

# Industrial Hose Service Life

All rubber products, including Industrial Hose, have a limited life on a given application. Assuming the correct hose has been selected for the application, this service life can be adversely affected by many variable conditions. The major ones are:

- Exposure to severe external abuse, such as kinking, bending, high end pull, crushing or abrasion.
  - Exposure to higher-than-rated working pressures or to high surge pressures.
  - Exposure to higher-than-rated temperatures.
  - Misapplication or exposure to corrosive fluids or gases outside the range of suitable applications.
1. **External abuse** – Hoses should be placed where they will not be run over by equipment or subjected to high end pull. Hoses should not be bent below recommended minimum bend radius. This could result in kinking the hose or reducing its pressure resistance. Large diameter hoses also may require additional support to reduce external abuse.
  2. **Hose & System Pressures** – In establishing and determining pressures related to hose and the systems to which they are applied, it is necessary to consider separately the characteristics of the hose and the system.

The system (or device or application) can have several pressures depending on pressure sources and surges imposed by the operator or mechanical components.

A given hose has a fixed characteristic with respect to the pressure it can withstand (and how it is applied) and still give satisfactory life.

3. **High Temperatures** – High temperatures can degrade rubber stocks very quickly, resulting in short service life.

Where external temperatures are higher than normal ambient, contact Parker for recommendations.

4. **Misapplication** – All Industrial Hoses are designed for a specific or related application. They should not be used for any other application without first contacting Parker for recommendations.
5. **Internal Abrasion** – For applications of a highly abrasive nature where the hose makes one or more bends, hose should be rotated 90° periodically to lengthen service life.

The hose manufacturer established, through design and testing, the recommended rated working pressure for the hose. It is the responsibility of the user to accurately determine the system pressure. Steady state pressure can be measured readily by gauges. Surges are difficult to measure and may require the use of electronic pressure sensing devices. Also, surge values depend on so many variables that a series of tests are usually required to obtain a valid set of readings. However, if there are extreme surges in the normal operation, or if there is the likelihood of abnormal operation of the system, the magnitude of these pressures must be determined.

Considering the recommended rated working pressure of the HOSE ASSEMBLY and the various pressures of the SYSTEM, the hose is matched to the system using proper application engineering principles.

## WARRANTY

### LIMITED WARRANTY FOR THE LIFE OF THE MERCHANDISE

Merchandise is warranted to be free from defects in material or workmanship for the life of the merchandise. Parker will, at its option, replace or repair any merchandise proved defective in material or workmanship, or both, during the warranty period. This is the exclusive remedy. For warranty service, please contact Parker Industrial Hose Division, 17295 Foltz Industrial Parkway, Cleveland, OH 44149.

**THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE EXPRESS WARRANTY PERIOD. LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION PERMITTED BY LAW.** Some states do not allow the exclusion or limitation of incidental or consequential damages, and some states do not allow limitation on how long an implied warranty lasts, so the above limitation and exclusion may not apply to you. The warranty gives you specific legal rights and you may also have other rights which vary from state to state.