Roller Train Distortion Left - Seal Left Cent - Roller Train Top Level Difference - Auge - - -	· o		ă l a	- Oii: - - Fitting: - Backlash: - Oii: - Fitting: - Backlash: - Oii: - Fitting: - Backlash: - Oii	
Curder Corrosion Left No Right Rocker Remodeling Left Left Mo Assembly Distortion Left Left Right Assembly Distortion Left Left Right Assembly Distortion Left No Function Roller Train Missing Left No Function Roller Train Missing Left - Right Seal Left Left - - Right Inclination Top Lavel Difference 1 Inclination Top Lavel Difference 1			i a	 Fitting: - Backlash: - Oli. Fitting: - Backlash: - Oli. Fitting: - Backlash: - Oli. 	
Acter Remodeling Left No Right I Assembly Distortion Left - Right Conners Left - Right Roller Train Missing Left - Right Saal Diameter-Roller Average - mm Distortion Left - Right Distortion Left - Right Bottom Left - Right Average - mm Right Right Distortion 2 Left				- Fiting: - Backlash: - Oil: - Fiting: - Backlash: - Oil: - Fiting: - Backlash: - Oil:	
Assembly Distortion Left - Right Assembly Distortion Left - Right Criners Missing Left - Right Diameter-Roller Average - mm Diameter-Roller Average - mm Distortion Left - Right Pright - Right Rolton 1 Top Lavel Difference 1 Inclination 0 M			~	– Fitting: – Backlash: – Oli: – – Fitting: – Backlash: – Oli	
Assembly Destortion Left - right Assemby Cuners No Functi Roller Train Missung Left - Right Diameter-Roller Avenage - rinn Distortion Left - Right Seal Left - Right Bottom Left Right Inclination Left Right Right			~	- Fiting: - Backlash: - Ok	
Others No Function Roler Train Missing Left No Function Diameter-Roller Avorage - mm Distortion Left - Right Seal Left - Right Bottom Left - Right Roll Top Lavel Difference - Inclination Top Lavel Difference 1			Drum Pinion R Gear-Middle	- Fiting: - Backlash: - Oli	
Roller Train Missing Left – Right Diameter-Roller Average – mm Distoruon Left – Right Seal Left – Right Seal Left – Right Bottom Left – – – Aight – – –				– Fiting: – Backlash: – Oli	
Diameter-Roller Average - mm Distortion Left - Right Saal Left - Right Bottom Left Right 17op Lavel Difference 1 Inclination Top Lavel Difference 1					
Desiontaon Left Aght Seal Left - Right Bottom - - Aight - - Inclination Top Level Difference 1 Kage - -		-	Pjmon-Middle	Damage: -	
Seal Left Lou		Basen	ioment Drum-L	Damage: - Corrosion: L M 🕥	
Seal Left			Doim-P	Damage; - Corrosion: L M (S)	
Bottom Bottom					
Right - Inclination Top Lavel Difference 1 Kage O			Drive Device		
Inclination Top Lavel Difference 1 kage		Drive	Drive Chain	- 1 - 1	
(D)	1 60 mm	Chain	Chain Sprocket	Damage: - Corrosion: L 🕅 S	
2 Anos	S	Redu	stion Gear	Damage: - Corrosion: L 🕲 S	
6.01			Cover Drum-L	Damage: - Corrosion: L M 🕥	
suite and a president way teld - mm, Right	шш –	S.	Drum-A	Damaga: Corrosion: L M 🕥	
l teh: -	- mm	<u>ل</u> ع	Gear-Middle	Damage: – Corrosion: L 🕅 S	
0 Right		Z	Counter Shaft	Damage: - Corrosion: L M S	
i at i		Cour	Counter Weight	Damage: Corrosion: L M S	R SA
	s S		ng Wet Condition	31.5 kg.m	RL
	0	RS Torque	Le Dry Condition	2.0 kg.m	RS
				Damage: - Corrosion: L M 🕥	RS REAL PROPERTY AND A REA
Damaga-Right L (0				
Damage-Bottom L M S RS	0	RS			

shows design dimension.

(45/96)

Survey Results of Gate Structure	

Top - Mid - Low - Bim - (9.5mm) UIS-Bottom L M S UIS-Bottom L M S Conner-L Conner-R - Conner-L Conner-R - Left Dattom web - (11.1mm) Left Agght No Left Right No Left Right - Left Agght -
C Reduction Gear Left: mm, Right: mm, RS
N N N
>
L M 3 Right No Right - Right - No Function No Function Right
A-Bontom - Right No Right - mm (16.3), Was L M Right - No Function Right - Aight - Right -

shows design dimension.

A-60

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Gate No. W39 (Main Weir Gate)

Gate No.	W.39	(Main weir Gale)						Dhotomach
ŝ	Survey Item	Survey Result	Judge	Survey Itam	Item	Surve	Survey Result	Judge-During and address of the second s
Gate Leaf			Ť	Hoisting Device				
Skin Plate	e Thickness-Avg	Top - Mid - Low - Bun - (9.5mm)	1	Wire Rope	Main-Left	y: – Distortion: –	Corrosion: - Oit: -	
	Corrosion	U/S-Bottom L M S	ł		Main-Right	y: - Distortion: -	Corrosion: - Oit: -	
	Damage-Rivet	Corner-L - Corner-R -	1		Roller Train-L	ũ	Broken	
Truss	Thickness-Avg	Bottom Flange - , Bortom Web - (19,1mm)	1		Roller Train-R	y: - Distortion: -	Corrosion: - Oil: -	
	Distortion		1	0 Un	Loft	Damage: -	Function: -	RS
End Grider		L-Bottom -, R-Bottom - (11.1mm)	0	-	Right	Damage: –	Function: Miss Alignment	
		Left No Right No		Bearing	Crum) – :aŭsweg	Oii: -	
	Oistorian	Left - Right -	-		Counter Shaft	Damage: -	Oii: -	RS
Bottom	Thickness-Avg	Flange – mm (16.3), Web – mm (9.4)			Reduction Gear Damage:	1	Oii: -	0
Girder	Corrosion	S W 7		Gear	Drum Gear-L	Damage; – Fitting:	- Backlash: - Oit -	RS
Rocker	Remodeling	Left No Right No			Drum Pinion-L Damage:	Damage: -		
Assembly		Lett - Right -			Crum Gear-R	Damage: - Fitting:	- Backlash: - Oil: -	
		No Function			Drum Pinion-A	Damage: -		
Roller Tr.	Roller Train Missing	Left - Right -			Gear-Middle	Damage: – Fitting:	- Backlash: - Oli: -	
	Orameter-Roller	Average – mm			Pinion-Middle	Damage:		
	Distorion		-	Basoment	Orum-L	Damaga: - Co	Corrosion: L M 🕥	
Seal	Left				Drum-R	Damage: - Co	Corrosion: L M 🕥	
	Bottom	-			Drive Device	Damage: – Cu	carrasion: L 🕅 S	PS.
	Right	E .		Drive Chain		Damage: - Lo	Looseness: L Oil: -	
Inclination	T	Top Level Difference 10 mm	->	Chain Sprocket	ket	Damage: - Cc	Corrosion: L 🕅 S	
Leakago		s M Q	0	Reduction 9	ioar	Damage: Cc	Corrosion: L 🕑 S	
Sult				Cover	Drum-L	Damage: - Cc	Corresion: L M 🕥	
Side Seal	al Abrasion-Max	Lett: - mm, Right: - mm	R S		DNm-R	Damage: - Cc	Corrosion: L M 🕥	
Roller Tr	1.3	Lett: - mm. Right: - mm	붑		Gear-Middle	Damage: - Co	corrosion: L 🕅 S	
Roller G	Roller Guard Missing	Left 0 Right 1	z	Counter Sh	aft	Damage: - Co	Corrosion: 4 M S	0
	Defect	Left 0 Right 0	z	Counter Weight	ight	Damage: - Co	Corrosion: L M S	•
Sill Beam		S W 7	1	Hoising	Wet Condition	24	kg·m	U
Concrete	e Damage-Left	s @ 7	RS	Torque	Ory Condition	1	kg∙m	
	Oamage-Right	L M ©	S. S.	Superstructure		Damage: - Co	Corrosion: L M 🕥	RS
	Damage-Bottom	c w c	AS					

Remarks: Judgement = N: Totaliy Replace, C: Partly Replace, AL: Large Repart, RM: Medrum Repart, RS: Small Repart, G: No Repart, -: No Dato.

\$ shows design dimension.

(47/96)

Results of Gate Structure	
Survey	

(48 / 86)

(Main Weir Gate) W40 Gate No.

	Cate NO.	744	(אומוון אבוי ממיב)	/~1n~							
	Surve	Survey Item		Survey Result	Judge		Survey Item	Su	Survey Result	Judge	Photograph
Gate Leaf	Leaf					Hoisting Device					
<u>۔</u>	Skin Plate	Thickness-Avg	- 10p - Mid	Low - Bim - (9.5mm)	- in	Wire Rope	Man-Left	y: - Distortion: -	Corrosian: – Oil: –	U	
		Corrosion	U/S-Bottom	S W 7	 		Main-Right	y: Distortion:	Corrosian: Oit:	0	
		Damage-Rivet	Corner-L -	Corner-R -	1		Roller Train-L	y: - Distortion: -	Corrosion: - Oil: -	v	
.1 <u></u>	Truss	Thickness-Avg	Bollom Flange -	Boltom Flange - , Boltoin Web - (19.1mm)	 	 r	Roller Train-R	y: - Distortion: -	Corrosion: - Oil: -	υ	
		Distortion	 			50	Left	Damage:	Function: -	RS	
<u></u>	End Girder	Thickness-Avg	- 90110m -	– , R-Bottom – (11.1mm)	ں ۽	 1	Right	Damage: –	Function:	<u></u>	
		Remodeling	Lett No	Pight No	«	Bearing	Drum	Damage: –	Oit: -	->	
		Distortion		Right –		r	Counter Shaft	Damage: –	Oit: -	ß	
1	Botton	Thickness-Avg	Flange – mm	mm (16.3), Web - mm (9.4)	(4)		Reduction Gear Damage:	Damage: –	Olt: +	0	
	Grder	Corrosion	~	S W		Gear	Drum Gear-L	Damage: – Fitting:	: = Backlash: - Oll: -	ŝ	
<u> </u>	Rocker	Remodeling	Left No	Right No			Drum Pinion-L Damage:	Damage: –		<-	
4	Assembly	Distortion	Left —	Right -		 r	Drum Gear-R	Damage: - Filting:	: Sacklash: Oll:		
		Others		No Function	 		Drum Pinion-R	Damage: –			
1 4	Rotter Train Missing	Missing	- 191	Right –			Gear-Middle	Damage: - Fitting:	: - Backlash: - Oil: -		
		Diameter-Roller	Average =	uu			Pinion-Middle	Damage:			
		Distortion	Lett -	- Hoht -		Basement	Drum-L	Damage: - (Corrosion: L M 🕥		
• • • •	Soal	Left					Drum-R	Damage: – (Corrosion: L M 🕲	>	
		Bottom		1			Drive Device	Damage: – (Corrosion: L 🕲 S	RS	
		Aight		ą		Drive Chain		Damage: - L	rooseness; - Oil: -	0	
<u>≈</u>	Incination		Top Level Difference	rence 20 mm	~>	Chain Sprocket	cket	Damage: - (Corrosion: L 🕅 S	<	
Leakage	age		0	S W (U	Reduction Gear	sear) - :eŭeweg	corrosion: L 🕅 S		
S.						Cover	Drum-L	Damaçe: - (Corrosion: L M 🕥		
<u></u>	Side Seal	Abrasion-Max	Lett: - M	mm, Right: – mm	RS.		Drum-R	Damage: (Corrosron:L M 🕥	→	
<u>1 ar</u> .	Roller Truck	Roller Truck Aprasion-Max	т. – т.	mm, Right; – mm	ъ́г		Gear-Middle	Damage: - (corrosion: L 🕅 S	υ	
	Roller Guard Missing	Missing	Left 1	Right t	z	Counter Shaft	aft	Damage: (Corrosion: L M S	σ	
		Defect	Let 0	Right O	z	Counter Weight	ight	Damage: - C	Corrosion: L M S	1	
<u> </u>	Sill Beam	Abrasion	7	M S	I	Horsting	Wet Condition	44,4	kg.m	봅	
10	Concrete	Damage-Left		м Ю	RS	Torque	Dry Condition	1	w∂-w		
		Damage-Right	7	© >>	RS	Superstructure		Damage: (Corrosion: L M 🕥	å	
		Damage-Bottom	0	s w (ŝ						
J											

