Gasket and Gasket material storage

Although many gasket materials can be used safely after storage for many years, ageing will have a distinct effect on the performance of certain types of gasket materials, resulting from chemical degradation which occurs over time. Primarily, this is a concern with materials which are bonded with elastomers, which, in general, should not be used after about 4 years from the date of manufacture. Those materials with elastomeric binders will inevitably deteriorate over time, and even more quickly at higher ambient temperatures.

Degradation is also catalyzed by intense sunlight. Although this is of little concern with metallic gaskets, it may have an effect on semi-metallic gaskets (specifically, those which are combined with elastomer bound materials). Since graphite and PTFE materials contain no binders, sheets, and gaskets of these materials have a virtually indefinite shelf life. In general:

- During storage, gaskets should not be subjected to extreme heat or humidity – store in a cool, dry place, away from direct sunlight, water, oil and chemicals
- Store sheet materials flat
- Avoid hanging gaskets – they may distort. Store soft gaskets flat. Large diameter spiral wound gaskets should be retained on their mounting board
- Gaskets should be kept clean and free from mechanical damage (for maximum protection, store in sealed poly bags)

Handling of gaskets and gasket materials

The condition of the gasket plays an important part in its performance. Some gasket materials are relatively robust (such as metallic gaskets), others are reasonably forgiving (such as CAF and PTFE), but others may be very brittle or prone to cracking. Consequently, all gaskets and gasket materials are best handled with the same care and attention. Bent, nicked, gouged, scratched or hammered gaskets will rarely seal effectively! When working in the field, carry cut gaskets carefully, ideally within some form of protective cover. Although carrying small gaskets in a pocket is a common practice, it is best avoided! If you bend the gasket it will be damaged. If it picks up debris from the inside of your pocket or elsewhere, it may scratch the surface.

- Carry gaskets carefully, ideally within some form of protective cover
- Do not bend or buckle
- Do not damage the surface
- For large diameter metallic and semi-metallic gaskets, always transport the gasket on its mounting to the installation site