( A Government of India Enterprise )

#### **TECHNICAL SPECIFICATION**

00010 - M5673086000

Specification

"VENT VALVE PARTS

PART NAME :COMPLETE ASH INTAKE VALVE ASSEMBLY DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB

ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET WITH CYLINDER

VALVE SIZE:200NB"

00020 - M5673086001

Specification

"VENT VALVE,OEM / PARTS

PART NAME :VALVE BODY

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

1

MATERIAL :ALLOY CAST IRON
EQUIPMENT NAME :ASH INTAKE VALVE
ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB, HARDNESS:250 BH (MIN)"

00030 - M5673086004

Specification

"VENT VALVE,OEM / PARTS

PART NAME :DISC ARM

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

5

MATERIAL :CAST IRON

EQUIPMENT NAME :ASH INTAKE VALVE ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB, MATERIAL SPEC:IS 210 GRADE FG260"

00040 - M5673086005

Specification

"VENT VALVE,OEM / PARTS PART NAME :DISC

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

6A

MATERIAL :MILD STEEL

EQUIPMENT NAME :ASH INTAKE VALVE ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB,10 MM THICK (MIN)"

00050 - M5673086006

Specification

"VENT VALVE, OEM / PARTS

PART NAME :DISC LINER

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

6B

MATERIAL :STAINLESS STEEL 420
EQUIPMENT NAME :ASH INTAKE VALVE
ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

WALVE SIZE:200 NB,10 MM THICK (MIN), HARDNESS:350 BHN (MIN)"

( A Government of India Enterprise )

00060 - M5673086007

Specification

"VENT VALVE,OEM / PARTS

PART NAME :SEAL HOLDER

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

7

MATERIAL :MILD STEEL

EQUIPMENT NAME :ASH INTAKE VALVE
ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

WALVE SIZE:200 NB"

00070 - M5673086008

Specification

"VENT VALVE,OEM / PARTS

PART NAME :SEAT (REPLACEABLE TYPE)

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

7A

MATERIAL :ALLOY CAST IRON
EQUIPMENT NAME :ASH INTAKE VALVE
ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB, HARDNESS:250 BHN (MIN)".

00080 - M5673086009

Specification

"VENT VALVE,OEM / PARTS PART NAME :SEAL

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

7B

MATERIAL :NEOPRENE RUBBER
EQUIPMENT NAME :ASH INTAKE VALVE
ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB, SHORE HARDNESS:70+/-10 A"

00090 - M5673086013

Specification

"VENT VALVE,OEM / PARTS PART NAME :SPRING

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

22

MATERIAL :SPRING STEEL

EQUIPMENT NAME :ASH INTAKE VALVE ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB"

00100 - M5673086023

Specification

"VENT VALVE,OEM / PARTS PART NAME :BUSH

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

13

MATERIAL :BRONZE

EQUIPMENT NAME :ASH INTAKE VALVE ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB"

00110 - M5673096001

( A Government of India Enterprise )

Specification

"VENT VALVE,OEM / PARTS PART NAME :CASING

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

& 1

MATERIAL :CAST IRON

EQUIPMENT NAME :DOUBLE DISC VALVE

VALVE SIZE:300 NB, MATERIAL SPEC:AS PER IS 210 GR FG260"

00120 - M5673096002

Specification

"VENT VALVE,OEM / PARTS

PART NAME :DISTANCE PIECE

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

& 2

MATERIAL :CAST IRON

EQUIPMENT NAME :DOUBLE DISC VALVE

VALVE SIZE:300 NB, MATERIAL SPEC:AS PER IS 210 GR FG260"

00130 - M5673096004

Specification

"VENT VALVE,OEM / PARTS PART NAME :SEAT

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

& 3

MATERIAL :STAINLESS STEEL 440C
EQUIPMENT NAME :DOUBLE DISC VALVE
VALVE SIZE:300 NB, HARDNESS:500 BHN (MIN)"

