



Dt:01.02.19

BOOK

EQUIPMENT:

[illegible]



HMP MILL PRODUCTION / IC BAY SHIFT LOG

960-102
Dt:01.03.19

DATE	
SHIFT	

Operator Name	
Staff No:	

KR 150

Shop Order	Size	Grade	QTY

HTC

Shop Order	Size	Grade	Nos	MT

HTC for the Day / month

Follow up:

Signature

Name:



HOT MILL PRODUCTION SHIFT LOG
(SRM & COLD SAW)

960-103
Dt: 09.02.19

DATE:

SHIFT:

Rolling

A	B	C	Total	Cumulative	Avg/ Day

Cold Stock Rolled:

Cold Stock Generated:

Rolling Stock Started at:

Reason for late start:

Sl. No.	Shop Order Processed	Size	Grade	Melt	Qty.	Cold Stock Generated
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

VALUE

SHOP ORDER	MIN.	MAX.	AVG.	ADJUSTMENT DONE

COLD SAW THICKENED END DETAILS

I					II				
LENGTH	MIN.	MAX.	AVG.	WT.	LENGTH	MIN.	MAX.	AVG.	WT.

SRM STANDS

8	7	6	5	4	3	2	1

[illegible]

SRM SPEED SETTING

GRADE

SRM Tolerance

MAX. WT

[illegible][illegible][illegible]

PRODUCTION DELAY INFORMATION FOR FOLLOW UP:

MAINTENACE DELAY INFORMATION FOR MTCE. FOLLOW UP:

Signature

Name

SPT 27 33 55006



960-104

Dt: 01.02.19

DAILY UTILISATION REPORT – HOT MILL

[illegible]

Signature of Shift In-charge
Name

SP 7873355010



960-106

Dt:01.02.19

PRODUCTION SCORING CARD

WORK CENTER

BILLET SAW / GAS CUTTING

BLOOM CUTTING DETAILS

HMSO NO				MELT NO				GRADE		TOTAL BLOOM		BILLET LENGTH				DATE		SHIFT	
Sno	OPERATOR NAME							STAFF NO								No.of BILLETS	End Cut Billet		
																	LENGTH 1	LENGTH 2	
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				

Total Billets

SIGNATURE

NAME

SP 7873355010

 960-107 Dt:01.02.19	MATERIAL ROUTE CARD		
DATE:			
Shop Order no.	Grade	melt No.	QC sig.
Billet Cutting	No. of blooms	Billet Length (MM)	No of Billets
R H F	Charging		Discharging
	STARTING		
	COMPLETION		
PUSH BENCH	Nos. Pushed	Nos. Rejected	Sig.
S R M	Nos. Rolled	Nos. Rejected	Sig.
	Cold Storage Nos.		
COLD SAWS	Nos. Cut	Nos. Rejected	Sig.
	Rolled Stock No.		
NEXT SHOP ORDER No: _____ Grade: _____ MELT NO.: _____			



SEAMLESS STEEL TUBE PLANT

HOT MILL/COLD SAW BUNDLE TAG

960-108

Dt: 01.02.19

Date : _____

Shift: _____

H.M S.O: _____

Bundle No: _____

Size : _____

Spec & Grade : _____

Melt No: _____

Bundle Qty : _____

Sig. of Cold Saw Operator:
Name: _____

Status : Put ☒ mark as applicable

☐	OK for HTC	Sig. of Incharge/IC Bay	Name: _____
☐	Grinding/Cutting	Sig. of Incharge/IC Bay	Name: _____



HOT MILL PRODUCTION SHIFT LOG

960-109/A
Dt:08.03.19

Date :

Shift:

	A	B	C	TOTAL	CUM	AVE / DAY
PUSHING						
ROLLING						

Cold StockRolledGeneratedRolled StockTaken OutCutPushing Started at:Reasons for late start:

Shop order processed	Size	Melt	Length	Qty	Gr.	HS Wt.
1						
2						
3						
4						

PB: Mandrel / SP

Mandrel Details	DG	IMG	RDF	HG
HB Lubrication OK / Not OK	Return line	Ok / Not OK	PRC	OK / Not OK

Balance Billet In RHF:

SRM WALL						
Shop Order	Min	Max	Avg	SRM Setting	PB Adjustment	Thicken end Control

Tube Surface : OK / Not OK

CPE Hollow bloom OD: mm WT: mm

Bin Changes

RHF	CPE	HS
-----	-----	----

Tool Changes

HS Blade	CPE Plug OK/ To be Changed	CPE Mandrel OK / To be Changed
----------	-------------------------------	-----------------------------------

PB Shell Surface Condition: OK / Not OK

PB Shell WT Reading:

PB set up plan

Caliber		Stand Position	Stand No.	Stand Changed
1.2	174.3			
1.3	165.4			
1.4	157.3			
1.5	150.4			
1.6	144.7			
1.7	139.9			
1.8	136.0			
A1				
A2				
A3				
A4				

Production delay

Duration (APPROX.)

Mtce. Delay

Duration (APPROX.)

Information for Mtce. Follow up

Important Information for follow up

Signature
NAME

Attendance Operators

Charging/ Discharging

1.

