

C-282 Chlorine Gas Filter

FACTS ABOUT IMPURITIES IN CHLORINE GAS

The principal impurity is FERRIC CHLORIDE. This is inherent in chlorine gas because it is packaged in steel containers.

The amount of ferric chloride that deposits out in a chlorine gas system is a function of the quantity of chlorine used.

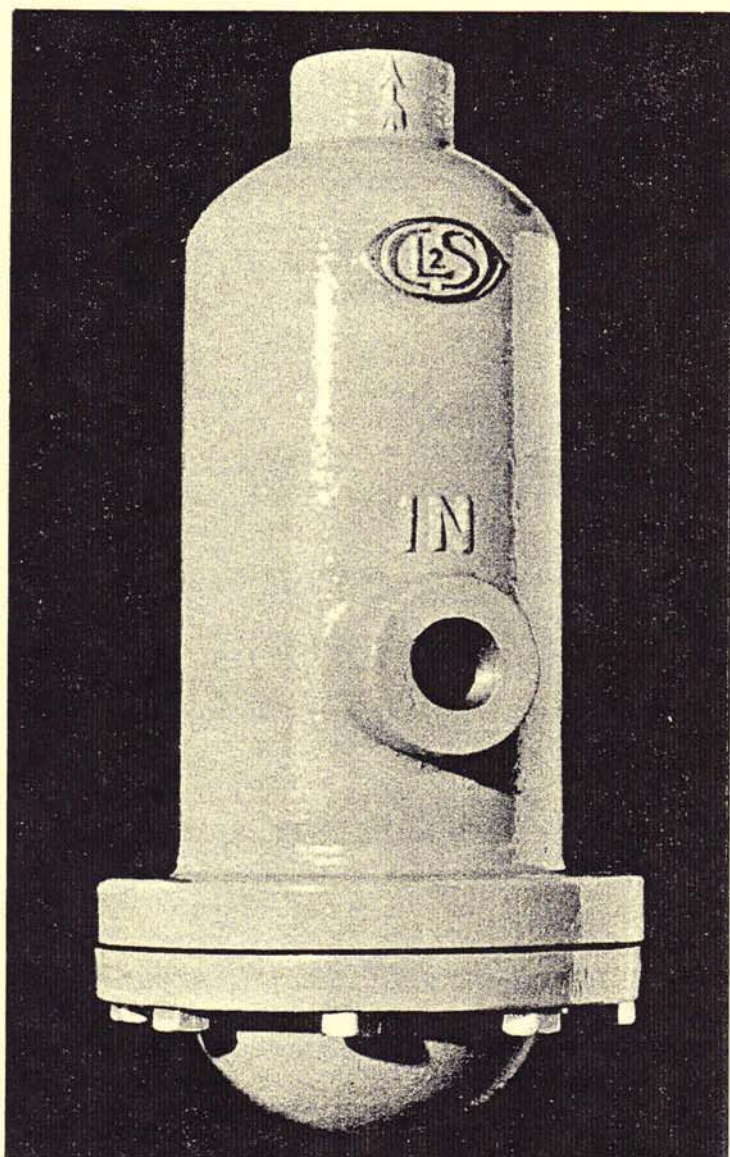
Lesser impurities can result from use of lubricants used in valves of the packaging system.

There is no convenient way of removing impurities from liquid chlorine. Impurities will always precipitate out of gas if it reliquefies. This is a common occurrence at points where there is a sudden pressure drop. Wide fluctuations in ambient temperature of chlorine storage space can cause reliquefaction.

DESIGN FEATURES OF C-282 FILTER

The C-282 Filter represents a new approach to the removal of the nuisance-causing impurities in chlorine gas. This filter has two chambers. The lower portion acts as a trap for liquid impurities (reliquefied gas and/or foam droplets from the evaporator). The sudden enlargement decreases the velocity so that gas is unable to carry entrained droplets of liquid chlorine which is high in ferric chloride. The upper portion has a removable filter cartridge. The filter element is especially impregnated so that the ferric chloride "plates out" rapidly as it passes through the element. Therefore the filter acts as both a filter and a condensate trap.

The C-282 Filter is made of 25,000 lb. tensile strength grey iron castings and is rated at 560 lbs. per square inch working pressure.