00140 - M5673096005

Specification

"VENT VALVE,OEM / PARTS

PART NAME :DISC HOLDER

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

& 4

EQUIPMENT NAME :DOUBLE DISC VALVE

VALVE SIZE:300 NB,MATERIAL SPEC:ASTM A 216 GR WCB/ CAST STEEL, IS 1030

GR 27/54"

00150 - M5673096006

Specification

"VENT VALVE,OEM / PARTS PART NAME :DISC

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

& 5

MATERIAL :STAINLESS STEEL 440C
EQUIPMENT NAME :DOUBLE DISC VALVE
VALVE SIZE:300 NB, HARDNESS:500 BHN (MIN)"

00160 - M5673096007

Specification

"VENT VALVE,OEM / PARTS

PART NAME :DISC SPRING

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

& 7

MATERIAL :SPRING STEEL

EQUIPMENT NAME :DOUBLE DISC VALVE VALVE SIZE:300 NB, MATERIAL SPEC:17.7 PH"

00170 - M5673096008

Specification

"VENT VALVE,OEM / PARTS

( A Government of India Enterprise )

PART NAME :INLET/OUTLET ADAPTER

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

& 9

MATERIAL :ALLOY CAST IRON

EQUIPMENT NAME :DOUBLE DISC VALVE VALVE SIZE:300 NB,HARDNESS:300 BHN (MIN)"

00180 - M5673096010

Specification

"VENT VALVE,OEM / PARTS

PART NAME :SPRING GUIDE PIN

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

& 6

MATERIAL :STAINLESS STEEL 304
EQUIPMENT NAME :DOUBLE DISC VALVE

WALVE SIZE:300 NB"

00190 - M5673096011

Specification

"VENT VALVE,OEM / PARTS

PART NAME :SPRING SPACER

DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

8 &

MATERIAL :MILD STEEL

EQUIPMENT NAME :DOUBLE DISC VALVE

VALVE SIZE:300 NB"

00200 - M5673270163

Specification

AHP\_COMMON,ON BASIS OF NTPC DRG / SPECS PART NAME : VENT VALVE FOR ALV

DRAWING & POSITION NUMBER : MTPS/AHD/ALV/100

DIMENSION : 100 NB

00210 - M560000038

Specification

AHP COMMON,ON BASIS OF NTPC DRG / SPECS

PART NAME : DOUBLE DISC VALVE ASSEMBLY

APPLICATION : ALV OUTLET

DRAWING & POSITION NUMBER : NTPC/SSTPP/AHM/ALVDISCHARGE VALVE/GA/01

DIMENSION : 200 NB

00220 - M5673086002

Specification

"VENT VALVE,OEM / PARTS

PART NAME :OUTLET BOX

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

2

MATERIAL :MILD STEEL

EQUIPMENT NAME :ASH INTAKE VALVE
ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

WALVE SIZE:200 NB, MATERIAL SPEC:I S2062, 10MM THICK"

00230 - M5673086003

Specification

"VENT VALVE,OEM / PARTS

PART NAME :VALVE LEVER

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

4

( A Government of India Enterprise )

MATERIAL :MILD STEEL

EQUIPMENT NAME :ASH INTAKE VALVE ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

WALVE SIZE:200 NB"

00240 - M5673086010

Specification

"VENT VALVE,OEM / PARTS PART NAME :SHAFT

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

9

MATERIAL :EN8

EQUIPMENT NAME :ASH INTAKE VALVE ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB"

00250 - M5673086011

Specification

"VENT VALVE,OEM / PARTS

PART NAME :SPRING SHACKLE

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

14

MATERIAL :FORGED CARBON STEEL
EQUIPMENT NAME :ASH INTAKE VALVE
ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB"

00260 - M5673086012

Specification

"VENT VALVE,OEM / PARTS

PART NAME :CYLINDER SHACKLE

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

15

MATERIAL :MILD STEEL

EQUIPMENT NAME :ASH INTAKE VALVE ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

WALVE SIZE:200 NBAP"