2.

CPE

1.

2.

3.

4.

Crane

1.

2.

3.

Helpers

1.

2.

3.

4.

Push Bench

1.

2.

3.

4.

Hot Saw

1.

2.

3.

4.

Furnace

1.

2.

3.

Rejection Details

Sl. No	HMSO	Rejections		Remarks
		Billet	Hollow Bloom	

CPE Setting Details

Roll Gap

Feed Angle

Guide Gap

Mandrel Position



960-110
09-01-02-19

WALKING BEAM FURNACE

Time	Zone temperature (°C)								Pre heat temp. (°C)	Oil flow meter reading	Oil consumed in litres
	I	II	III	IV	V	VI	VII	VIII			
C shift											
06:00											
05:00											
04:00											
03:00											
02:00											
01:00											
00:00											
23:00											
B shift											
22:00											
21:00											
20:00											
19:00											
18:00											
17:00											
16:00											
15:00											
A shift											
14:00											
13:00											
12:00											
11:00											
10:00											
09:00											
08:00											
07:00											



960-110
09-01-02-19

WALKING BEAM FURNACE

Oil consumption				Date :
Shift	A	B	C	
Final reading				
Initial reading				
Shift oil consumption				
Day oil consumption				

Blowers operated:

Shift	WBF		
	Combustion air Blower	Atomising Air Blower	Induced draft fan
A			
B			
C			

Remarks A shift

Remarks B shift

Remarks C shift

Shift	Furnace operator name	Staff No.	Signature
A			
B			
C			

SP787 3355018



SP 78733 55021

ROLL DOWN FURNACE

960-111

Dt:01.02.19

Date :

	RHF Oil Consumption			RDF Oil Consumption		
Shift	A	B	C	A	B	C
Final Reading						
Initial Reading						
Shift Oil Consumption						
Today Oil Consumption						

Blowers Operated:

Shift	RHF					RDF	
	Combustion Air Blower	Atomising Air Blower	Nose Cooling Fan	Dilution Fan	Induced draft Fan	Combustion Air Blower	
A							
B							
C							

Shift	Charging Material Grade	Number of pushes	Billets left in furnace
A			
B			
C			

Remarks A shift

Remarks B shift

Remarks C shift

Shift	Furnace Operator Name	Staff No.	Signature
A			
B			
C			

ROTARY HEARTH FURNACE

[illegible]

SP7873355024

[illegible]



652-005

Dt: 01.02.19

STAGE INSPECTION REPORT
WALKING BEAM FURNACE(WBF) & STRETCH REDUCING MILL(SRM)
(ALL DIMENSIONS IN MM)

SHEET OF

DATE

SHIFT

Sl No	SO No.	SRM SIZE	GRADE	MELT NO.	ROLLED QTY, (Nos)	TIME	DESCALER PRESSURE Kg/mm ²	WBF TEMP °C	SHELL TEMP. °C PRE DE-SCALER	POST DESCALER	SRM FINISHING TEMP °C	QC Inspector	NAME	SIGNATURE
													NAME	

												Production Supervisor	NAME	
												QC Supervisor	SIGNATURE	

													NAME	
													SIGNATURE	

													NAME	
													SIGNATURE	

													NAME	
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													NAME	
													SIGNATURE	

													NAME	
													SIGNATURE	

													NAME	
													SIGNATURE	

													NAME	
													SIGNATURE	

M – MIDDLE WALL, LE – LEADING END, TE – TAIL END
PC – PB ROLL CLOSE, PO – PB ROLL OPEN, S – SRM SPEED ADJUSTED, FF- FEEDBACK FORM GIVEN TO HMP
X - Average Wall Thickness(WT); R – Range of Wall Thickness = Max WT – Min WT

REMARKS

Material Code → SP7873360000

Material Code → SP7873360002



652-006
Dt: 01.02.19

HOT MILL SURVEILLANCE FEED BACK

REF: HMQC:

Date: Shift: A/B/C/G/N Time: Hrs.

Issued to Shri:

Acknowledge by

(Signature):

Details of Feed Back:

HMSO

Size

Grade

Feedback given by:
[Name & Signature]

Comments/Corrective Action by Task Performer

Name & Signature of Task Performer

Review of Effectiveness by QC officials:

Signature of QC official

Final comments by QC Executives:

CC: HMP

For record and MIR



652-007
Dt. 01.02.19

STAGE INSPECTION REPORT - COLD SAW (ALL DIMENSIONS IN MM)

SHEET OF

DATE

SHIFT

SHOP ORDER NO.

SIZE(mm)

GRADE

MELT NO.

SHOP ORDER NO.

SIZE(mm)

GRADE

MELT NO.

