



CUTES Europe Liquid ring vacuum pumps

sizing tools [bc2 - rev.1]

pneurop 6612/1984

Acceptance specification and performance tests for liquid ring vacuum pumps

PNEUROP correction factors

$$K1 = N_g / N_t$$

$$K2 = [(P_{in} - P_{VPeff}) / (P_{in} - P_{VPtest})] / [(T_{ring\ test} + 273) / (T_{ring\ eff} + 273)]$$

$$K3 = (T_{air\ eff} + 273) / (T_{air\ test} + 273)$$

K1: the suction capacity is proportional to the rotating speed,
 N_g = contractual rpm ; N_t = rpm in the test

K2: reflects the effect of the temperature (T_{ring}) of the liquid ring. PVP is the partial vapour pressure of the ring liquid.

K3: reflects the effect of the temperature of dry air at the inlet

