

## **FARADIP.FOUR FAILURE RATE DATA BASE (52 Versions since 1987)**

The continuously updated FARADIP data has been available for over 35 years and is widely recognised and used. It was first developed in 1987, and has been continuously expanded since then, in order to cater for the fact that failure rates of component parts and equipment cover a wide range of values and are the least accurate of the engineering parameters. Thus, the presentation of data as ranges, with an indication of the more likely value, is adopted. This unique feature is not offered by other data sources.

It provides failure rate DATA RANGES for a nested hierarchy of items covering electrical, electronic, mechanical, pneumatic, instrumentation and protective devices. Relative failure mode percentages are also included where available. The hierarchy of items incorporates 13 main screens and 47 subscreens.

It is based on over 450 data sources covering a wide range of industries. The sources involve over 10,000 lines of failure rate data and are a blend of generic, industry specific and site-specific data which include:

- Published field failure data bases
- Published papers
- Technis's own collection of field reliability data based on over 40 years of consultancy

Vendor claims of so called “data” and FMEDA predicted values (NOT being empirical field data) are specifically excluded from the Technis database which underpins the Faradip ranges. An ongoing Technis study has long established that there is over half an order of magnitude optimism in vendor based claims of failure rate.

Another Technis study has established an approximately 30% per decade improvement in failure rates and this is one of many factors taken into account in constructing and updating the data ranges.

There is no other comparable product available.

As an additional and completely separate facility, Faradip also includes an FMEDA package for assessing equipment failure rate, diagnostic coverage and Safe Failure Fraction (as per IEC 61508 [2010]).