

RIM SEAL FOAM POURER

MODEL - RPA & RPA-S

TECHNICAL DATA

MODEL	RPA – Carbon Steel RPA-S – Stainless Steel
SIZE	65 NB INLET
WORKING PRESSURE	Min 2.8 Kg/cm ² (40 PSI) Max 7 Kg/cm ² (100 PSI)
FLANGE CONNECTION	ANSI B16.5 class 150#
FINISH	Red RAL 3000
ORDERING INFORMATION	a) Model b) Flow & Pressure at inlet of each Foam Pourer c) Foam concentrate used d) Tank number / Tag number



APPLICATION

TP Rim Seal Foam Pourer – RPA consists mainly of Foam Maker, a windshield and an integral deflector. The RPA is designed to deliver fully aspirated foam directly to the annular seal area of open top floating roof tank. The Rim Seal Foam Pourer is used for one of the most common applications of protecting tank seal in vertical liquid storage tank with internal floating roof with low expansion foam system. The application of aspirated foam is on the basis of the risk comprising the area in the annular ring between the rim of the floating roof and the tank shell. The Foam system design guidelines generally used are in accordance with NFPA 11 standard. The Rim Seal Foam Pourers are defined by NFPA 11 as Type II discharge outlets for delivering the low expansion aspirated foam to the seal. The Rim Seal Foam Pourers are widely used with the Inline Foam Inductor, Balance Pressure Foam Proportioning System, Bladder Tank system or Foam tenders.

SPECIFICATION

The Rim Seal Foam Pourer is an air aspirating foam generator connected to the foam pourer to deliver the aspirated foam gently into the tank seal area. The rim seal foam pourer covers a wide range of foam solution rates from 50 to 550 liters per minute at 2.8 to 7 kg/ sq.cm inlet pressure. Each rim seal foam pourer is supplied with an orifice plate, designed for the required flow at inlet pressure. The orifice is field replaceable in the event of change in design parameters. The foam is produced by introducing air into the foam solution stream. The inlet of foam maker is designed to create venturi jet which draws air into the foam solution stream. The air is drawn into the foam solution through holes located on the foam maker covered with stainless steel screen to exclude nesting birds and insects.

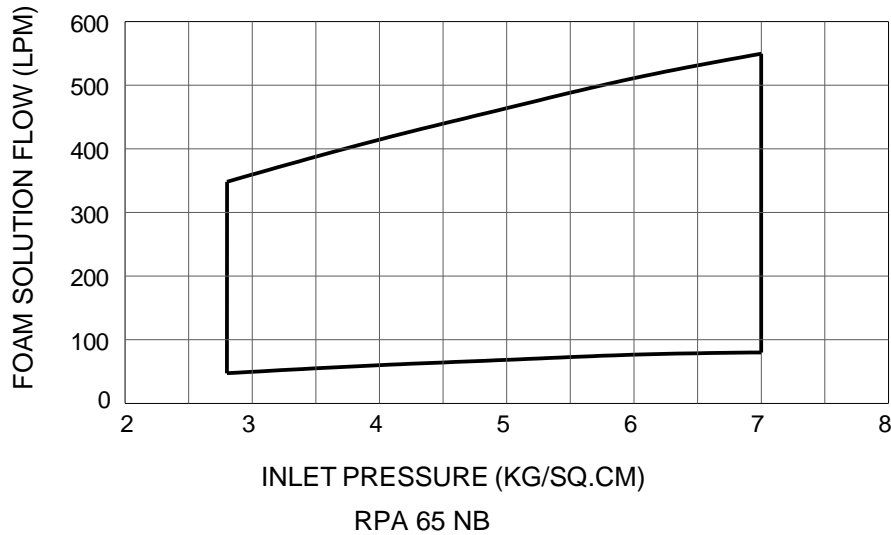
SYSTEM DESIGN REQUIREMENT

For essential requirement of appropriately designed foam pouring system for storage tanks refer NFPA- 11/ OISD/ TAC/ Governmental codes or ordinances wherever applicable.

