

Abstract:

It is proved today that practically all industries require fluid movement systems with different characteristics, adapted to the industrial processes placed in position. The complexity degree of fluid transport systems may therefore be variable.

The calculation of load losses in pipes remains of capital importance especially for the choice and the measurement of energy generators (pump, compressor, ventilator)

Our study, from an essentially numerical aspect, contribute to the determination of load losses in pipes. The approximate representations are only little usable for the calculation of a water supply system because when they are simple, they are not precise and if their accuracy is sufficient, they are complex. For the purpose to standardize and simplify the calculation methods of load losses, we present a formula which gives a maximum relative difference of about 2 % with regard to Colebrook law.