CSAW I/ II	SO NO.	BUNDLE NO.	LE/TE CUT		WALL THICKNESS REQUIRED			WALL THICKNESS MEASURED							ACCEPT YES/NO	ACTION IF ANY
			LENGTH	WEIGHT	MIN / MAX	AVG MIN/MAX	1	2	3	4	5	6	7	8	X	R

LE

TE

NAME & SIGNATURE OF QC INSPECTOR

NAME & SIGNATURE OF PRODUCTION SUPERVISOR

NAME & SIGNATURE OF QC SUPERVISOR

SP7873360004



653-016
Dt: 01.02.19

SSTP

SPARK / METASCOPE TEST REPORT

Date:

Shift:

SPARK / METASCOPE TEST REPORT

REMARKS

[illegible]

Material Code $\rightarrow$ SP7873360010

		RECORD OF DIMENSIONAL PARAMETERS ON HOLLOW / FINISHED TUBES						DATE					
653-017 Dt: 01.02.19								SHIFT					
Shop Order No.					Size				Tolerance		Min	Max	
Bundle No.					Specn. & Grade				O.D mm				
Bundle Qty.					Heat No.				W.T mm				
Sl. No	Measurement (mm) on	1	2	3	4	5	6	Remarks					
	O.D							Length					
	W.T							Accepted					
	O.D							226 =					
	W.T							227 =					
	O.D							125 =					
	W.T							122 =					
	O.D							121 =					
	W.T							128 =					
	O.D							120 =					
	W.T							176 =					
	O.D							143 =					
	W.T							144 =					
	O.D							145 =					
	W.T							124 =					
	O.D							160 =					
	W.T							TOTAL					
	O.D							VDI CHECK POINTS					
	W.T												
	O.D												
SPARK / SPECTRUM TEST RESULT								N	T	SCA	SPECIMEN	NDT QTY	Hydro Qty
DONE BY :					T1	T11	T22						
INSPECTOR :							SUPERVISOR :						

Material Code → SP7873360012



653-019

Dt: 01.02.19

F.O.T CLEARANCE-DRAW BENCH
(315 KN/800KN/50T/60T)

DATE:

Informed at:

Time:

Specn & Gr:

Heat No:

S.O.No:

Finished size:

Kind of draw:

First/Second/Final

Hollow size:

Desired

Die.mm

Plug. Mm

OD, mm

WT, mm

Length
mm

Surface

Remarks

Observations

Bundle No.

Result

Inspector

Staff No

Inspection Sup:

Production Sup:

(Q.C. Copy)

Material Code → SP7873360014

 653-020 Dt: 01.02.19	F.O.T CLEARANCE STRAIGHTENER (KR 75 / KR 150)					DATE	SHIFT
	FOT TIME						
S.O. NO	SIZE	GRADE	MELT NO	INFORMED	FROM	TO	
BUNDLE NO.	OD TOLERANCE		OD MEASUREMENT	SURFACE	STRAIGHTNESS	REMARKS	
	MIN	MAX					
RESULT	INSPECTOR						
	INSPECTION SUPERVISOR						
	PRODUCTION SUPERVISOR						

Material Code → SP78733 6 0016

 653-021 Dt: 01.02.19		RECORD OF DIMENSIONAL PARAMETERS ON RIFLE TUBES								DATE		SHIFT		
S.O No.					Size				Tolerance		Min		Max	
Bundle No.					Specn. & Gr				O.D in mm					
Bundle Qty.					Heat No.				RIB HT					
Sl. No	Measurement (mm) on	1	2	3	4	5	6	7	8	OD		OD		
1	R													
	T													
	RIBHT													
2	R													
	T													
	RIBHT													
3	R													
	T													
	RIBHT													
4	R													
	T													
	RIBHT													
5	R													
	T													
	RIBHT													
6	R													
	T													
	RIBHT													
7	R													
	T													
	RIBHT													
8	R													
	T													
	RIBHT													
SPARK TEST DONE BY:								N	T	SCA	SPECIMEN	NDT QTY	Hydro Qty	
					T1	T11	T22							
INSPECTOR :						SUPERVISOR :								

Material Code → SP7873360018

 653-022 Dt: 01.02.19		SSTP		SALVAGE ADVICE SLIP NDT / VDI				BUNDLE DATE & SHIFT		
SHOP ORDER NO.						GRADE				
Size						MELT NO.				
Tolerance				NDT		VDI				
OD (mm)	WT(mm)	SALVAGE CODE	T.QTY	OK	SALVAGE CODE	T.QTY	OK			
Min	Max	Min	Max	227 BEND			125 SL			
				210 Ex Defect			226 OL			
Signature of supervisor			110				227 BEND			
Signature of initiating Inspector										
Signature of Inspector After Salvage										

Material code → SP7873360020



BUNDLE INSPECTION REPORT

SHIFT:

[illegible]

Material Code $\rightarrow$ SP7873360022

Material Code → SP7873360024



653-027
Dt: 01.02.19

TEST REQUISITION FORM

Ref No:

Date:

From:

To
Dy Manager
Plant Laboratory /NDTL

The following test(s) may be conducted and test report(s) issued:

Sl.No	Description of Materials	Nature of test	Number of Pieces	Specification if any to which the test to be conducted	Special remarks if any

Registration No:
Date:
Initial:

Signature
(Requisition Department)



653-018
Dt: 01.02.19

Dt: 01.02.19

Bharat Heavy Electricals Limited
Seamless Steel Tube Plant
Quality Control - SSTP

SHIFT PRODUCTION REPORT FOR VDI

Page.....of.....