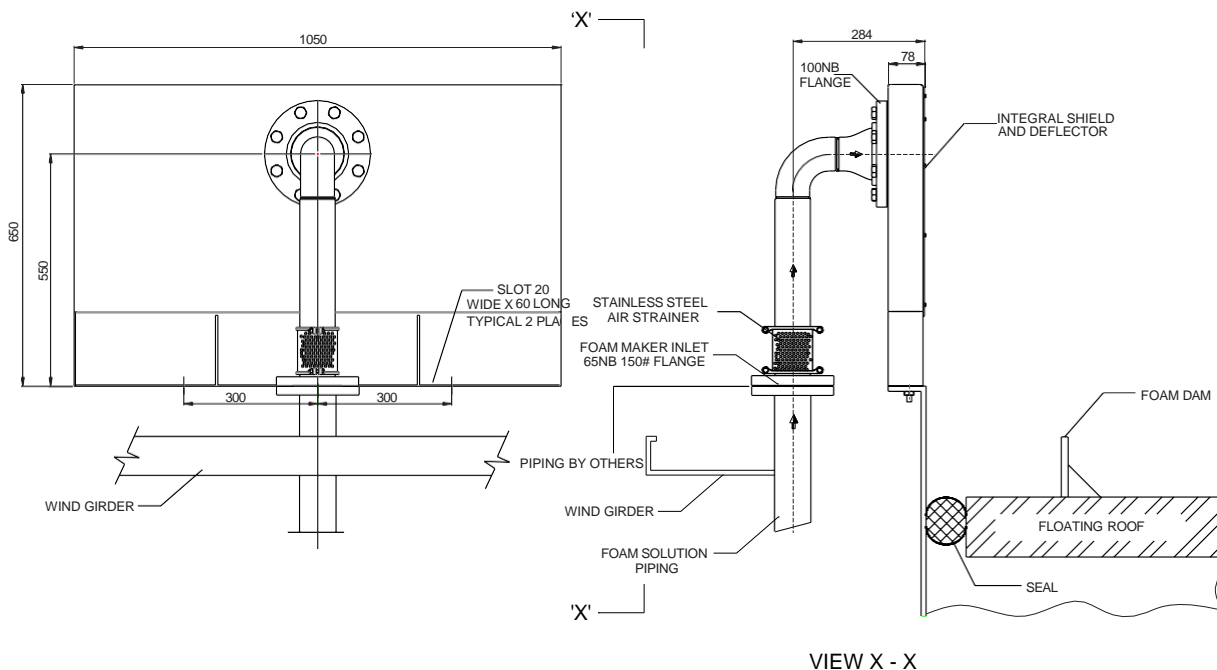
TESTING & MAINTENANCE

Qualified and trained person must commission the system. After few initial successful tests, an authorized person must be trained to perform inspection and testing of the system. It is recommended to carry out physical inspection of the system regularly. The system must be fully tested at least once in a year or in accordance to the standards of the organization having local jurisdiction. Do not turn off the system or any valve to make repair or test the system, without placing a roving Fire Patrol in the area covered by the system. The Patrol should continue until the system is put back in service. Also inform the local security guard and control alarm station, so as to avoid false alarm. Each system is to be flushed properly. To test the RPA without discharging the foam into the tank seal area, the RPA is to be rotated 180° away from the wind shield. The air screen is to be inspected periodically for the obstruction of air inlet holes. If any obstruction is noticed, remove the same and flush, if necessary. The RPA outlet and pourer, if exposed to atmospheric condition, should be periodically inspected for nest and other obstructions. The obstruction, if noticed, must be removed and flushed to clear the discharge path.

PRESSURE VS FLOW PERFORMANCE CURVE



TYPICAL INSTALLATION OF RIM SEAL FOAM POURER



*All Dimensions are in MM (Approx.)

NOTE:

A PROVISION IS TO BE MADE FOR PRESSURE GAUGE MOUNTING AT INLET OF RPA, WHICH MAY BE PLUGGED AFTER SUCCESSFUL COMMISSIONING OF THE SYSTEM. THIS PROVISION WILL HELP TO ANALYSE THE SYSTEM WHILE COMMISSIONING.