00270 - M5673086015

Specification

. "VENT VALVE,OEM / PARTS

PART NAME :COVER PLATE

DRAWING & POSITION NUMBER :NTPC/AHP/AIV/ALVINLET/200NB &

26

MATERIAL :MILD STEEL

EQUIPMENT NAME :ASH INTAKE VALVE
ADDITIONAL INFORMATION :FLAP TYPE

AT ALV INLET

VALVE SIZE:200 NB"

00280 - M5673096000

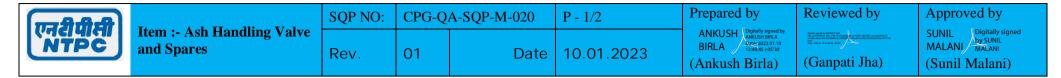
Specification

"VENT VALVE,OEM / PARTS

PART NAME :COMPLETE DOUBLE DISC VALVE ASSEMBLY
DRAWING & POSITION NUMBER :NTPC/AHP/DOUBLE DISC VV/300NB

DOUBLE DISC VALVE, WITHOUT CYLINDER, AT SILO INLET".

## STANDARD QUALITY PLAN



SL.	COMPONENT/	CHARAC-	QUANTUM		REFERENCE	ACCEPTANCE	FORMAT		AGE	NCY	REMARKS
NO.	OPERATION	TERISTICS	OF CH	ECK	DOCUMENT	NORM	OF RECORD	D	М	N	
			M	N					IVI	IV	
<i>A</i> )	Raw Material / Bought O	ut Items Checks									
1.	Body, Bonnet, Seat/	a.) Chemical &	1/	1/	Tender/PO specificati		TC/IR		P/V	V	
	Slide/Gate/ Disc, Dome,	Mechanical Properties	Heat	Heat	approved Drg/ DS / T						
	Back seat, Disc Spring,	b.) Hardness (for high	100	100	Tender/PO specificati		TC/IR		P/V	V	
	Ring, Adapter (as applicable)	hardness components)	%	%	approved Drg/ DS / T	S					
2.	Pneumatic cylinder (as	Operational check,	100	100	Tender/PO specificati		TC/IR		P/V	V	
	applicable)	stroke and Leakage Test	%	%	approved Drg/ DS / T	S					
3.	Shaft (as applicable)	a.) Chemical &	1/	1/	Tender/PO specificati	on / NTPC	TC/IR		P/V	V	
		Mechanical Properties	Heat	Heat	approved Drg/ DS / T	S					
		incl. Hardness (for high									
		hardness requirement)									
		b.) Ultrasonic Testing	100	100	ASTM A 388	Note 6	TC/IR		P/V	V	(for dia. $\geq$ 50 mm)
			%	%							
4.	Inflatable Seal (as	Hardness	1/lot	1/lot	Tender/PO specificati	on / NTPC	TC/IR		P/V	V	
	applicable)				approved Drg/ DS / T	S					
<b>B</b> )	Process / Assembly Check	cs									
	Machining of	a.) Dimension	Mfr	10%	Tender/PO specificati	on / NTPC	TC/IR		P	V	
	components as		std		approved Drg/ DS / T	S					
	mentioned above (as	b.) DPT	Mfr	10%	ASTM E 165	No relevant	TC/IR		P	V	
	applicable)	,	std			Indication					
		c.) Leakage test of body	Mfr	10%	Tender/PO	No pressure	TC/IR		P	V	
			std		specification / NTPC	drop					
					approved Drg/ DS/TS						

# Abbreviations :-

M	Manufacturer	P	Per	form		IR	Inspection Record / Report
N	NTPC Ltd or authorized representative	W	Wit	ness		TC	Test Certificate
TS/DS	Technical specification/Datasheet	V	Rev	view of records		MTC	Manufacturer's Test Certificate
PO	Purchase Order	Mfr. S	td.	Manufacturer St	tai	ndard	

#### STANDARD QUALITY PLAN

mana .		SQP NO: CPG-QA-SQP-M-020 P - 2/2	P - 2/2	Prepared by	Reviewed by	Approved by		
NTPC ar	tem :- Ash Handling Valve nd Spares	Rev.	01	Date	10.01.2023	ANKUSH ANKUSH BIRLA Date: 2023 01.10 12:49:04 + 05:30'  (Ankush Birla)	Manuscript and the second of t	SUNIL Digitally signed by SUNIL MALANI MALANI (Sunil Malani)