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Remarks: Uudgement • N: Totally Replace, C: Partly Replace, RL: Large Repair, RM: Medium Repair, RS: Small Repart, G. No Repair, -: No Data) shows design dimension.

Structure
Gate S
Results of
Survey

Weir Gate)
(Main
W41
e No.

				t		-	ŭ	Summer Poent	. 7	Photograph
Su	Survey Item	Sur	Survey Result	Judge	Survey Item	y Item	0	Incol Askin		
Gate Leaf				<u>-</u>	Hoisting Device					
Skin Plate	1 Thickness-Avg	Top - Mid - Low	ом — Віт — (9.5тт)	1	Wire Rope	Main-Left	y: - Distortion:	- Corrosion: -	-:;o	
		U/S-Bottom	L M S	1		Main-Right	y: - Distortion:	- Corrosion: -	- <i>::</i> :0	
	Damage-Rivet	Corner-L -	Corner-A -	1		Roter Train-L	y: - Distortion:	- Corrosion: -	Oit -	
Take	Thickness.Avo	Borrom Flenge - , Ú	Bortom Flange - , Bortom Web - (19.1mm)	1		Roller Train-R	y: - Distortion:	- Corrosion: -	Oit -	
	Distorion			1	лч Д	Left	Damage: –	Function: -		RS .
End Girder	1	L-Botiom - , R	-, R-Bonom - (11.1mm)	v		Right	Damage: –	Function:		
		ON JET	Rigm No	«	មិចផកកណ្ដ	Dom	Damage: –	Oit:		
	Distortion	Lefr –	Right -			Counter Shaft	Damage: –	0it –		R
Bottom	Thickness-Avg	Flange - mm (1	mm (16.3), Web - mm (9.4)			Reduction Gear	Reduction Gear Damage: Loose	Oit: -		0
Girder	Corrosion	7	M S		Gear	Drum Gear-L	Damage: - Fitting:	- Backlash:	- 1 1 1	RS
Rocker	Remodeling	Left No	Right No			Drum Pinion-L	Damage:			ないののかいたかであるという
Assembly		Left -	Right –			Orum Gear-R	Damage: - Fitti	Fitting: – Backlash: -	- 0% -	
		2	Na Function			Drum Pinion-R	Dатаде; –			
Rotler Tri	Roller Train Missing	Leň -	Aight -			Gear-Middle	Damage: - Fill	Fiting: - Backlash:	- 04: -	
	Diameter-Rotter	T	e e			Pinion-Middle	Damage: -			
	Distortion		Right –		Basement	Dom-L	– ;əbemeq	Corrosion: L	S M	
Seat	Left					Orum-R	Damage: -	Corrosion: L	M ©	
	Bottom	-	1			Drive Device	Damage: -	Corrosion: L (s S	RS V 4 V 4 V
	Right		1		Drive Chain		Damage:	- "Issanesco"	- ::0	
Inclination		Top Lovel Difference 35	ence 35 mm	->	Chain Sprocket	cket	Damage:	Corrosion: L (s ©	
Leakage		0	S W (0	Reduction Gear	Gear	Damage: –	Carrosian: L (s S	
Sill					Cover	Drum-L	Damage:	Corrosion: L	ତ ×	
Side Seal	al Abrasion-Max	rett: – mm	mm, Right: – mm	RS		Drum-R	Damage: -	Corrosion: L	() X	
Roller Tr	×	100 - WW	mm, Right: – mm	5		Gear-Middle	Damage:	Corrosion: L (s S	U
Roller G	Roller Guard Missing	Let 0	Right 0	z	Counter Shaft	laft.	Damage:	Carrosian: L	N S	
	Defect	Let 0	Right 1	z	Counter Weight	eight	Damage: –	Corrosion: L	M S	1
Sil Beam	1		0 ¥	RS	Hoisting	Wet Condition	37	kg.m		RL
Concrete		7	(9) V	RS	Torque	Ory Condition	t	<i>w</i> ∂∙ <i>m</i>		
		7	ß, s	RS	Superstructure	_	Damage:	Corrosion: L	(⊙) ¥	B.C.
	Damage-Bottom	Ξ	S M (RS						

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(96 / 69)

Structure
f Gate
Results of
Survey

Gate No. W42 (Main Weir Gate)

Sur	Survey Item	Survey Result	asonr	Surve	Survey Itom	Survey Result		Photograph
Gate Leaf				Hoisting Device				
Skin Plate	Thickness-Avg	Top - Mid - Low - Bim - (9.5mm)	1	Wire Rope	Main-Left	y: – Distortion: – Co	Corrosion: - Oil: -	
	Corrosion	U/S-Battom L M S	1		Main-Right	y: – Distortion: – Co	Corrasian: - Oit:-	6 6
•	Damage-Rivet	Corner-L - Corner-R -	1		Roller Train-L	Groken	en a	
Truss	Thickness-Avg	Bottom Flange + , Bottom Web - (19.1mm)	1		Rotler Train-R	y: - Distortion: - Co	Corrosion: - Oit:-	
	Distertion		Ι	Drum	hen	Damage: – Fur	Function; -	R.
End Giraer	r Thickness-Avg	L-Bottom -, R-Bottom - (11.1mm)	υ		Right	Damage: - Fur	Function: -	
	Remodeling	Left No Right No	←	Веапир	Drum	Demage: Oil;	1	
	Distortion	Leit – Right –			Counter Shaft	Damage: - OH: -	1	RS
Bottom	Thickness-Avg	Flange – mm (16.3), Web – mm (9.4)			Reduction Goar Damage:	– :#O – :#O	1	
Girder	Corrosion	S W 7		Gear	Drum Gear-L	Damage: - Fining: -	Backlash: - Oil:	RS
Rocker	Remodeling	Left No Right No			Drum Pinion-L	Damage: -		
Assembly	Distortion	Lott – Right –			Drum Gear-A	Damage: - Filting: -	Backlash: - Oit -	
	Others	No Function			Drum Pinion-R Damage:	Damage: –		
Rotter Trail	Roter Train Missing	Lett - Right -			Gear-Middle	Damage: - Fitting: - I	Backlash: - Oll: -	
	Diamoter-Roller	Average - mm			Pjnion-Middle	Damage: –		
	Distortion	Left - Right -		Basement	Drum-L	Damage: Corrosion:	1001: T M 🕥	
Seal	Left	1			Drum-R	Damage: - Corrosion:	101: T M ©	
	Bottom	1			Drive Device	Damage: - Corrosion:	kon: L 🕲 S	ST Control of the second
	Right	8		Drive Chain		Damage: - Looseness:	10:5: - 0/: -	
Inclination		Top Level Difference 10 mm	->	Chain Sprocket	tet	Damage: - Corrosion;	ion: L (B) S	
Leakage		s 🛞 7	U	Reduction Gear		Damage: - Corrosion:	ion: L 🕅 S	
Sill				Cover	um-L	Damage: - Corrosion:	ion: L M 🕥	
Side Seal	Abrasion-Max	Lott: — mm, Right: — mm	S ^R		Drum-R	Damage: - Corrosion:	ion: L M ③	
Roller Truc	Roller Truck Abrasion-Max	Left: – mm, Right: – mm	Ъ.		Gear-Middle	Damage: - Corrosion:	ion: L 🕅 S	
Rotter Guard Missing	QuissiM b.	Left I Right T	z	Counter Shaft		Damage: - Corrosion:	ion: L M S	
	Defect	Lett 0 Right 0	z	Counter Weight		Damage: - Corrosion:	ion: L M S	
Sul Boam	Abrasion	S W 7	1	Moisting	Wet Condition	33.3 K	kg.m	
Concrete	Damage-Left	S W 7	RS	Torque	Dry Condition	− kg·m	ŧ	
	Damage-Right	S W 7	RS S	Superstructure		Damage: - Corrosion;	ion: L M ③	AS A CONTRACT OF A
	Damage-Bottom	s N O	RS S					

Remarks: Judgement = N: Totally Repiace, C: Party Replace, RL: Large Repair, RM: Medium Repair, RS: Small Repair, G: No Repair, -: No Data.

shows design dimension.