INSTALLATION

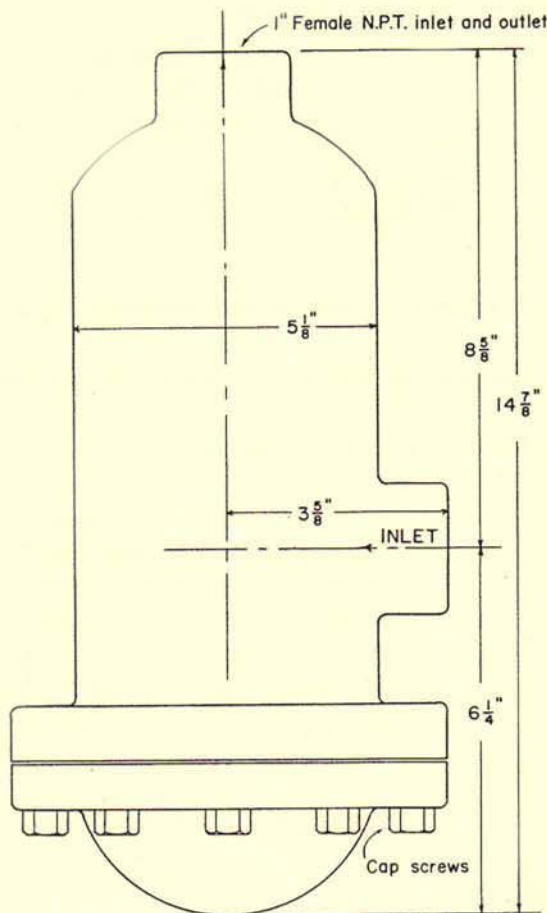


FIG. 1 DIMENSIONS

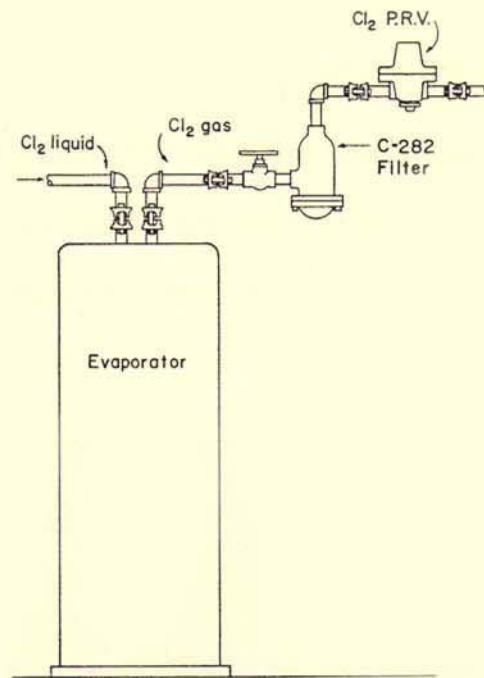


FIG. 2 LIQUID WITHDRAWAL

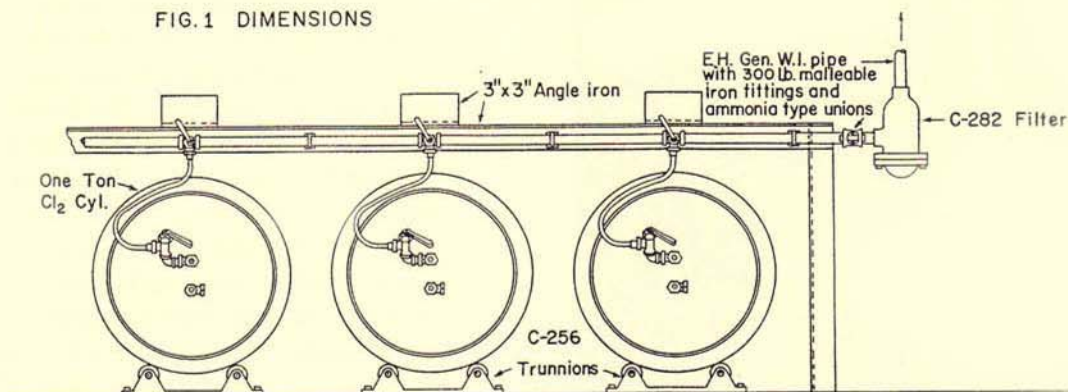


FIG. 3 GAS WITHDRAWAL

Liquid withdrawal (Fig. 2) - Note the filter is placed immediately downstream from the evaporator but ahead of the chlorine pressure reducing valve.

Gas withdrawal (Fig. 3) - Note the filter is placed as close as possible to the chlorine containers. In either case always install filter upstream from any reducing valve.

THE C-282 FILTER SHOULD BE USED ON ANY INSTALLATION USING ONE TON CHLORINE CYLINDERS REGARDLESS OF CHLORINATOR CAPACITY, AND ON ANY INSTALLATION USING AN EVAPORATOR.

C-282 Chlorine Gas Filter

