Acid Anodize Bench

Job - # L257

Description Of Operation

Process Vessel

This vessel includes a pump and filtered recirculation loop to produce a horizontal style flow path between the anode and cathode substrates. The recirculation pump is located in the lower storage compartment of the bench and is activated via a selector switch located on the front control panel. The pneumatically operated pump requires constant lubrication of the air motor. Please refer to the pump owners manual supplied for maintenance procedures and lubrication requirements. The filter housing is located at the rear of the process vessel and includes a manually operated vent valve.

This process vessel is manually filled with chemistry. The process vessel is drained to a waste container located in the lower storage compartment of the unit. The vessel should only be filled to the required level to wet the anode and cathode substrates. This will minimize the amount of waste container change outs during the drain process. The vessel is manually drained via a deadman style selector switch located on the front control panel.

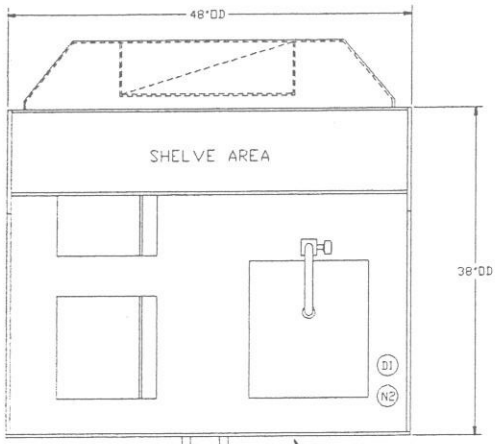
The waste vessel is equipped with a custom fitted cap and also a vent cap. The vent cap should be removed during the drain process. Installed in the custom cap is a quick disconnect type fitting for the acid waste drain tube and a compression type fitting for a liquid level detection tube. The liquid level detection tube activates a pneumatically operated visual indicator located directly above the drain switch when the waste vessel is full. During the drain process the recirculation pump should be off and the filter housing purge valve should be opened. The pump can be bump started to minimize the amount of process liquid left in the system during the drain process.

Rinse Vessel

The rinse vessel is also designed to have a horizontal style laminar flowpath. The vessel is equipped with a (3) position selector switch to control the DI water supply valves. The operator has the option of either a low flow, high flow or off mode. The low flow is adjustable via a manually operated needle valve located in the lower storage compartment. The rinse vessel is drained via a selector switch located on the front control panel. The rinse vessel drains to lab waste.

Utility Sink

The utility sink includes a manually operated DI water gooseneck type faucet. The utility sink also drains to lab waste. Also included with the unit is (1) DI water Spray Gun and (1) Nitrogen Spray Gun for operator convenience.