tructure
Gate S
ts of
Resul
Survey

Gate No.	W43	(Main Weir Gate)	ite)						
	Survey Item	Surve	tesuit	Judge	Survey Item	ltem	Survey Result	Judge	Photograph
Gate Leaf				Ť	Hoisting Device				
	-	The - Mid - LOW	v – Bim – (9.5mm)	1	Wire Rope	Main-Left	y: - Distortion: - Corrosion: - Oil:-	0	
	factoria (ti/S-Bottom L	×	ł			y: - Distortion: - Corresion: - Oil:-	0 1	
	2		Corner-R	1		Roller Train-L	y: - Distortion; - Corrosion: - Oil: -	0	
5		Bottom Flance 80	Boltom Flance - , Boltom Viet - (19.1mm)				y: - Distortion; - Corrosion; - Oli:-	0 -	
				1	E S	Loft	Damage: Function;	R	
End Girder	Thickness-Avg	L-Bottom R-I	– , R-Bottom – (11,1mm)	v		Right	Damage: - Function: -	<	
	Remodeling		Right No	4	Bearing	Drum	Damage: - Olf: -	→	
	Distortion	Lett - F	Hight -			Counter Shaft	,	RS	
Batem	8	Flange – mm (16	mm (16.3), Wab - mm (9.4)	Ē		Reduction Gear Damage:	Damage: - Ott: -	0	
Girder		~	S N		Gear	Orum Gear-L	Damage: - Fitting: - Backlash: - (Oit - RS	
Rocker	Remodeling	Left No 1	Right No			Drum Pinion-L	Damage: -	<	
Assembly	Distortion		Right -			Drum Gear-R	Damage; - Fitting: - Backlash: - (- - 8	
	Others	No.	No Function			Orum Pinion-R Damage:	Damage: -	+	
Roller Train Missing	Missing	1 - 407	Right			Gear-Middle	Damage: - Fitting: - Backlash: - t	- .	
	Diameter-Roller	Average – mm				Pinion-Middle	Damage: -		
	Distortion	- 401 -	Right -		Basement	Drum-L	Oamage: – Corrosion: I. 🔊	s	
Seal	Left					Drum-A	Damage: – Corrosion: L M	→ 0	
	Bottom					Orive Device	Damage: – Corrosion: L 🛞	S RS	
	нон		1		Orive Chain		Damage: - Looseness: L Oil:	0 1	
Inclination		Top Level Difference 5 mm	ice 5 mm	->	Chain Sprocket	sket	Damage: – Corrosion: L 🕐	< ∽	
Leakade			s S	v	Reduction Gear	iear i	Damage: Corrosion: L 🛞	S	
Silt					Cover	Drum-L	Damage: – Corrosion: I, M	0	
Side Seal	Abrasion-Max	Left: - mm,	mm, Right: - mm	RS		ԵսուԳ		-> ⊘	
Roller Truc	1 ×	Lett: - mm,	mm, Aight: – mm	ਛ		Gear-Middle	Damage: – Corrosion: L 🕅	s S	
Roller Gua	Rolter Guard Missing	1 0 407	Right D	z	Counter Shaft	aft	Damage: – Corrosion: L M	s S	
	Defect	0	Кідт О	z	Counter Weight	łdpe	Damage: – Corrosion: L M	۱ ه	
Sill Beam			N S		Hoisting	Wet Condition	38.5 kg·m	ъ́	
Concrete	Damage-Left		s Q	RS	Torque	Dry Condition	ш-бх —		
	Damage-Right		s W	RS	Superstructure		Damage: – Corrosion: L M	وي ۲	
	Damage-Bottom	7	\$	RS					

Remarks: Judgement = N: Totally Replace, C: Party Replace, RL: Large Repar, RM: Moorum Repair, RS: Small Repair, C: No Reparc, -: No Data.

shows design dimension.

A-65

(51 / 56)

urvey Item survey Result Ju te Thekness-Avg 700 - Mid - Low - Bim - (9.5mm) Carrosson U/S-Bentom 4, M 5 Carrosson U/S-Bentom 4, M 5 Carrosson U/S-Bentom 4, M 5 Carrosson U/S-Bentom - (11.1mm) Distornon Left - Carner-R - Distornon Left - Right - Distornon Left - Right - Distornon Left - Right - Carrosson Left - Right - Distornon Left - Right - Carrosson Left - Right - Distornon Left - Right - Right - Distornon Left - Right - Distornon Left - Right - Band Misseng Left mm, Right: - mm Right - Distornon Left - M, Right: - mm	Gate No.	W44	(Main Weir Gate)								
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Su	vey Item	Survey Resu		Judge	Survoi	Item	Survey R	esult	Judge	
Bits Therenserved Town Research The Research The Concent Control Control <thcontin< th=""> <thcontin< th=""> Control<!--</th--><th>ate Leaf</th><th></th><th></th><th></th><th></th><th>loisting Device</th><th></th><th></th><th></th><th></th><th></th></thcontin<></thcontin<>	ate Leaf					loisting Device					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Skin Plate		- MOT -	1 - (9.5mm)	;		Main-Left	- Distortion: -			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	•		-	l	1			- Distortion; -			
True True Relativity		Damage-Pivel	,	er_R _	ī	1- -	- I	- Distortion; -			
Normality Contraction Image Parton Contraction Contractin Contractin		Theboas.Avo	Boliom Flange - , Bollom Wet	0 - (13.1mm)	1			- Distortion: -			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	-	Distortion			1	E POQ	Leít	1	ction: –	R	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Eod Gro			– (11.1mm)	ů		Right	1			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$))		۶		4	Bearing	Drum	1	-		
Reaction Threaders Ang Fanger Imager Ohr Ohr Guiden Li M S Casar Drun Gaert Damager Filling: Backlast: Ohr I Recien Li M S East Drun Gaert Drun Filling: Backlast: Dh I		Detedion	,					•	I	RS	-1
Control L M Start Drun Casert Drun Casert <thdrun casert<="" th=""></thdrun>	actor	Thicknass-Aut	1.1	I F			Reduction Gear	1		C	
Rum Enclose Laft No. Right No. Crum Enclose Damage: Filting: - Backlash: - Olt- Assenting Laft - Right - Dummer: - Dummer: - Filting: - Backlash: - Olt- Assenting Laft - Right - Backlash: - Olt- Dummer: - Electrine Dimmer: - Assenting Laft - Right - Backlash: - Olt- Dummer: - Electrine Backlash: - Olt- Assenting Laft - Right - Backlash: - Dummer: - Electrine Dimmer: - Consolin: Lift N Dimmer: - Dimmer: - Dimer: - <		Carlosion		S	F	Gear	Drum Gear-L	- Fitting: -	ö,	RS	
Non- Control Left Regist Regist Distribution Di	Contract Contract	Bemodalino			-		T	Damage:			<u> </u>
Northold Down Pranty: - Composition Down Pranty: - Composition Down Pranty: - Composition Composition <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>Drum Gear-R</td> <td>– Fitting: –</td> <td>- 01</td> <td></td> <td></td>					-		Drum Gear-R	– Fitting: –	- 01		
Currens Left Angler Currens Left Angler Ourmage Fitting Backlash: Off Roller Train Nussing Left - Agpti - Processor: L M Staal Left - Agpti - 1 Damage: - Correson: L M Staal Left - Agpti - 1 Damage: - Correson: L M Staal Left - - Agpti - - Damage: - Correson: L M Staal Left - - - Damage: - Correson: L M S Roper - - Damage: - Lond Damage: - Correson: L M S Roper - - - Damage: - L S <t< td=""><td></td><td></td><td></td><td></td><td>T</td><td></td><td>Drum Pinion-R</td><td></td><td></td><td></td><td></td></t<>					T		Drum Pinion-R				
Andrer fam Marange Connection Left Connection L M Signature Connection L M Signatex<		Others					Gear-Middle	Damage: - Fithing: -	1		
Damage relation Left - Roych - Corroscon: L M O Staal Left - Roych - Corroscon: L M O Staal Left - Roych - Corroscon: L M O Staal Left - - - Corroscon: L M O Rogn - - - Damage: - Corroscon: L M O Inclination - - Damage: - Corroscon: L M S Inclination - - Damage: - Corroscon: L M S Inclination - - Damage: - Corroscon: L M S Inclination - - Damage: - Corroscon: L M S Scio Seal Abrosciter Damage: -	Holler	Burssing Vie			T			Damage: -			
Association Left - Right - Right - North-L Oarmage: - - Outm-R Saal Left - - - - - - - - - Saal Left - - - - - - - - - - Ropul - - - - - Damage: - - Corrosion: L< M S		Diameter-Roller	Average -		-						
Left - - 0 Damage: - Caroson: L M		Distortion	- Aight	-		Basement	Orum-L	1	3		
Bottom - - - - - - 0 </td <td>Seal</td> <td>Left</td> <td>1</td> <td></td> <td></td> <td></td> <td>Drum-R</td> <td></td> <td>N -</td> <td>→</td> <td></td>	Seal	Left	1				Drum-R		N -	→	
Right - - Damage: - Looseness: L Oit< - Inclination 70p Levol Difference 5 mm V Chain Sprocket Damage: - Corresion: L \textcircled{OS} S kage - \overbrace{O} M S C Cover Damage: - Corresion: L \textcircled{OS} S kage - \overbrace{O} M S C Cover Damage: - Corresion: L \textcircled{OS} S kage - - mm, Right: - mm RS Cover Damage: - Corresion: L \textcircled{OS} S Stoo Seal Aborsson-Max Left: - mm, Right: - mm RS Cover Damage: - Corresion: L \textcircled{OS} S Rouler Truck Aborsson-Max Left: - mm, Right: - mm R Cover Damage: - Corresion: L \textcircled{OS} S Rouler Truck Aborsson-Max Left: - mm, Right: - mm, Right: - Corresion: L \textcircled{O} S \textcircled{O} <t< td=""><td></td><td>Bettom</td><td></td><td></td><td></td><td></td><td>Drive Device</td><td>1</td><td>3 ~</td><td>RS</td><td></td></t<>		Bettom					Drive Device	1	3 ~	RS	
		Bunht	2			Drive Chain		1	7	c c	
kege Corrosion: L M S C Reduction Gear Damage: Corrosion: L M S Stoe Seal Aborasion-Max Left: - mm. Right: - mm. Right: - mm. Right: - M S - Corrosion: L M S - - Corrosion: L M S - Corrosion: L M	locioato	1	Top Level Difference 5 m	m.	Þ	Chain Sproc	ket	-	۲ ۲		44
Side Seal Aborasion-Max Left: $ mn$ Right: $ mn$ $Right: mn Right: mn Right: mn Right: mn Right: Right: Concesion: L M Similities Right: Right:$	1 aakadin		v O	S	0	Reduction C	ear	1	3 		
Side Seal Abresion-Max Left: - mm, Right: M S Roller Truck Abrasion-Max Left: - mm, Right: - mm, Right: - M S Roller Truck Abrasion-Max Left: - mm, Right: - mm RL Roller Cuard Missing Left 0 Right 0 N N Counter Shaft Damage: - Conosion: L M S Roller Cuard Missing Left 0 Right 1 N N Counter Shaft Damage: - Conosion: L M S Sill Beam Abrasion L M S - Housing M S M S - Conosion: L M S Sill Beam Abrasion L M S RS M S M S - Conosion: L M S Concette Damage-Left L M S RS Damage: - Conosion: L M S Sill Beam Abrasion L M S RS Droque Dry Condition </td <td>e e e</td> <td></td> <td></td> <td></td> <td></td> <td>Cover</td> <td>Drum-L</td> <td>1</td> <td>L M</td> <td></td> <td></td>	e e e					Cover	Drum-L	1	L M		
Abraseon-Max Left: mm, Right: mm set mm set <thm set<="" th=""> mm set mm set</thm>		ſ —	,		ЯS		Drum-R	1	L M		
Identify Left Ø Right N Counter Shaft Damage: - Contosion: L M S Missing Left Ø Right N N Counter Shaft Damage: - Contosion: L M S Defact Left Ø Right N N Counter Weight Damage: - Contosion: L M S Abrasion L M S - Housing Wei Condition 44.4 N°m Abrasion L M S Fis Torque Dry Condition - kg·m Camage-Left L M S RS Lordue Dry Condition - kg·m Camage-Right L M S As Superstructure Damage: - Contosion: L M				- mm	Ē		Gear-Middle	1	8	c	
Detect Left 0 Algni N Counter Weight Damage: - Correston: L M Abrasion L M S - Housing Wet Condition 44.4 Kg·m Abrasion L M S - Housing Wet Condition 44.4 Kg·m Damage-Left L M S As Provide Areason: L M Camage-Right L M S As Superstructure Damage: - Corroson: L M		ard Mission	0		z	Counter Sh	L L	,	T M		
Abrasion L M S Housing Wet Condition 44.4 Kg·m Damage-Left L M S FS Torque Dry Condition kg·m Camage-Right L M S Superstructure Damage: - Connosion: L M		Cafaet	0		z	Counter We	ght	1	L M		
Damage-Left L M M As Camage-Right L M As Superstructure Camage-Right L M One of the structure	Sul Bran			S	I	Hoisting	Wet Condition		<i>დ</i> -ш	HL NY	「おおい
Camage-Right L M S Superstructure Damage: - Corrosion: L M S	2000			ତ	RS.	Torque	Dry Condition	бх -	w.	-	
				୭୭		Superstructure		1	W 7	RS	
~ • •		Damage-Bottom	3	S	AS B						

