

Subject: Plated steel fittings

Product: PEFS F3

Parts: Hydraulic adaptors and hose couplings used in the discharge system

Chubb provided an upgrade path for an owner of a PEFS system to convert to our new PEFS F3 system.

Most components of the existing PEFS discharge system, including tubing, hose, hydraulic adaptors and hose couplings, were able to be retained during the conversion process (see example in Figure 1).

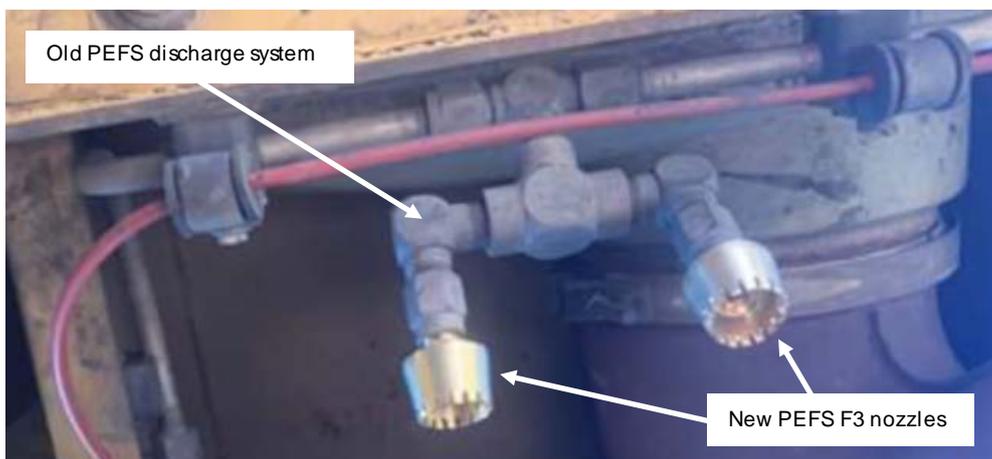


Figure 1 – New PEFS F3 nozzles in old discharge system

However, plated steel fittings can deteriorate and corrode over time. To minimise blockages or impairments to the discharge nozzles from rust particles and other contaminants, it is important that the discharge system is cleaned during maintenance.

The new PEFS F3 nozzle has a smaller inside diameter (ID) than the older PEFS nozzles (refer Figures 2 and 3).



Figure 2 – Old PEFS BM17 nozzle (rear view)



Figure 3 – PEFS F3 BM11 nozzle (rear view)

In practice, this means that the smaller ID may trap larger rust particles (refer Figure 4) or contaminants from passing through the nozzle during the system discharge.



*Figure 4 – PEFS F3 nozzle (rear view)
with rust particle*

PEFS F3 nozzles are cleaned at 6 monthly intervals and a clear passage test is carried out on the distribution system annually. These intervals are minimal requirements only. Maintenance frequencies can be increased to suit the age of equipment and/or the local conditions.

Why does the PEFS F3 nozzle have a smaller passage?

The reduction in size of the PEFS F3 nozzle was necessary to increase agitation of the fluorine free foam solution and also to soften the spray pattern. The change improved foam blanket generation and fire performance.

In field actions

- Systems that fail to discharge correctly during the annual discharge test due to nozzle impairments (unexpected changes to nozzle spray patterns) must be cleaned and flushed according to the requirements of “Distribution System – Clear Passage Test”, Page 21 of the PEFS F3 Maintenance Manual.
- Where multiple nozzles are found to be impaired during the annual discharge test, Service technicians must recommend either increasing the frequency of the relevant routine maintenance task (cleaning and/or discharge testing), or the replacement of all plated steel fittings in the discharge system.

Effective Date: Immediately

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