Semi-probabiliste approach of hydrocarbons canalization

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Description
Actually as a conception rule and verification standards of the mechanical strength hydrocarbons transport pipelines, the deterministic formulation s used. The pipelines conception standards giving the sizing formulae and the acceptability criteria, as based on material strength formulae, on load limits and on ruin criteria such us flow and rupture limits without taking their aleatory character into account. A probabilistic approach to relate the conduit sizing to the risk of failure expressed in terms of probability which depends on distribution probabilities in the loads in the tube manufacturing dimensional tolerances and in the tube wall material strength. It does not, however, give sizing formulae such as deterministic formulae. It is this reason, that we try to develop formulae based on a seni probabilistic format which appear in a forn analogous to deterministic formulae, but they incorporate elements of failure probability …