Remarks: Judgement = N; Toteliy Replace, C; Party Replace, RL; Large Repair, RM: Medium Repair, RS: Smalt Repair, G: No Repair, -: No Data.

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Gate No. W45 (Main Weir Gate)

Gate NO.	C+11	(Main wen uave)		$\left \right $				0000-11	Photograph
Sur	Survey item	Survey	Survey Result	Judge	Survey Item	ltern	Survey Hesuit	affor	
Gate Leaf				° 1	Hoisting Device				
Skin Plate	Thickness-Avg	Top - Mid - Low -	- Bim - (9.5mm)	Ι	Wire Rope	Main-Left	y: - Distortion: - Corrosion; - Oil: -	U	
	Corrosion	U/S-Bottom L	S W	1		Main-Right		0	
	Damage-Rivet	Corner-L -	Corner-A -	1		Roller Train-L	y: - Distortion: - Corrosion: - Oil: -	0	
Truss	Thickness-Avg	Bottom Fiange - , Bottom Web - (19.1mm)	om Web - (19.1mm)			Roller Train-R	y: - Distortion; - Corrosion; - Dii:-	0	
	Distortion			1	Drum	Left	Damage: – Function: –	2 22	
End Girder	—	L-Bottom - , A-B	- , R-Bottom = (11.1mm)	U		Aight	Damage: – Function; –	2 	
		Left No Rig	Right No	«	Bearing	шъл П	Damage: Oil:	≫	and the second of the second se
	Distortion	Left - Ai	Right -			Counter Shaft	Damage: - Oil: -	RS	
Bottom	Thickness-Avg	Flange – mm (16.3). Web	3). Web - mm (9.4)			Reduction Gear Damage:	Damage: - Ou! -	0	
Cirder	Corrosion		N S		Cear	Drum Gear-L	Damage; – Fitting: – Backlash: – Oil:	- RS	
Rocker	Remodeling	Tett No Bi	Right No			Drum Pinion-L	Damage: -	<	
Assembly	Distortion	Lett - Ri	Right –			Drum Gear-R	Damage: - Fitting: - Backlash: - Oll:		
	Others	NoF	No Function			Drum Pinion-R	Damage: -		
Rotter Trai	Rotter Train Missing	Left - A	Right –			Gear-Middle	Damage: Fiting: Backlash: Oil:		
	Chameter-Roller	mm - eterade				Pinion-Middle	Damage:		
	Distortion	Laft -	Right –		Basement	Drum-L	Damage: - Corrosion: L M 🕥		
202	40 40		,			Drum-R	Damage: – Corrosion: L M 🕥	→ 	
	Bottom		1			Drive Device	Damage: Corrosion: L 🕑 S	RS	
	Richt			-	Drive Chain		Damage: Looseness: L Oil:	U	
Inclination	1	Top Level Difference	e 5 mm	Þ	Chain Sprocket	ket	Damage: - Corrosion: L 🕅 S	<	
Leakade		0	N S	0	Reduction Gear	ear	Damage: - Corrosion: L 🕅 S		
Sitt					Cover	Drum-L	Damage: – Corrosion: L M 🕤		
Side Seal	Abrasion-Max	Left: - mm, Right:	Right: – mm	RS		Doum-R	Damage: – Corrosion: L M 🕥	->	
Roller True	L×	,	Hight: – mm	ਛ		Gear-Middle	Damage: – Corrosion; L 🙆 S	υ	
Roller Guz	Roller Guard Missing	-	Right 1	z	Counter Shaft	Li Li	Damage: – Corrosion: L M S	σ	
	Defect	0	Right 0	z	Counter Weight	ght	Damage: – Corrosion: L M S		
Sill Beam			S M	1	Hoisting	Wet Condition	35 kg-m	ŭ	
Concrete		7	s N	RS	Torque	Dry Condition	– kg·m	-+	
			s Ø	RS	Superstructure		Damage: - Corrosion: L M 🕥	S.	
	Damage-Bottom	 ۲	@ ×	RS					
						0	CHell Dootse G. No Bonair - No Data		

Remarks: Juogement = N: Totally Replace, C: Partly Replace, RL: Large Repar, RM: Medium Repar, RS: Small Repar, G: No Repar, -: No Data.

shows design dimension.

(53 / 96)

Structure
of Gate
Results
Survey

Gate)	
Weir	
(Main	•
10	
W46	
No	

urvey item urvey item Carroson Carroson Carroson Damage-Avg der Trhackness-Avg der Trhackness-Avg Remodeling Distorton Distort	Gate No.	W46	(Main Weir Gate)						
Prior Priore Prior Prior <	Surv	ev item	Result	Judge	Survey	/ Item	Survey Result	epnr	ride Dosou A
Name The description L M T D is the description L M D is the description D is the description D D is the description D D is the description D is the description D		unav fa			histign Device				
Number of the interval of the inter of the interval of the interval of the int	Gate Leaf			Т			Direction Connection -	6	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Skin Plate	Truckness-Avg	Mid - Low - Bim -	I	Wire Rope			,	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Carrosian	۲ W	ł			- Distortion: - Corrosion: -	ه	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Damage-Bivet	ŀ	1			– Distortion; – Corrosion: –	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Yaree	N.C.MOGE. AVO	Bortom Flange - , Bottom Web - [19.1mm]	I			- Distortion: - Corrosion: -	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion		1	Drum			SH	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Fnd Guder		-, R-Bottom -	υ			- Function:	~	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	•			←	ຜີຂອກກອ		,	→	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion					- Of:	S.	
r Consider L M S Consider Finanger Finanger Finanger Finanger Finanger Consider Consider <thconsider< th=""> Consider <</thconsider<>	Borrow	Thirkmoss. Aut	- mm (16.3), Web -			Reduction Gear	I	U	
Remodeling Left No Right - Right - Deum Eining Demoger Fitting Fitting Fitting Contrast Chinages Fitting - Exercisent Contrast Fitting - Exercisent Contrast Fitting - Exercisent Contrast Fitting - Exercisent Contrast Fitting - Exercisent - Contrast	Gunar	Corrosion	N 7		Cear		– Firing: – Backlash: – Oll	Sr Sr	
Nov Description Left Right Oith Canador Dum Renewit Primon. Dum Renewit Entingr Babalitam: O // - Train Massing Laft Right Dum Renewit D	Recter	Remodelino		-			Damaga: -	<	
Chores No Function Durn Preiser, Entropy: Entro	Assembly	Distortion					- Fitting: - Backlash: - Oil:		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Others	No Function			Drum Pinion-R	•		
Diameter-Roller Average Immonuted Prinor. Middle Demage: Immonuted Prinor. Middle Demage: Immonuted Distributed Middle Demage: Immonuted Distributed Distributed <t< td=""><td>Roter Train</td><td>Missing</td><td></td><td></td><td></td><td></td><td>– Fitting: – Backlasn: – Oit:</td><td></td><td></td></t<>	Roter Train	Missing					– Fitting: – Backlasn: – Oit:		
Distortion Left - Right Damage: - Corresion: L M M Left - - N Num-R Damage: - Corresion: L M S Bottom - - N V Damage: - Corresion: L M S N ator - - - N V Damage: - Corresion: L M S N		Diameter-Roller	Average -	 			1		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion	Lott - Right		Basemont		- Corrosion: L M		
Bottom - - Orve Device Damage: - Corresion: L S 1 Right - - - - Damage: - Corresion: L S 1 aton 7op Level Difference 0 mm V Chain Sprocket Damage: - Corresion: L S S aton 7op Level Difference 0 mm V S Chain Sprocket Damage: - Corresion: L S S Seal Abrason-Max Left: - mm, Right: - mm R Cover Drum-L Damage: Corresion: L M S Truck Abrason-Max Left: - Mm, Right: - M S Cover Drum-L Damage: Corresion: L M S Corresion: L M S Corresion: L M S Corresion: L M S Corresion: L M	Seal	Left				Drum-R	Corrosion: L M	>	
Applie Amage: Looseness Off- Off- ation Top Level Difference 0 mm V Crain Sprocket Damage: Looseness Off- N S ation Top Level Difference 0 mm V Crain Sprocket Damage: Looseness - Off- S S seal Abrasion-Max Left: - mm, Right: - mm Right - mm R S <t< td=""><td><u> </u></td><td>Bottom</td><td></td><td></td><td></td><td></td><td>Corrosion: L 🕑</td><td>RS</td><td></td></t<>	<u> </u>	Bottom					Corrosion: L 🕑	RS	
ation Top Level Difference 0 mm Image: - Constant: Left: - mm. Aight: - mm Reduction Gear Left: - Conrosion: L S S Seal Abrasion-Max Left: - mm. Right: - mm Right - Corresion: L M S r Truck Abrasion-Max Left: - mm. Right: - mm Right - M S S r Truck Abrasion-Max Left: - mm. Right: - mm Right N Counter Shaft Damage: - Corrosion: L M S <td< td=""><td></td><td>Richt</td><td></td><td></td><td>Drive Chain</td><td></td><td>- Looseness: -</td><td>0</td><td></td></td<>		Richt			Drive Chain		- Looseness: -	0	
Image: bottomImage: bottomImage	Inclination		Top Level Difference 0 mm	 →	Chain Sproc	ket	- Corrosion: L 🕅	<	
An	Leakage		×	v	Reduction C	ear	Corrosion: L 🕅		
State Seal Abrasion-Max Left: Imm. Right:	Sill				Cover	Drum-L	- Corrosion: L M		
Left: $ mn$, $Right$: $ RL$ Cear-Middle $Darmage$: $ Corrosion$: L M S Left 1 $Right$ N N Counter Shaft Darmage: $-$ Corrosion: L M S Left 0 $Right$ N Counter Shaft Darmage: $-$ Corrosion: L M S Left 0 $Right$ N N Counter Weight Darmage: $-$ Corrosion: L M S Left 0 $Right$ N N Counter Weight Darmage: $-$ Corrosion: L M S Left L M S - Torque Dry Condition 35 $Kg·m$ $ Kg·m$ $ M$ M $ Kg·m$ M M M $ Kg·m$ $ M$ M		Abrasion-Max	– mm, Right: –	RS		Drum-R	Corrosion: L M	->	
Left Paght N Counter Shaft Damage: Corroston: L M S L M S Left Damage: Corroston: L M S <thl m="" s<="" th=""> L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S L M S <thl m="" s<="" th=""> <thl m="" s<="" th=""> <thl m="" s<="" th=""></thl></thl></thl></thl>	Roller Truci	k Abrasion-Max	- mm, Right: -	Ē		Gear-Middle	Corrosion: L 🕲	0	
Left O Right N Counter Weight Damage: - Corroston: L M S n L M S - Hotsing Wet Condition 35 kg·m b-Left L M S - Torque Dry Condition 35 kg·m b-Left L M S - Torque Dry Condition 75 kg·m b-Hight L M S - Suportunature Damage: - Corroston: L M s-Bottom L M S S S S S	Roller Guar	rd Missing	-	z	Counter Sh	ŧ	- Corrosion: L M	0	
Azrasion L M S Holaing Wat Condition 35 kg·m Azrasion L M S Torque Pry Condition Kg·m Damage-telt L M S Superstructure Damage: Corrosion: L M Damage-Right L M S Superstructure Damage: Corrosion: L M		Defect	0	z	Counter We	ight	- Corrosion: L M		
Damage-tett L M S - Torque Dry Condition - Kg·M Damage-Right L M S - Superstructure Damage: - Corresion: L M S	Sult Beam	Abrasion	¥	1	Hoisting	Wet Condition		ਛ	
Damage-Right <u>L M S – Superstructure</u> Damage: - Corresion: L M S Damage-Bottom L M S RS	Concrote	Damage-Left	W	1	Torque	Dry Condition		1	
L M ©		Damage-Right	W		superstructure		Corrosion: L M	Ъ	
		Damage-Bottom	r w	RS					