Work centre no:			Date:	Shift:		Total Inspection Qty.					Nos			
Shop order No	Bundle No	Grade	Finished Tube Size OD WT Length			Inspn time From To		Idle code	Inspn. Nos	Accept Nos	Salvage/Rein Nos Code		Next work centre	Remarks
Name/Sign Inspector I			Name/Sign Inspector II			Name/Sign Helper			Name/Sign Supervisor					

Material Code $\rightarrow$ SP7873360026

SP7873355041



961 - 007

Dr: 01.02.19

BOILER LOG SHEET

RUNNING BOILER :

DATE :

TIME	WATER			OIL			STEAM			Blower Pressure mm of H ₂ O Column	FLUE GAS		HIGH Pr. CUT - OFF		RESTART		Water Pump In Line		REMARKS	
	Pressure kg/ cm ²	Tank Level	Meter Reading	Tank Level Lit	Flow Meter LPM	Burner Inlet Pr. PSI	Burner Outlet Pr. PSI	Oil Temp °C	Pressure kg/ cm ²		Temp °C	Flow Meter T/hr	Pressure PSI	Temp °C	Time	kg/Cm ²	Time	kg/Cm ²		I
06-00																				
07-00																				
08-00																				
09-00																				
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02-00																				
03-00																				
04-00																				
05-00																				

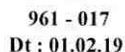
SHIFT	RUNNING HOURS	OPERATOR'S NAME	SIGNATURE OF OPERATOR	HARDNESS OF FEED WATER SAMPLE TESTED IN PPM		BOTTOM BLOW DOWN TIME		LOW WATER ALARM CHECKED AT	oil consumption		Litres	WATER LEVEL INDICATOR AT TIME		PUSHED
				SHIFT A	SHIFT B	SHIFT A	SHIFT B		I	II		SHIFT A	SHIFT B	
SHIFT A	1			SHIFT A		SHIFT A						SHIFT A		
SHIFT B	2			SHIFT B		SHIFT B						SHIFT B		
SHIFT C	1			SHIFT C		SHIFT C						SHIFT C		
Total hours	2													

Signature of Supervisor

Prepared By

Reviewed By

Approved By



SP 7873355051

BHEL ,TIRUCHIRAPPALLI - 620 014

SHIFT :

STOCK OILING - SFTC - HANDING OVER

DESCRIPTION		FOR THE SHIFT	CUMULATIVE	DESCRIPTION		FOR THE SHIFT	CUMULATIVE
BUNDLING				BUNDLING			
FTTC RAISED				FTTC RAISED			
HANDING OVER				HANDING OVER			
FTTC No.	WEIGHT	FTTC No.	WEIGHT	FTTC No.	WEIGHT	SFTC No.	WEIGHT
				FTTC / HO GAP DETALIS			WEIGHT
				TOTAL			
BEVELLING DETAILS							
SIZE / ANGLE		GRADE		SHIFT PRODUCTION		CUMULATIVE PRODUCTION	
SIGN							

Approved By



010-010

BHARAT HEAVY ELECTRICALS LIMITED, TIRUCHY-14

SEAMLESS STEEL TUBE PLANT

FURNACE TEMPERATURE LOG SHEET

Dt: 01.02.19

FURNACE-5T /7.5 T	
SHIFT	A / B / C
DATE	

[illegible]

REMARKS:

Prepared By

Reviewed By

Approved By

517873355056



961 - 024

Dt : 01.02.19

IPA OVER / FOR KR 75

SEAMLESS STEEL TUBE PLANT
BHEL, Tiruchirapalli - 620014

COLD MILL

S.O. NO. :

Date :

Bundle No. :

Shift :

Specification :

Charge No. :

Fce : NF / TF

Quantity :

Disch
Time }

Operator Signature

Prepared By

Reviewed By

Approved By



961 - 018

ID: 01.02.19

C.O.No
NAME

SIZE (mm)
10
15
20
25
30
35
40
45
50
60
70
80
90
100
120
150
200
250
300
350
400
450
500
600
700
800
900
1000
1200
1500
2000
2500
3000
3500
4000
4500
5000
6000
7000
8000
9000
10000

P.O.No

NAME _____

SPECN & GRADE

W.O.No

Melt. No

Sl.No

1

2

3

4

5

9

7

∞

6

10

11

12

13

14

13

Band No	
Page No	

Bande Qly

Daidie Lengui

Total

Bundles

Nos

Length

Production

Quality Control

Prepared By

Reviewed By

Approved By

SP7873355042

 961 - 008 Dt : 01.02.19		BHEL / SSTP		Mechanical	
Maintenance Service Requisition				Electrical	
Equipment No/Name					
Reporting Date :		Time	Shift	A B C G N	
Nature of trouble :					
Handing over : ON TEMPORARY Basis (T)					
Date :		Time :	Handing over : ON COMPLETION Basis (C)		
Remarks :		Date :	Time :		
Maintenance Personnel		Production Personnel		Maintenance Personnel	
Control No. (For Mtce.use only)				Mechanical	Electrical

