

$$p=F/A; p=\rho gh;$$

Bernoulli:

$$mgz+mv^2/2+mp/\rho \text{ [J]}$$

$$gz+v^2/2+p/\rho \text{ [J/kg]}$$

$$z+ v^2/(2g)+p/(\rho g) \text{ [m]}$$

Portata=velocità*sezione

Bernoulli generalizzata:

$$z_1+v_1^2/(2g)+p_1/(\rho g)-hw\pm hi=z_2+ v_2^2/(2g)+p_2/(\rho g) \text{ [m]}$$

$$gz_1+v_1^2/2+p_1/\rho-Lw\pm Li=gz_2+ v_2^2/2+p_2/\rho \text{ [J/kg]}$$

perdite di carico:

$$\text{continue: } Y=K*v^2/R \quad r=\text{raggio medio}$$

$$\text{accidentali: } y=\beta*v^2/d^5 \quad \beta=0.00164+0.000042/d$$

d=diametro