Remarks: Judgement = N: Totally Replace, C: Parily Replace, RL: Large Repar, RM: Medium Repair, RS: Small Repair, G: No Repair, -: No Data.

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(24 / 38)

Structure
Gate
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Results
Survey

Gate No. W47 (Main Weir Gate)

			ŀ	•		firmer Descrite	Photograph	rach
Surv	Survey Item	Survey Result	Judge	Survey Item	y Item	uncar Kayne		
Gate Leaf			Í	Hoisting Device				
Skin Plate	Thickness-Avg	Top - Mid - Low - BIM - (9.5mm)	1	Wire Ropo	Main-Left	y: - Distortion: - Corrosion: - Oil: -		
	Corrosion	U/S-Bottom L M S	U		Main-Right	y: - Distortion: - Corrosion: - Oit: -	3	
	Damage-Rivet	Corner-L 1 Corner-R 1	0		Roller Train-L	y: - Distortion; - Corrosion: - Oil: -	0	
Truss	Thickness-Avg	Bortom Flange - , Bortom Web - (19.1mm)	1		Roller Train-R	y: - Distortion; - Corrosion; - Oil: -	C	
	Distortion		1	Сvн Оvн	Left	Damage: – Function: –	RS Contraction	
End Girder	Thickness-Avg	L-Bottom - , R-Bottom - (11,1mm)	υ		Right	Damage: - Function: -	<	
	Remodeling	Lett No Right No	€	Bearing	Orum	0amage: - 0# -		
	Oistorion	Lott - Right 5 mm Bend			Counter Shaft Damage:	Damage: – Oii: –	RS	
Bottom	Thickness-Avg	Flange - mm (16.3), Web - mm (9.4)			Reduction Gear Damage:	Damage: - Oil: -		
Girder	Corrosion	S W 7		Gear	Drum Gear-L	Damage: Fitting: Becklash: Oil:	RS	
Rocker	Remodeling	Lett No Right No			Drum Pinion-L	Damage: -		
Assembly	Distortion	Lott M AD. Right Heavy AD.			Drum Gear-R	Damage: - Fitting: - Backlash: - Oil: -		
	Others	No Function			Drum Pinton-R	Damage: –		
Roller Train Missing	Ons 21M	Lett - Right -			Gear-Miccle	Damage: - Fitting: - Backtash: - Oil: -		
	Diameter-Roller	Average – mm			Pinion-Middle	Oamage:		
	Oistortion	Lett - Right -		Basement	Drum-L	Damage: Corrosion: L M 🕄		
Seal	reft	1507			Drum-R	Damage: – Corrosion; L M 🕥		
	Bottom	,1507			Drive Device	Damage: – Corrosion: L 🕅 S	RS	
	Aught	l, ost		Drive Chain		Damage: Looseness: - Oil: -	U	
Inclination		Top Level Difference 10 mm	→	Chain Sprocket	cket	Damage: Corrosion: L 🕑 S		
Leakage		s @ 7	υ	Reduction Gear	bear	Damage: – Corrosion: L 🕅 S		
Sill				Cover	Drum-L	Damage: – Corrosion: L M 🕥		
Side Seal	Abrasion-Max	Left: - mm. Right: - mm	R\$		Orum-R	Damage: – Conosion: L M 🕥		
Roller Truck	Roller Truck Abrasion-Max	Left: 15 mm. Right: 10 mm	Ъ		Gear-Middle	Damage: – Corrosion: L 🔊 S		
Roter Guard Missing	d Missing	Lett 0 Right O	z	Counter Shaft	aft	Damage: – Corrosion: L M S	C	
	Deloct	Lett 1 Right 0	z	Counter Weight	ight	Damage: – Corrosion: L M S	RS	
Sill Beam	Abrasion	L M S	ł	Hoisting	We: Condition	51.8 kg-m	RL	
Concrete	Damage-Left	د @ ۶	RS	Torque	Dry Condition	3.9 kg·т	RS	
	Damage-Right	C w S	RS S	Superstructure		Damage: - Corrosion: L M 🕲	RS	
	Damage-Bottom	n L <i>N</i> S	1				3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	

Remarks: Judgement = N: Totally Replace, C: Party Replace, RL: Large Repair, RM: Medium Repair, RS: Small Repair, G: No Repair, -: No Date.

() shows design dimension,

Structure
of Gate
Results o
Survey F

Gate No.	W48	(Main Weir Gate)	(ote						(96/96)
2 rus	Survey Item	275	Survey Result	agour	Sur	Survey Item	Survey Result	Judge	Photograph
Gate Leaf				Ĩ	Hoisting Device	90			
Skin Plate	Thickness-Avg	Top - Mid - Low	w = Btm = (9.5mm)	1	Wire Rope	e Main-Left	y: - Distortion: - Corrosion: +	0 - //0	
	Carrosion	U/S-Bottom L	© w 7	σ		Main-Right	y: - Distortion: - Corrosion: -	0#= 0#:=	
	Damage-Rivet	Corner-L 2	Corner-R 1	0		Roller Train-L	y: - Distortion: - Corrosion: -	· 0//- C	
Truss	Thickness-Avg	Bottom Flange - , Bc	Bottom Flange - , Bottom Web - (19.1mm)	1		Roller Train-R	y: - Distortion: - Corrosion: -	0%- C	
	Distortion			1	E PO O	Left	Damage: - Function: -	RS	
End Girder	Thickness-Avg	L-Bottom -, R-	-, R-Botrom - (11.1mm)	U		Right	Damage: - Function:	<	
		Let No F	Right No	<	Bearing	Orum	Damage: - Oil: -	->	
	Distortion	194 - 197	Right —			Counter Shaft	Damege: Oil:	å	
Bottom	Thickness-Avg	Fiange – mm (16	mm (16.3), Web – mm (9.4)			Reduction Gear Damage:	ar Damage: Oil:	v	
Girder	Corrosion	د -	S N		Gear	Drum Gear-L	Damaço: - Fiting: - Backlash:	- <i>Oi</i> : - RS	
Rocker	Remodeling	Left No F	Right No			Drum Pinion-L	. Damage: ~	<	
Assembly	Distortion	Left Heavy Ab.	Right Heavy Ab.			Drum Gear-R	Damage: - Fitting: - Backlash:		
	Others	N	No Function			Drum Pinion-A	l Damage:		
Roller Train Missind	Missind	1- 107	Right –			Gear-Middle	Damage: – Fitting: – Backlash:	- 01: -	
	Diameter-Rotler					Pinlon-Middle	Camage: –		
	Distortion	Left -	Right –		Basement	Drw-L	Damage: - Corrosion: L	M ©	
Seal	Left		4.5 m Broken	E		Drum-R	Damage: – Corrosion: L	^ © ″	
	Bottom		Lost	F		Drive Device	Damage: – Corrosion: L	© S RS	
	Right	3.0.	3.0 m Broken		Orive Chain	Ē	Damaga: - Looseness: -	<i>oit:</i> – c	
Indination		Top Level Difference 30 mm	2e 30 mm	→	Chain Sprocket	ocket	Damage: – Corrosion: L	ج م 2	
Leakage		Θ	s N	υ	Reduction Gear	Gœr	Damage: Corrosion: L	s 🕲	
Sult					Cover	Drum-L	Damage: – Corrosion: L	6 x	
Side Seal	Abrasion-Max	Left: – mm,	mm, Right: – mm	ß		Drum-R	Damage: - Corrosion: L	→ ⑤ ¥	
Roller Truck	Roller Truck Abrasion-Max	Lett: 10 mm,	mm, Aight: 10 mm	ВĹ		Gear-Middle	Damage: - Corrosion. L	S S	
Roller Guard Missing	d Missing	Left O A	Aight 0	z	Counter Shaft	haft	Damage: Corrosion: L	M S C	
	Delect	Left O R	Right 0	z	Counter Weight	Veight	Damage: - Corrosion: L	M S RS	
Sift Beam	Abrasion	1	S W	1	Hoisting	Wet Condition	44 kg.m	ي تر	
Concrete	Damage-Left	7	N S	1	Torque	Dry Condition	5.9 kg.m	S.S.	GATE NO. N. S.
	Damage-Right	7	M S	\$ 	Superstructure	9	Damage: - Corrosion: L	SR SR	
	Damage-Bottom	7	S	I					
			000 1 1 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0	0.000		Dismo DC. Small O	a a a a a a a a a a a a a a a a a a a		

Remarks: Judgement = N: Totally Replace, C: Partly Roplace, RL: Large Repar, AM: Medium Repair, RS: Small Repair, G: No Repair, -: No Data.