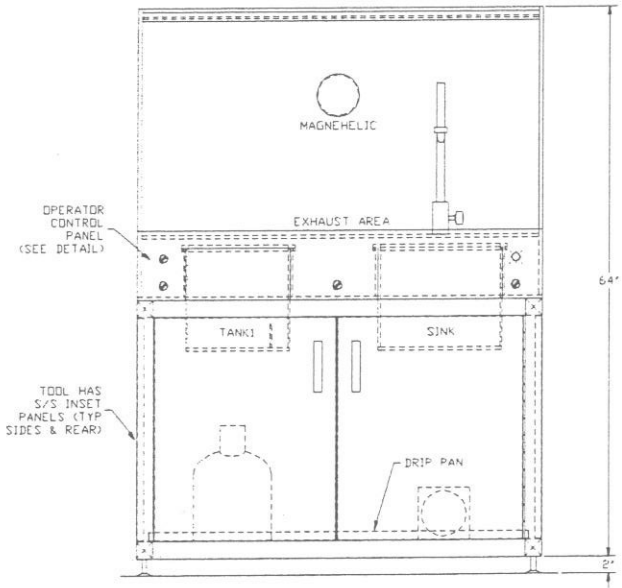


PLAN VIEW

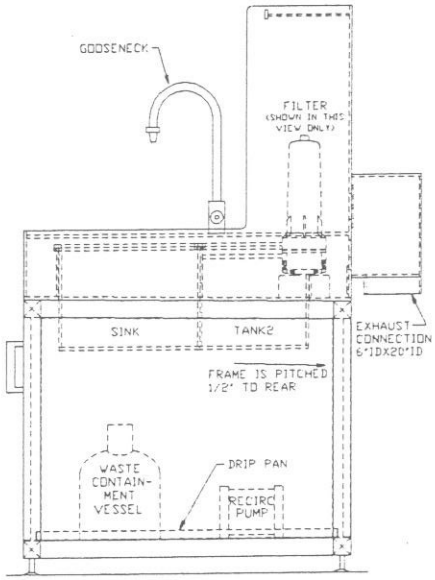
NOTES:

1. MATERIAL OF CONSTRUCTION: UPPER UNIT IS CORZAN
   LOWER UNIT IS STAINLESS STEEL
2. WASTE CONTAINMENT VESSEL IS LOCATED IN STORAGE AREA
3. PUMP IS LOCATED IN STORAGE AREA
4. TOOL HAS S/S ACCESS DOORS TO STORAGE AREA
5. TANKS AND SINK HAVE RIM EXHAUST
6. TOOL HAS CASTERS AND LEVELING PADS AS REQUIRED

CONTROL PANEL DETAIL
(ENLARGED PARTIAL VIEW)



FRONT ELEVATION



SIDE ELEVATION

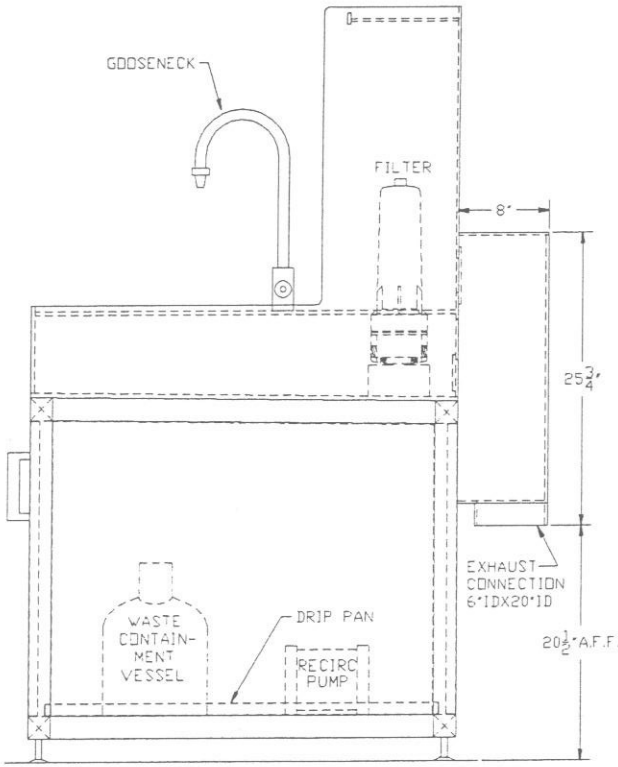
REYNOLDSTECH
6895 KINNE STREET, EAST SYRACUSE, NEW YORK 13057 USA
(315)437-0532 (PHONE) (315)437-1390 (FAX)
www.REYNOLDSTECH.com rtf@dreamscape.com(email)