Prepared By

Reviewed By

Approved By



961 - 006

Dt: 01.02.19

SEAMLESS STEEL TUBE PLANT - COLD MILL SHIFT PRODUCTION REPORT FOR PICKLING PLANT

Page of

SP7873355040

[illegible]

Prepared By

Reviewed By

Approved By

SP 7873355037


 961 - 003
 Dt : 01.02.19

PICKLING PLANT NEUTRALISATION - LOG

 DATE :
 SHIFT :

	Type of pump used	Time		Total time	Time	PH - Values once a hour								Solar area		
		From	To													
Waste Water					Neutralisation Pit											Dentation Tank once a shift
					Ventilation Pit											
Waste Acid					Distribution Pit											
					Sedimentation I											
Milk of Lime					Sedimentation II											
Fresh Acid					Sedimentation III											Drying pit (if liquid)
Status of Sludge level	Sedimentation Pit I	Sedimentation Pit II	Sedimentation Pit III	Solar I Detention	Solar II Detention	Solar III Detention	Solar Dry Pit I		Solar Dry Pit II		Solar Dry Pit III					
Shift start																
Shift end																
Equipment status	Fresh acid storage tanks	Fresh acid pump	Suction Blowers	Pit Pumps	MOL pump	Stirr			Ventulation Air hose							
	A					MOL Prepath	MOL Holding	Natural Pit								
	B															
Tank clearing details :																
General					Name of the Helper					Name & Sig . Of Operator						
					1. Name of LCS											
					2.											

Prepared By

Reviewed By

Approved By

SP7873355039



961-005

Dt: 01.02.19

PICKLING PLANT PROCESS TIME SHEET

PROCESS NAME

DATE:

SHIFT:

[illegible]

Prepared By

Reviewed By

Approved By

SP7873355036



961 - 002

Dt: 01.02.19

S.S.T.P COLD MILL

WIP STATUS CARD FOR ALLOY STEEL

[illegible]

Prepared By

Reviewed By

Approved By

597873355035



961-001

Dt: 01.02.19

S.S.T.P COLD MILL

WIP STATUS CARD FOR CARBON STEEL

[illegible]

Prepared By

Reviewed By

Approved By

SP7873355060

 961 - 028 Dt : 01.02.19		SSTP	BUNDLE TAG	Specimen Bundle No .		S. O. No.	
CUSTOMER					P. O. No.		
SPECIFICATION				MELT NO.	SIZE in MM		
QUANTITY	Nos.	METERS	WEIGHT (Kgs)	BUNDLE No.	SIGNATURE		

Prepared By

Reviewed By

Approved By

SR7873355058



961 – 026

Dt : 01.02.19

NORMALISING OVER / FOR KR 75

SEAMLESS STEEL TUBE PLANT

BHEL, Tiruchirapalli – 620014

COLD MILL

S.O. NO. :

Date :

Bundle No. :

Shift :

Specification :

Charge No. :

Fce : NF /TF

Quantity :

Disch
Time }

Operator Signature

Prepared By

Reviewed By

Approved By

SR7873255057



961 - 025

Dt: 01.02.19

NORMALISING OVER FOR / TEMPERING

SEAMLESS STEEL TUBE PLANT

BHEL, Tiruchirapalli - 620014

COLD MILL

S.O. NO. :

Date :

Bundle No. :

Shift :

Specification :

Charge No. :

Fce : 7.5T/5.0T

Quantity :

Disch
Time }

Operator Signature

Prepared By

Reviewed By

Approved By

SP7873355054



PA OVER FOR / PICKLING

SEAMLESS STEEL TUBE PLANT

BHEL, Tiruchirapalli – 620014

961 – 022

Dt : 01.02.19

COLD MILL

S.O. NO. :

Date :

Bundle No. :

Shift :

Specification :

Charge No. :

Fce : NF / TF

Quantity :

Disch
Time }
}

Operator Signature

Prepared By

Reviewed By

Approved By

SR 7873355055



961 - 023
Dt : 01.02.19

SCA OVER / FOR KR 75
SEAMLESS STEEL TUBE PLANT
BHEL, Tiruchirapalli - 620014
COLD MILL

S.O. NO.	:	Date :
Bundle No.	:	Shift :
Specification :		
Charge No.	:	Fce : 7.5T /5.0T
Quantity :		

Disch
Time }
}

Operator Signature

Prepared By

Reviewed By

Approved By



961 - 016

Dt: 01.02.19

SEAMLESS STEEL TUBE PLANT - COLD MILL

SHIFT PRODUCTION REPORT FOR BEVELLING MACHINE

[illegible]

- REQUIRED FOR API ORDERS

Prepared By

Reviewed By

Approved By

SHIFT PRODUCTION REPORT FOR FURNACES (5.0 T / 7.5 T)

[illegible]



961 - 015
Dt: 01.02.19

Dt: 01.02.19

SEAMLESS STEEL TUBE PLANT - COLD MILL

SP7873355099

Page Of

SHIFT PRODUCTION REPORT FOR HYDRO STATIC PIPE TESTER

[illegible]

- Required for API orders

Prepared By

Reviewed By

Approved By



961 - 009
Dt: 01.02.19

SEAMLESS STEEL TUBE PLANT - COLD MILL

SHIFT PRODUCTION REPORT FOR POINTING I / 11/800 KN / 315 KN / 50 T / 60 T

[illegible]