Shows design dimension.

(56 / 36)

Structure
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Weir Gate)
(Main W
W49
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Gate No.	W49	(Main Weir Gate)					
Surve	Survey Item	tesult	Judge	Survey Item	ltem	Survey Result	Judge Photograph
Cate Leaf				Hoisting Device			
Skun Plate	Thickness-Avg	Top - Mid - Low - Bim - (9.5mm)	ł	Wire Rope	Main-Left	.	
		U/S-Bottom L 🕑 S	U		Main-Right	y: - Distortion: - Corrosion: - Oit -	
	Damage-Rivet	Corner-L 1 Corner-A 1	U		Roller Train-L	y: - Distortion: - Corrosion: - Oit-	0
Truss		Bollom Flange - , Bollom Web - (19.1mm)	1		Roller Train-R	Broken	0
			1	E JO	Left	Damage: - Function: -	RS
End Girder	Thickness-Avg	(-Bottom - R-Bottom - (11.1mm)	v		Right	Damage: - Function: -	
	Remodeling	Left No Right No	4	Bearing	Drum	Damage: - Oii: -	· · · · · · · · · · · · · · · · · · ·
	Distortion	Lott - Fighi -			Counter Shaft	Damage: – Oii: –	RS To Variation (Contraction of Contraction of Cont
Bottam	δ.Υ.	Flange - mm (16.3). Web - mm (9.4)			Reduction Gear Damage:	- 0ii: -	
Girder	Corrosión	S W 1		Gear	Drum Gear-L	Damage: – Fiting: – Backlash: – Oil: –	RS
Rocker	Remodeling	Left No Right No			Drum Pinion-L		
Assembly	Oistoriion	Let Heavy AD. Right Heavy AD.			Drum Gear-R	Damaçe: = Pitting: = Backlash: = Oit: =	
	Others	No Function			Drum Pinion-R		
Roller Train Missing	6uissiw 1	tou i Bighi i			Gear-Middle	Damage: - Fiting: - Backlash: - Oit: -	
	Diameter-Roller Average	Average – rnm			Pinion-Middle	Damage: -	
	Oistortion	Lett - Right -		Basement	Drum-L	Damage: Corrosion: L M 🕥	
Seal	Left	4.0 m Broken	[Drum-R	~ 1	
	Bottom	1007			Drive Device	Damage: – Corrosion: L 🕅 S	
	Right	4.0 m Broken		Drive Chain		Ő	
Inclination		Top Level Difference 20 mm	->	Chain Sprocket	tet	Damage: - Corrosion: 4 (P) S	
Leakago		© w 7	ပ	Reduction Gear	aar	Damage: - Corrosion: L 🕅 S	
Sil				Cover	Drum-L	Damage: – Corrosion: L M 🕥	
Side Seal	Abrasion-Max	4.eft: + mm, Aight: - mm	S ^R		Drum-R	Damage: – Corrosion: L M 🕃	
Roller Truck		Lett: 16 mm, Right: 14 mm	ŭ		Gear-Middle	- Corrosion: L 🛞	
Roller Guard Missing	rd Missing	Lett O Fright O	z	Counter Shaft	ų	Damage: – Corrosion: L M S	
	Defect	Let 0 Argh 0	z	Counter Weight	ght	Damage: – Corrosion: L M S	
Sil Beam	Abrasion	S W 7	1	Housting	Wet Condition	29.6 kg-m	U
Concrete	Damage-Left	L M S		Tarque	Dry Condition		RS
	Damage-Right	L M S	i	Superstructure		Damage: Corrosion: L M 🕲	RS
	Damage-Bottom	A M S	1			C. No Data	

Remarks: Judgement = N: Totally Replace, C: Partly Replace, RL: Large Repair, RM: Medium Repair, RS: Small Repair, G: No Repair, -: No Data.

shows design dimension.

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etal Insulant Insulant <t< th=""><th>Surve</th><th>y item</th><th>tesult</th><th>Judge</th><th>Survey</th><th>r Item</th><th>Survey Result</th><th>Judge</th><th>Photograph</th></t<>	Surve	y item	tesult	Judge	Survey	r Item	Survey Result	Judge	Photograph
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Gate Leaf			Ľ	oisting Device				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	late	Thickness-Avg	– Wid – Low – Bim –	1	Wire Rope	Main-Left	- Distortion: - Corrosion: -		
		Corrosion	© -1	0	-	Main-Right	- Distortion: - Corrosion: -		
Transier in the constant of the consta		Damage-Rivet		υ			– Distortion: – Corrosion: –		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Thickness-Avg	Bottom Flange - , Bottom Web - (19.1mm)	1			- Distortion: - Corrosion: -		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion		1	0 vu	Left	- Function:	RS	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1		1	U		Rıght	: 1	-»	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				<	Bearing	Drum	- Oil:	- >	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Distortion					- Oil:	R S	
Circle Canadian L M S Down Pranoni, Damage: - Filing: - Backlash: - Olt- Rocker Renceut Leff HaazyAb. Pgyth Alo Poun Pranoni, Damage: - Filing: - Backlash: - Olt- Acsention Leff HaazyAb. Pgyth Alo Poun Pranoni, Damage: - Filing: - Backlash: - Olt- Acsention Leff HaazyAb. Pgyth Alor Poun Pranoni, Camage: - Filing: - Backlash: - Olt- Acsention Leff HaazyAb. Pgyth Camage: - Filing: - Backlash: - Olt- Poun- Acsention Leff HaazyAb. Pgyth Paby Ab Poun- Poun- Diamaterizate Jumage: - Filing: - Backlash: - Olt- Poun- Poun- Diamage: - Contrason: L M Diamaterizate Jumage: - Filing: - Backlash: - Olt- Diamage: - Contrason: L M S Diamaterizate Jumage: - Contrason: L M Diamage: - Contrason: L M S Diamaterizate Diamage: - Contrason: L M Diamage: - Contrason: L M S Diamaterizate Diamage: C Diamage: - Contrason: L M S D D D D		Thickness-Avg	- mm (16.3), Web -			Reduction Gear	1	v	
Rockar Itemporing Left Agent No Amager Filmop: Filmop: Filmop: Out Assembly Disontion Left Fight 0 Dormager Filmop: Filmop: - Oit Assembly Disontion Left Asservat. Agent Dormager Filmop: - Consider - Oit Assembly Disontion Left Asservat. Agent Dormager - Filmop: - Backlasht<- Oit		Carrosion	W		Gear	Drum Gear-L	- Fitting: - Backlash: -	1	
Assembly Canador Left Damage: - Filmy: - Backash: - Olt- Characher Assembly Canador Left No Function Animeter Train Mussing Left Animater Earnage: - Filmy: - Backash: - Olt- Chiracher Notier Train Mussing Left Animater Earnage: - Filmy: - Backash: - Olt- Chiracher Notier Train Mussing Left - Rayh Pronon-Middle Damage: - Filmy: - Backash: - Olt Distortion Left Left - 4.0 mboxen D Damage: - Carroscin: L M S Seal Left Left Lost Dume Animage: - Carroscin: L M S Seal Left Lost Dume Animage: - Carroscin: L M S Reluct Top Level Difference 60 mm Lost Dume Animage: - Carroscin: L M S Age Dume Animage: - Carroscin: L M S Dume Animage: - Carroscin: L M S Seal Aprim Dume, L Damage: - Carroscin: L M S S Seal Aprim Dume, L Damage: - Carroscin: L M S S Seal Aprescontex Lost Dume Animage: - Car	Rocker	ftamodeling				Drum PineonL	Damage: -	<	
		Distortion				1	- Fitting: - Backlash: -		
Holier Train Left Left Right Oil Right Concesson: L M Since Diamater-Roller Average $-mm$ Right Left $-$ Right Diamage: $-$ Concesson: L M Since $-$ Concesson: L M Since		Others	No Function						
	Holler Train	Missing	2			Gear-Middle	- Fitting: - Backlash: -		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Diameter-Rotler	•			Pjnion-Middle	Damage:		
		Distortion			Basement	Drum-L	- Corrosion: L M		
Buttom Losi Losi Losi Losi Correstor: Loi Correstor:<		Left	4.0 m Broken			ք-աղ	- Corrosion: L M	-	
Right Losi Losi Damage: Losenes: - Oit - Inclination Top Level Difference 50 mm V Vove Chain Sprocket Damage: Locosenes: - Oit - kage \overline{O} be level Difference 50 mm V N S Chain Sprocket Damage: - Corrosion: L \overline{O} S kage \overline{O} binage: \overline{O} mage: - Corrosion: L \overline{O} S State Scon.Max Left: - mm, Right: - mm Rol N Damage: - Corrosion: L \overline{O} S Roller Truck Atrasson-Max Left: 1/4 <mm, right:<="" td=""> 1/5<mm<< td=""> R Damage: - Corrosion: L \overline{O} S Roller Truck Atrasson-Max Left: 1/4<mm, right:<="" td=""> 1/5<mm< td=""> R Drum-L Damage: - Corrosion: L \overline{O} S N S S S S S S S S S</mm<></mm,></mm<<></mm,>		Boltom	Fost			Drive Device	- Corrosion: L 🕑		
Inclination Top Level Difference 50 mm Image: - Corrosion: L C S kage - \bigcirc N S C C Reduction Gear Damage: - Corrosion: L S S kage - \bigcirc N S C C Reduction Gear Damage: - Corrosion: L S S Store Seal Abrasion-Max Left: - mm. Right: 15 <mm< td=""> RI Dum:-L Damage: - Corrosion: L S S Roller Truck Abrasion-Max Left: - mm. Right: 15<mm< td=""> RI Damage: - Corrosion: L S S Roller Truck Abrasion-Max Left: 0 Right 0 N N Counter Straft Damage: - Corrosion: L S<td></td><td>Right</td><td>Lost</td><td></td><td>Drive Chain</td><td></td><td>- Looseness: -</td><td>ა </td><td></td></mm<></mm<>		Right	Lost		Drive Chain		- Looseness: -	ა 	
kage Corrosion: L M S C Reduction Cear Damage: - Corrosion: L M S Side Seal Abrasion-Max Left: - mm, Right: - mm, Right: - mm, Right: - M S Side Seal Abrasion-Max Left: - mm, Right: - mm< Right:	Inclination		Top Level Difference 50 mm	→	Chain Sproc	ket	- Corrosion: L 🕑		
StateImage: -CoverDamage: -Corrosion: LMNStateAbrasion-MaxLeft: -mm. Right: -mmRSDamage: -Corrosion: LMNRoller TruckAbrasion-MaxLeft: 0Right 0NRLCean-MadeDamage: -Corrosion: LMNRoller TruckAbrasion-MaxLeft: 0Right 0NNCounter ShaftDamage: -Corrosion: LMNRoller TruckLeft: 0Right 0NNCounter ShaftDamage: -Corrosion: LMNStil BeamLeft: 0Right 0NNCounter WegntDamage: -Corrosion: LMNStil BeamAbrasionLeft: 0Right 0NNCounter WegntDamage: -Corrosion: LMNStil BeamAbrasionLMS-Pointer WegntDamage: -Corrosion: LMSStil BeamAbrasionLMSCorrosion: LMSStil BeamAbrasionLMS-Corrosion: LMSAConcelleDamage-LeftLMS-Corrosion: LMSAConcelleDamage-ReithLMS-Corrosion: LMSAConcelleDamage-ReithLMS-Corrosion: LMSAConcelleDamage-ReithL </td <td>Leakage</td> <td></td> <td>×</td> <td>v</td> <td>Reduction G</td> <td>ear</td> <td>- Corrosion: L 🕅</td> <td></td> <td></td>	Leakage		×	v	Reduction G	ear	- Corrosion: L 🕅		
Abrasion-Max Left: mm. Right: M Solution L M Solu	Sill				Cover	Drum-L	– Corrosion: L M		
k Abrasuo-Max Letit: 14 mm. Right: 15 mm Right 5 mmodel Damage: - Corrosion: L (\bigcirc S S rd Left 0 Right 1 N Counter Shaft Damage: - Corrosion: L (\circlearrowright S N S Delect Left 0 Right N N Counter Shaft Damage: - Corrosion: L (\circlearrowright S N S Delect Left 0 Right N Counter Weight Damage: - Corrosion: L (\circlearrowright S N S N S N S N S N S N S N S N S N S N S N N S N N N S N		Abrasion-Max	– mm, Right; –	RS		Drum-R	- Corrosion: L M		
Id Left D Right N N Counter Shaft Damage: - Corrosion: L N S Delect Left 0 Right N N Counter Weight Damage: - Corrosion: L M S Abrasion: L M S Housting Vert Condition 74.8 Kg·m S Damage-lett L M S Torque Dr M S D Damage: - Corrosion: L M S D Damage: - Corrosion: L M S D	×	Abrasion-Max	14 mm, Aight: 15	Ъ			- Corrosion: 4 🕲		
Detect Left D Router Weight D Counter Weight D	Roller Guard	Quissim	0	z	Counter Sha	ſħ	– Corrosion: L M		
Abrasion L M S Housing Wat Condition 14.8 kg·m Damage-Right L M S Torque Dry Condition 2.0 kg·m Damage-Right L M S Superstructure 2.0 kg·m Damage-Right L M S Superstructure 2.0 kg·m Damage-Right L M S Superstructure 2.0 kg·m		Defect	0	z	Counter We	ght	- Corresion: L M		
Damage-Lett L M S - Torque Dry Condition 2.0 kg·m Damage-Right L M S - Superstructura Damage: - Contoson: L M Damage-Bottom L M S - Superstructura Damage: - Contoson: L M		Abrasion	W	ł	Hoisting	Wet Condition		3	
L M S — Superstructure Damage: - Corroson: L M S L M S		Damage-Left	¥	1	Torque	Dry Condition		0 	
5 W 7		Damaga-Right	W	1	iuperstructure		- Corrosuon: L M		
		Damage-Bottom	W T	1				_	

