



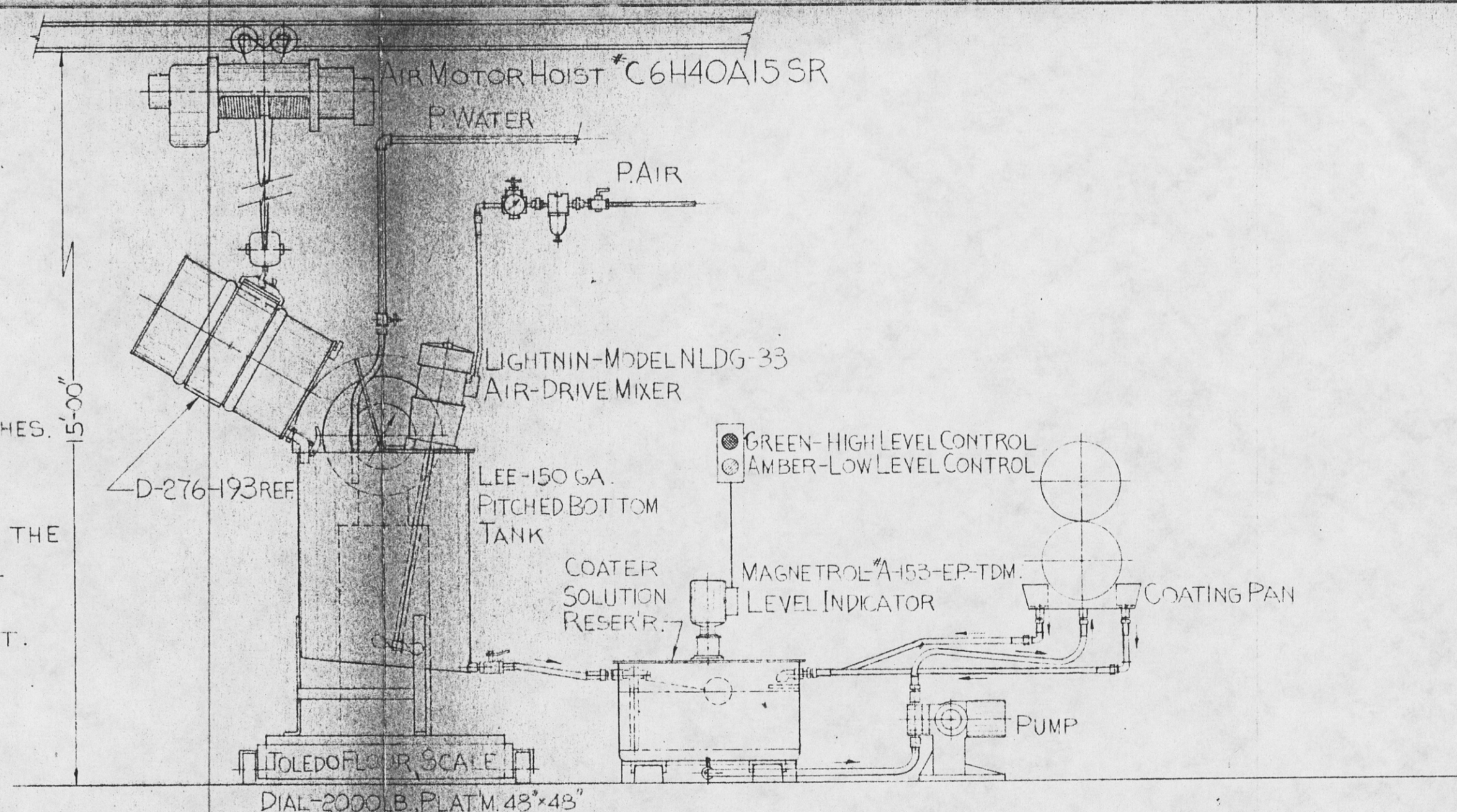
[Alvin W. Boese Papers.](#)

Copyright Notice:

This material may be protected by copyright law (U.S. Code, Title 17). Researchers are liable for any infringement. For more information, visit www.mnhs.org/copyright.