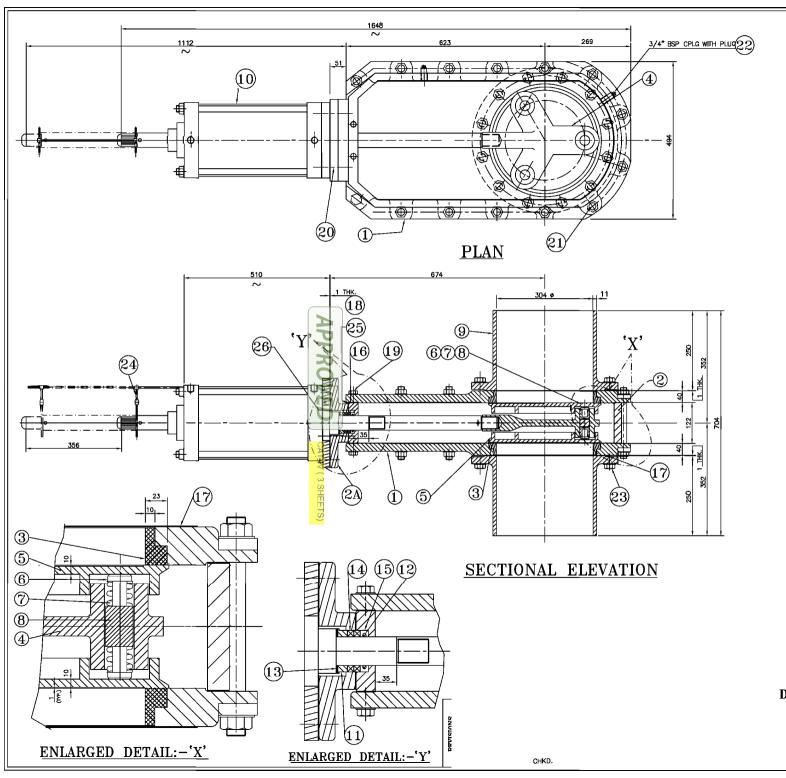
SL.	COMPONENT/	CHARAC-	QUAN		REFERENCE	ACCEPTANCE	FORMAT	D	AGENCY		REMARKS
NO.	OPERATION	TERISTICS	OF CH	ECK	DOCUMENT	NORM	OF		М	N	
			М	N			RECORD		IVI	IV	
<i>C</i> )	Finished Product / Final	Inspection									
	Valve and Spares	a.) Dimension,	100	10%	Tender/PO specificat	ion / NTPC	IR		P	W	
		completeness, Hardness	%		approved Drg/ DS / 7	TS .					
		(on high hardness									
		accessible parts)									
		b.) Grade verification by	100	rand	Tender/PO specificat	ion / NTPC	IR	Y	P	W	
		PMI (for accessible	%	om	approved Drg/ DS / 7	TS .					
		SS/Alloy steel parts)									
		c.) Operation test (5	100	10%	Tender/PO specificat	ion / NTPC	IR	Y	P	W	For Complete
		cycles)	%		approved Drg/ DS / 7	TS .					Valve only
		d.) Leakage test	100	10%	Tender/PO specificat	ion / NTPC	IR	Y	P	W	For Complete
		(Pneumatic/Hydro)	%		approved Drg/ DS / T	CS .					Valve & Casing
											only