Remarks: Judgement = N: Totally Replace, C: Partly Replace, RL: Large Repar, RM: Medium Repar, RS: Small Ropar, G: No Repar, -: No Data.

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(58 / 66)

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Cate No	W61	(Main Weir Gate)						
		tesult	Judge	Survey Item	ltem	Survey Result	Judge	Photograph
				Moisting Device				
Cate Loar		Tooso 0 Midt 0 0 Low 0.8 Bith - (9.5mm)	0	Wire Rope	Main-Left	y: - Distortion: - Corrosion: - Oil: -	J	
Skin Plate	I nickness-wy	1 IVS-Bottom L M (3)	υ		Main-Right	y: - Distortion: - Corrosion: - Oit-	g	
	ten.	Corner-A	0		Roller Train-L	Braken	o	
		9 Bolk	1		Roller Train-À	y: - Distortion: - Carrosion: - Oli-	0	
	Distorion	Vertical Truss (L4 Flange Bend)	RS	Drum	Left	Damage: - Function: Miss Alignment	neni AS	
End Girder	-	L-Bottom 10.9, R-Bottom 10.7 [11.1mm]	U		Right	Damage: - Function: Miss Alignment	neni	
	Remodeling	Left No Right No	<-	Bearing	Drum	Damage: - 0#: -	->	
			—		Counter Shaft Damage:	Damage: – Oii: –	RS	
Bottom	Thickness-Avg	Flange – mm (16.3), Web – mm (9.4)			Reduction Gear Damage:	Damage: Oil: -	0	
Girder	Corrosion			Gear	Drum Gear-L	Damage: - Filting: - Backlash: - Oll:	- RS	
Rocker	Remodeling	Left No Right No			Drum Pinion-L	Damage:	< 	
Assembly	Distorion	Lett 0.5 m Broken Right Heavy Ab.			Drum Gear-R	Damage: - Fitting: - Backlash: - Oll:		
	Others	No Function			Drum Pinion-R	Damage:		
Roller Train Missing	Missing	Left 0 Right 0			Gear-Middle	Damage: - Fitting: - Backlash: - Oll:		
	Diameter-Aoliter	Average 151.9 mm			Pinion-Middle	Damage: -		
	Distortion			Basement	Drum-t	Damage: - Corrosion: L M 🕥	6	
Spal	tet				Drum-R	Damage: - Corrosion: L M	→ ⊙	
	Bottom	Losi			Orive Device	Damage: – Corrosion: L 🚳	S RS	
	Right	3 m Broken		Drive Chain		Damage: – Looseness: – Oil	0 	
Inclination		Top Level Difference 70 mm	->	Chain Sprocket	cket	Damage: - Corrosion: L 🕅	<u>ل</u> ې د د	
Leakage		s w	v	Reduction Gear	àear	Damage: – Corrosion: L 🛞	s	
Pill Still				Cover	Drum-L	Damage: – Corrosion: L M (ତ	
Side Seal	Abrasion-Max	Lett: - mm, Right: - mm	RS		Drum-R	Damage: – Corrosion: L M 🤇	≁ ୭	
Roller Truc	ΙX	Lett: 11 mm, Right: 13 mm	Ъ		Gear-Middle	Damage: Corrosion: L 🕑	C S	
Roller Gual	Raller Guard Missing	Lett O Right O	z	Counter Shaft	aft	Damage: – Corrosion: L M	S S	
	Delect	Left 1 Right 0	z	Counter Weight	ыghi	Damage: - Corrosion: L M	S RS	
Sili Beam		r w s	1	5unsioH	Wet Condition	31.5 кд-т	ਛ 	
Concrete	Damage-Left	S W 7	1	Torque	Dry Condition			
	Damage-Right	5 W 7	1	Superstructure		Damage: – Corrosion: L M (ی ۳	
	Damage-Bottom	ר א S	1					
Remarks	s: Judgement = N:	Remarks: Judgement = N: Totally Replace, C: Partly Replace, RL: Large Repair, RM.	je Repair	RM: Medium Re	pair, AS: Small F	Medium Repair, RS: Small Repair, G: No Ropair, ∹ No Daia.		

() shaws design dimension.

(59/96)