The diagram illustrates the operation of a float valve assembly. A vertical line represents the float arm, with a float body at the top and a valve at the bottom. The float body has two positions: 'ON' (top) and 'OFF' (bottom). The valve has two positions: 'OFF' (top) and 'ON' (bottom). The liquid level is indicated by a horizontal line. The distance from the 'ON' position of the float body to the liquid level is 32.6 GALLONS. The distance from the 'OFF' position of the float body to the liquid level is 28.4 GALLONS. The distance between the 'ON' and 'OFF' positions of the float body is 1.50. The distance between the 'OFF' and 'ON' positions of the valve is 1.875. The distance from the 'ON' position of the valve to the 'RESERVOIR BOTTOM' is 1.875. The 'GREEN LIGHT' is associated with the 'ON' position of the float body, and the 'AMBER LIGHT' is associated with the 'ON' position of the valve.

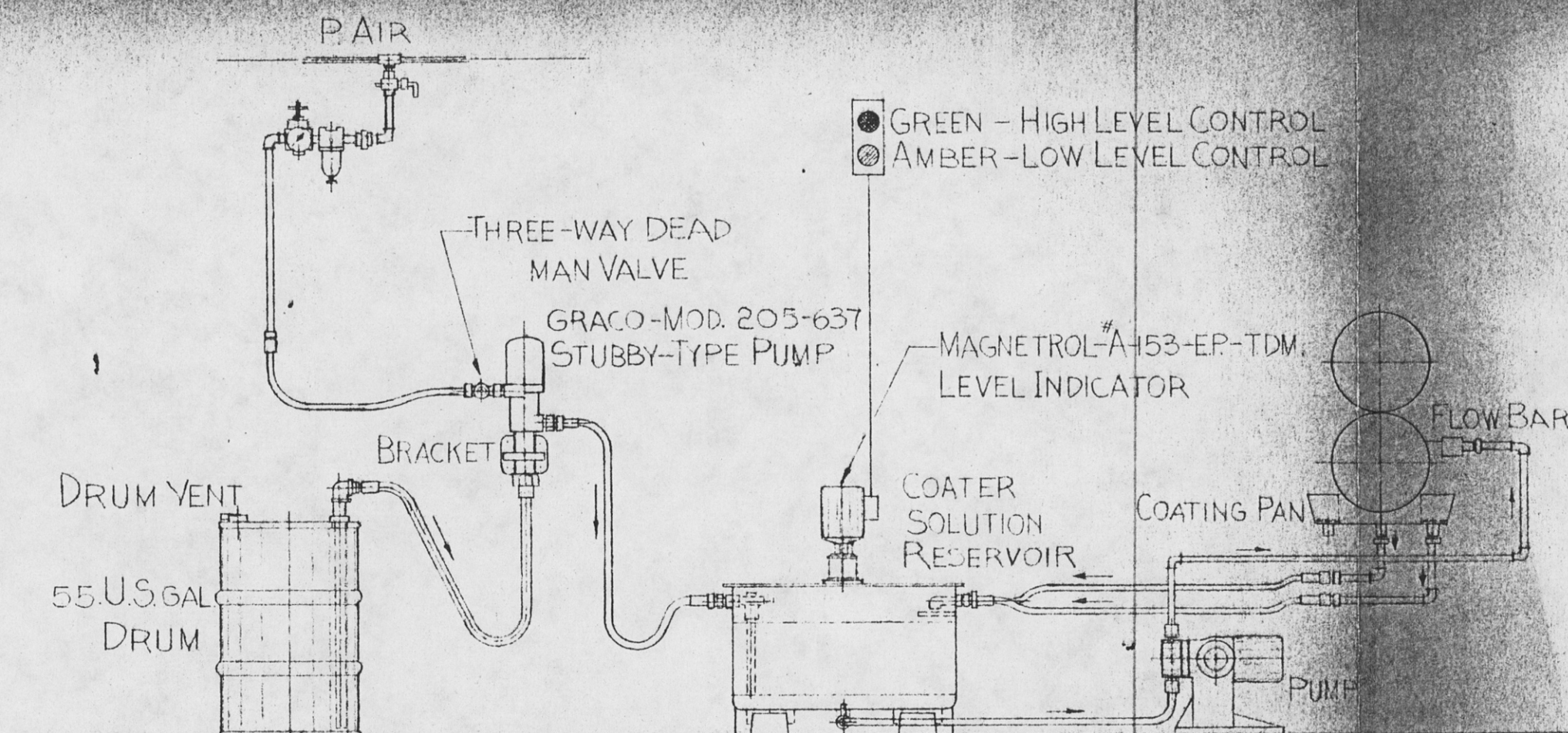
SOLUTION LEVEL IS AUTOMATICALLY MAINTAINED WITHIN $1\frac{1}{2}$ INCHES.
(GREEN LIGHT WILL STAY ON WITHIN THIS RANGE).
WHEN GREEN LIGHT GOES OFF THE SUPPLY TANK IS EMPTY.
AT THIS TIME APPROX. 28.4 GALLONS OF SOLUTION REMAIN IN THE
RESERVOIR; AT AN OPERATING SPEED OF 60 R.P.M. THIS WILL
LAST APPROX. 47.3 MINUTE. THE OPERATOR WILL HAVE
TO MIX A NEW SUPPLY WITHIN THIS 47.3 MINUTE TIME LIMIT.



