



DON'T MIX AND MATCH

What is the definition of Mix and Match?

Mix and match is the practice of using a different manufacturer of hose/fitting/ferrule combination that has not been verified by successful testing.

The BFPA considers that the practice of mix and matching is unacceptable as all components for an assembly must be compatible by design, size and type, and must have been compatibility proven by successful testing in accordance with the relevant hose/end termination specification.

NOTE 1: *Only use suppliers who can prove that all hose and coupling combinations have been successfully tested in accordance with the appropriate standard. Such tests shall include hydrostatic, impulse and leakage testing and ensure that materials can be traced back to the point of manufacture.*

In the final analysis, the producer of the hose assembly is responsible for its performance.

Within the American standard, SAE J1273, recommended practice states:

- a) Hose fitting components from one manufacturer are not usually compatible with fitting components supplied by another manufacturer (for example, do not use a hose fitting nipple from one manufacturer with a hose socket from another manufacturer).

NOTE 2: *It is the responsibility of the fabricator to consult the manufacturer's written instructions or the manufacturer directly, for information on proper fitting components.*

- b) Care must be taken to determine proven compatibility between the hose and fitting. Base selection on the manufacturers' recommendations substantiated by testing to industry standards such as SAE J517. Hose from one manufacturer is not usually compatible with fittings from another. Do not inter-mix hose and fittings from two manufacturers without approval from both manufacturers.

NOTE 3: *Other industry standards (for example, BS, EN, ISO etcetera) also specify suitable test methods to ensure hose and fitting compatibility. Tests include hydrostatic, impulse and leakage testing.*

- c) These Guidelines recommend that all hoses must carry the manufacturer's name or trademark, date of manufacture, type, size and working pressure.

NOTE 4: *It is important that the hose used meets the standard marked on it (i.e. SAE, BS, EN, ISO). It should have a date of manufacture (rubber hose particularly has a known shelf life, size, working pressure, maker's name, mark, or logo), to ensure it is traceable to the source of production.*

- d) The BFPA advises that the fittings used are size and type marked, carry the manufacturer's identification and show compatibility recommendations. The manufacturer of the fitting will be able to provide guidance as to swaging criteria. It is always prudent to view all unmarked or untraceable fittings as suspicious!