



Quality Assurance Department
 Boiler Auxiliaries Plant
 BHEL - RANIPET - 632 406

STANDARD QUALITY PLAN FOR CHAIN

ITEM/SUBSYSTEM:

CHAIN FOR ROTATIVE GATE (Type W78, W82, W124, W132 & R0622, R04824)

QP-NO: SQP:DAM: 501

REV: NO-00

DATE: 02/07/2001

PAGE: 01 OF 03

SL NO	COMPONENT & OPERATION	CHARACTERISTICS	CL	TYPE OF CHECK	QUANTITY OF CHECK	REFERENCE DOCUMENTS	ACCEPTANCE NORMS	FORMAT OF RECORDS	AGENCY			REMARKS
									M	C	B	
1	2	5	4	5	6	7	8	9				11
1.0	RAW MATERIALS											
1.1	a) Connecting Pin / Bearing Pin b) Link Plate / off set plate c) Bush d) Roller e) T Pin / Split Pin	Chemical Properties	M	Analysis	1 No per lot	As per BHEL approved Drg.	-do-	* Mill TC		V	V	* If mill TC is not available, vendor has to test the sample at Govt./BHEL apprd labs
2.0	IN PROCESS INSPECTION											
2.1	a) Connecting Pin / Bearing Pin b) Link Plate / off set plate c) Bush d) Roller e) T Pin / Split Pin	i) Critical Dimension ii) Hardness after Heat Treatment	M	Measurement	1% per lot	-do-	-do-	R	P	V	V	@ Random check by BHEL during final inspection

Legends:

M - Manufacturer / Subcontractor, C - Contractor's / Subcontractor's QC / Authorised Inspn Agency, B - BHEL
 Cl - Class (M = Major C = Critical) P - Perform, V - Verification, W - Witness, R - Report TC - Test Certificate

PREPARED BY

REVIEWED BY

APPROVED BY

Sanjiv Kumar

QC (Proc)

QA

B. Srinivasulu

Approved



Quality Assurance Department
 Boiler Auxiliaries Plant
 BHEL, RANIPET - 632 406

STANDARD QUALITY PLAN FOR CHAIN

ITEM/SUBSYSTEM: CHAIN FOR GENERATOR GATE (Type W78, W82, W124, W132 & R0622, R04824)

QPN: SOP:DAM: 501
 REV: NO:00
 DATE: 02/05/2001
 PAGE: 02 OF 03

SL. NO	COMPONENT & OPERATION	CHARACTERISTICS	CL.	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENTS	ACCEPTANCE NORMS	FORMAT OF RECORDS	AGENCY			REMARKS	
									M	C	B		
1													
2.2	Case hardening of bush, bearing pin, connecting pin. (as applicable)	Case depth (as applicable)	C	Destructive test #	1 No per HT batch	As per BHEL approved Drg.		Report	P	V	V	# Random check by BHEL during final inspection	
3.0	FINAL INSPECTION												
3.1	Assembly of chain	a) Critical Dimension b) No of pitches	M	Measurement & count	1% per lot	-do-		R	P	W	W	-do-	
4.0	TESTING OF CHAIN	a) Pre - load	M	Mechanical	100%	BHEL appd drg. & No physical damage for chain		R	P	W	W	W \$	\$ 5% checking by BHEL
		b) Measuring load & length	M	Length measurement	100%	BHEL appd drg. & +0.25%-0.00% L. of chain		R	P	W	W	\$	
		c) Breaking load	C	Mechanical testing	2 test per P.O.	BHEL appd drg & Ref. Note below		R	P	W	W	W	
		d) Articulation	M	Visual	100%				P	W	W	W	

Legends:
 M - Manufacturer / Subcontractor, C - Contractor's / Subcontractor's QC / Authorised Inspn Agency, B - BHEL
 CI - Class (M = Major C = Critical) P - Perform, V - Verifier, W - Witness, R - Report T.C - Test Certificate

PREPARED BY

[Signature]

REVIEWED BY

[Signature]

APPROVED BY

[Signature]

QC (Proc)

QA

[Signature]



Quality Assurance Department
Boiler Auxiliaries Plant
BHEL -RANIPET - 632 406

STANDARD QUALITY PLAN FOR CHAIN

ITEM/SUBSYSTEM:
CHAIN FOR GULLLOTINE GATE (Type W78, W82, W124, W132 & R0622, R04624)

QP-NO: SQP:DAMI: 501
REV: NO: 00
DATE: 02-07-2001
PAGE: 03 OF 03

SL NO	COMPONENT & OPERATION	CHARACTERISTICS	CL	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENTS	ACCEPTANCE NORMS	FORMAT OF RECORDS	AGENCY			REMARKS
									M	C	B	
5.0	PRESERVATION & PACKING	a) Marking b) Oiling c) Packing	M	Visual	100%	Stamping of vendor symbol / emblem and type of chain No. before heat treatment of off set plate / link plate has to be ensured Rust preventive oil servo compound chain Grease	-	-	P	V	V	* Random witness by BHEL
			M	Visual	100%	Chain shall be packed tightly in separate poly-thene bags and stacked in a wooden Box. Packing slip should contain P.O. NO, TC. No & Quantity	-	-	P	V	V	

General Notes:

- All reports marked as "R" to be submitted for BHEL during final inspection
- Length measuring report to be furnished with serial no. Serial No to be put on metal tag and shall be fixed on each length of chain.
- Additional connecting Pin and 'T' Pin shall be supplied along with packing boxes as per the BHEL appd dry requirement.

Legends:

M - Manufacturer / Subcontractor, C - Contractor's / Subcontractor's QC / Authorised Inspsn Agency, B - BHEL
Cl - Class (M = Major C = Critical) P - Perform, V - Verification, W - Witness, R - Report TC - Test Certificate

PREPARED BY	QC (Proc)		REVIEWED BY	APPROVED BY
	<i>[Signature]</i>	QA		