#### Notes :-

- 1. Y mark in Column 'D' means such document shall be furnished by the manufacturer / supplier.
- 2. Calibrated equipments required for performing the tests in presence of NTPC or authorized representative, shall be arranged by the supplier without any extra cost.
- 3. Witness by NTPC/authorized representative (wherever applicable) shall be on randomly chosen sample/s. NTPC shall review Mfrs test report for balance quantity.
- 4. Reference and Acceptance norms shall be derived from following in the same sequence
  - a) NTPC Approved drawing / data sheet b) NTPC tech specs c) Purchase Order d) Relevant national standard e) Relevant International standard f) Manufacturer's standard g) Good Engineering practices
- 5. In case of electrical actuator, test report for HV,IR and Functional checks shall be furnished for NTPC's review. In case of Pneumatic actuator, test report for leakage check, low pressure friction check and functional check shall be furnished for NTPC's review.
- 6. When Back Wall Echo (BWE) set to 100% Full Screen Height (FSH) in sound area of the material, a defect echo > 20% FSH is not acceptable. Also loss of BWE > 20% is not acceptable.

## Abbreviations :-

M	Manufacturer	P	Per	form		IR	Inspection Record / Report
N	NTPC Ltd or authorized representative	W	Wit	ness		TC	Test Certificate
TS/DS	Technical specification/Datasheet	V	Rev	view of records		MTC	Manufacturer's Test Certificate
PO	Purchase Order	Mfr. S	td.	Manufacturer St	tai	ndard	



