

A system of age control should be maintained to ensure that hose is used before its shelf life has expired. Shelf life is the period of time when it is reasonable to expect the hose to retain full capabilities for rendering the intended service. Hose shall be stored in a manner that facilitates age control and first-in, first-out (FIFO) usage based on the manufacturing date on the hose or hose assembly. The shelf life period of rubber hose in bulk form or hose made from two or more materials (hose assembly) is difficult to define as so many factors can detrimentally influence the hoses suitability for use.

According to standard DIN 20066:2002-10:  
For the production of hose assemblies the hose (bulk hose) must be younger than 4 years according to the hoses date of manufacture. The service life of a hose assembly, including any period of storage should not exceed 6 years; the period of storage should not exceed 2 of these 6 years.

Additionally, the International Standard Organization (ISO) has prepared a draft version of a guideline for hose/hose assembly usage that differs slightly from the German guideline. The ISO/TR 17165-2 states that the shelf life of hose as bulk hose or as hose made of 2 or more materials should not exceed 40 quarters (10 years) from the date of manufacture of the hose if stored in accordance with ISO 2230.

After all cases of hose storage, if visual inspection gives rise to any doubts as to the functionality of the hose (cracks in the cover, rust etc.), pressure testing should be carried out before use or the hose should be disposed of. Hose assemblies should always be considered as safety relevant components, so no risks should be taken.

## HOSE STORAGE – Best practices:

- Store in a clean, cool and dry area ( $\approx$  room temperature)
- Avoid direct sun light or moisture
- Do not store near high power electrical equipment
- Avoid contact with corrosive chemicals
- Avoid Ultraviolet light
- Avoid Insects/Rodents
- Avoid Radioactive materials

## FITTINGS STORAGE – Best practices:

- Additionally to the factors above the following points should be observed for storage of hose fittings
- Store fittings in clearly marked closed containers such as the original Parker packaging.
- A stock rotation system (FIFO) should be in place so that a shelf life of 2 years is not exceeded for fittings with O-rings as they may degrade as a result of normal environmental

