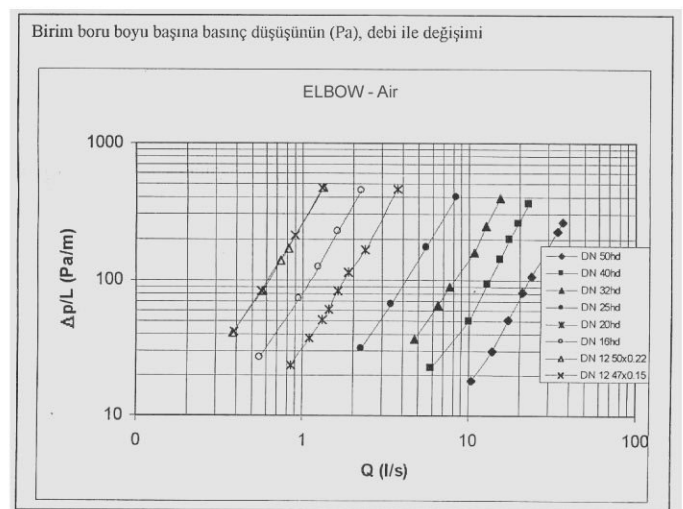
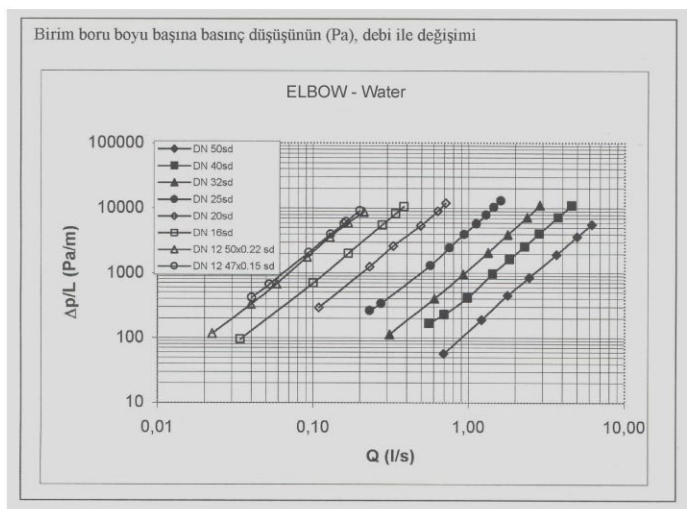


Pressure Drops at the metal flexible hoses:

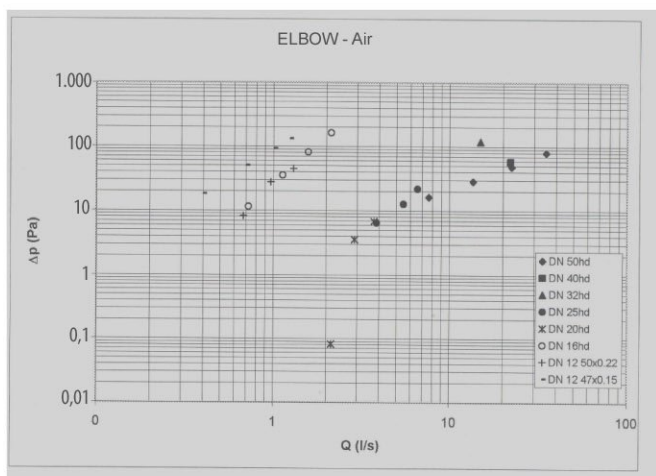
In the experiments with water/air, below in the graphics, pressure loss (Pa) per unit length of pipe is mentioned with the exchange of flow rate (lt/sc) of water/air inside the pipe.



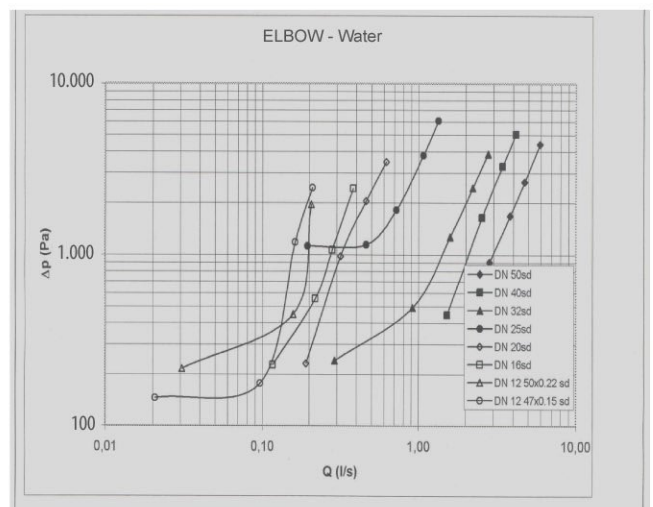
Pressure Loss for Flexible Metal Hoses with minimum bending radius:

Find below the medium pressure drop calculation for one pc 90° elbow; which has been found by deducting pressure decrease of the flexible curly hose while it is straight, from the pressure decrease of the hoses at 90° twist on the minimum twist diameter

AIR



WATER



Exchange of Coefficients of continuous load loss to Number (Re)

Continuous load loss coefficient (Hose friction coefficient) is defined as λ .

$$\lambda = \frac{\Delta P / (\rho g)}{v^2 / (2g)}$$

In this formula Δp defines the pressure drop b/w inlet and outlet of the flexible hose (Pa); ρ defines the volume of fluid (kg/m^3); v defines the velocity of fluid (m/sc); g acceleration gravity. (m/sc^2)
 Reynold number is defined as Re in this formula.

$$Re = VD/v$$

D is the nominal diameter of the hose; ν is kinematical viscosity of fluid (m^2/sn). Below on the charts; λ - Re variation is shown for different flexible hose types by evaluating the data from the experiment done by water and air.

