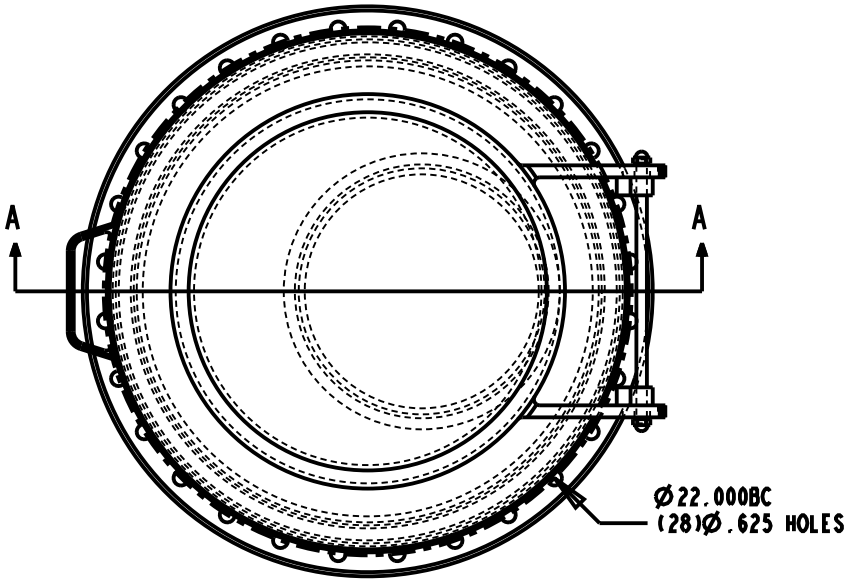
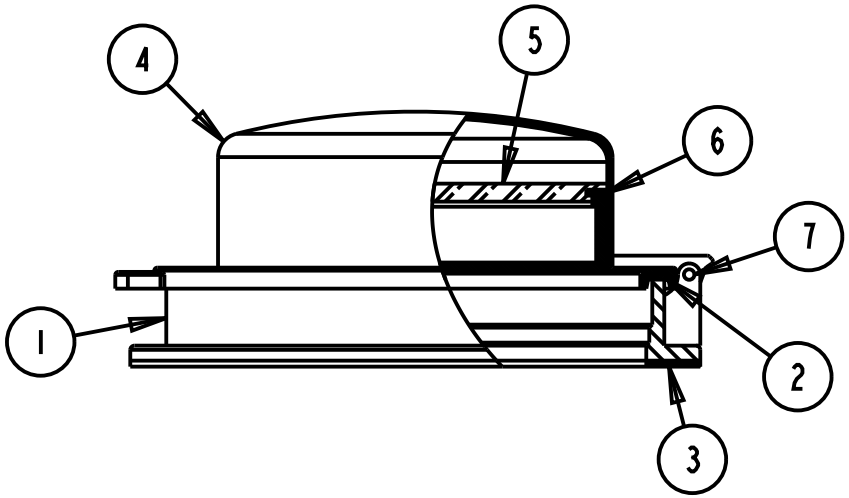
Clay & Bailey Mfg. Co.
#54-20” Pressure / Vacuum Device

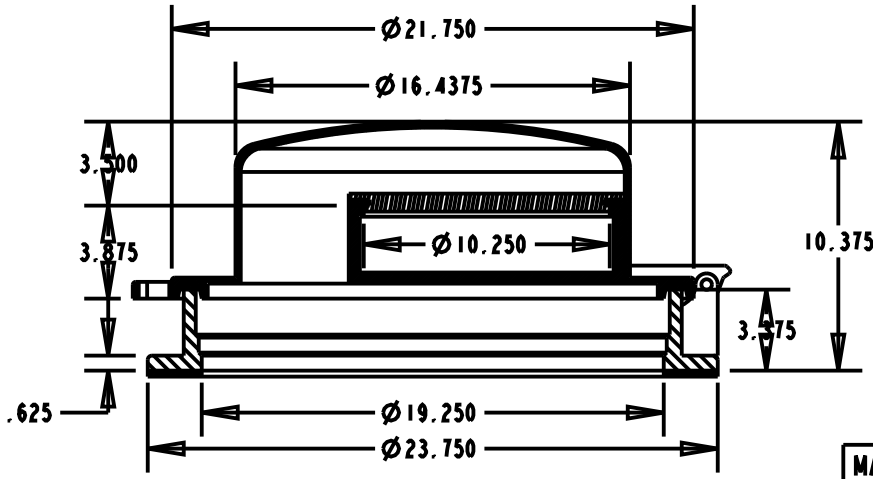
Operation & Maintenance Manual

Clay & Bailey Mfg. Co.
P.O. Box 8026
40th & Fremont Ave.
Kansas City, Missouri 64129
Ph 816-924-3900
Toll Free 800-821-6583
Fax 816-924-3903

Recycled







SECTION A-A
SCALE 1 : 8

ITEM NO.	PART NAME	PART NUMBER	QTY.
1	Base	0054-03-2041	1
2	Lid Gasket	0054-05-2063	1
3	Base Gasket	0054-05-2022	1
4	Cap	0054-01-2002	1
5	Vacuum Valve	0054-03-2004	1
6	Vacuum Valve Gasket	0887-05-1016	1
7	Hinge Pin	0054-07-2009	1
8	Tinnerman	N/A	2

MATERIAL:	CLAY & BAILEY MFG. CO.		
	PART NAME: 20" Thief Hatch		
WT:		DRAWN BY: JLR	DWG: 0054-03-2000
SCALE:	APPROVED:	DATE: 10-12-2013	SHEET 1 OF 1

Product Description

The C & B #54-20” PV Manhole is designed for use on storage tanks that require large volume pressure and vacuum relief.

The C & B #54-20” PV Manhole is not a static appurtenance, but is an integral part of the dynamic operation of the tank. Just as other pertinent equipment to your process, such as blowers, pumps and valves, this PV manhole requires a regular maintenance schedule of inspections.

Frequency of Inspections

Frequency of Inspections of #54-20” Manholes are dependent upon the environment and operating conditions.

Definitions:

Mild Operating Conditions - Vapors vented from the materials in the tank cause no residue to form, or excessive corrosion on working parts of manhole. And / Or vapor or gas moving through the manhole is constant, and no surge shock is encountered.

Extreme Operating Conditions - Internal vapor, particulate or liquid under operating conditions will cause product buildup or corrosion of manway. Pressure or vacuum surges and shocks occur on a regular basis during operation.

Operating Conditions	Inspections Per Month
Mild	1
Extreme	2-4*

* Depending on rate of build up or severity of conditions.

Inspection & Maintenance Cover & Base

With both hands on opposite sides of the cover, (while closed), move the cover on base to determine flatness of cover base fit. No rocking should be evident.

Lift cover and lay it back on tank roof. Inspect gasket for indentations or scars. Clean gasket and seal area thoroughly with warm water. Cover gasket should be replaced if it is torn, or a permanent indentation in the gasket more than 1/16” deep is discovered.

Inspect base & cover for corrosion pitting and clean all surfaces. If corrosion pits are more than 1/8” deep or the cover is out of flatness more than 1/16”, replace affected parts.

Internal Vacuum Plates

Check the vacuum valve for free movement by reaching into the inlet port on the side of the cover, grasping the vacuum valve, (it works with dead weight, no springs), and moving it up and down. Also check for internal debris, and tearing or contamination of the gasket.

Note: The internal vacuum working parts are sealed inside the cap of the #54-20 cover with silicone, if the vacuum valve needs to be replaced or repaired it is recommended that you send it back to the factory.