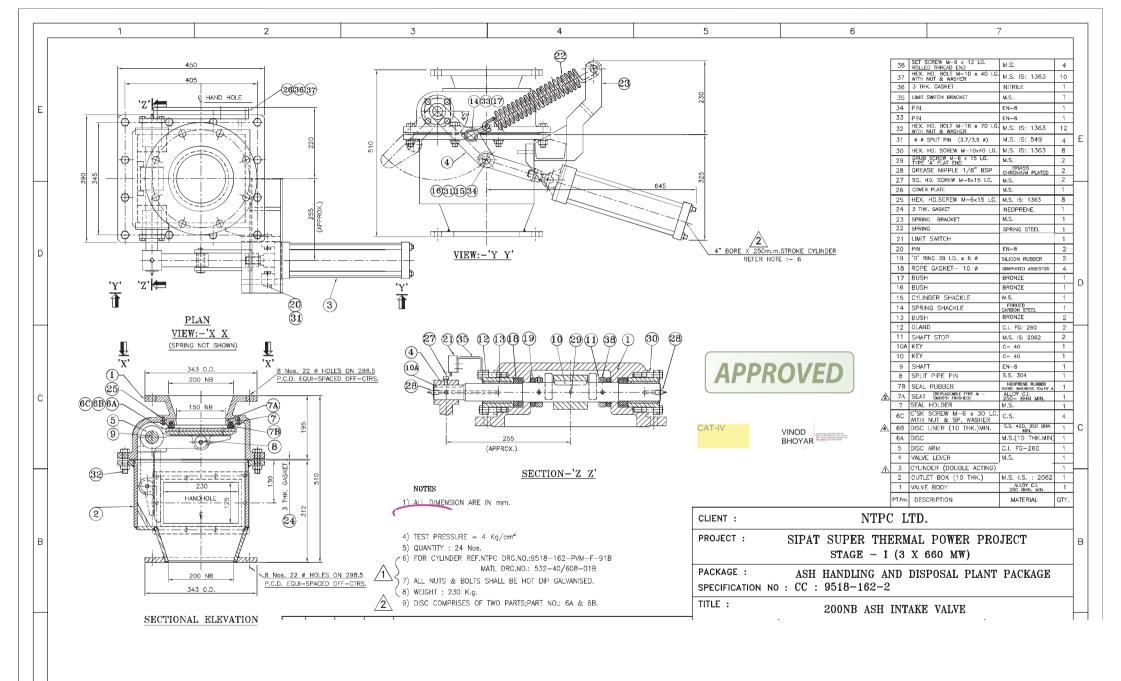
#### **NOTES**

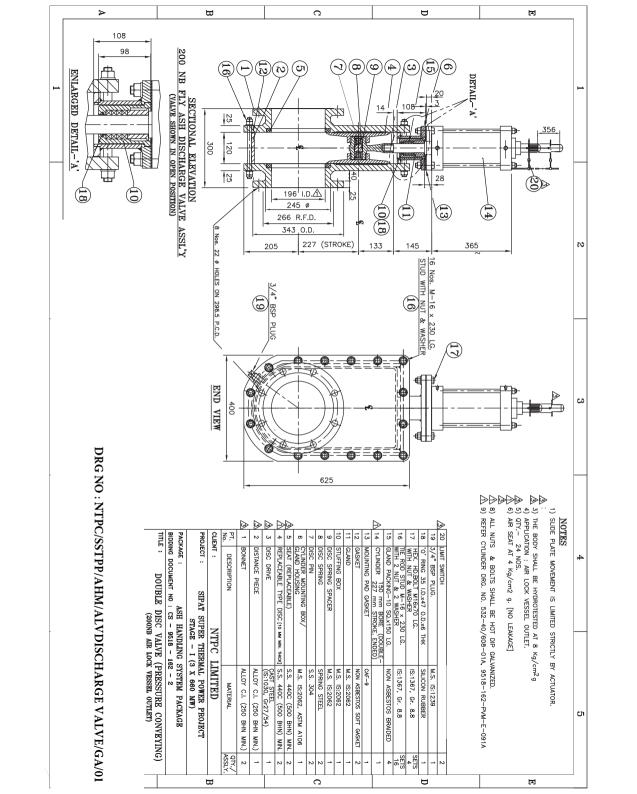
- 1) SLIDE PLATE MOVEMENT IS LIMITED STRICTLY BY ACTUATOR.
- 225) PART NO 1&2 SHELL BE HYDRO TESTED AT 8Kg/cm2 g IN ASSLY. CONDITION.
  4) APPLICATION: SILO INLET
  5) CONNECTION BETWEEN VALVE & PIPE WILL BE COUPLING
- 6) QTY.-12 Nos.

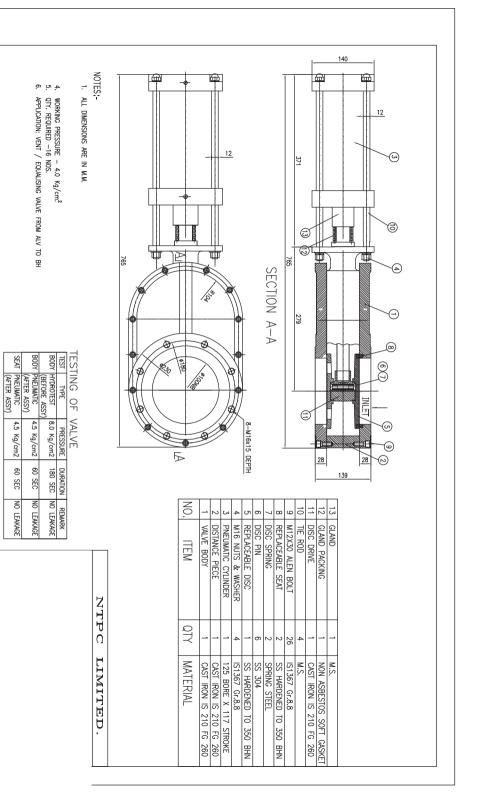
  ⚠ 7) AIR SEAT AT 4 Kg/cm<sup>2</sup>g [NO LEAKAGE]
- ⚠9) ALL NUTS & BOLTS SHALL BE HOT DIP GALVANIZED.