Prepared By

Reviewed By

Approved By

SP7873255059



TEMPERING OVER / FOR KR 75

SEAMLESS STEEL TUBE PLANT

BHEL, Tiruchirapalli – 620014

961 – 027

Dt: 01.02.19

COLD MILL

S.O. NO. :

Date :

Bundle No. :

Shift :

Specification :

Charge No. :

Fce : 7.5T / 5.0T

Quantity :

Disch
Time }

Operator Signature

Prepared By

Reviewed By

Approved By



961 - 020
Dt : 01.02.19

SP 7873355053 Utilities / Mechanical / Repair Shop

INDENT CUM WORK ORDER FORM

(To be filled in by the indenter)

Date :

01. Name of the Indenter _____ 02. Dept. / Section _____ 03. Phone No. _____
04. Name of the part eqpt _____ 05. Spare material code No. _____
To be made newly / repaired
06. Quantity Required _____ Nos. / SETS 07. Completion Required by dt. _____
08. Raw material specification _____ 09. Substitute Material Specification _____
10. DRG. No. _____ / Sketch Enclosed
11. Verified from store / MC / SITE and found that
No spare is available

Signature of the Indenter
(Executive / Supervisor)

TO BE FILLED IN BY THE REPAIR SHOP

01. Received _____ date _____ time _____ hrs _____ 02. Accepted for manufacturing /
Returned to the indenter
03. Work order No. _____
04. Work centre LB/NL/FN/RM/CH/PH
05. Completed date _____
06. Quantity manufactured _____
07. Informed for inspection on _____ time _____
08. Name of the person / Inspection on _____
Indenter _____
Signature of Repair Shop Supervisor

INSPECTION REPORT

Quantity Offered _____
Quantity Accepted _____
Signature of Inspector / Indenter

Prepared By

Reviewed By

Approved By

SP7873355097

[illegible]

Prepared By

Reviewed By

Approved By

SP7873355038


 961-004
 Dt : 01.02.19

SEAMLESS STEEL TUBE PLANT

PICKLING PLANT - BATH CONTROL SHEET

DATE :

SHIFT:

G

 REPLENISHMENT
 DONE

 REPLENISHMENT
 REQUIRED
PROCESS
TANK NO

OPERATING POINTAGE

OTHER CONTROLS

DESIRED
RANGE

ACTUAL

DESIRED RANGE

ACTUAL

1

ALKALI DEGREASING

30 - 125 Pts

PH: 7 - 10.0

Add : Bags of

2

HOT RINSE I

PH: 7 - 10.0

3

PICKLING I

10 - 25%

Fe : 0 - 100
Grames/ Litrs

4

PICKLING II

10 - 25%

Fe : 0 - 100
Grames/ Litrs

5

COLD RINSE I

PH : 1.0 - 7.0

6

COLD RINSE II

PH : 2.0 - 7.0

7

HOT RINSE II

PH : 2.0 - 7.0

8

PHOSPHATING

30 - 50 Pts

Fe : 3.0 - 6.0

Add : Carboys of

9

COLD RINSE III

PH : 5.0 - 7.0

10

COLD RINSE IV

PH : 5.0 - 7.0

11

PASSIVATING

5 - 8.0 Pts

12

LUBRICATING

3 - 5%

FA : 0.0 - 1.0

Add : Bags of

LAB INCHARGE

Prepared By

Reviewed By

Approved By

MATL CODE: SP787-1500576



965-001
Dt: 29.12.18

BHARAT HEAVY ELECTRICALS LIMITED/ SEAMLESS STEEL TUBE PLANT-TIRUCHIRAPALLI-620014
PLANT SERVICES DEPARTMENT
COMPRESSOR LOG SHEET

Compressor No. _____
Date: _____

TIME	Pr Kg/sq.cm				COOLING WATER	At Inlet	Atmospheric	Wet bulb	Temperature (Deg C)				Cylinder Lubrication Drop/min		Air Pt. Kg/sq.cm		Current in Amps			Total inline compressor	Machine No.	Running Groups			Total Hrs for the day
	INSTAGES		RECEIVER						Inter Cooler		After Cooler		LP	HP	Before drier	After drier	R	Y	B			Shift			
	I	II	I	II					inlet	outlet	inlet	outlet										A	B	C	
06-15																									
07-00																									
08-00																									
09-00																									
10-00																									
11-00																									
12-00																									
13-00																									
14-00																									
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23-00																									
24-00																									
01-00																									
02-00																									
03-00																									
04-00																									
05-00																									
Compressor no.	1	2	3	4	5	6	7	8																	
Running Hrs at starting																									
Running Hrs for the day																									
Cum Running Hrs at the end of shift																									

Energy Meter Reading

Machine No. _____
A _____ B _____ C _____

Operators Name & Sign _____ Supervisor _____

MATL CODE : SP767-1500517 (FRONT SIDE)



