



ENGINEERED SYSTEM WORKSHEET REV A

Date: _____

Company: _____ Contact Name: _____

Vessel Name: _____ Contact Phone: _____

Hull Number: _____ Contact E-Mail: _____

Vessel Information

Where will the vessel be Flagged? _____

Vessel Load Line Length: _____

Overall Vessel Length: _____

Approvals Required:

USCG	_____	Subchapter:	_____
RINA	_____	Standard/Rule:	_____
ABS	_____	Standard/Rule:	_____
TC	_____	Standard/Rule:	_____
SOLAS	_____	Standard/Rule:	_____

System Voltage: _____

Number of Engines: _____

Number of Generators: _____

Number of Blowers: _____

Other Circuits: _____

Egress of Protected Space (Check One):

Vertical _____ Both _____

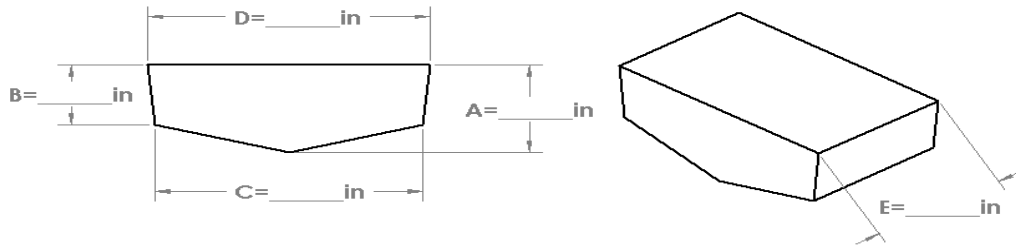
Horizontal _____

Air Receivers (Compressed Air Tanks) in Protected Space: Qty: _____

Air Receiver Volume: _____ in³ _____ in³ _____ in³

Air Receiver Pressure: _____ psi _____ psi _____ psi

Volume Calculations



Gross Volume

$$\begin{aligned}
 &\frac{\text{in}}{A} + \frac{\text{in}}{B} = \frac{\text{in}}{\quad} / 2 = \frac{\text{in}}{\quad} \times \frac{\text{in}}{C} = \frac{\text{in}^2}{\quad} \\
 &\frac{\text{in}}{D} - \frac{\text{in}}{C} = \frac{\text{in}}{\quad} / 2 = \frac{\text{in}}{\quad} \times \frac{\text{in}}{B} = \frac{\text{in}^2}{\quad} \\
 &= \frac{\text{in}^2}{\quad} \\
 &\quad \times \quad \\
 &\quad \frac{\text{in}}{E} \\
 &= \frac{\text{in}^3}{\quad} \\
 &\quad / \\
 &\quad 1728 \\
 &= \frac{\text{ft}^3}{\quad}
 \end{aligned}$$

Additional Volumes

$$\begin{aligned}
 &\frac{\text{in}}{\text{Length}} \times \frac{\text{in}}{\text{Width}} \times \frac{\text{in}}{\text{Height}} = \frac{\text{in}^3}{\quad} / 1728 = \frac{\text{ft}^3}{\quad} \\
 &\frac{\text{in}}{\text{Length}} \times \frac{\text{in}}{\text{Width}} \times \frac{\text{in}}{\text{Height}} = \frac{\text{in}^3}{\quad} / 1728 = \frac{\text{ft}^3}{\quad} \\
 &\quad \text{Total} = \frac{\text{ft}^3}{\quad}
 \end{aligned}$$

Fixed Tank Volume

$$\begin{aligned}
 &\frac{\text{in}}{\text{Length}} \times \frac{\text{in}}{\text{Width}} \times \frac{\text{in}}{\text{Height}} = \frac{\text{in}^3}{\quad} / 1728 = \frac{\text{ft}^3}{\quad} \\
 &\frac{\text{in}}{\text{Length}} \times \frac{\text{in}}{\text{Width}} \times \frac{\text{in}}{\text{Height}} = \frac{\text{in}^3}{\quad} / 1728 = \frac{\text{ft}^3}{\quad} \\
 &\quad \text{Total} = \frac{\text{ft}^3}{\quad}
 \end{aligned}$$

USCG allows deductions for Fixed Tanks by Boat Manufacturers Only.

Gross Volume:	+	ft ³
Additional Volumes:		ft ³
Tank Deductions:	-	ft ³
Total:	=	ft ³

Any Vessel over 6000ft³, or with vertical egress only, require a time delay, gas siren, and stop valves.

Pipe Network TBD. Nozzles to be calculated and shipped once final Pipe Network installation is complete.