Gate No.		W52	(Main Weir Gate)						(60 / 96)
	Survey	Survey Nem	Survey Result	agone		Survey Item	Survey Result	Judge	Photograph
Cate Leaf					Moisting Device				
<u>م</u>] 	Plate	Thickness Avg	Top - Mid - Low - Bim - (9.5mm)	nm) G	Wire Rope	Main-Left	y: - Distortion: - Corrosion: - Oil: -	0	
		Corrosion	U/S-Bottom L M	σ		Main-Right	y: + Distortion: - Corrosion: + Oit-	0	
		Damage-Rivet	Corner-L 1.5 Corner-R 1	0		Roller Train-L	y: - Distortion: - Corrosion: - Oil: -	0 	
1 F	Truss	Thickness-Avg		(wu		Roller Train-R	y = Distortion; + Corrosion; - Oit -	0	
		Distortion			E - JO	Left	Damage: – Function: –	RS	
	End Grider	Thickness-Avg	L-Bottom -, R-Bottom - (11.1mm)	nm) C		Right	Damage: – Function; –	<	
		Remodeling	Lett No Right No	€	Beanng	Drum	Damage: - Oil: -	-> 	
		Distortion	Latt - Right -			Counter Shaft Damage:	Damage: – Out –	AS AS	
	Battam	Thickness-Avg	ge – mm (16.3), Web –	mm (9.4)		Reduction Gear Damage:	r Damage: - OK: -	0	
0 0	Grder	Corrosion	S W 7		Gear	Drum Gear-t	Damage: - Fitting: - Backlash: - Oil:	r RS	
<u>1</u> a	Bocker	Remodelind	Left No Right No		- -	Drum Pinion-L	Damage: -	<-	
~~~~~	Assembly	Distorion	Left Heavy AD. Right Heavy AD.			Drum Gear-R	Damage; - Fitting: - Backlash: - Oil:	1	
		Others	No Function			Orum Pinion-A	Damage; –		
	Boller Train Missing	Missing	Lett - Right -			Gear-Middle	Damage: - Fitting: - Backlash: - On	On: -	
<u>.</u>		Diameter-Roller	Average – mn			Pjnion-Middle	Damage:		
		Distortion		   	Basement	Orum-L	Damage: Corrosion: L M 🛇		
	Soal	Lafr	4.0 m Broken			Orum-R	Damage: - Corrosion: L M 🕥	<u>\</u>	
<u>}</u>	į	Bottom	1021			Drive Device	Damage: - Corrosion: L 🕲 S	RS	
		Right	3.0 m Broken	 	Drive Chain		Damage: - Looseness: - Oit	0	
<u> </u>	Inclination		Top Level Difference 0 mm	→ 	Chain Sprocket	cket	Damage: Corrosion: L 🕅 S	< 	
Leakage	96		s 19 7	U	Reduction Gear	Gear	Damage: - Corrosion: L 🕅 S		
S.					Cover	Drum-L	Damage: - Corrosion: L M 🕥	6	
	Side Seal	Abrasion-Max	Lett: - mm, Right: - mm	RS		Drum-R	Damage: – Corrosion; L M 🕥	→ @	
1 <u>a</u>	otter Truck	Roller Truck Abrasion-Max	Left: - mm, Right: - mm	BL.		Gear-Middle	Damage: – Corrosion: 4 🕅 S	U IO	
1 @	Roller Guard Missing	Missing	Lett 0 Right 0	z	Counter Shaft	aft	Damage: - Corrosion: L M 5	с 2	
		Dofact	•	z	Counter Weight	նգին	Damage: – Corrosion: L M S	S RS	
10	Sill Beam	Abrasion	L M S		Hoisting	Wet Condition	43.B KG-M	3	
10	Concrete	Damage-Left	S W 7	 	Torque	Dry Condition	5.9 kg·M	RS	
		Damage-Hight	C W S	1	Superstructure		Damage: – Corrosion: L M 🕥	୍ଲ କ	
		Damage-Bottom	S N I	1					
j	Remarks:	Audoemant = N	indommont = N: Totally Replace, C: Partly Replace, RL: Largo Repair, RM: Medium Repair, RS: Small Repair, G: No Repair, ∹ No Data.	: Largo Repair	RM: Medium Re	pair, RS: Small R	tepair, G: No Repart, -: No Data.		

Survey Results of Gate Structure

Remarks: Judgement = N: Totally Replace, C: Partly Replace, RL: Largo Repair, RM: Medium Repair, RS: Small Repair, G: No Repard

shows design dimension.

Gate No.	W53	(Main Weir Gate)					(61/95)
Surve	Survey Item	Result	Judge	Survey Item	item	Survey Result	Photograph
Cate Leaf			Ţ	Hoisting Device			
Skin Plate	Thickness-Avg	70p - Mid - Low - Bim - (9.5mm)	U	Wire Rope	Main-Left	y: - Distortion: - Corrosion: - Oil: - G	
	Corrosion	U/S-Bottom L M ③	0		Main-Right	y: - Distortion: - Corresion: - Oil: - G	
	Damage-Rivet	Corner-R	0		Fiotier Train-L	Broken C	
Truss	Thickness-Avg	Bottom Flange - , Bottom Web - (19.1mm)	1		Rolter Train-R	y: = Distortion: = Corroson: = Ort = C	
	Distortion	Verucal Truss (L5 Bottom Bend)	RS	Drum	Left	Damage: - Function: Miss Alignment RS	
End Girder		L-Bottom - , R-Bottom - (11,1mm)	v		Aight	Damage: - Function: Miss Alignment 🗛 🧖	
	Remodeling	Let No Right No	←	ຊີອສກ່າງຊື	Drum	Damege: - Oii: - 🔶 🗞 💀	
					Counter Shaft	Damage: - Ou: - RS	
Bottom	Thickness-Avg	Flange – mm (16.3), Web – mm (9.4)			Reduction Gear Damage:	Damage: - Oii: ~ C	
Girder	Corrosion	L M S		Gear	Drum Gear-L	Damago: - Fitting: 100% Backlash: 2.2 mm Oil: AS	
Rocker	Remodeling	Left No Right No			Drum Pinion-L	Damage: -	
Assembly	Oistortian	NY AD.			Drum Gear-R	Damage: – Fitung: – Backlash: – Ou: –	
	Others	No Function			Orum Pinion-R Damage:	Damage:	
Roller Train Missing	Missing	Left 0 Right 1			Cear-Middle	Damage: - Futing: - Backtash: - Oit: -	
	Diameter-Roller Average	152.0			Pinion-Middle	Damage:	
	Distortion	Left - Right -		Basement	Drum-L	Damage: - Corrosion: L M 🕥	
Seal	Left	3.0 m Broken			Drum-R	Damage: - Corrosion: L M 🕥 🗸	
	Gottom	1001			Drive Device	1 S 🕲 7	
	Right	3.0 m Broken		Drive Chain		Damage: Looseness: L Oil: - C	
Inclination		Top Lavel Difference 0 mm	>	Chain Sprocket	Xet		
Leakage		s w O	υ	Reduction Gear	iear	Damage: - Corrosion: L (M) S	
Sill				Cover	Drm-L	Damage: – Corrosion: L M 🕤	
Side Seat	Abrasion-Max	tett: − mm, Pight: − mm	RS		Drum-R		
Roller Truct	1.8	Lett: - mm. Right: - mm	Ъ.		Gear-Middle	Damage: - Corrosion: L 🕅 S C	
Roller Guard Missing	rd Missing	Left C Right 1	z	Counter Shaft	aft	Damage: - Corrosion: L M S G	
	Defect	Lett 0 Right 1	2	Counter Weight	ight	Damage: - Corrosion: L M S RS	
Sill Baam		r w S	1	Hoising	Wet Condition	44.4 kg·m RL	
Concrete	Damage-Left	L M S	1	Torque	Dry Condition		
	Damage-Pught	S W 7	1	Superstructure		Darrage: - Corrosion: L M 🕥 RS	

Remarks: Judgement – N: Totally Replace, C: Partly Replace, RL: Large Repair, RM: Modium Repair, RS: Smalt Repair, G: No Repair, -; No Data.

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Damage-Right Damage-Bottom

( 61 / 96 )

Survey Results of Gate Structure

A-75

) shows design dimension.

( 05 / 70 )												a subject to a state			×								-									
	ude looks																										- かいこう かいかい そうちょう 経済的な 場合的 アイ・ション・ション・ション・ション・ション・ション・ション・ション・ション・ション					
	agon		ं	0	0	v	RS	4	<b>→</b>	RS.	0	S.	<						→	RS	0	<			→	v	U	RS	ğ	RS	RS	
	Survey Result		– Carrosian: – Oit: –	- Corrosion: - Oil	- Corrosion: - Oil:-	- Corrosion: - Oil: -	Function: -	Function: -	O#: -	Oit: -	<i>Oi</i> ? –	Fitting: - Backlash: - Oil: -		Fitting: - Backlash: - Oil: -		Fining: – Backlash; – Oil: –		Corrosion: L M 🕥	Corrosion: L M 🕲	Corrosion: L 🕑 S	Looseness: L Oit: -	Corrosion: 4 🕑 S	Corrosion: L 🕑 S	Corrosion: L M 🕥	Corrosion: L M 🕥	Corrosion: L 🕅 S	Corrosion: L M S	Corrosion: L M S	44.4 KG·M	а. 9 кр. т	Corrosian: L M 🕥	
			y: - Distortion:	y - Distortion: -	y: - Distortion: -	y: - Distortion:	Damage: -	Damage: –	Damago: -	Damage: -	r Damage: -	Damage; - Fil	Demage: –	Damage: - Fil	Damage:	Damage: – Fil	Damage: –	Damage: –	Damage: -	Damage:	Damage:	Damage: –	Датаде: —	Damaĝe: –	Damage: -	Damage: -	Damage: -	Damaĝe: -	÷	E,	Damage: -	
	Survey Item		Main-Left	Main-Right	Roller Train-L	Roller Train-R	Left	Right	E DZG	Counter Shaft	Reduction Gear Damage:	Drum Gear-L	Drum Pinion-L	Drum Gear-A	Drum Pinion-R	Gear-Middle	Pinion-Middle	Orum-L	Orum-R	Drive Device		cket	3ear	Drum-L	Drum-R	Gear-Middle	att	eight	Wet Condition	Dry Condition		
ľ	Surve	Moisting Device	<i>Wird</i> Rope				Drum		веато			Gear				<del></del>		Basement			Drive Chain	Chain Sprocket	Reduction Gear	Cover			Counter Shaft	Counter We	Hoisting	Tarque	Superstructure	
ł	agpnc		1	0	U	1	RS	0	<-									<u> </u>		<b> </b>	<u> </u>		0		SS.	æ	z	z	1	1	1	ľ
(Main Weir Gate)	Survey Rosult		- Mid - Low - Bim - (9.5mm)	U/S-Bottom L (M) S	آ س	- Bonon	Vertical Truss (L-4.5, Bollom Bend)	1Bottom - A-Rottom - (11.1mm)	Rignt No		Flange - mm (16.3), Web ~ mm (9.4)	S W 7	Lett No Right No	Left Heavy Ab. Right Heavy Ab.	No Function	- 2 Right 0	152.1	- Hgh -	Lost	Losi	7031	Top Level Difference 10 mm	S W Q		: - mm, Aight; - mm	r: — mm, Aight: — mm	0	r 0 Right 0	S W 7	S W 7	L M S	
(Ma			- Tep -					9-7		Left			Lett	:eft	+	104 2	_		+	-	+	700		+-	reit: K		1	tet.	+-	-	-	_
W54	r item		Thickness-Avg	Corrosion	C-maga Direct	Thickness.Avo		Therease-Au	Remodeling	Distorion	Thickness-Avo	Corrosion	Remodeling	Distortion	Others	Missino	Diamater-Roller	Distortion	Left	Battom	Right				Abrasion-Max	Roller Truck Abrasion-Max	Missino	Defect	Abrasion	Damage-Left	Damage-Righi	
Gate No.	Survey Item	Gate Leaf	Pláte			TA, CE		0.404			Bottom		Rocker	2		Botter Train Missing			Seal	}		Inclination	Leakage	Sill	Side Seal	Roller Truck	Roller Guard Missino		Sill Beam	Concrete		

Survey Results of Gate Structure

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Remarks: Judgement • N. Totally Replace, C. Party Replace, RL: Large Repar, RM: Medium Repair, RS: Smail Repair, G: No Repair, .. No Data.

shows design dimension.