BHARAT HEAVY ELECTRICALS LIMITED/ SEAMLESS STEEL TUBE PLANT-TIRUCHIRAPALLI-620014
PLANT SERVICES DEPARTMENT

MAIN CIRCULATING PUMP HOUSE

TIME	CLOSED CIRCUIT 150HP			CLOSED CIRCUIT 55HP			CLOSED CIRCUIT 24HP			Cooling Water				LOG SHEET	REMARKS
	Pump No.1	Pump No.2	Pump No.3	Pump No.4	Pump No.5	Pump No.6	Pump No.7	Pump No.8	Pump No.9	Temperature in Deg C		Date:			
	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current In Amps	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current In Amps	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current In Amps	l/cell	V/cell				
06-15															
07-00															
08-00															
09-00															
10-00															
11-00															
12-00															
13-00															
14-00															
15-00															
16-00															
17-00															
18-00															
19-00															
20-00															
21-00															
22-00															
23-00															
00-00															
01-00															
02-00															
03-00															
04-00															
05-00															
05-45															
Shift Running Hours															
Pump no. 1 2 3 4 5 6 7 8 9															
Shift															
A															
B															
C															
Total															

Shift	Name of Operator	Signature of Operator	Signature of supervisor
A			
B			
C			

MATC CODE: SP787-1500517 (BACK SIDE)



BHARAT HEAVY ELECTRICALS LIMITED/ SEAMLESS STEEL TUBE PLANT - DATE:
TIRUCHIRAPALLI-620014
PLANT SERVICES DEPARTMENT

965-007
 Dt: 29.12.18

TOP TANK WATER LEVEL LOG SHEET
 TOP TANK: OVERALL HEIGHT 48.925Mtrs. CAPACITY-500M3 (5 Lakh Litres)
 BOTTOM TANK: CAPACITY - 200M3 (2 Lakh Litres)

TIME	Level in	EQUALISING RESERVOIR PUMPING REMARKS	
06-15			
07-00			
08-00			
09-00			
10-00			
11-00			
12-00			
13-00			
14-00		Water Flow Reading :	CONSUMPTION:
15-00			
16-00			
17-00			
18-00			
19-00			
20-00			
21-00			
22-00		Water Flow Reading :	CONSUMPTION:
23-00			
00-00			
01-00			
02-00			
03-00			
04-00			
05-00			
05-45			
		Water Flow Reading :	CONSUMPTION:
		CONSUMPTION OF THE DAY:	M3

WHEEL

965-004
Dr29.12.18

**BHARAT HEAVY ELECTRICALS LIMITED/ SEAMLESS STEEL TUBE PLANT-TIRUCHIRAPALLI-620014
PLANT SERVICES DEPARTMENT**

SUB STATION LOG SHEET

[illegible]

MATL CODE: SP7871500520 (FRONT SIDE)

 BHARAT HEAVY ELECTRICALS LIMITED/ SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI-620014 PLANT SERVICES DEPARTMENT LOG SHEET FOR SCALE PIT PUMP HOUSE OPEN CIRCUIT 60 HP VERTICAL TYPE												Date:
Time	Pump no.1			Pump no.2			Pump no.3			Sump level in meter	Remarks	
	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current in Amps	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current in Amps	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current in Amps			
06-30											A-Shift	
07-30												
08-30												
09-30												
10-30												
11-30												
12-30												
13-30												
14-30											B-Shift	
15-30												
16-30												
17-30												
18-30												
19-30												
20-30												
21-30												
22-30											C-Shift	
23-30												
00-30												
01-30												
02-30												
03-30												
04-30												
05-30												
Shift	Name of Operator			Signature of Operator			Signature of Supervisor					
A												
B												
C												

MATL CODE: SP7871500520

(BACK SIDE)



965-006
Dt: 29.12.18

**BHARAT HEAVY ELECTRICALS LIMITED/ SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI-620014
PLANT SERVICES DEPARTMENT**

**LOG SHEET FOR RETURN WATER PUMP HOUSE
CLOSED CIRCUIT 65 HP CENTIFUGAL TYPE**

Date:

Time	Pump no.1			Pump no.2			Pump no.3			Sump level in meter	Remarks
	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current in Amps	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current in Amps	Suction Pr. Kg/cm ²	Delivery Pr. Kg/cm ²	Current in Amps		
06-15											A-Shift
07-00											
08-00											
09-00											
10-00											
11-00											
12-00											
13-00											
14-00											B-Shift
15-00											
16-00											
17-00											
18-00											
19-00											
20-00											
21-00											
22-00											C-Shift
23-00											
00-00											
01-00											
02-00											
03-00											
04-00											
05-00											
05-45											
Shift	Name of Operator			Signature of Operator			Signature of Supervisor				
A											
B											
C											

MATL CODE: SP387-1500521

		BHEL / SSTP		Electrical					
965-008 Dt: 29.12.18		Maintenance Service Requisition		Instrumentation					
				Mechanical					
Equipment No./ Name: Reporting date:		Time: Shift: <table border="1"><tr><td>A</td><td>B</td><td>C</td><td>G</td></tr></table>		A	B	C	G		
A	B	C	G						
Nature of breakdown:									
Handing over: On Temporary Basis (T) Date: Time:		Handing over on Completion basis (C) Date: Time:							
Remarks:		Remarks:							
Maintenance personnel	Production personnel	Maintenance personnel		Production personnel					
Electrical		Instrumentation		Mechanical					

