## Storage Info and period of use of thermoplastic hoses

In DIN 20066 : 2002-10, section 14 - Assessment of functional capability - states the following under "14.1.2 Storage and period of use" the following is specified:

- 1. DIN 7716 applies to the storage of hoses and hose assemblies (see also ISO 8331)
- 2. Even with proper storage and permissible stress, hoses and hose assemblies are subject to natural aging. This limits their period of use
- 3. improper storage, mechanical damage and inadmissible stress are the most common causes of failure
- 4. the period of use can be determined in individual cases according to empirical values, in deviation from the following guideline values
- 5. at the time of manufacture of the hose assembly, the hose (bulk hose) should not be older than 4 years
- 6. the use of a hose line, including any storage period of the hose line, should not exceed 6 years. The storage period should not exceed 2 years

## Re 1:

Storage requirements for hoses and hose assemblies are specified in DIN 7716. If the requirements and environmental conditions specified there (temperature, humidity, no direct sunlight, etc.) are observed, a 4-year-old thermoplastic hose meets the requirements

## Re 5:

According to our experience, a thermoplastic hose stored normally for 4 years will not show any negative change with regard to pressure load under operating conditions or changes in physical properties

## Re 6:

Our hose assemblies have been used since 1964 in the automotive industry and in general mechanical engineering. The service life of the hose assemblies is generally longer than 10 years. There are no known failures over this time axis

*Note:* The TÜV and the automobile manufacturers do not prescribe replacement of the lines, whereby the specifications of DIN 20066 are safely proven

DIN 20066 : 2002 - 10 states the following in section 14.2 " inspection criteria ":

The functional capability of hose assemblies must be assessed at intervals to be specified by the equipment manufacturer:

Hose assemblies shall be replaced when the following criteria are found:

- damage to the outer layer up to the reinforcement (e.g.: chafing, cracks, cuts)
- embrittlement of the outer layer (cracking of the hose material)

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- deformations that do not correspond to the natural shape of the hose or hose assembly, both ٠ in the depressurized and pressurized state or in the event of bending, e.g. separation of layers, formation of bubbles
- leaks
- damage or deformation of the hose fitting (sealing function impaired); minor surface damage is no reason for replacement
- Hose migrating out of the fitting •
- corrosion of the fitting reducing function and strength •
- installation requirements not observed •
- storage and/or usage period of the hose or hose assembly has been exceeded. If the user • does not have any information about the storage and the guide values according to DIN 20066 / section 14.1.2 are recommended

A repair of the hose assembly using the hose used and/or the fitting used (binding area) is not permitted.



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