REV NO	DESCRIPTION	DR BY	DATE
1	AS BUILT	GVA	02/17/00

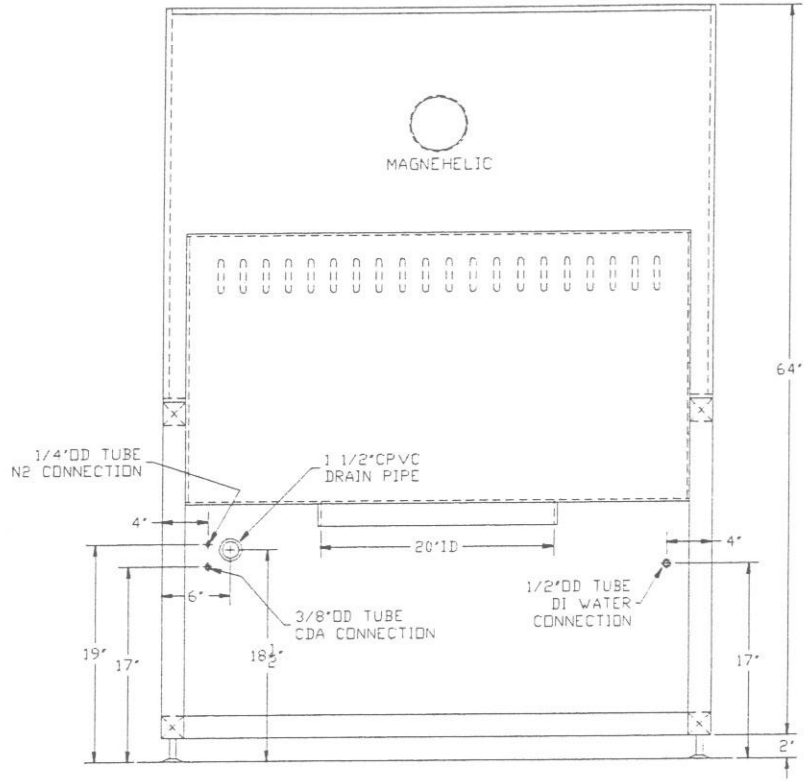
LUCENT TECHNOLOGIES

ACID ANODIZE BENCH
TOOL CONSTRUCTION

DR BY	GVA	SCALE	NONE	SHEET	DWG NO	REV
DATE	7/29/99	JOB NO	L257		L257TL01	0



SIDE ELEVATION



REAR ELEVATION

NOTES:

1. MATERIAL OF CONSTRUCTION: UPPER UNIT IS CORZAN
   LOWER UNIT IS STAINLESS STEEL

REYNOLDSTECH
6895 KINNE STREET, EAST SYRACUSE, NEW YORK 13057 USA
(315)437-0532 (PHONE) (315)437-1390 (FAX)
www.REYNOLDSTECH.com rtf@dreamscape.com(email)

REV NO	DESCRIPTION	DR BY	DATE
1	AS BUILT	GVA	02/17/00

LUCNENT TECHNOLOGIES

ACID ANODIZE BENCH

FACILITY CONNECTION LOCATIONS

DR BY	SCALE	SHEET	DWG NO	REV
GVA	NONE		L257F D02	0
DATE 7/29/99	JOB NO L257			

FACILITY CONNECTION TABLE

SERVICE DESCRIPTION:	SIZE:	CAPACITY:	MATERIAL:	PRESSURE RATING:	COMMENTS:
EXHAUST	6"ID X 20"ID	1000 CFM	CORZAN	0.75"wg	PRESSURE DROP FOR BENCH 0.50"wg
NITROGEN SUPPLY	1/4"OD TUBE	1 SCFM	S/S	80 PSI (MIN)	N/A
CDA SUPPLY	3/8"OD TUBE	10 SCFM	S/S	100 PSI (MIN)	N/A
DI WATER SUPPLY	1/2" FLARETEK	10 GPM	TEFLON	50 PSI (MIN)	N/A
WASTE DRAIN	1 1/2" PIPE	10 GPM	CPVC	ATMOSPHERIC	N/A

REYNOLDSTECH
6895 KINNE STREET, EAST SYRACUSE, NEW YORK 13057 USA
(315)437-0532 (PHONE) (315)437-1390 (FAX)
www.REYNOLDSTECH.com rtf@dreamscape.com(email)

REV NO	DESCRIPTION	DR BY	DATE
1	AS BUILT	GVA	02/17/00

LUCENT TECHNOLOGIES

ACID ANODIZE BENCH
FACILITY CONNECTION TABLE

DR BY	GVA	SCALE	NONE	SHEET	DWG NO.	REV
DATE	07/30/99	JOB NO.	L257		L257FD01	0