MATL CODE : SP7871500522

 965-009 Dt: 29.12.18		BHARAT HEAVY ELECTRICALS LIMITED/ SEAMLESS STEEL TUBE PLANT- TIRUCHIRAPALLI-620014 PLANT SERVICES DEPARTMENT LOG SHEET (ELEC/ INST/ MECH)				Date : / / Shift: A/B/C/G Name : Staffno. Design	
Log Slno.	Equipment location	Description of job / Breakdown call	Time		Description of job done	If not completed reason	
			From	To			

Signature of Supervisor/Shift in charge/Executive

Signature of Electrician/Fitter/Instrument Mechanic/Electronic Mechanic

MATL : SP7871500523
CODE

 965-010 Dt: 29.12.18	BHARAT HEAVY ELECTRICALS LTD SEAMLESS STEEL TUBE PLANT/TIRUCHIRAPALLI-14 PLANT SERVICES DEPARTMENT PERMIT TO WORK ON ELECTRICAL EQUIPMENT LINE	L.C.No. Date:														
I hereby declare that the following electrical equipment line is dead and isolated from all live conductors. A caution notice has been affixed to the controlling switches.																
I. Here state exactly the electrical/ line on which it is safe to work																
II. Here state exactly the points at which the eqpt. /line is isolated from all live parts and controlling switches' keys thereof which are kept open																
III. Here state exactly at what points the electrical eqpt./line is connected to earth. If not earthed say so.																
IV. Here state exactly whether any other person has prior line clearance on the same equipment/line and if so give details																
<table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; width: 50%;"><u>ISSUER</u></th> <th style="text-align: left; width: 50%;"><u>RECEIVER</u></th> </tr> </thead> <tbody> <tr> <td>Name :</td> <td>Name :</td> </tr> <tr> <td>Staffno. :</td> <td>Staffno. :</td> </tr> <tr> <td>Desgn :</td> <td>Desgn :</td> </tr> <tr> <td>Dept :</td> <td>Dept :</td> </tr> <tr> <td>Date & Time :</td> <td>Date & Time :</td> </tr> <tr> <td>Signature :</td> <td>Signature :</td> </tr> </tbody> </table>			<u>ISSUER</u>	<u>RECEIVER</u>	Name :	Name :	Staffno. :	Staffno. :	Desgn :	Desgn :	Dept :	Dept :	Date & Time :	Date & Time :	Signature :	Signature :
<u>ISSUER</u>	<u>RECEIVER</u>															
Name :	Name :															
Staffno. :	Staffno. :															
Desgn :	Desgn :															
Dept :	Dept :															
Date & Time :	Date & Time :															
Signature :	Signature :															
Note: 1. This card after being signed by an authorised person for the work to proceed, is to be handed over to the person in charge of the work and retained by that person until the work is completed or stopped by an authorised person. 2. The electrical equipment mentioned herein must not again be made alive until the card has been signed and returned by the person in charge of the work to an authorised person.																
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> I hereby declare that all men, earthings and materials under my charge have cleared the said equipment/line and men have been warned that it is no longer safe to work on the electrical equipment/line specified on this card. </td> <td style="width: 50%;"></td> </tr> <tr> <td> Date : Signature : </td> <td> Date : Signature : </td> </tr> <tr> <td> Time : Desgn : </td> <td> Time : Desgn : </td> </tr> </table>			I hereby declare that all men, earthings and materials under my charge have cleared the said equipment/line and men have been warned that it is no longer safe to work on the electrical equipment/line specified on this card.		Date : Signature :	Date : Signature :	Time : Desgn :	Time : Desgn :								
I hereby declare that all men, earthings and materials under my charge have cleared the said equipment/line and men have been warned that it is no longer safe to work on the electrical equipment/line specified on this card.																
Date : Signature :	Date : Signature :															
Time : Desgn :	Time : Desgn :															

MATL
CODE :

SP7871500524



965-011
Dt: 29.12.18

BHARAT HEAVY ELECTRICALS LIMITED/ SEAMLESS STEEL TUBE PLANT-
TIRUCHIRAPALLI-620014
PLANT SERVICES DEPARTMENT/INSTRUMENTATION

CALIBRATION RECORDS:

Location:		IDN No.:	
Description of Instrument:		Range:	
Test Equipment reference:		Room Temperature	
calibration ref standard		Check Method: Procedure No.	
Characteristics/Parameters Checked:		Acceptance Criteria	

CALIBRATED ON:

CALIBRATION DUE :

SL NO.	REFERENCE INPUT		INSTRUMENT/GAUGE READINGS(OUTPUT)					
	I/P	O/P	BEFORE ADJUSTMENT			AFTER ADJUSTMENT		
			READING	ERROR	%ERROR	READING	ERROR	%ERROR
1								
2								
3								
4								
5								

REMARKS:

CALIBRATION TAG UPTO DATE: YES/NO

INSTRUMENT MECHANIC

SUPERVISOR/SHIFT INCHARGE

EXECUTIVE