

LOSS OF PRODUCTION

The cost of unexpected downtime and lost production is a very significant item in total life cycle cost, and can rival the energy costs and replacement parts costs. All of the above factors affecting the working life of a pump can impact downtime and loss of production. Despite the design or target life of a pump and its components, there will be occasions when an unexpected failure occurs. In those cases where the cost of lost production is unacceptable, a spare pump may be installed in parallel to reduce risk. If a spare pump is used, the initial cost will be greater, but the cost of lost production will be avoided, or at least minimized.

PUMP RELIABILITY FACTORS

Figure 1-2 summarizes the many factors that influence pump reliability. These, obviously, include selection (type chosen), installation, usage (application), operation, and maintenance-related parameters. While each of these will be covered in much more detail throughout this text, it should also be noted that correct operating instructions are often lacking. It is certainly obvious that pump start-up, operating surveillance, shut-down and related procedures can and will influence pump reliability. Detailed guidance on the correct procedures to be employed can be found in Appendix 1.

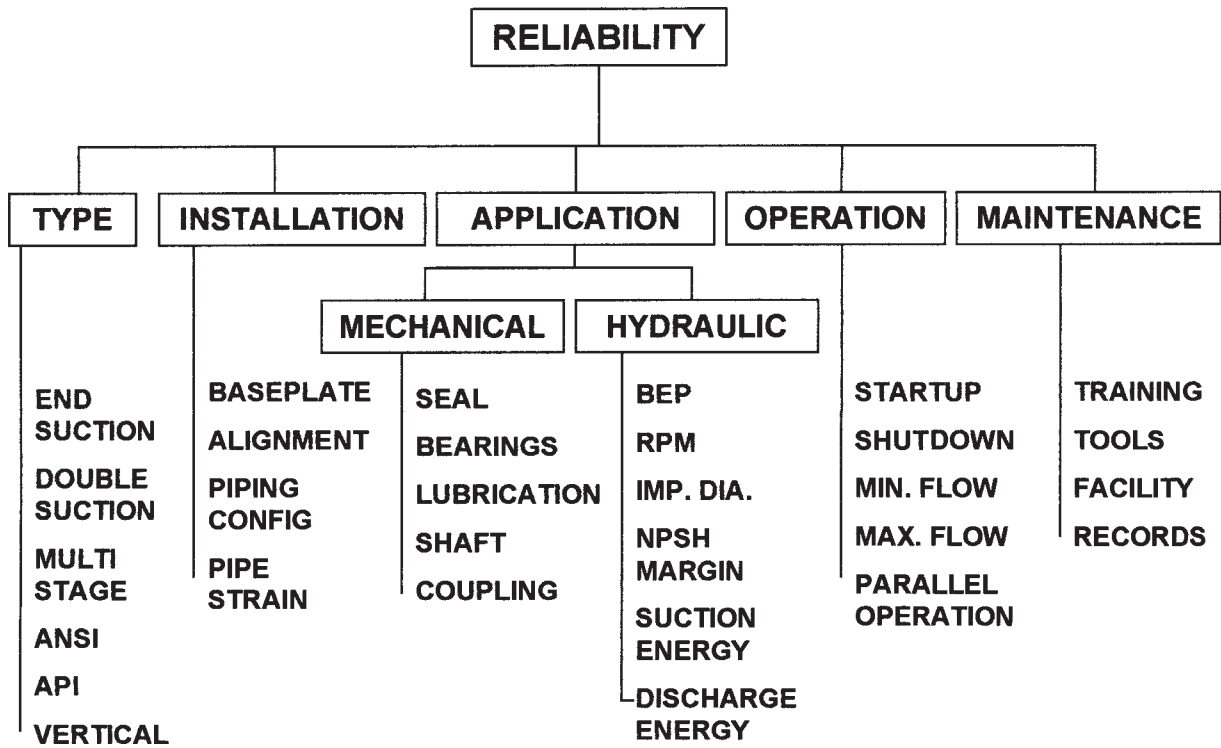


Figure 1-2: Pump reliability factors