١	26	M-12 x 55 Lg. HEX. SOC. HD. CAP SCREW WITH SP. WASHER	M.S. IS:2269 P-8.8	4 SETS				
	25	GASKET 1.5THK.x120x230 LG.	CAF-9	1				
	24	LIMIT SWITCH		1				
	23	M-20 x 45 LG. HEX. BOLT WITH WASHER	IS:1367 Gr.8.8	24 SETS				
	22	3/4" BSP PLUG	M.S.	2				
	21	M-20x230 LG. STUD WITH NUT & WASHER	IS:1367 Gr.8.8	14 SETS				
ı	20	WITH NUT & WASHER M-20x70 LG. HEX. BOLT WITH NUT & WASHER	IS:1367 Gr.8.8	4 SETS				
	19	M-16x45 LG, HEX. BOLT WITH WASHER	IS:1367 Gr.8.8	4 SETS				
į	18	GASKET 1THK.x 220x285 LG.	RTV SEALANT	11				
	17	GASKET 1.5THK.x304 I.D.x350 O.D.	CAF-9	2				
	16	GASKET 1.5 THK.	CAF-9	2				
[	15	ROD SCRAPER	M.S. IS:2062	1				
	14	GLAND PACKING - 10 SQ.	NON ASBESTOS BRAIDED	2				
	13	RUBBER WASHER 36 I/Dx64 O/Dx 3 THK,	NEOPRENE	1				
	12	'O' RING 44 I.D.x 6 Ø	VITON	1				
Į	11_	GLAND	M.S. IS:2062	1				
$\Delta$	10	CYLINDER 8" BORE x 14" STROKE		1				
ĺ	9	INLET/OUTLET ADAPTER	ALLOY C.I. BHN 300 (MIN.)	2				
l	8	SPRING SPACER	M.S. IS:2062	3				
<i>A</i>	7	DISC SPRING	SPRING STEEL (17.7PH)	6				
	6	SPRING GUIDE PIN	S.S. 304	6				
ß	5	DISC	S.S. 440 C (500 BHN MIN.)	2				
	4	DISC HOLDER	ASTM A 216 Gr. WCB/ C.S. IS:1030 Gr. 27/54	1				
<i>A</i>	3	SEAT	C.S. IS:1030 Gr. 27/54 S.S. 440 C (500 BHN MIN.)	2				
	2 <b>A</b>	MOUNTING PAD	l C.I. Gr. FG: 260 - I	1				
	2	DISTANCE PIECE	IS: 210 C.I. Gr. FG: 260 IS: 210 C.I. Gr. FG: 260	1				
	1_	CASING	C.I. Gr. FG: 260 IS: 210	2				
	PT. No.	DESCRIPTION	MATERIAL	QTY./ ASSL'Y				
		BILL OF 1	MATERIAL					
	CLIEN'	r: NTPC ]	LIMITED					

DRAWING NO: NTPC/AHP/DOUBLE DISC VV/300NB







REVISIONS 8∰

DRAWING NO: MTPS/AHD/ALV/100

### STANDARD TC / INSPECTION REPORT REQUIREMENT



ITEM: Ash Handling Valve **Spares** 

STCR NO: CPG-QA-STC-M-284 Rev. 00 Date 29-03-2024

Approved Prepared by ANKUS Digitally signed by ANKUSH BIRLA Date: 2024.03.29 10:50:05 +05'30' GANPA Digitally signed by GANPATI JHA
TI JHA
Date: 2024.03.29
10:50:29 +05'30'

by



# Pre-Dispatch Inspection (PDI) by NTPC is not envisaged. Vendor, along with material, shall submit test certificates / internal inspection reports for following-

SI no.	Attribute / Test	Reference / Acceptance Norms	<u>Remarks</u>
A)	Raw Material / Bought Out I tems Chec	ks	
1	Chemical Composition & Mechanical Properties incl. Hardness (as applicable)	Tender/PO specs/NTPC approved Drg/DS/relevant standard / Manufacturer's Standard	Chemical Composition not applicable for Cast Iron Components.
2	Ultra Sonic Testing (for Plate thickness ≥ 25 mm & Dia. ≥ 50 mm) – as applicable	Manufacturer 3 Standard	
B)	Process / Assembly Checks		
1	DPT check on machining (as applicable)	Tender/PO specs/NTPC approved Drg/DS/relevant standard /	
2	Leakage Test of Body (as applicable)	Manufacturer's Standard	
<i>C</i> )	Finished Product / Final Inspection / T	esting	
1	Dimensional Check, Hardness Test (as applicable for high hardness components)	Tender/PO specs/NTPC approved Drg/DS/relevant standard / Manufacturer's Standard	

## Notes :-

1. TC / IR shall be from manufacturer's own lab or a NABL accredited lab or any third-party lab accredited as per ISO / IEC 17025.