



### LEGEND

- CLIENT'S SCOPE
- VENDOR'S SCOPE
- BALL VALVE
- MANUAL DIAPHRAGM VALVE
- PRESSURE REGULATING VALVE
- TRI CLOVER CLAMP
- MICRON FILTER
- DIAPHRAGM PRESSURE GAUGE
- STEAM TRAP
- ANGLE SEAT VALVE
- PNEUMATIC DIAPHRAGM VALVE
- TEMP. INDICATOR CONTROLLER RECORDER
- TEMP. ELEMENT
- PERISTALTIC PUMP
- FLEXIBLE HOSE
- PNEUMATIC FLUSH BOTTOM VALVE
- PNEUMATIC SAMPLING VALVE
- BOURDON PRESSURE GAUGE
- PRESSURE RELIEVE VALVE

- STEAM TRAP
- NON RETURN VALVE
- ROTAMETER
- NEEDLE VALVE
- CONDUCTIVITY SENSOR
- BACK PRESSURE CONTROL VALVE
- PRESSURE INDICATOR
- FLOW SWITCH
- CIRCULATION PUMP
- DIFFERENTIAL PRESSURE SENSOR PORT
- LG LIGHT GLASS
- SG SIGHT GLASS
- SPRAY BALL
- BUTTERFLY BALL
- BACK PRESSURE CONTROL VALVE
- AIR FLOW REGULATOR WITH LUBRICATOR
- RUPTURE DISC
- ELECTROMAGNETIC FLOW METER

	CHWR SUPPLY
	CHWR RETURN
	COOLING WATER SUPPLY
	COOLING WATER RETURN
	COMPRESSED AIR
	CLEAN STEAM
	PLANT STEAM
	CIP
	EXHAUST GAS
	NITROGEN
	BIOWASTE DRAIN
	DRAIN
	CONDENSATE DRAIN

<b>WORKING VOLUME</b>	400L
<b>GROSS VOLUME</b>	500L
<b>QUANTITY</b>	1 No
<b>H/D RATIO</b>	1.5:1
<b>MOC- PRODUCT CONTACT</b>	SS316L
<b>MOC- PRODUCT NON CONTACT</b>	SS304
<b>JACKET</b>	HOLLOW TYPE
<b>INSULATION</b>	MINERAL WOOL
<b>LEGS</b>	3 NOS

**NOTE : THIS P&ID IS ONLY FOR INFORMATION. ACTUAL P&ID HAVE TO BE PROVIDED BY THE VENDOR**

01	2013-01-24	NWSG	HLL comments incorporated, received during the workshop dated 22nd and 23rd January 2013	Kind of revision		
Rev.	Date	Changed/Checked	Kind of revision			
Client:			Project No.: 110831			
Site Address:			Location: Bangalore - 560 080, INDIA.			
Description:			MICROFILTRATION SYSTEM (500L GROSS VOLUME) DIPHTEHERIA BLOCK			
Drawn	23.11.2012	SAPL	Name			
Checked	23.11.2012	NWSG	Date			
Approved	23.11.2012	NWSG	Scale			
Scale: NTS	0mbs : mm	Scale: A3	Issued To			
Drawing no: NPI/110831/EQP/PID/BR/CD-HNS01_01			Rev. 01			

**nne pharmaplan**  
 #14, Achah Shetty Layout,  
 Bangalore - 560 080, INDIA.