The diagram illustrates the operation of a float valve assembly. A vertical line represents the float arm, with a float body at the top and a valve stem at the bottom. The float body has two positions: 'ON' (up) and 'OFF' (down). The valve stem has two positions: 'OFF' (up) and 'ON' (down). The diagram shows the following fuel volumes at different float positions:

- When the float is 'ON' and the valve is 'OFF', the fuel volume is 38.2 GALLONS.
- When the float is 'OFF' and the valve is 'OFF', the fuel volume is 33.05 GALLONS.
- The difference in fuel volume between these two states is 1.875 GALLONS.
- When the float is 'OFF' and the valve is 'ON', the fuel volume is 5.83 GALLONS.
- The difference in fuel volume between the 'OFF/OFF' state and the 'OFF/ON' state is 1.75 GALLONS.
- The difference in fuel volume between the 'ON/OFF' state and the 'OFF/ON' state is 2.125 GALLONS.
- The total difference in fuel volume between the 'ON/OFF' state and the 'OFF/ON' state is 3.875 GALLONS.
- The 'ON' position of the valve stem is labeled 'RESERVOIR BOTTOM'.

SOLUTION LEVEL IS MANUALLY MAINTAINED. WHEN THE RESERVOIR IS FULL A GREEN LIGHT WILL GO ON. WHEN THE LEVEL DROPS APPROX. $1\frac{7}{8}$ INCHES, THE GREEN LIGHT WILL GO OFF. WHEN APPROX. 5.83 GALLONS REMAIN IN THE RESERVOIR AN AMBER LIGHT WILL COME ON. THE AMBER LIGHT SIGNALS THE OPERATOR TO REFILL THE RESERVOIR UNTIL THE GREEN LIGHT AGAIN APPEARS. WHEN THE AMBER LIGHT GOES ON THE OPERATOR WILL HAVE APPROX. 9.7 MINUTES TO REPLACE THE SUPPLY DRUM IF IT IS EMPTY.



USED ON		2-K MAKER	1	APR. 2, 1968		
TOLERANCES EXCEPT AS NOTED		MAXIMUM SURFACE ROUGHNESS EXCEPT AS NOTED	ISSUE	ISSUE DATE AND CHANGE RECORD	REV.	CH.
MACHINED DIMENSIONS .00 ± .000 ±		SCALE 1/2" = 1'-0"	DIVISION TAPE PROJ. 67-5401			
ANGULAR DIM. ±		DR. M.T. LOWE & TOPPAT	TITLE COATING SOLUTION PIPING SCHEMATIC II			
WELDMENT DIM. UNDER 50" ± 50" & OVER ±		CH.				
±		APP.				
MINNESOTA MINING & MANUFACTURING CO. ST. PAUL, MINNESOTA			C 12-2387-0003-8			

12-2387-0003-8