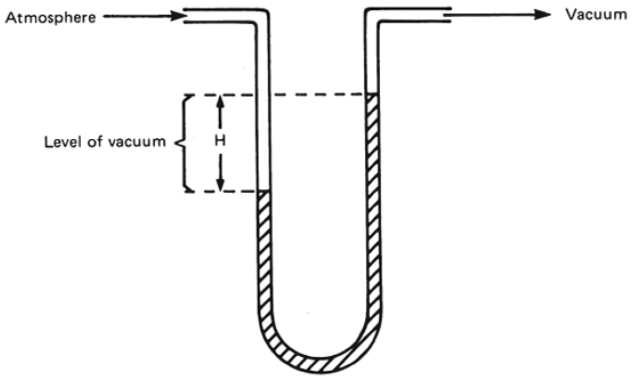
VACUUM SERVICE GUIDE

GUIDE ON VACUUM SERVICE	ISSUED BY:	DATE:	TABLE:
	APPROVED BY:		A 002/90

1 - The relation of various levels of vacuum service to standard atmospheric condition can be illustrated by a column of Mercury of 1 atmosphere, and then indicating how vacuum is measured on that basis. (SEE BELOW ILLUSTRATION)



2 - The pressure of the atmosphere at sea level on a standard day will raise the level of Mercury in a tube to a height of 760 mm.

3 - As the pressure is reduced the column of Mercury in the tube will drop. If the pressure is reduced to zero (absolute vacuum), the level of Mercury in the tube will be at the level of the Mercury in the container.

COMPARISON DATA

Atmospheric pressure (sea level, O C) = 1 Atmosphere = 760mm of Mercury (mm Hg)= 29.92 Inches of Mercury = 14.7 psi.

1mm. Of Hg=1 Torr - 1 Micron Hg= 0.001 mm. Of Mercury

Typical leakage unit=1 standard cc per second=1 cubic centimeter of gas at atmospheric pressure

GUIDE TO SELECTING AVCO BALL VALVES

VACUUM		*AVCO BALL VALVE*	*VACUUM RANGE*
Torr or mm Hg	*Microns*		
1	*1000*	*COVERED BY ALL AVCO VALVES*	*MEDIUM VACUUM*
1×10^{-1}	*100*		
1×10^{-2}	*10*		
1×10^{-3}	*1*		
1×10^{-4}	*0.1*	*SPECIAL ASSEMBLY*	*HIGH VACUUM*
1×10^{-5}	*0.01*		
1×10^{-6}	*0.001*	*SPECIAL ASSEMBLY*	*VERY HIGH VACUUM*
1×10^{-7}	*0.000*	*SPECIAL VALVES*	*ULTRA HIGH VACUUM*

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